

DISTANCE LEARNING MIGRANT EDUCATION PROGRAM



# GRADES 1-2

2014 GUIDE FOR TEACHERS





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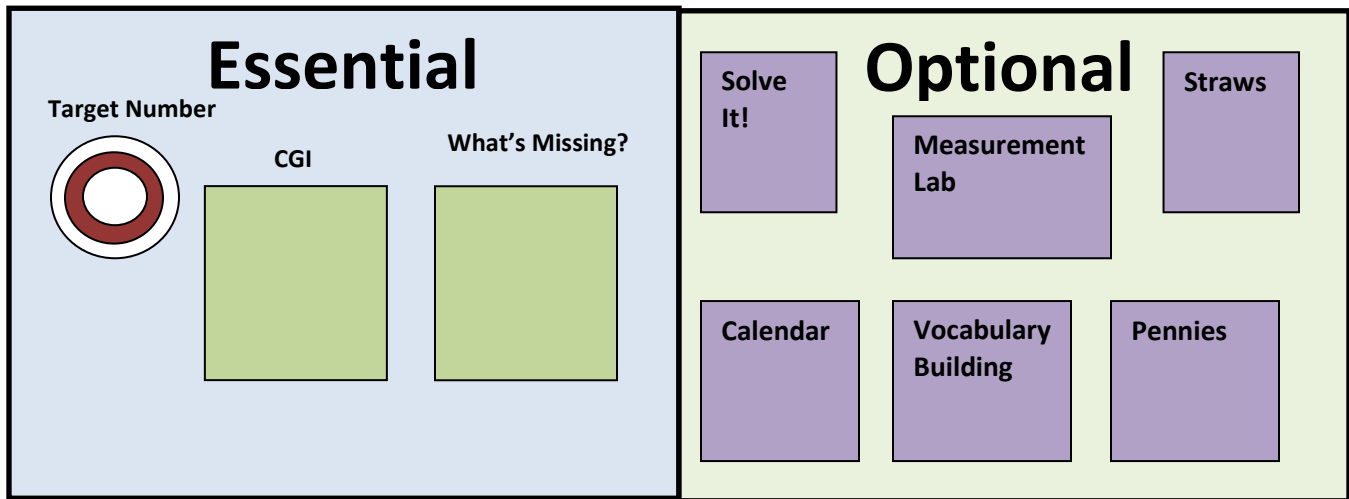
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**Kinder Daily Routines Introduction**



**1<sup>st</sup> and 2<sup>nd</sup> Grade Band Daily Routines Introduction**

First and second grade students will begin most days gathered around the Daily Routine area. Provide a comfortable area in the room, preferably with an area rug at which students gather around the wall display. The graphic above demonstrates a simple permanent display. You may, however, display the activities any way you wish. Just be sure that all of the activities are placed at a height that first and second grade students can reach. Student leaders will ultimately direct the activities while the rest of the class models with their student sets or responds to the leader’s questions. Blackline masters are provided as noted in the materials list.

The Daily Routines explained in this section are the base activities for every lesson of every unit. Specific materials for activities that change such as the Measurement Lab, CGI, Money Matters, or the Graphing Activity will be noted in the curriculum for that particular lesson.

**Language Objectives for Daily Routines**

- Listen to, read, and speak the months of the year.
- Listen to, read, speak, and write measurement vocabulary: length, width, long, tall, longer, taller, short, shorter, wide, wider, and widest.
- Speak to partners, teacher, and class using vocabulary introduced in the Daily Routines.
- Listen to, read, speak, and write the labels of the graph using Interactive Writing.

**Math Objectives for Daily Routines**

- Find, complete and create patterns.
- Listen to, read, and speak the months of the year, days of the week and dates on a calendar.
- Solve word problems using a variety of strategies and defend their strategies.
- Use place value to group tens and ones.
- Understand the relationship among coins: pennies, nickels, dimes, and quarters.
- Measure to compare up to three items’ length, weight, capacity, and area.
- Generate picture and bar graphs from experiences in the classroom.



## 1<sup>st</sup> – 2<sup>nd</sup> --- Daily Routines Materials List per Activity

### Essential

- **Target Number**
  - BLM Poster for Target Number
  - Suggested target numbers are provided in the main curriculum.
- **CGI**
  - BLM Poster for CGI
  - Unit CGI Problems (found in unit curriculum BLM section)
- **What's Missing**
  - BLM Poster What's Missing?
  - Situations as noted in the various lessons

### Optional

- **Calendar**
  - Large poster-size calendar template to which you will add the month dates
  - Date cards to fit the calendar – each month should exhibit a different pattern
  - Month and Year title card to label the calendar
- **Money Matters**
  - Available on MAS Space
- **Graphing**
  - Generic picture and bar graph grids
  - NOTE: There are directions for creating a Birthday Graph which you can keep on the wall in the room to keep track of and celebrate birthdays and special occasions.
  - Unifix cubes or Linking cubes
  - Materials as noted in the various lessons
  - Situations as noted in the various lessons
- **Measurement** (only when needed for the math lesson)
  - BLM Measurement Poster
  - Materials noted in the various lessons
  - Situations as noted in the various lessons
- **Solve It!**
  - BLM Poster Solve It!
  - BLM Daily Problems



**ESSENTIAL** – these activities are directly related to the assessment items.

## CGI Problems

*One CGI problem per day.*

There are 11 CGI problems written for each Unit. It will be the teacher's choice as to which problems to use on a daily basis. Numbers have been left out so that you can provide quantities that are reasonable for your students' abilities. Difficulty increases from Result Unknown to Start Unknown of each type; however, when students see the action in the problems and use manipulatives to physically act out the problem, all levels are attainable with even the youngest of children.

Using CGI with your students:

Read the word problem to the students. (For older students, have a copy for them to read.)

Ask students to solve the problem and to show their work on paper or to use manipulatives/counters.

As students are working, go around the room. Ask individual students to explain their strategy to you. This allows several more students than usual to have your attention and, what the researchers discovered, gives you more insight into how the students are thinking. Students who are struggling will also have a chance to overhear some strategies that might make sense to them.

When students are done, ask for a volunteer to demonstrate and explain their strategy to the class. Ask for one or two more volunteers who have a DIFFERENT strategy, as this helps students understand that there is more than one way to get to the correct answer. In addition, students become more comfortable with how to give an explanation, as well as helping their fellow students understand the math involved. When students share their solutions, encourage participation by calling on someone else to explain that student's strategy. It is also important to look for and point out connections between the strategies shared.

It does take a lot of time to cover one problem, but it gives students the time they need for *learning*, instead of just "covering" the concept.

### Options:

- There is a CGI graphic organizer that you can use.
- If some students finish early, ask them to solve the problem again, but with a different set of numbers.
- The curriculum provides three sets of numbers for each problem.
- Write/scribe a student's explanation for the class to see.
- Use this with your word wall. Hang a 12" x 18" piece of construction paper on the board. Ask the students to write their strategy on the paper instead of on the board. If the K-1 student uses counting as his/her strategy, this can be attached to his/her vocabulary word, "count," on the word wall. (If the student demonstrates with manipulatives, the teacher can draw the representation on the paper.)



When you and the students are comfortable with the process, you can start asking the students questions, based on situations you encounter with your group. For example: “Did you see any strategies for adding four groups of six that you would like to try the next time you have a problem like that?” ~or~ Draw a straight line of 23 circles, then draw four groups of six and ask the students, “Which has 24?” “Which is easier to check?” “Why?”

### Problem Type

#### Join

- **Result Unknown:** These are the typical problems students are used to seeing in curriculum resources. Anna had 5 marbles. Marcos gave her 3 more. How many marbles did Anna have then?
- **Change Unknown:** These are the typical “missing addend” problems. Anna had 5 marbles. How many marbles did she need to have 8 marbles?
- **Start Unknown:** *These are the typical “work backward” problems. Anna had some marbles. Marcos gave her 3 more. Then she had 8 marbles. How many marbles did Anna have to begin with?*

#### Separate

- **Result Unknown:** Typical “take away” problems. Anna had 8 marbles. She gave 3 to Marcos. How many marbles did she have then?
- **Change Unknown:** Anna had 8 marbles. She gave some to Marcos. Then she had 3 marbles. How many marbles did she give to Juan?
- **Start Unknown:** *Typical “work backwards.” Anna had some marbles. She gave 5 to Marcos. Then she had 3 marbles. How many marbles did Anna have in the beginning?*

#### Part-Part-Whole

- **Whole Unknown:** These are addition problems of items in a set. Anna had 5 green marbles and 3 blue marbles. How many marbles did she have?
- **Part Unknown:** These are subtraction problems of items in a set. Anna had 8 marbles. 5 of them were green. How many were NOT green?

#### Compare

- **Difference Unknown:** These are the typical comparison problems. Anna had 8 marbles. Marcos had 5 marbles. How many more marbles did Anna have?
- **Compare Quantity Unknown:** These comparison problems are a little more challenging in the verbiage. The action is actually counting on. Marcos had 5 marbles. Anna had 3 more marbles than Marcos. How many marbles did Anna have?
- **Referent Unknown:** *Again, challenging problems because of the verbiage, these problems are actually counting back. Anna had 8 marbles. She had 5 more marbles than Marcos. How many marbles did Marcos have?*

#### Grouping / Partitioning

- **Multiplication:** These problems are straight forward multiplication word problems.
- **Measurement Division:** Students are asked to divide, but the visualization is different from what they are used to reading in textbooks which traditionally tell you how many sets there are, and want to know how many of each there will be in a set. In measurement division, students know how many are in a set, but need to determine the number of sets there will be. EX: You have 35 widgets and want to package them seven to a package. How many packages will you make?
- **Partitive or Divvy Out Division:** Students divide to find the number of items per set. EX: There are 35 widgets to be packaged in seven packages. How many widgets will there be in each package?

**(Essential Daily Routine Activities Continued)****TARGET NUMBER**

Every day there is a target number suggested in the overview of Daily Routines in the main curriculum. Simply hide this number from the students until you are ready to time them. Tell them that they have one minute (or 30 seconds, whatever you have) to represent the number in as many ways as possible. On your count, show the number and begin timing. When you call time, everyone must stop writing. They then group into threes or fours to share their representations with one another (give them about one minute to do that). They select one or two unusual representations to share with the class. Have the students share orally, explaining the representation if necessary; or if you are pushed for time, have all write them on the board and use a gallery walk to explore them.

You will see new and different representations as your students grow in their understandings of quantity in number.

**WHAT'S MISSING?**

Students use what they know about related addition and subtraction to discover the missing number needed in the box to make the number sentence a true statement. Since 1<sup>st</sup> graders are students who have COMPLETED the first grade, it is not inappropriate for your 1<sup>st</sup> graders to begin to memorize the basic addition and subtraction facts; however, if you feel your students need the manipulatives, you may slow down the activity, give students counters, and let them use the counters to help them find the missing number.

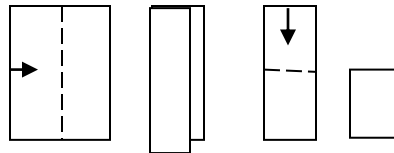
**Materials:**

- Unknown Quantity Flash Cards (any flash cards with a symbol in the number sentence representing number – referred to as “What’s Missing? cards in the directions)
- Individual answer boards or one piece of plain white paper per student
- Dark crayons

**Unit 1 – Addition and Subtraction****Procedure:**

- Shuffle the What’s Missing? Cards and lay face down in front of you.
- Ask students to fold a piece of paper into fourths

(Fold across portrait, fold down portrait so they have a sturdy display paper 1/4 the size of the paper. Students use the front and back, then open the last fold, and fold back to expose two new sides)



- Draw one card at a time, showing to the class.
- Students are to write their answer in large print on their quarter folded paper or individual white boards and hold it in the air – no yelling out.
- When all answers are in the air, on the Teacher’s count of three, everyone says the answer.
- Student volunteers then explain how they knew the number in the box.
- Repeat another three times, each time students using a new “face” on their quarter sheet.
- Teacher should be watching the class to see who knows the facts and who still needs help memorizing them, or at least using this type of thinking. These students need extra practice with the What’s Missing? Cards. Be sure to make this a center activity. These cards can be made self-checking by writing answers on a Post-It-Note and attaching to the back.
  - Be sure that you are using a variety of box placements each day so that sometimes the box is in the initial numeral position and sometimes the box is in the second numeral position.



**Unit 2 – Addition and Subtraction --Repeat Unit 1 Activities**

**Unit 3 –Addition and Subtraction ---Repeat Unit 1 Activities**

**Unit 4 – Addition and Subtraction Relay**

**OPTIONS:**

**Option 1** - If the majority of your students need the controlled practice from Unit 1, then repeat that activity.

**Option 2** – If the majority of your students are comfortable with finding the number in the box, divide the class into two Teams and have the old-fashioned relay activity.

**What’s Missing?** Relay (Make sure that almost all of your students can get the correct answer before playing this game.)

- Students line up in two equal lines, facing the Teacher.
- When the Teacher shows the, What’s in the Box? Card, the student at the beginning of each line calls out the answer.
- First student who calls out the correct answer gets the card.
- Both students go to the back of their respective lines.
- Repeat the process until either all students have had a chance to play, or all of the cards are gone.
- Winning Team is the Team with the most cards at the end of the game.

**Unit 5 – Addition and Subtraction Relay**

**OPTIONS:**

**Option 1** - If the majority of your students need the controlled practice from unit 1, then repeat that activity.

**Option 2** – If the majority of your students are comfortable with finding the number in the box, divide the class into two Teams and have the old-fashioned relay activity.

**Unit 6 – Addition and Subtraction Relay**

**OPTIONS:**

**Option 1** - If the majority of your students need the controlled practice from Unit 1, then repeat that activity.

**Option 2** – If the majority of your students are comfortable with finding the number in the box, divide the class into two Teams and have the old-fashioned relay activity.



**OPTIONAL** –These activities are not directly related to assessment items. However, in a full program, these would be considered part of your Daily Routine.

## CALENDAR

Each of the 12 months of the year should be on cards for the Word Wall. Many wonderful ideas for introducing Word Wall vocabulary can be found on the Teach Net website: <http://www.teachnet.com/lesson/langarts/wordwall062599.html>. Be sure that you label the wall calendar with the appropriate month.

For the first month, use a color or shape pattern; for example, perhaps all the odd numbers would be red while the even numbers would be blue; or perhaps you would use a sun for the odd numbers and a crescent moon for the even numbers.

Each day after the first day, you will simply put the correct date on the calendar. Ask children what they notice about the numbers on the calendar. Tell them that you are keeping track of the date of the month. Example: *Today is the first day of the month of June. It is June 1<sup>st</sup>. We're going to put this shape on the Thursday, June 1<sup>st</sup> to help us keep track of what day it is. What do you notice about this shape? (Accept any answer, but also help them to see that it has number 1 on it. Hopefully they can recognize the shape and / or color.)*

The next day you would do the same, but use the other shape for June 2<sup>nd</sup>. If you are beginning AFTER June 1<sup>st</sup>, begin by saying, *"I want to know what date today is. I know that this is the month of JUNE and that June began on Thursday. Thursday was June 1<sup>st</sup>. We're going to put this shape on the Thursday that was June 1<sup>st</sup> to help us keep track of what day it is. What do you notice about this shape?"* Catch up to the date you are starting. When you have four or five days on the calendar, ask students, *"What pattern do you see?"* [sun, moon] Ask them what they think will come next and why. Repeat the process for the rest of June. If your school continues beyond June, start a new pattern with the new month.

Next, point to "yesterday," and ask, "What day of the week was yesterday?" Repeat the process of having a student find the day of the week word card, affix the card to the board under yesterday. Point to words "today" and the "day of the week word cards" and everyone then says, "Yesterday was (word)."

Finally, point to "tomorrow," and ask, "What day of the week will it be tomorrow?" Repeat the process, ending with "Tomorrow will be (word)."

## COUNTING STRAWS CHART and COUNTING COINS POCKET CHART

Students listen to teacher and other students as they see the actual collecting of straws/coins. Students count and bundle their own sets of straws together as appropriate.

You are going to use straws on one chart and coins on another chart to keep track of the number of days there have been since the beginning of school.



## (Optional Daily Routine Activities Continued)

### Counting the Days with Straws

Every day you will add a straw or coffee stir to the “ones” cup of the Counting the Days with Straws.

When you reach ten straws (or coffee stirs) you simply bundle the straws with a rubber band and put them over in the next cup to the left, the “tens” cup. *All students should have an individual set of straws/coffee stirs and rubber bands to count individually WITH the student helper each day.*

- *Ask the students to tell you how many straws (stirs) they have* (they will probably need to recount them).
- Then *ask them to tell you what the straws (stirs) represent* (the number of days you have been in school).
- *How many days have you been in school?* (same number as the number of straws)

Every day, count the straws from one to see how many days there have been since the beginning of school.

- When you bundle a ten, *ask the students to tell you what the bundle of ten straws represents* (10 days).
- *When you have more than ten, have the students tell you there are (number of) ten bundles plus (number of) single straws.* That is a total of (number) straws.
- *What does that number represent?* The number of days you have been in school.

Ultimately you want students to be able to count the tens (10, 20, etc.) and add on the ones (1, 2, 3, etc.)

When you come to the weekends, please count them the following week by adding those straws the first day you come back, explaining to the students that even though you and they were not in school, the campus was still prepared for the summer program, so it is important to count the weekend, too.

### Counting the Days with Coins

Another way to keep track of the number of days is to count coins in the Counting the Days with Coins Pocket Chart. Using coins will help children remember not only the name, but their values and relationships. Every day you will add a penny to the chart. Tell the students that a penny represents one cent in US money. When we add a penny, we add another cent to the chart; and we also add the counting of one more day to the chart. Students should each have a set of coins so that when you discuss the coins, they will be able to investigate them individually. Have the students look carefully at the penny. What can they tell you about the coin? Have them find as many interesting facts about the coin as they can, but be sure they notice the color which you can explain is copper, and the pictures on the front and back.

- *Ask the students to name the coin(s).*
- *How much money is each coin worth?*
- *How many of the coins are on the chart?*
- *How much are the coins worth?*
- *Ask a volunteer to write the worth using a cent sign.*
- *What else are you using the coins to represent?* (number of days you have been in school)
- *How many days have you been in school?*



**(Optional Daily Routine Activities Continued)**

When you arrive at the 5<sup>th</sup> day, drop the penny into the chart and ask the questions just as you have before; then tell students that you have another coin to show them. Show them the nickel. Ask anyone if they know what the coin is and how much it is worth.

Ask them to find the nickel in their collections and to tell you as many things as they can about the coin. Once you have gathered many attributes, have the students compare the nickel to the penny. Particular attributes would be color, size, and pictures on head and tail of coin.

Explain that the nickel is worth five cents. You can use this coin to represent the number of days you have been in school. Where could you put it? (Accept all answers.) Tell students you are going to place it right above the penny (your pocket chart should be big enough to stack the coins edge to edge in the pocket).

- *Ask the students how much money is represented in pennies.*
- *What else do the pennies represent?* (Number of days in school)
- *How many days have we been in school?*
- *How do you know?* (There are that many pennies.)
- *What other coin have we used to represent the number of days we have been in school?* (a nickel)
- *How many nickels do we have?*
- *How many pennies does a nickel represent?*

Continue in this way until you have been in school 10 days, then introduce the dime in the same fashion.

Introduce the quarter in the same fashion when you have been in school for 25 days.

Be sure to go back every day and count the pennies from one. Begin to count by fives when you have enough nickels, and finally by tens with two or more dimes.

**Solve It! for 1-2** (solve only 2-step problems)

**Solve It! for 3-4 and 5-6** (solve 2- and 3-step problems)

Being able to solve multi-step problems is a real-life skill. After all, most problems that we face day-to-day in our living involve having to solve several smaller problems before we arrive at the solution for the big one facing us.

In our Solve It! section this summer, we'll be working in small groups to recognize multi-step problems, solve and check each to make sure our solutions are accurate, and then use that information to solve the bigger problem.



**(Optional Daily Routine Activities Continued)**

**Solve It! - The Set Up**

- The class is divided appropriately into small groups for each lesson’s problem according to the number of steps in solving the problem.
- 2-step problems are worked with a partner; 3-step problems are worked in a group of three or triad.
- There are three problems per unit, one to be given with each Lesson.
- The chart below shows you the number of steps to a solution for each grade band, and what the teaming structure is for each lesson’s problem.

Units	Grade Band 1-2	Grade Bands 3-4, 5-6, 7-8
1	2-step, all 3 lesson pairs	2-step, all 3 lesson pairs
2	2-step, all 3 lesson pairs	2-step, all 3 lesson pairs
3	2-step, all 3 lesson pairs	3-step, triad, triad, pairs
4	2-step, pair, pair, independent	3-step, pair, pair, independent
5	2-step, pair, pair, independent	3-step, pair, pair, independent
6	2-step, all lessons independent	2, 3-step, all lessons independent

**Solve It! - The Rationale**

The difficulty in solving multi-step problems is usually not the arithmetic; the difficulty is with the words and how they flow together to make a story. Once students understand that there are a series of actions taking place, each adding its own significance to the final solution, students will find the process much less daunting.

It’s like the old elephant joke – Question: How do you eat an elephant? Answer: One bite at a time. So let’s teach students to first recognize the “elephant” as needing more than one step to solve; then show them how taking the problem “one bite at a time” will get them to their final goal.

Each of the three lessons per unit has a very distinct approach. We’ll look at those approaches in our next section.

**Varied Approaches of the Three Lessons**

**Set 1, Lesson 1 is a set of related problems (Units 1, 2, 3).** *Subsequent solutions are dependent upon preceding answers.*

- Students work in teams composed of the same number of students as there are related problems; i.e., two related problems are solved in pairs, three related problems in groups of three or triad.
- All students are given the same set of problems. Each student signs his or her name at the top of the page.
- Work the first problem; then rotate the problem page to the person on your left (clockwise).
- Look at the sheet you have been handed. Is the strategy the same or different from your strategy? Verify, or check the answer, even if the answer is the same as the one you calculated. Remember, errors do happen.



- Use the verified answer to solve Problem #2.

### (Optional Daily Routine Activities Continued)

#### Solve It! continued

- Rotate the problem page to the person on your left and repeat the process.
- When all problems have been solved, rotate the problem sheet back to the person whose name is at the top of the problem sheet. Verify the final answer.

Now, discuss in your small groups the different strategies used to solve the problem.

- How are they different?
- How are they alike?
- Did you see a strategy that you had never thought to use? Explain how and why it worked.
- Did you see a strategy that you would like to have explained? Ask the person to explain it

#### Set 2, Lesson 2 is a multi-step problem which needs pulling apart. (Units 1, 2, 3)

Students work in teams composed of the same number of students as there are steps in the problem; i.e., 2-step problems are solved in partners, 3-step problems in groups of three and so on.

- All students are given the same set of problems. Sign your name at the top of the page.
- Work as a group to break the problem apart into the smaller problems. What do you need to solve for each step of the problem? Send problem page back to the person whose name is at the top of the problem sheet. Verify the final answer.

Now, discuss in your small groups the different strategies used to solve the problem.

- How are they different?
- How are they alike?
- Did you see a strategy that you had never thought to use? Explain how and why it worked.
- Did you see a strategy that you would like to have explained? Ask the person to explain it.

#### Set 3, Lesson 3 is a multi-step problem which needs pulling apart. (All problems worked in pairs for Lesson 3, Units 1, 2, 3; and Lessons 1, 2 Units 4 & 5)

Students work in partners to solve the problem. There are two problems this time, one for each partner.

- Solve your own multi-step problem. Trade papers with your partner and check your partner's solution to a different problem.

Now, discuss the different strategies used to solve the problems.

- How are they different?
- How are they alike?
- Did you see a strategy that you had never thought to use? Explain how and why it worked.
- Did you see a strategy that you would like to have explained? Ask the person to explain it.

**(Optional Daily Routine Activities Continued)****Solve It, continued****Independent Problem Solving (Lesson 3, Units 4 & 5, all Lessons Unit 6)**

Naturally, the goal is for students to be independent problem solvers. Once students have practiced in small groups, it's time to see what they can do individually. These problems are great assessments for you as their Teacher. Everyone in the room has the same problem, but works independently to solve it. Once the problems are finished, it's time to discuss in large group:

- How did you solve the problem?
- Did someone solve it a different way?
- How are the strategies alike? How are they different?
- Did you see a strategy that you had never thought to use? Explain how and why it worked.
- Did you see a strategy that you would like to have explained? Ask the person to explain it.

Thank you to Fritzie Publishing and Educational Services for giving permission to adapt *Traveling Problem Solving* for this summer program. All rights are reserved and use is limited to training and individual classroom use.

**GRAPHING**

You will have a graphing activity suggested every day based on the curriculum needs for the day, usually drawn from the language lesson. The TV Math Lesson often uses the results from the graph as a springboard, so please don't skip it.

The first graph you will want to generate, however, is a birthday graph. If your students are able to create their own class graph (first a real graph, then a bar graph made from those results), please do so. Otherwise, help students generate the graph by giving them a sticky note with their birthday/year and name on it, then making a horizontal bar graph. You may need to help them find the months. You are simply graphing the months of the year (not the days within the months).

**Questions to Ask**

- *First allow students to tell you what they notice about the graph.* They will probably see the months that have many birthdays, and the months that have fewer. Let them use their observation skills first.
- *How many students have birthdays in the month of (month)?*
- *How do you know?* (The graph has that many sticky notes in the (month) column.)
- *Which month has the greatest number of birthdays? How do you know?*
- *Which month has the fewest number of birthdays? How do you know?*
- *How many more birthdays does (month) have than (month)?* (Show students how to compare the rows.)
- *How many fewer birthdays does (month) have than (month)?*
- *If you had a choice of the month to be born, which month would it be and why?*



## (Optional Daily Routine Activities Continued)

### MEASUREMENT

Measurement and Estimate are life skills which are poorly addressed in our society. Although there will not be a measurement activity for every lesson, certainly there will be many throughout the summer program. These will all be drawn from the mathematics and literature connection. Each lesson will have a list of materials needed within the main curriculum; however there will be an assortment of generic materials needed throughout the summer:

- **Color tiles** (12 per student)
- **Inch Worms** (12 per student)
- **Measure a Foot** (1 per student)
- **Primary Rulers** (to the inch – 1 per student)
- **Primary Bucket Balances** ( 1 per 4 students)
- **Customary Measurement Cups** (1 per 2 students)

### MONEY MATTERS – Now found on MAS Space

Money Matters is in response to the National plea and the State’s new student expectations regarding Financial Literacy. Each day will provide a brief lesson written specifically to the expectations appropriate to the grade band, as outlined in the 2014-2015 K-8 Math TEKS.

#### 1<sup>st</sup> Grade Expectations

(from Obj 9, Personal Financial Literacy)

- 9(A) define money earned as income;
- 9(B) identify income as a means of obtaining goods and services, often making choices between wants and needs;
- 9(C) distinguish between spending and saving; and;
- 9(D) consider charitable giving.

#### 2<sup>nd</sup> Grade Expectations

- 11 (A) calculate how money saved can accumulate into a larger amount over time;
- 11 (B) explain that saving is an alternative to spending;
- 11 (C) distinguish between a deposit and a withdrawal;
- 11 (D) identify examples of borrowing and distinguish between responsible and irresponsible borrowing;
- 11 (E) identify examples of lending and use concepts of benefits and costs to evaluate lending decisions; and
- 11 (F) differentiate between producers and consumers and calculate the cost to produce a simple item.

The tasks for this are found on MAS Space.

### VOCABULARY BUILDING

Each day during Daily Routines, send a few minutes working with the unit vocabulary words. Suggested activities below:



- Alphabetize words
- Isolate initial and final sounds in vocabulary words
- Identify words that name actions (verbs) and words that name persons, places, or things (nouns)
- Read vocabulary words and when appropriate add inflectional endings (e.g., plurals, past tenses)
- Identify antonyms and/or synonyms for vocabulary words
- Count the number of letters in a word and compare lengths
- Identify the number of syllables in a word
- Brainstorm a list of words with the same initial sound as one of the vocabulary words
- Discuss blends (fl-, bl-, cr-, etc.), digraphs (sh-, ch-, th-) in words
- Word sort activities (initial sound, # of letters, # of syllables, final sound, etc.)
- Interactive Writing: use vocabulary words in sentences
- Rhyming activities: make a list of words that rhyme with vocabulary words (words can be real words or nonsense words)
- Play “I am thinking of a word...” Display vocabulary words and give clues to help students determine the mystery word. Possible clues: the word I am think of has # letters. The word I am thinking of begins/ends with the /?/ sound. The word I am thinking of rhymes with \_\_\_\_\_?
- Movement activities when spelling the words:
  - Snap & Clap – snap the vowels and clap the consonants
  - Stomp – stomp out each letter with your foot
  - Skywriting – students write each letter in the air to spell the word
  - Jumping Jacks – Spell the word and do one jumping jack for each letter



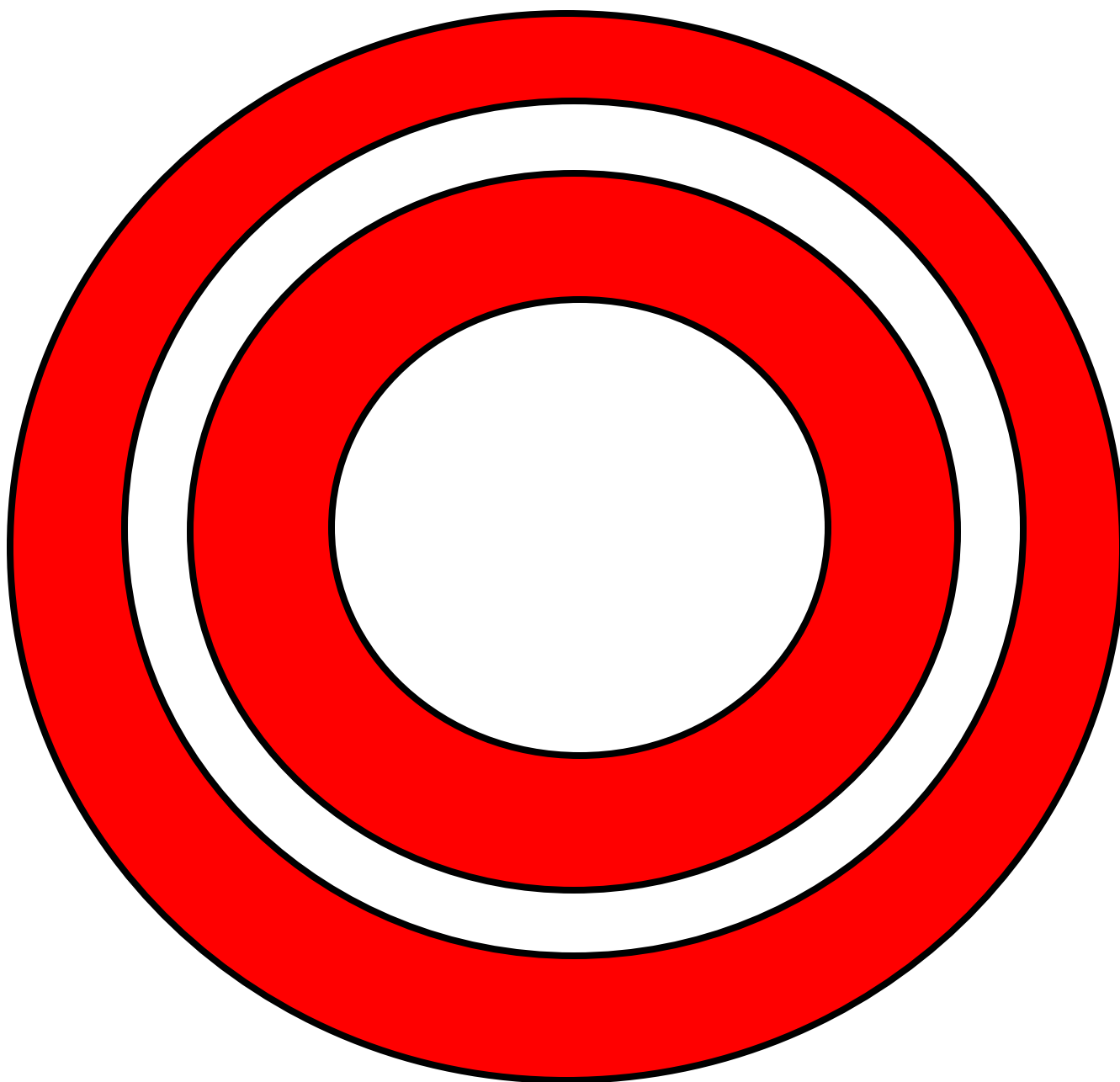
**CGI Investigators!**







# Target Number







# What's Missing?







**Solve It!**





# Measurement Lab





# 1<sup>st</sup>-2<sup>nd</sup> Unit 1

## Overview *The Berenstain Bears' Trouble with Money*

*This is a quick snapshot of the three math lessons for this unit. For detailed instructions, balance literacy objectives/extended activities, enrichment ideas refer to the complete lesson plans for each lesson. Notice that the Classroom Lesson has been divided into the Language portion and the Transition to Math portion.*

Lesson Segment	Math Objectives	Language Objectives	Activity	Manipulatives	Supplies
<b>Unit 1</b> <b>Lesson 1</b> <b>Daily Routine</b> 30 – 45 minutes	<b>ESSENTIAL</b> <b>Pre-assessment Today</b> Students will be pre-assessed on skills to be learned this summer.  <b>OPTIONAL</b>	<b>ESSENTIAL</b> <b>Pre-assessment Today</b>   <b>OPTIONAL</b>	<b>ESSENTIAL</b> <b>Pre-assessment Today</b>   <b>OPTIONAL</b>	<b>ESSENTIAL</b> Gather the materials as listed on the Pre-Assessment Teacher Guide. Sets must be made ahead of time, 1 per student you are testing.  <b>OPTIONAL</b>	<b>ESSENTIAL</b> <ul style="list-style-type: none"> <li>• <b>BLM</b> 1<sup>st</sup> grade Pre-assessment</li> <li>• <b>BLM</b> 2<sup>nd</sup> grade Pre-assessment</li> </ul> <b>OPTIONAL</b>
<b>Classroom Lesson 1</b> .5 to 1 hour (divided between Language and Transition to Math Lessons)	<b>Math Objectives:</b> Skip count by 5s, 10s and 25s.	<b>Reading Objectives:</b> Use text clues to make, revise, and confirm predictions. <b>Language Objectives:</b> Read, understand, and use vocabulary words. Understand illustrations and text can be used to determine the meaning of unknown words.	<b>Language</b> <i>The Berenstain Bears' Trouble with Money</i> by Stan & Jan Berenstain Classroom Set  Discussion Read Aloud Word Hunt  <b>Vocabulary</b> allowance greedy generous spendthrift sensible	<b>Language</b> <ul style="list-style-type: none"> <li>• Small Post-it Notes</li> <li>• Chart Paper</li> <li>• Additional titles Berenstain Bear book (optional)</li> </ul>	<b>Language</b> <ul style="list-style-type: none"> <li>• <b>BLM</b> Word Cards</li> </ul>
	<b>Math Language Objectives</b> <b>Math Objectives:</b> <ul style="list-style-type: none"> <li>• Skip count by 5s, 10s and 25s</li> </ul>	<b>Math</b> <b>Building Background</b>  <b>Vocabulary</b>  <b>Reading</b>	<b>Math</b> Transparent Counter sets – 1 set per student in a bag <ul style="list-style-type: none"> <li>• 20 yellow</li> <li>• 10 red</li> <li>• 4 orang</li> </ul>	<b>Math</b> <b>BLM TM</b> Hundreds Chart	

<p><b>TV Lesson 1</b> 30 minutes</p>	<p>Identify US coins by name, including pennies, nickels, dimes and quarters. Skip count by five, ten, and 25 to 100.</p>	<p>Complete sentence stems using money amounts and words. Use the math vocabulary during the activity. Discuss solution strategies.</p>	<p><b>Building Background</b> <b>Vocabulary Building</b> <b>Mathematics</b></p>	<ul style="list-style-type: none"> <li>• Transparent Counter sets – 1 set per student in a bag <ul style="list-style-type: none"> <li>○ 20 yellow</li> <li>○ 10 red</li> <li>○ 4 orange</li> </ul> </li> <li>• Student Money Sets in Ziploc (1 set per student) <ul style="list-style-type: none"> <li>• 100 pennies</li> <li>• 20 nickels</li> <li>• 10 dimes</li> <li>• 4 quarters</li> <li>• 10 \$1dollar bills</li> </ul> </li> <li>• Sentence Stem on a sentence strip or board – <b>This coin is a _____.</b></li> <li>• Sentence Stem on a sentence strip or board – <b>A _____ is worth _____ cents.</b></li> <li>• Big Money coins</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM TM</b> Hundreds Chart</li> </ul>
<p><b>Follow-up and Snack Fraction 1</b> .5 to 1 hour</p>	<p>Identify US coins by name, including pennies, nickels, dimes and quarters. Skip count by five, ten, and 25 to 100. Determine the value of a set of coins less than or equal to \$1.00.</p>	<p>Complete sentence stems. Listen and speak with a partner during our math activity. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>Continue TV Lesson, circulating the room and asking questions provided in the lesson.</p>	<ul style="list-style-type: none"> <li>• Student Money Sets in Ziploc (1 set per student) <ul style="list-style-type: none"> <li>○ 100 pennies</li> <li>○ 20 nickels</li> <li>○ 10 dimes</li> <li>○ 4 quarters</li> <li>○ 10 \$1dollar bills</li> </ul> </li> <li>• Sentence Stem on a sentence strip or board – <b>This coin is a _____.</b></li> <li>• Sentence Stem on a sentence strip or board – <b>A _____ is worth _____ cents.</b></li> <li>• Big Money coins – demo set</li> <li>• corner of the room</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM TM</b> Hundreds Chart</li> <li>• <b>BLM</b> Piggy Bank Count – 1 per student</li> <li>• <b>BLM</b> Piggy Bank Record Sheet – 1 per student</li> </ul>

<p><b>SNACK FRACTIONS</b>          Separate a whole into two equal parts and use appropriate language to describe the parts such as one out of two equal parts.          Partition objects into two equal parts and name the parts halves. Write the fraction in numeric form.</p>	<p><b>SNACK FRACTIONS</b>          Explain why each portion is half.          Share-write what a half is.</p>	<p><b>SNACK FRACTIONS</b>  <b>Building Background</b>          Teacher demo of halves.  <b>Vocabulary</b>          half          fair share          equal pieces          Model sharing the apple with a partner.          Students then model while the          Teacher demonstrates half through questions.          Students first divide a picture and create a record sheet, then are given 2 pre-cut halves to share with a partner. Students must explain how they know they have halves.</p>	<p><b>SNACK FRACTIONS</b>  <b>TEACHER DEMO:</b></p> <ul style="list-style-type: none"> <li>• 1 large apple</li> <li>• sharp knife</li> <li>• Paper towel</li> <li>• Paper plate</li> </ul> <p>(student supplies follow)</p> <p><b>STUDENT ACTIVITY (per partner pair):</b></p> <ul style="list-style-type: none"> <li>• 1 apple previously cut in half and put into 1 Ziploc. You might want dip each half in orange juice to keep from turning brown.</li> <li>• 2 paper dessert plates</li> <li>• 2 paper towels</li> <li>• 1 scissors per student</li> <li>• 1 ruler and marker per student</li> <li>• 1 glue stick per student</li> </ul> <p>Chart paper with question: How do you know that each portion is half? Put a copy of the record sheet apple cut apart at the top of the chart with the question.</p>	<p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li>• BLM Apple Snack Fractions</li> <li>• BLM Apple to Share</li> </ul>
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Lesson Segment	Math Objectives	Language Objectives	Activity	Manipulatives	Supplies
<p><b>Unit 1 Lesson 2</b> <b>Daily Routine</b> 30 – 45 minutes</p>	<p><b>ESSENTIAL</b> Represent a number using multiple representations. Compare and order two or more concrete objects according to length. Solve math word problems. Determine a missing number in an equation regardless of where the number is in the equation.</p> <p><b>OPTIONAL</b> Solve multi-step problems. Read and use a calendar. Recognize and recite the days of the week. Recognize and recite the months of the year. Count and group straws by tens and some more. Count pennies and provide other coin equivalencies. Create graphs and analyze data from everyday experiences.</p>	<p><b>ESSENTIAL</b> Listen to, read and speak measurement vocabulary: length, width, unit of measure. Speak to partner, teacher, and class using vocabulary introduced in Daily Routines. Reason, model and solve oral word problems.</p> <p><b>OPTIONAL</b> Read word problems and discuss them with a partner. Listen to, read and speak the information on a calendar. Write graph titles and labels interactively.</p>	<p><b>ESSENTIAL Daily Routine Activities</b></p> <ul style="list-style-type: none"> <li>• Target Number</li> <li>• Measurement</li> <li>• CGI</li> <li>• What’s Missing</li> </ul> <p><b>OPTIONAL for longer programs</b></p> <ul style="list-style-type: none"> <li>• Solve It!</li> <li>• Calendar</li> <li>• Straws</li> <li>• Pennies</li> <li>• Graphing</li> <li>• Vocabulary Building</li> </ul> <p><b>OPTIONAL Program</b> <b>Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• Unknown Quantity Cards – add and subtract</li> <li>• Crayons – 1 set per student</li> <li>• Chart paper and markers – classroom display</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Large wall calendar</li> <li>• Floor or large wall graph</li> <li>• Number of straws to match your number of days in school, and enough rubber bands to band them in groups of ten – 1 kit per student</li> <li>• Coin Kits – 1 per student</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• BLM Measurement Lab Record Sheet</li> <li>• BLMs of posters for the ESSENTIAL Daily Routine Activities, and any OPTIONAL activities you are going to use.</li> <li>• BLM CGI Problems (Lesson 1)</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• BLM for Calendar board – find in the Daily Routine Overview section of your TE</li> <li>• BLM of Days of the Week songs - find in the Daily Routine Overview section of your TE</li> <li>• Sentence strips for graph titles</li> </ul>
<p><b>Classroom Lesson 2</b> 1 to 1.5 hour</p>	<p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Recognize 100 pennies on the hundreds chart as 100 pennies in a dollar.</li> </ul>	<p><b>Reading Objective</b> Read smoothly, accurately, and with expression.</p> <p><b>Language Objective</b> Identify, understand, and use idioms.</p>	<p><b>Language</b> <i>The Berenstain Bears’ Trouble with Money</i> Classroom Set</p> <p>Class Discussion Explicit instruction Read Aloud</p>	<p><b>Language</b> Poem written on chart paper</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>• BLM Idiom Graphic Organizer</li> <li>• BLM Word Cards</li> </ul>

			Teacher Modeling Repeated Readings of text			
		<b>Math Language Objectives</b> Recognize 100 pennies on the hundreds chart as 100 pennies in a dollar.	<b>Math</b> <b>Building Background</b>  <b>Vocabulary</b>  <b>Reading</b>	<b>Math</b> • Student Money Sets from Lesson 1 – 1 per student • <b>BLM</b> math word cards		<b>Math</b> • <b>BLM TM</b> Hundreds Chart from Lesson 1 – 1 per student • <b>BLM</b> math word cards
<b>TV Lesson2</b> 30 minutes	Solve addition and subtraction story problems. Use number sentences to represent story problems.	Use the math vocabulary during the activity. Discuss solution strategies.	<b>Building Background</b> <b>Vocabulary Building</b>  <b>Mathematics</b>	Student Money Sets in Ziploc (1 set per student) <ul style="list-style-type: none"> <li>100 pennies</li> <li>20 nickels</li> <li>10 dimes</li> <li>4 quarters</li> <li>10 \$1dollar bills</li> </ul>	<b>BLM</b> Piggy Bank Story Board – 1 per student <b>BLM</b> Money Problems – 1 per student	
<b>Follow-up and Snack Fraction 2</b> .5 to 1 hour	<ul style="list-style-type: none"> <li>Solve addition and subtraction story problems.</li> <li>Use number sentences to represent story problems.</li> </ul> <b>SNACK FRACTIONS</b> <ul style="list-style-type: none"> <li>Separate a whole into two equal parts and use appropriate language to describe the parts such as one out of two equal parts.</li> <li>Partition objects into two equal parts and</li> </ul>	<b>Language Objectives:</b> <ul style="list-style-type: none"> <li>Complete sentence stems.</li> <li>Listen and speak with a partner during our math activity.</li> <li>Use the math vocabulary during the activity.</li> <li>Share-write math journal response.</li> </ul> <b>SNACK FRACTIONS</b> <ul style="list-style-type: none"> <li>Explain why each portion is half.</li> <li>Share-write what is a half.</li> </ul>	<b>SNACK FRACTIONS</b> <b>Building Background</b> Shouldn't need to demo today, just explain expectations.  <b>Vocabulary</b> Half, halves Fourth, fourths	<ul style="list-style-type: none"> <li>Student Money Sets in Ziploc (1 set per student) <ul style="list-style-type: none"> <li>100 pennies</li> <li>20 nickels</li> <li>10 dimes</li> <li>4 quarters</li> <li>10 \$1dollar bills</li> </ul> </li> </ul> <b>SNACK FRACTIONS</b> <b>STUDENT ACTIVITY (per partner pair):</b> <ul style="list-style-type: none"> <li>1 ice cream sandwich per pair.</li> <li>1 plastic knife</li> <li>2 paper dessert plates</li> <li>2 paper towels</li> <li>1 scissors per student</li> <li>1 ruler and marker per</li> </ul>	<ul style="list-style-type: none"> <li><b>BLM</b> Piggy Bank Storyboard from TV lesson – 1 per student</li> <li><b>BLM</b> Bear Problems to Model – 1 per student</li> </ul> <b>SNACK FRACTIONS</b> <b>TEACHER DEMO</b> <ul style="list-style-type: none"> <li><b>BLM</b> Ice Cream Sandwich Snack Fractions – 1 per student</li> <li><b>BLM</b> Ice Cream Sandwich to Share (1 per 6 students) Chart paper with 3questions: <ul style="list-style-type: none"> <li><b>How do you know that</b></li> </ul> </li> </ul>	

	<p>name the parts halves.</p> <ul style="list-style-type: none"> <li>• Represent the fraction half numerically</li> </ul>		<p>Fair shares Equal pieces</p>	<p>student</p> <ul style="list-style-type: none"> <li>• 1 glue stick per student</li> </ul>	<p><i>each portion is half?</i></p> <ul style="list-style-type: none"> <li>• <i>How do you describe this fraction?</i></li> <li>• <i>How do you represent this fraction in numbers?</i></li> </ul> <p>Put a copy of the record sheet ice cream sandwich cut apart at the top of the chart with the question</p>
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Lesson Segment	Math Objectives	Language Objectives	Activity	Manipulatives	Supplies
<p><b>Unit 1 Lesson 3</b> <i>Daily Routine</i> 30 – 45 minutes</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• Represent a number using multiple representations.</li> <li>• Compare and order two or more concrete objects according to length.</li> <li>• Solve math word problems</li> <li>• Determine a missing number in an equation regardless of where the number is in the equation.</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Solve multi-step problems</li> <li>• Read and use a calendar.</li> <li>• Recognize and recite the days of the week.</li> <li>• Recognize and recite the months of the year.</li> <li>• Count and group straws by tens and some more.</li> <li>• Count pennies and provide other coin equivalencies.</li> <li>• Create graphs and analyze data from everyday experiences.</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• Listen to, read and speak measurement vocabulary: length, width, unit of measure.</li> <li>• Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.</li> <li>• Reason, model and solve oral word problems.</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Read word problems and discuss them with a partner.</li> <li>• Listen to, read and speak the information on a calendar.</li> <li>• Write graph titles and labels interactively.</li> </ul>	<p><b>ESSENTIAL Daily Routine Activities</b></p> <ul style="list-style-type: none"> <li>• Target Number</li> <li>• Measurement</li> <li>• CGI</li> <li>• What’s Missing</li> </ul> <p><b>OPTIONAL for longer programs</b></p> <ul style="list-style-type: none"> <li>• Solve It!</li> <li>• Calendar</li> <li>• Straws</li> <li>• Pennies</li> <li>• Graphing</li> <li>• Vocabulary building</li> </ul> <p><b>OPTIONAL Program</b> <b>Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• Unknown Quantity Cards – add and subtract</li> <li>• Crayons – set per student</li> <li>• Chart paper and markers – classroom display</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Large wall calendar</li> <li>• Floor or large wall graph</li> <li>• Number of straws to match your number of days in school, and enough rubber bands to band them in groups of ten – 1 kit per student</li> <li>• Coin Kits – 1 per student</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Measurement Lab Record Sheet</li> <li>• <b>BLMs</b> of posters for the <b>ESSENTIAL Daily Routine</b> Activities, and any <b>OPTIONAL</b> activities you are going to use.</li> <li>• <b>BLM</b> CGI (Lesson 1)</li> <li>• Crayons – set per student</li> <li>• Chart paper and markers – classroom display</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> for Calendar board – find in the Daily Routine Overview section of your TE</li> <li>• <b>BLM</b> of Days of the Week songs - find in the Daily Routine Overview section of your TE</li> <li>• Sentence strips for graph titles</li> </ul>

<p><b>Classroom Lesson3</b> 1 to 1.5 hour</p>	<p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences.</li> </ul>	<p><b>Reading Objectives</b></p> <ul style="list-style-type: none"> <li>• Use illustrations and text to infer character feelings</li> <li>• Actively participate in classroom discussion</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Understand, use, and apply new vocabulary</li> </ul>	<p><b>Language</b> <i>The Berenstain Bears' Trouble with Money</i> Classroom Set</p> <p>Mystery Word Game Read Aloud Classroom Discussion</p> <p><b>Vocabulary</b> Allowance Greedy Generous Spendthrift Sensible</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>• Student Money Sets from Lesson 1 – 1 per student</li> </ul>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>• BLM Word Cards</li> </ul>
<p><b>TV Lesson3</b> 30 minutes</p>	<p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Match number sentences to models of story problems.</li> </ul>	<p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>• Use the math vocabulary during the activity.</li> <li>• Discuss solution strategies</li> </ul>	<p><b>Math</b> <b>Building Background</b></p> <p><b>Vocabulary</b></p> <p><b>Reading</b></p>	<p><b>Math</b></p> <ul style="list-style-type: none"> <li>• Student Money Sets from Lesson 1 – 1 per student</li> </ul>	<p><b>Math</b></p> <ul style="list-style-type: none"> <li>• BLM Piggy Bank Story Board from Lesson 2 – 1 per student</li> <li>• BLM TM – Bear Money Problems</li> <li>• BLM Math Word Cards</li> </ul>
<p><b>Follow-up and Snack Fraction3</b> .5 to 1 hour</p>	<p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Solve addition and subtraction story problems.</li> <li>• Use number sentences to represent story</li> </ul>	<p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>• Complete sentence stems.</li> <li>• Listen and speak with</li> </ul>	<p><b>Building Background</b></p> <p><b>Vocabulary Building</b></p> <p><b>Mathematics</b></p>	<p><b>BLM Models to Numbers – 1 per student</b></p> <ul style="list-style-type: none"> <li>• BLM Choose the Number Sentence – 1 per student</li> </ul>	<p><b>Family Fun Game – 1 set per partners for the room; 1 set per student to take home.</b></p> <p><b>Game is TV Demo</b></p> <ul style="list-style-type: none"> <li>• BLM Choose the Number Sentence – 1 per student</li> <li>• BLM Family Fun Game</li> </ul>




























	<p>problems.</p> <ul style="list-style-type: none"> <li>Match number sentences to models of story problems.</li> </ul>	<p>a partner during our math activity.</p> <ul style="list-style-type: none"> <li>Use the math vocabulary during the activity.</li> <li>Discuss answers and strategies during a game activity.</li> <li>Share-write math journal response.</li> </ul>	<p>SNACK FRACTIONS  <b>Building Background Vocabulary</b>  Teacher demo of halves  half  fair share  equal pieces</p>	<p>SNACK FRACTIONS  Explain why each portion is half.  Share-write what a half is.</p>	<p>SNACK FRACTIONS  1 string cheese per pair.  1 plastic knife  2 paper dessert plates  2 paper towels  1 scissors per student  1 ruler and marker per student  1 glue stick per student  Chart paper with question: <b>How do you know that each portion is half?</b> Put a copy of the record sheet string cheese cut apart at the top of the chart with the question.</p>	<p>board</p> <ul style="list-style-type: none"> <li>game pieces</li> <li>game board</li> <li>movement cards</li> <li>all-level answer key</li> <li>problem cards (blue for grades 1-2)</li> <li>special instructions for grades 1-2</li> <li>money kit</li> <li>hundreds chart</li> <li>piggy bank story board</li> </ul> <p>SNACK FRACTIONS</p> <ul style="list-style-type: none"> <li>BLM String Cheese Snack Fractions (1 per student)</li> <li>BLM String Cheese to Share (1 per 2 students)</li> </ul> <p>TEACHER DEMO:</p> <ul style="list-style-type: none"> <li>1 cheese stick</li> <li>Plastic knife</li> <li>Paper towel</li> <li>Paper plate</li> </ul> <p>STUDENT ACTIVITY /pair (see left column)</p>
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# 1-2 Roadmap Unit 1 2014

<b>Unit 1</b>	<b>Lesson 1</b>		<b>Lesson 2</b>		<b>Lesson 3</b>	
	<b>TV and Follow Up</b>	<b>Snack Fractions</b>	<b>TV and Follow Up</b>	<b>Snack Fractions</b>	<b>TV and Follow Up</b>	<b>Snack Fractions</b>
<b>1<sup>st</sup> Grade</b> <b>Assessment Items</b> <ul style="list-style-type: none"> <li>Lesson 1: 4, 8</li> <li>Lesson 2:</li> <li>Lesson 3:</li> </ul> <b>Daily Routines</b> <ul style="list-style-type: none"> <li>What's Missing (2)</li> <li>CGI (1, 5)</li> <li>CGI (3, 6)</li> <li>Target Number</li> </ul> <b>Snack Fractions (6, 8)</b>	<p>1.5F Determine the unknown whole number in an addition or subtraction equations when the unknown may be any one of the three or four terms in the equation</p>	<p>1.6G Partition two – dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p>1.6H Identify examples and non-examples of halves and fourths</p> <p>2.3A Partition objects into equal parts and name the parts, including halves, fourths, and eighths using words.</p> <p>2.3C Use concrete models to count fractions parts beyond one whole using words and recognize how many parts it takes to equal one whole</p> <p>2.3D Identify examples and non-examples of halves, fourths, and eighths.</p>	<p>1.3B Use objects and pictorial models to solve word problems involving joining, separating sets within 20 and unknowns as any one of the terms in the problem.</p> <p>1.3F Generate and solve problems situations when given a number sentence involving addition or subtraction of numbers within 20.</p> <p>1.5D Represent word problems involving addition and subtraction of whole numbers up to 200 using concrete and pictorial models and number sentences.</p>	<p>1.6G Partition two – dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p>1.6H Identify examples and non-examples of halves and fourths</p> <p>2.3A Partition objects into equal parts and name the parts, including halves, fourths, and eighths using words.</p> <p>2.3C Use concrete models to count fractions parts beyond one whole using words and recognize how many parts it takes to equal one whole</p> <p>2.3D Identify examples and non-examples of halves, fourths, and eighths.</p>	<p>1.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</p> <p>1.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluation the problem-solving process and the reasonableness of the solution.</p> <p>1.2A Recognize instantly the quantity of structured arrangements</p>	<p>31.6G Partition two – dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p>1.6H Identify examples and non-examples of halves and fourths</p> <p>2.3A Partition objects into equal parts and name the parts, including halves, fourths, and eighths using words.</p> <p>2.3C Use concrete models to count fractions parts beyond one whole using words and recognize how many parts it takes to equal one whole</p> <p>2.3D Identify examples and non-examples of halves, fourths, and eighths.</p>
<b>2<sup>nd</sup> Grade</b> <b>Assessment Items</b> <ul style="list-style-type: none"> <li>Lesson 1: review 2<sup>nd</sup> grade objectives</li> <li>Lesson 2: 1, 2, 5, 6</li> <li>Lesson 3: 1, 2, 5, 6</li> </ul> <b>Daily Routines</b> <ul style="list-style-type: none"> <li>Measurement (4)</li> </ul> <b>Snack Fractions (8)</b>						

## Sheltered Instruction Strategies

<p><b>Daily Routines</b></p> <p> Objectives –</p> <p> Vocabulary –</p> <p> Student Interaction</p> <p> Questioning</p> <p> Graphic Organizers</p>	<ul style="list-style-type: none"> <li>• Every activity has a specific <b>objective</b> as outlined in the Daily Routines Explanation of the Teacher’s Guide.</li> <li>• Use and expect your students to use the <b>vocabulary</b> from your word wall as they work through the activities in this section.</li> <li>• <b>Students are to interact</b> through working in pairs, small groups and whole class during these activities.</li> <li>• Generic <b>questions</b> are found in the Daily Routines Explanation and in the graphing section of the curriculum. Questions are often provided in the Measurement Lab teacher overview in the curriculum.</li> <li>• <b>Graphic organizers</b> are provided for many of the Daily Routines, in particular Measurement Lab, STAAR Performance, Fraction Action.</li> </ul>
<p><b>Classroom Language Lesson</b></p> <p> Objectives</p> <p> Vocabulary</p> <p> Student Interaction</p> <p> Questioning</p> <p> Graphic Organizers</p>	<ul style="list-style-type: none"> <li>• Begin and end each lesson by reading and explaining the lessons’ <b>objective(s)</b>.</li> <li>• New <b>vocabulary</b> will be introduced and explicitly taught in each unit. Students will also be given authentic opportunities to practice new words.</li> <li>• Lessons have been designed to provide students with the opportunity to interact one-on-one with a peer, in small groups, as well as, in a whole group setting.</li> <li>• <b>Questions</b> are imbedded in each lesson. Higher order questioning will engage students and ultimately provide a deeper level of understanding. Encourage students to explain their thinking.</li> <li>• <b>Graphic organizers</b> have been included to aid students in the organization and conceptualization of new information.</li> </ul>
<p><b>Transition to Math</b></p> <p> Objectives</p> <p> Vocabulary</p> <p> Student Interaction</p> <p> Questioning</p>	<ul style="list-style-type: none"> <li>• Read through the <b>objectives</b> before you begin the lesson, explaining what the skills are to be learned. At the end of the lesson, reinforce the students’ learning by reading through the objectives again, having the students tell you what activities helped them to learn each skill.</li> <li>• <b>Vocabulary</b> is critical to the students’ learning. Use and expect your students to use the vocabulary from this lesson and previous lessons as pertinent to the activity.</li> <li>• Pairs, small groups, whole class <b>student interaction</b> is built into the lesson so that students can discuss and learn through hands-on interaction. The point of all math lessons is for students to truly understand the mathematics behind the arithmetic, to use problem solving skills and to see and use patterns and relationships.</li> <li>• <b>Questioning</b> is written into the script so that the teacher has easy access to beginning questions. The students’ answers will most</li> </ul>

 <b>Graphic Organizers</b>	<ul style="list-style-type: none"> <li>• <b>Graphing Organizers</b> are peppered throughout the curriculum in the form of graphs, charts, tables, cloze, record sheets. Check the blackline masters to use these important tools.</li> </ul>
<p><b>TV Lesson</b></p>  <b>Objectives</b>  <b>Vocabulary</b>  <b>Student Interaction</b>  <b>Questioning</b>  <b>Graphic Organizers</b>	<ul style="list-style-type: none"> <li>• The TV Teacher will read through the <b>objectives</b> before beginning the lesson, explaining what the skills are to be learned. At the end of the lesson, she will reinforce the students’ learning by reading through the objectives again. It will be important for you to have the students tell you what activities helped them to learn each skill.</li> <li>• <b>Vocabulary</b> is critical to the students’ learning. The TV Teacher will use the appropriate vocabulary during the TV Lesson. It is expected that your students will use the vocabulary from this lesson and previous lessons as they work with the TV Teacher.</li> <li>• As the TV Teacher works through the lesson, she will provide quick as well as more sustained pauses for <b>student interaction</b>. It is important that the students use this time to quickly respond to her questions and to learn through hands-on interaction. The point of all math lessons is for students to truly understand the mathematics behind the arithmetic, to use problem solving skills and to see and use patterns and relationships.</li> <li>• <b>Questioning</b> is written into the TV script. The Classroom Teacher will be the key factor in facilitating the answers from the students. It is important that the students are fully engaged in the lesson in all manner, including answering the questions</li> <li>• <b>Graphing Organizers</b> are peppered throughout the curriculum in the form of graphs, charts, tables, cloze, record sheets. Check the blackline masters to use these important tools.</li> </ul>
<p><b>Follow-up Lesson</b></p>  <b>Objectives</b>  <b>Vocabulary</b>  <b>Student Interaction</b>  <b>Questioning</b>  <b>Graphic Organizers</b>	<ul style="list-style-type: none"> <li>• <b>Objectives</b> for the Follow up lesson are usually expanded from the TV Lesson. Reading them before the lesson and again after the lesson while students explain through what activity they experienced the objective is important.</li> <li>• <b>Vocabulary</b> is practiced and applied during this lesson. Use and expect to hear your students use appropriate and mathematically correct terms.</li> <li>• <b>Students Interact</b> through pairs, small group, and whole class experiences.</li> <li>• <b>Questions</b> are provided in the script as well as in a section titled “Questions” to help the Classroom Teacher clarify, to probe for deeper understanding, and to enrich their learning experiences.</li> <li>• Most lessons provide <b>graphic organizers</b> such as record sheet, game score sheets, tables to help students see patterns and relationships.</li> </ul>

## Snack Fractions



**Objectives**



**Vocabulary**



**Student Interaction**



**Questioning**



**Graphic Organizers**

- As with all of the portions of this curriculum, **objectives** are stated clearly at the beginning of the lesson and reviewed by you and your students at the end of the lesson. Snack Fractions will work on the same objectives through one unit.
- **Vocabulary** is very specific in working with fractions. Use and expect your students to use the fraction vocabulary and the dialog as scripted to help them put mathematical language to what they are experiencing with their snacks and graphic organizers.
- **Students interact** in partners during this activity. As you circulate the room, listen for their interaction – the fundamental understandings they have about fraction, and their use of fraction language.
- **Questions** are provided as springboards to lead you into deeper discussions, to help clarify student understanding, to assist students in probing deeper into fractional relationships, and to extend their experiences.
- Every snack fraction offers **a graphic organizer** in the form of record sheets accompanied by cut and paste models as appropriate to the lesson.



## Project SMART/Math MATTERS 2014

Grade Level: 1-2

Unit 1 / Lessons 1 – 2 - 3

### Daily Routine Math Objectives:

Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.

Model and solve oral word problems.

Model and solve 2-step word problems.

Represent numbers in a variety of representations including contextual references (i.e., 12 could be  $7 + 5$ , but could also be a dozen).

Read and use a calendar.

Count objects, group in ones and tens.

Compare item lengths using money as the unit of measure.

Estimate and measure linearly in units that approximate standard units.

Create graphs from everyday experiences.

### Daily Routine Language Objectives:

Listen to, read and speak the calendar vocabulary.

Listen to, read and speak measurement vocabulary: length, estimate, width, longer, shorter.

Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.

Write graph titles and labels interactively.

Reason, model and solve oral word problems.

### Unit Math Objectives (Integrated Lesson including snack fractions):

Use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundred, so many tens, and so many ones.

Create sets of tens and ones using concrete objects to describe, compare and order whole numbers.

Use objects and pictorial models to solve word problems involving joining, separating and comparing sets.

Represent word problems involving addition and subtraction of whole numbers.

Solve one and multi-step word problems involving addition and subtraction using a variety of strategies based on place value including algorithms.

Separate a whole into two, three or four equal parts and use appropriate language to describe the parts, such as three out of four equal parts.

Partition objects such as strips, lines, regular polygons, and circles into equal parts and name the parts, including halves, fourths and eighths using words such as one-half or three-fourths.

Explain that the more fractional parts used to make a whole, the smaller the part, and the fewer the fractional parts, the larger the part.

Identify examples and non-examples of halves, fourths and eighths.

Identify U.S. coins by names, including pennies, nickels, dimes and quarters.

### Unit Language Objectives:

Think, pair, share questions throughout the unit.

Learn and use new vocabulary.

Listen to the story for enjoyment and to develop an understanding of the vocabulary.

Listen to, speak, read and write unit vocabulary in a variety of group and individual settings.

Share-write math sentences.

Describe why a snack is or is not half.

**Technology Objectives:**

Use research skills and electronic communication, with appropriate supervision, to create new knowledge.  
Technology suggested in this unit: iPad, SMART Board or other “smart” projection device, Internet

**Key Vocabulary, MATH:** penny, nickel, dime, quarter, dollar, coins, add +, subtract -, equals = is the same as, cents

**Key Vocabulary, LANGUAGE:** allowance, greedy, generous, spend thrift, sensible

**Resources/Literacy Links**

*The Berenstain Bears’ Trouble with Money* by Stan and Jan Berenstain

Related links: <http://www.econ.org/parentscorner/berenstainbearsactivitybook.pdf>

<http://www.truesmarts.com/activity/trouble-with-money-the-berenstain-bears>

<http://www.umsl.edu/~wpockets/schoolhouse/lessons/bears/bears.html>

**Lesson Sequence**

- Daily Routine: 30 to 45 minutes
- Classroom Lesson: .5 to 1 hour
- TV Lesson: 30 minutes
- Classroom Follow-up including Snack Fractions: .5 to 1 hour

**MATH WALK**

Penny Hunt

**Technology Connections**

- **Math Practice:** Recognizing coins and values, easy to hard.  
[http://www.sheppardsoftware.com/mathgames/earlymath/Fruit\\_Shoot\\_coins.htm](http://www.sheppardsoftware.com/mathgames/earlymath/Fruit_Shoot_coins.htm)
- **Science Connection:** Making a penny shiny project and making green penny project.  
[http://www.ehow.com/info\\_7916817\\_shiny-penny-science-projects.html](http://www.ehow.com/info_7916817_shiny-penny-science-projects.html)
- **Social Studies Connection:** How money is designed and printed.  
<http://kids.usa.gov/watch-videos/videos/money-factory/index.shtml>  
A little older than Kinder  
<http://www.newmoney.gov/newmoney/dyob/index.html>  
Interactive designing your own bill
- **Health/Physical Ed Connection:** Show-n-Share – Movement Activity  
[http://web.wnlsd.ca/student\\_health/DPA/Kindergarten%20Non-Equipment%20Activities.pdf](http://web.wnlsd.ca/student_health/DPA/Kindergarten%20Non-Equipment%20Activities.pdf)
- **Art Connection:**  
Coin rubbings  
Make a bank from a coffee can or other can with a plastic lid.



**Materials**

(BLM denotes Blackline Masters found in curriculum)

- BLM Pre-assessment grade 1
- BLM Pre-assessment grade 2

**Math Objectives**

- Solve math word problems.
- Pre-assess program skills.

 **Balanced Literacy Language Objectives**

- Listen, read and write to understand problems and explain solution strategies

**TEKS** (denotes Texas Essential Knowledge and Skills that are taught in this unit)

**Lesson 1**

- 1<sup>st</sup> – 1.3BF, 1.5DF, 1.6GH
- 2<sup>nd</sup> – 2.3A, 2.4C, 2.7C

**Lesson 2**

- 1<sup>st</sup> – 1.3BF, 1.5DF, 1.6GH
- 2<sup>nd</sup> – 2.3D, 2.3E, 2.2A

**Lesson 3**

- 1<sup>st</sup> – 1.1ABC, 1.2A
- 2<sup>nd</sup> – 2.3D, 2.3E, 2.2A

**ELPS** (English Language Proficiency Standard)

1E, 2E, 3B, 3D, 3G

**CCRS** (College and Career Readiness Standards)

CROSS-CURRICULAR

II.D.1., II.E.1., II.E.2.

ELA II.A.1., II.A.3., III.B.3

MATH VI.B.1., VI.B.2.,

VI.C.2

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

1<sup>st</sup> - 1, 2, 4, 8

2<sup>nd</sup> - 2, 3, 7

**Unit 1, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Daily Routine****Pre-assessment – Administer today instead of Daily Routines**

*Follow the directions for each grade level, first or second, to administer the Pre-assessment today. Please let the students know that they are not expected to know all of the skills on this assessment. You are going to teach them the skills they do not know.*

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (fundamental number sense for all items)
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2 - 12
  - Lesson 3 - 24
- **CGI Problem** (1<sup>st</sup> items 1, 2, 5, 6; 2<sup>nd</sup> items 5, 6)
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2 – Join, Result Unknown (1<sup>st</sup> item 1, 2<sup>nd</sup> item 3)
  - Lesson 3 – Compare, Difference Unknown (1<sup>st</sup> item 5, 2<sup>nd</sup> item 6)
- **What’s Missing** (1<sup>st</sup> and 2<sup>nd</sup> item 2)
  - Lesson 1 – omit for Pre-assessment
  - All lessons other than Assessment Lessons: Use the Unknown Quantity cards as outlined in the overview of the Daily Routines (1<sup>st</sup> and 2<sup>nd</sup> Item 2 – both are subtraction)

**Assessment Items 1<sup>st</sup> grade #8 and 2<sup>nd</sup> grade #7 will be reviewed daily in Snack Fractions.** *Note: Snacks are the same throughout the grade bands; therefore there will be times when your primary students will experience fractional parts of a set. These do teach “fractioness,” and are a necessary part of the students’ learning.)*

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

#### TEACHERS:

Azulito's Corner is your class's opportunity to go online to MAS Space and interact with others across the United States who are working on Math MATTERS this summer. Please take the time daily to respond to the activity. Azulito will share during the TV Lesson. Usually the activity will be really quick, asking you to respond to and share one of the Daily Routine experiences. Today, however, it's a little more involved as we would like to know about your class. Please feel free to post a class photo if you wish!

#### Azulito's Corner Lesson 1

Tell us about your class. Write a class paragraph that tells us:

- where you go to school
- your teacher's name and your names
- something about the weather where you live now
- what crops are growing in the fields
- what you love about math
- what is still confusing about math
- Work as a class to create a word problem using vocabulary from the literature book.

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – omit for Lesson 1, but catch up on Lesson 2.
- **Straws** – omit for Lesson 1, but catch up on Lesson 2.
- **Pennies** – omit for Lesson 1, but catch up on Lesson 2.
- **Measurement**
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2
  - Lesson 3
- **Graphing**
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2 – Generate the Birthday Graph (*directions in the overview portion for Daily Routines*)
  - Lesson 3 – How many pennies do you think are in the jar? (*Have a plastic screw lid jar with 127 pennies in it – bar graph with choices: less than 50, 50 to 100, 101 to 150, 151 to 200. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by groups of tens and ones.*)

#### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Explain how you estimated the number of pennies in the jar.

**Money Matters** (*If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.*)

#### Vocabulary Building

- Choose an activity listed in the Daily Routines section.

**Unit 1 CGI Problems for *The Berenstain Bears' Trouble with Money***



Join	<p><b>Result Unknown (JRU)</b>                      Brother Bear had __ cents. Grizzly Gramps gave him __ cents. How much money does Brother Bear have now?                      10, 9    25, 10    40, 50</p>	<p><b>Change Unknown (JCU)</b>                      Sister Bear had __ cents from selling flowers. How many more cents will she need in order to meet her goal of raising __ cents?                      10, 50    30, 90    25, 75</p>	<p><b>Start Unknown (JSU)</b>                      Sister Bear had some money in her piggy bank. She put __ more cents into her bank and now she has __ cents. How much money was in her piggy bank to start?                      27, 30    47, 67    39, 87</p>
Separate	<p><b>Result Unknown (SRU)</b>                      Brother Bear had __ cents. He spent __ cents on playing video games. How much does he have now?                      50, 50    50, 40    50, 29</p>	<p><b>Change Unknown (SCU)</b>                      Sister Bear had __ cents. She spent some on a mouth organ and now she has __ cents. How much did she spend on the mouth organ?                      20, 12    25, 10    70, 41</p>	<p><b>Start Unknown (SSU)</b>                      Sister Bear had some money in her piggy bank. She spent __ cents on an airplane and now she has __ cents in her bank. How much did Sister have in her bank to start?                      15, 30    27, 50    65, 34</p>
Part-Part-Whole	<p><b>Whole Unknown (PPW-WU)</b>                      Mama and Papa Bear gave Brother Bear __ and Sister Bear __ for an allowance. How much money did they give the cubs in all?                      25, 25    35, 50    50, 75</p>		<p><b>Part Unknown (PPW-PU)</b>                      Brother Bear earned __ cents. He earned __ cents from selling flowers and the rest from giving tours. How much did he earn from giving tours?                      85, 35    62, 30    70, 28</p>
Compare	<p><b>Difference Unknown (CDU)</b>                      Brother Bear had __ cents. Sister Bear had __ cents. How many fewer cents did Brother have than Sister?                      37, 57    25, 75    54, 62</p>	<p><b>Quantity Unknown (CQU)</b>                      The Bear cubs sold __ cents worth of flowers. They sold __ cents more of fresh berries than flowers. How many cents worth of berries did they sell?                      12, 8    20, 25    35, 55</p>	<p><b>Referent Unknown (CRU)</b>                      Mama and Papa Bear gave the cubs an allowance. They gave Brother Bear __ cents which was __ cents more than Sister because he is older. How much did Sister get?                      50, 10    50, 25    75, 15</p>
Multiply and Divide	<p><b>Multiplication</b>                      Brother and Sister Bear decided to count their money. They put their coins in __ stacks of __ cents in each stack. How much money did they have?                      3, 5    5, 10    6, 6</p>	<p><b>Measurement Division (MD)</b>                      The cubs put all of their money together and then divided it into equal parts. If they had a total of __ cents and they made equal piles of __ cents each, how many equal piles would there be?                      50, 10    60, 20    90, 15</p>	<p><b>Partitive Division (PD)</b>                      The cubs put all of their money together. They had __ cents. They want to split it equally among __ people. How much money will each person get?                      30, 2    39, 3    75, 5</p>



Unit 1 CGI Problems for *The Berenstain Bears' Trouble with Money*



Unir	<p><b>Resultado desconocido (JRU)</b>                      Hermano Oso tenía ____ centavos. Abuelo Pardo le dio ____ centavos. ¿Cuánto dinero tiene Hermano Oso ahora?</p> <p>10, 9    25, 10    40, 50</p>	<p><b>Cambio desconocido (JCU)</b>                      Hermana Osa tenía ____ centavos por vender flores. ¿Cuántos más centavos necesita para alcanzar su meta de ganar ____ centavos?</p> <p>10, 50    30, 90    25, 75</p>	<p><b>Inicio desconocido (JSU)</b>                      Hermana Osa tenía algo de dinero en su alcancía. Ella le metió ____ más centavos a su alcancía y ahora tiene ____ centavos. ¿Cuánto dinero tenía su alcancía al principio?</p> <p>27, 30    47, 67    39, 87</p>
Separar	<p><b>Resultado desconocido (SRU)</b>                      Hermano Oso tenía ____ centavos. El gastó ____ centavos jugando juegos de video. ¿Cuánto tiene ahora?</p> <p>50, 50    50, 40    50, 29</p>	<p><b>Cambio desconocido (SCU)</b>                      Hermano Oso tenía ____ centavos. Gastó dinero en comprar un órgano de boca y ahora tiene ____ centavos. ¿Cuánto gastó en su órgano de boca?</p> <p>20, 12    25, 10    70, 41</p>	<p><b>Inicio desconocido (SSU)</b>                      Hermana Osa tenía algo de dinero en su alcancía. Ella gastó ____ centavos en un avión y ahora tiene ____ centavos en su alcancía. ¿Cuánto dinero tenía en su alcancía al principio?</p> <p>15, 30    27, 50    65, 34</p>
Parte-Parte-Entero	<p><b>Entero desconocido (PPW-WU)</b>                      Mamá y Papá Oso le dieron a Hermano Oso ____ y a Hermana Oso ____ para dinero de bolsillo. ¿Cuánto dinero les dieron en total a los cachorros?</p> <p>25, 25    35, 50    50, 75</p>		<p><b>Parte desconocida (PPW-PU)</b>                      Hermano Oso ganó ____ centavos. El ganó ____ centavos vendiendo flores y el resto en dando tours. ¿Cuánto ganó por dar tours?</p> <p>85, 35    62, 30    70, 28</p>
Comparar	<p><b>Diferencia desconocida (CDU)</b>                      Hermano Oso tenía ____ centavos. Hermana Oso tenía ____ centavos. ¿Cuántos centavos menos tenía Hermano que Hermana?</p> <p>37, 57    25, 75    54, 62</p>	<p><b>Cantidad desconocida (CQU)</b>                      Los osos cachorros vendieron ____ centavos de flores. Ellos vendieron ____ centavos más de bayas que de flores. ¿Cuántos centavos vendieron de bayas?</p> <p>12, 8    20, 25    35, 55</p>	<p><b>Referente desconocido (CRU)</b>                      Mamá y Papá Oso les dieron a los cachorros dinero de bolsillo. Le dieron a Hermano Oso ____ centavos que son ____ centavos más que a Hermana Oso porque él es mayor que ella. ¿Cuánto recibió Hermana?</p> <p>50, 10    50, 25    75, 15</p>

<b>Multiplicar y dividir</b>	<b>Multiplicación</b>	<b>División de medición (MD)</b>	<b>División partitiva(PD)</b>
	<p>Hermano y Hermana Oso decidieron contar su dinero. Pusieron sus monedas en _____ bultos de _____ centavos en cada bulto. ¿Cuánto dinero tenían?</p> <p>3, 5    5, 10    6, 6</p>	<p>Los cachorros juntaron todo su dinero y lo dividieron en partes iguales. Si ellos tenían un total de _____ centavos e hicieron bultos iguales de _____ centavos, ¿Cuántos bultos iguales había?</p> <p>50, 10    60, 20    90, 15</p>	<p>Los cachorros juntaron todo su dinero. Ellos tenían _____ centavos. Ellos quieren separarlos igualmente entre _____ personas. ¿Cuánto dinero recibirá cada persona?</p> <p>30, 2    39, 3    75, 5</p>

## Solve It! Problems Unit 1, Lesson 1

Pairs



### First Problem

- Josie had 15 cookies. She gave 8 to her friend, Juan. How many cookies did Josie have then?
  - What is the answer to the question? Show your solution strategy.

<b>Problem Solution (#1 Problem Solver)</b> Name:	<b>Solution Verification (#2 Problem Solver)</b> Name:

### Second Problem

- Josie's mother gave her 9 more cookies. Now how many cookies does Josie have?
  - What do you need from Problem 1 to solve the problem?
  - Be sure to verify the answer to problem 1 before solving this problem.
  - What is the answer to the question? Show your solution strategy.

<b>Problem Solution (#2 Problem Solver)</b> Name:	<b>Solution Verification (#1 Problem Solver)</b> Name:

## Solve It! Problems Unit 1, Lesson 1

Pairs



### Primer problema

- Josie tenía 15 galletas. Le dio 8 a su amigo Juan. ¿Cuántas galletas le quedaron a Josie?
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.

<b>Solución del problema</b> (Solucionador del problema #1) Nombre:	<b>Verificación de la solución</b> (Solucionador del problema #2) Nombre:

### Segundo problema

- La mamá de Josie le dio 9 galletas más. ¿Cuántas galletas tiene Josie ahora?
  - ¿Qué necesitas del problema 1 para resolver este problema?
  - Asegúrate de verificar la respuesta del problema 1 antes de resolver este problema.
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.

<b>Solución del problema</b> (Solucionador del problema #1) Nombre:	<b>Verificación de la solución</b> (Solucionador del problema #2) Nombre:



## Grade Band: 1-2, Units 1-2 Unit Writing Workshop



- **Genre: Personal Narrative**
- Writing Objective: Students will write a personal narrative about an item they need to save money in order to purchase.
- Planning and Organization of text:
  - Students will compose writing and illustrations on a blank piece of writing paper. They will plan their writing using the pre-writing template.
  - Sentence stems (on planning template) will provide additional writing support for student.

Each student's writing will look differently, depending on the ability level of the child. Writing may be:

- **Illustration with dictation**

Pre-writers will illustrate the item for which they are saving. Then the student will dictate to the teacher what they've drawn, and the teacher will write the words for the student. Students may even want to copy what the teacher has written.

- **Illustration with labels**

Students who are just beginning to learn how to write using conventional letters can label their pictures with the letters representing the sounds they hear in the word. Students should be encouraged to write the sounds they hear in each word. The teacher may need to help students isolate the sound they hear at the beginning of the word. Ask: What sound do you hear at the beginning/middle/end of the word \_\_\_\_? What letter makes that sound?

- **Illustration with conventional writing**

The student illustrates the item for which they are saving. Then, the student writes a sentence (or several sentences) to explain what he/she drew. The teacher can support these students by having them orally share what they want to write, help the student count the number of words in their sentence, and draw that number of lines on the student's paper to help them include each word in their writing. Encourage students with stronger writing abilities to flesh out their writing with additional sentences.

- Possible sequence of mini-lessons:
  1. **Brainstorm:** Explain to students that an important part of writing is brainstorming. When we brainstorm we jot down all of our thought/ideas on a certain topic. The notes that we take before we begin the actual writing helps us to organize our thoughts. Explain to the students that they will be brainstorming ideas for our writing project. Allow the students time to discuss their ideas about what they would like to buy. Select one item mentioned by the students. You will use this item to model how to fill in the planning template.

Example: (you would include quick sketches while students brainstorm to provide visual support)

<b>I would like to buy...</b>	<b>I will need to save \$_____.</b>
<b>To earn money I can...</b>	<b>I should have enough money saved by...</b>

2. Draft:

- **Model** for students how to use the pre-writing template to organize their ideas for writing. Select an idea from the brainstorming session and develop the idea into a piece of writing. Show how ideas can be developed through pictures and words.

Model for students how to include writing with their illustrations. What you model with writing should match your students' writing abilities (see above). If you have a range of abilities, model several different strategies for writing.

Then provide time for your students to write independently.

3. Revise: Based on where each student is at with their writing development, help students add more to their writing. Before expecting the students to attempt this independently be sure to revise the letter previously modeled for the students. How could you revise this piece to model the expectation for the students?

- Adding more detail to the illustrations
- Add labels to their illustration
- Adding more letters to represent the sounds they hear in the word(s)
- Dictating more details about the gift they drew (What made this gift special? How did it make you feel? etc.)
- Writing more sentences

4. Publish: They can read their writing to a partner. Alternatively, students can share their letter with a student from another grade band. The other class could share their writing with your students, as well.

<p><b>I would like to buy...</b></p>	<p><b>I will need to save \$_____.</b></p>
<p><b>To earn money I can...</b></p>	<p><b>I should have enough money saved by...</b></p>





**Literature Selection*****The Berenstain Bears' Trouble with Money***

by Stan &amp; Jan Berenstain

**Materials**

(BLM stands for Blackline Masters. You will find the BLMs at the end of the lesson for which they are needed.)

**Language Materials**

- BLM Word Cards
- Small Post-it notes
- Additional titles Berenstain Bear book (optional)

**Transition to Math Materials**

- Transparent Counter sets – 1 set per student in a bag
  - 20 yellow
  - 10 red
  - 4 orange
- BLM TM Hundreds Chart

**Literature Vocabulary**

allowance  
greedy  
generous  
spendthrift  
sensible

**Math Vocabulary**

coins  
penny  
nickel  
dime  
quarter  
dollar  
cents  
equals, =, is the same as  
add +  
subtract -

**ELPS (English Language Proficiency Standard)**

1B, 2B, 2D, 3D, 4C, 4D, 4I

**Unit 1, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson**

Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.

**Math Objectives:**

- Skip count by 5s, 10s and 25s.

**Reading Objectives:**

- Use text clues to make, revise, and confirm predictions.

**Language Objectives:**

- Read, understand, and use vocabulary words.
- Understand illustrations and text can be used to determine the meaning of unknown words.

**ESTABLISH CLASSROOM ROUTINES:**

Explain, model, and practice the Rug Partner Routine and ELL Guidelines as described below until firm.

Prior to the lesson, students should be assigned a rug partner. Be sure to partner up students by English proficiency level, so that there is a mixture of proficiencies. For example, pair beginning ELL with an intermediate or advanced ELL and intermediate ELL with advanced or proficient speaker.

**Rug Partners Routine**

1. Students sit next to their rug partner– “shoulder to shoulder” and facing forward each time they gather to the rug for reading time.
2. Teacher poses question to students.
3. Students quietly think about the question and gather their thoughts.
4. One or two students share with the class their thinking. This allows the teacher to assess understanding, and may spark the thinking of others.
5. Partners are instructed to turn to each other and sit knee-to-knee and eye-to-eye.
6. Teacher circulates as students talk, assessing student understanding and noting model conversations.
7. Teacher signals when it is time to stop talking and return to the “shoulder to shoulder” position. (For example, “1, 2, 3; eyes on me.”)
8. Teacher calls on several students to share with the group what they discussed with their partner.

**Unit 1, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson - continued**

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR II.A.2., II.A.3., II.A.4.  
ELA II.A.2., II.B.1., III.B.1., III.B.2.  
MATH IV.B.4.

**ELL Guidelines:**

Building off of students’ home languages helps your ELLs better understand new vocabulary in English. It also improves their oral language development in both languages, and shows that their home language plays an important role in their learning. Throughout the unit, continue to remind students to speak in their home language when needed. Students need to know:

1. If students can’t think of a word in English when they’re talking, they should say it in their home language (*ex: Spanish*).
2. Teachers can help translate to English.
3. Other students can help explain what the student is saying.

**BEFORE READING**

**Building Background, Vocabulary**

Instruct students to gather at the rug with their rug partner as practiced.

Display the word card labeled “allowance.” Read the word “allowance” slowly and with careful enunciation. Instruct students to read it aloud with you several times as you point to the word.

Ask if there are any volunteers that can explain to the group what the word allowance means. Be sure to refer to and use ELL Routines to guide discussion.

Explain receiving an allowance is one way for a child to acquire money. Have students brainstorm additional ways for children to get money. Record responses on chart paper or white board. (*Children can find money, earn it, receive it as a gift, etc.*)

Using the Rug Partner Routine, ask students to think about a time they had money of their own. From where did the money come? How did they use the money?

**Comprehensible Input, Vocabulary**

Display the word cards “sensible” and “spendthrift.” Explain the meaning of each word. Then describe a situation where someone was either spendthrift or sensible with money, but do not define it. (*Example. Last week, Juan earned \$5. He used \$1 to pay for lunch and put the rest in his money jar. Did Juan use his money in a spendthrift or sensible way?*) Students can use the rug routine to discuss which word best describes the scenario. If time permits, students can use the Rug Partner Routine to share a time when they or someone they knew was spendthrift or sensible with money.

Repeat with word cards “greedy” and “generous.”

**Unit 1, Lesson 1**

**Classroom Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>



**Guided Reading Groups & Independent Reading Connection**

If you conduct guided reading groups as part of your balanced literacy instruction, or provide time for students to read independently, you can reinforce these same reading strategies.

For a guided reading group, ask the following questions after students have had a chance to read the text on their own. For students who are reading independently, when you sit down next to them, have them pause their reading and ask them one of these questions about what they have already read.

- **Determining Word Meaning**  
“What do you think this word means?”
  - Reread the sentences before and after the word.
  - Look at the pictures – do they give any clues?
  - Try putting another word in that place. What word could we put there?
  
- **Inferring** (“reading between the lines”)
  - “What does it really mean when it says \_\_\_\_\_?” (Point out a specific part of the text.)
  - “How did the character change in this story?”
  - Ask a question to have students interpret something that happens in the text: “Why did \_\_\_\_\_?”

**Building Background, Literature**

Tell students you are going to read a book by Stan and Jan Berenstain titled “*Trouble with Money.*”

Ask students to think how money can be trouble or cause problems? Have a whole class discussion or use the Rug Partner Routine.

Explain that the authors wrote a series of books about two characters named Brother and Sister Bear and that they often began their books with a poem. These poems give the reader clues about what will happen in the story.

Display the poem written on chart paper and read it aloud to the class. Be sure to point to each word as you say it.

Discuss the meaning of the poem. Talk as a class or use the Rug Partner Routine.

**DURING READING**

**Comprehensible Input, Vocabulary, and Literature Practice and Application, Literature**

During a read aloud, teacher should periodically:

- Model reading strategy by thinking aloud.
- Pose questions that provide students an opportunity to practice reading strategies. Students simply think to themselves or share their response with the group or a partner.
- Provide opportunities to reflect on text.

Keep in mind that pausing the reading for too long or too frequently can interfere with student comprehension and enjoyment. Listed below are possible places to stop to model or practice targeted strategies.

Page 1

Use text clues and personal experience to make predictions.

- **Question:** Based on the title and the meaning of the poem, what do you think this book is going to be about?

Page 9

Make, Confirm and Revise Predictions.

- **Reflection:** Ask students to confirm or revise their prediction.

Page 14

Make, Confirm, and Revise Predictions.

- **Reflection:** Ask students to confirm or revise their predictions.

**Unit 1, Lesson 1**

**Classroom Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>



**Listening Center: Independent Reading**

Have students listen to a recorded version of *Trouble with Money* or any other Berenstain Bear Book.

**Beginning ELLs:** Benefit from listening to a text repeatedly to connect oral and written language.

**Intermediate & Advanced ELLs:** Benefit from listening to a text repeatedly to develop fluency. Show students how they can read along softly with parts of the text as they listen.

If you have a recording device, have students choose their favorite page, and record themselves reading it aloud. Then, they listen to that particular page several times, reading along softly. When they feel they've had enough time to practice, they record themselves reading that page again. Have students compare their two recordings to see how their fluency has improved.

**Language Center Connection**  
Have extra sets of the vocabulary word cards and magnetic letters in the center. Students can use magnetic letters to build each vocabulary word.

- **Question:** Reread: "They decided right then and there to mend their careless, spend thrift ways." Ask students to predict if the bears will learn how to use money in a more sensible way. If so, how might they do it?

Page 15

Make, Confirm, and Revise Predictions.

- **Reflection:** Before reading page 15, tell students to look closely at the illustrations. Call their attention to the money in the boxes at the bottom of the page. Ask students to confirm or revise their prediction.

Page 20

Determine meaning of unknown words.

- **Think Aloud:** Papa said the cubs looked like "misers." In the picture, the cubs look very preoccupied by their money. I am not sure what miser means, but I know to be greedy is to want more, more, more. I also know selfish people do not share with others. Perhaps, miser means a person that thinks a lot about money and doesn't like to share it."

**AFTER READING**

**Practice and Application, Vocabulary**

Informally assess student understanding of the text using discussion questions. Students can share their response with the group or with their partner. Possible questions to discuss:

- At the beginning of the book, were Brother and Sister Bear using their money in a spendthrift or sensible way? How about at the end of the book?
- Why was Papa Bear upset once the bears started to save their money?
- At first, Papa thought Brother and Sister Bear were being greedy. Later he learned that they were in fact very generous. Have you ever misjudged a person? How did you feel when you discovered you were wrong about that person? Do think Papa Bear felt the same way? Encourage students to explain their thinking.

**Unit 1, Lesson 1**

**Classroom Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>





**Practice and Application Vocabulary**

Gather the word cards presented in the before reading section.

1. Choose one card. Show it to the students and read it aloud. Then have the students read the word with you.
2. Call attention to spelling patterns or related words.
3. Add the word card to the interactive word wall.
4. Word Hunt Activity: Provide students with small sticky notes. Encourage them to work with a partner to find the vocabulary words on the word wall in their book. Provide page numbers/descriptions to those who need extra assistance.

**Word Wall**

The Word Wall should be easily accessible by students. Students should be encouraged to refer to, use, and manipulate the word cards throughout the week. Word Walls can be a pocket chart, magnetic board, or even a piece of chart paper.



allowance

greedy

generous

spendthrift



sensible

asignación

codicioso

generoso



gastador

sensible






(Objectives and materials were listed in the complete Classroom Lesson list at the beginning of the Classroom lesson, but are listed again to help you organize more quickly.)

**Math Objectives:**

- Skip count by 5s, 10s and 25s

**Materials for TM Lesson**

- Transparent Counter sets – 1 set per student in a bag
  - 20 yellow
  - 10 red
  - 4 orange
- **BLM TM** Hundreds Chart

 **Technology:** free online multiple choice for naming coins. Could be used as a class activity or set up as a center.  
<http://www.ixl.com/math/kindergarten/coin-names-penny-through-quarter>

**ELPS** (*English Language Proficiency Standard*)  
1E, 1F, 3A, 3D, 3F, 4I

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.B.2., I.C.1  
MATH I.A.2., I.C.1., IV.B.2, IV.B.4.

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



#### TRANSITION to Math

#### Building Background, Math

Brother Bear and Sister Bear learned a lot about money, didn't they? We are, too, during this unit. Before we learn about money, though, we're going to use a 100s board and transparent counters to count by numbers that will be important to our counting money.

How many of you can skip count by FIVES? (*Ask for a show of hands, and then have a group of volunteers skip count by fives, helping them when they need it.*)

Instead of counting by ONES, 1, 2, 3, 4, 5, and so on, they SKIPPED a lot of numbers and counted in groups of five. We can all do that, too.

Look at your Hundreds Chart. We're going to use the YELLOW transparent counters to cover all of the numbers we would say if we skipped counted by FIVES.

How will you know what numbers to cover? (*Listen to all responses – some might already know how to count by fives, others may need to count over five each time. If many students need the counting, you will need to model and have them count with you.*)

(*Continue after you have covered all of the fives with yellow transparent counters.*) Let's read all the numbers we have covered with our yellow transparent counters (*do so*).

Who can count by TENS? (*Ask for a show of hands, and then have a group of volunteers skip count by 10s, helping them when they need it.*)

Let's use our hundreds chart again. Remove all of your yellow transparent counters. This time we will use our RED transparent counters and we will count by TENS.

How will you know what numbers to cover? (*Listen to all responses – some might already know how to count by 10s, others may need to count over ten each time. If many students need the counting, you will need to model and have them count with you.*)

(*Continue after you have covered all of the TENS with RED transparent counters.*) Let's read all the numbers we have covered with our RED transparent counters (*do so*).

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### TRANSITION to Math

#### Building Background, Math

I have one more number I want us to use to skip count. Does anyone in here know how to skip count by TWENTY-FIVE? (*probably not*)

That one is a lot harder, isn't it? Let's use the orange transparent markers to mark the numbers we would say if we count by TWENTY-FIVE.

How will you know what numbers to cover? (*Listen to all responses – some might know how to count by 25s, most probably will need to count over 25 each time. Be sure that you model this and that you count with them.*)

Let's count the numbers that we say when we skip count by 25. Which ones are they on the hundreds chart? (*the ones covered with the orange transparent counters*)

These skip counting numbers are very important when you are working with money. You will learn why in the TV Lesson.

**Objectives:** Read the math and language objectives and have students explain how they learned them.

#### Distribute TV Lesson Materials

#### TV Materials:

- Transparent Counter sets – 1 set per student in a bag
  - 20 yellow
  - 10 red
  - 4 orange
- **BLM TM** Hundreds Chart
- Student Money Sets in Ziploc (1 set per student)
  - 100 pennies
  - 20 nickels
  - 10 dimes
  - 4 quarters
  - 10 \$1 dollar bills

Need the following for both TV Lesson (*or use SmartBoard*) and the Classroom

- Sentence Stem on a sentence strip or board – **This coin is a \_\_\_\_.**
- Sentence Stem on a sentence strip or board – **A \_\_\_\_ is worth \_\_\_\_ cents.**
- Big Money coins

coins

penny

nickel

dime



monedas

centavo

moneda de 5 centavos

moneda de 10 centavos



quarter

dollar

coins

subtract -





moneda de 25 centavos

dólar

monedas

restar -



(Create on cardstock – One set for the room, and one set for each student to take home at end of Lesson 1 for practice)

**equals =**  
**is the same as**

**add +**

**cents**



(Create on cardstock – One set for the room, and one set for each student to take home at end of Lesson 1 for practice)

es igual a =

sumar +

centavos



**BLM-TM Unit 1, Lesson 1****Hundreds Chart** 

(One sheet per student – they will also need for the TV Lesson)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100





**Literature Vocabulary**

allowance  
greedy  
generous  
spendthrift  
sensible

**Math Vocabulary**

coins  
penny  
nickel  
dime  
quarter  
dollar  
cents  
equals, = is the same as  
add +  
subtract -

**TV Materials:**

- Transparent Counter sets – 1 set per student in a bag
  - 20 yellow
  - 10 red
  - 4 orange
- **BLM TM** Hundreds Chart
- Student Money Sets in Ziploc (1 set per student)
  - 100 pennies
  - 20 nickels
  - 10 dimes
  - 4 quarters
  - 10 \$1dollar bills

Need the following for both TV Lesson (*or use SmartBoard*) and the Classroom

- Sentence Stem on a sentence strip or board – **This coin is a \_\_\_\_\_.**
- Sentence Stem on a sentence strip or board – **A \_\_\_\_\_ is worth \_\_\_\_\_ cents.**
- Big Money coins

**ELPS** (*English Language Proficiency Standard*)

1E, 2I, 3D, 3H, 4F

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.1., I.C.2., I.C.3  
ELA III.A.2., III.B.2., IV.A.3.

**Unit 1, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives:**

- Identify US coins by name, including pennies, nickels, dimes and quarters.
- Skip count by five, ten, and 25 to 100.

**Language Objectives:**

- Complete sentence stems using money amounts and words.
- Use the math vocabulary during the activity.
- Discuss solution strategies.

**Building Background, Math**

**TEACHER:** Hello boys and girls, My name is \_\_\_\_\_, and I am going to be your TV Teacher this summer. We're going to be learning and experiencing lots of fun math this summer!

And we'll be practicing more language skills. You were learning many words that deal with money today! We'll do lots of money activities together!

And we have a special friend who is going to be helping me this year. If you were with us last year, you know Azulito. Azulito, where are you?

**AZULITO:** Oh, I am here! Hello boys and girls. It is good to be back with you again, back with all my friends from last year, and here to meet all the boys and girls who are with us for the first time this year. You are my new friends! What are we going to do today in math?

**TEACHER:** We have lots of fun things to do today, Azulito! Let's start with the math words that we will need for our lessons.

*(Show the math words.*

- *Begin with the word "cents," so that you relate each coin back to cents.*
- *As you work through the coins, use the sentence stems to both identify the coins and to recognize the coins value.*
- *Perhaps Azulito can use the other words in sentences to help the students understand in context.)*

We're going to be using these words a lot today, and more! We're going to be counting money. In your story, Brother Bear and Sister Bear learned about how to make, save and spend money.

**AZULITO:** They sure did – they were very smart!

**Unit 1, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson** - continued

Before we begin, let's empty our money sets on our desks (*do so and slight pause*). Now, sort all of your coins by kind – pennies, nickels, dimes, quarters. (*give plenty of time*) We'll have our coins sorted for us when we are ready to use them.

**Comprehensible Input, Math**

**TEACHER:** Let's start by counting by fives just like you did in your classroom lesson (*do so first, just verbally, but show the numbers on the SMART Board as you say them*).

Now, let's go back and use our Hundreds Chart with the yellow transparent markers. Are you ready? (*Count, and place the markers on the hundreds chart as you count to 100.*)

We have counted by fives from five to 100. When you look at the Hundreds Chart, do you see that the yellow marker is at the end of FIVE boxes?

**AZULITO:** Oh yes, I do see that – look (*SMART Board pointing*) here are 1, 2, 3, 4, FIVE boxes, and we have a yellow marker on the FIVE. Then we have another 1, 2, 3, 4, FIVE boxes and we have a yellow marker on the 10. So does that mean that this marker is representing FIVE boxes?

**TEACHER:** Very good, Azulito! Yes it does. Now, boys and girls, we have a United States coin that represents FIVE cents. Show your teacher that coin, then say the name of the coin. (*pause*)

**AZULITO:** (*pause*) I know! This is the coin (*show nickel on SMART Board*) and we call this a nickel!

**TEACHER:** You are correct, Azulito. Boys and girls, did you find the nickel, too? We can use our nickels on the Hundreds Chart. First, take all of the nickels from your sorting. (*do so*) Let's remove our yellow markers from our Hundreds Charts. (*do so*) We're going to put our nickels on the chart to represent FIVE cents. Where do you think our first nickel will be placed? (*pause*)

**AZULITO:** (*pause*) I know – a nickel represents FIVE cents, so our first nickel will go on the FIVE!

**TEACHER:** What do you think, boys and girls? Is Azulito correct? (*pause*) Yes, you are! Now, where will the second nickel go boys and girls? (*quick pause*)

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**AZULITO:** *(pause)* That's easy! Put that on the TEN. This nickel represents another FIVE cents, so I had to count over another FIVE. It goes on the TEN space. See – *(point to each nickel)* FIVE cents and TEN cents – 5, 10!

**TEACHER:** You are very good, Azulito. Now, count out five more nickels. Boys and girls, tell Azulito where to put the next coins *(pause)*.

**AZULITO:** *(Pause)* Oh, I could hear you! Most of the boys and girls said, 15, 20, 25 30, and I think that is right – *(place the nickels, then start at the first nickel)* 5, 10 15, 20, 25, 30.

**TEACHER:** Well done. Now where will the rest of the nickels be placed? Sing out the numbers, boys and girls. *(pause)*

**AZULITO:** OK, *(nickels onto the SMART Board hundreds chart as Azulito says the numbers)* 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100! We did it! *(Now count again from 5.)*

**TEACHER:** Terrific! You have just counted nickels! Let's count them again, and this time, let's say "CENTS" after each number, because when we are counting nickels, we are counting FIVE CENTS at a time *(do so through 100 CENTS)*.

Hmm, what does 100 CENTS equal? Tell your teacher what you think 100 CENTS equals. *(pause)*

**AZULITO:** *(pause)* I know – it is one dollar. One dollar *(show the dollar bill)* equals 100 CENTS. We have counted nickels to one dollar! We are very smart!

**TEACHER:** Very true, Azulito – you are all very smart! We could have called this board our DOLLAR BOARD, couldn't we! I think I will keep a dollar bill tucked under the board beneath the 100 to remind me that 100 CENTS is equal to ONE DOLLAR *(tuck the bill under the lower right hand corner, leaving most of the bill showing)*. You can do the same, boys and girls.

Let's clear the nickels from our boards, and see what we can do with dimes. First, boys and girls, show your teacher a dime and tell how much a dime is worth *(pause)* *(show on SMART BOARD)*. This is a dime, and it is worth TEN cents! What do you think we will count by if we are counting dimes?

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**AZULITO:** That's easy. We are counting by TENS because a dime represents 10 TENS.

**TEACHER:** Before we place our dimes on the Hundreds Chart, let's skip count out loud by TENS (*do so, putting the number on the SMART Board each time you say it*).

Now, boys and girls, place your dimes on the Hundreds Chart to show that you are counting 10 CENTS every time you count (*pause*).

**AZULITO:** (*pause*) I can do that, too! (*SMART Board – place the dime on the hundreds chart every time Azulito says the next number.*) And now I have 100 CENTS!

**TEACHER:** And what does 100 CENTS equal?

**AZULITO:** One DOLLAR!

**TEACHER:** We are not going to count the pennies today, so what coin do we have left to count by? (*pause*) Yes, a quarter. And how many cents does a quarter represent? (*pause*) 25 cents.

**AZULITO:** This one is a little harder. That's a lot of cents to count at one time! But we can do it, can't we boys and girls!

**TEACHER:** Because it is harder, let's use our ORANGE transparent markers first so we can see our numbers. Ready – 25 (*pause*) 50 (*pause*) 75 (*pause*) 100. Now, let's count out loud by 25. (*A little faster this time*) 25, 50, 75, 100.

Clear your hundreds boards, and let's use our quarters.

**AZULITO:** I don't have very many quarters. I only have (*count them*) 1, 2, 3, 4 quarters!

**TEACHER:** That is true, Azulito. We will learn more about quarters during this week. Even the name "QUARTER" has a special meaning which we are going to investigate! But for now, let's clear away our transparent orange markers and place our quarters on the hundreds chart. Everyone, place do that. (*pause*)

**AZULITO:** (*pause*) Here is what I did – 25 cents, 50 cents, 75 cents, 100 cents!

**TEACHER:** Remember, we could also call this our DOLLAR board.

**Azulito's Corner**

**Lesson 1**

Tell us about your class. Write a class paragraph that tells us:

- where you go to school
- your teacher's name and your names
- something about the weather where you live now
- what crops are growing in the fields
- what you love about math
- what is still confusing about math
- Work as a class to create a word problem using vocabulary from the literature book.

**Unit 1, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>



**TV Lesson** - continued

**AZULITO:** Yes, because 100 CENTS equals one DOLLAR! So 4 quarts equals 1 DOLLAR? This was fun! I really like counting money!

**AZULITO:** And speaking of fun, I have something to share that is fun, too! I want to tell you about Azulito's Corner! *(Talk about MAS Space. If you have time, get online and show your Lesson 1 entry for MAS Space. If not, tell the students just enough of what they will find out about you to make them want to go online and know more. Get them excited about telling about their class.)*

**Teacher:** Thank you, Azulito! I'm sure everyone will go online so we'll all know one another. We can meet classes from all over the United States. Let's see how many different States we can meet!

**Objectives:** And now before we go, let's review what we have learned today! *(do so)*

**Literature Vocabulary**

allowance  
greedy  
generous  
spendthrift  
sensible

**Math Vocabulary**

coins  
penny  
nickel  
dime  
quarter  
dollar  
cents  
equals, = is the same as  
add +  
subtract -

**Materials**

- **BLM TM** Hundreds Chart
- Student Money Sets in Ziploc (1 set per student)
  - 100 pennies
  - 20 nickels
  - 10 dimes
  - 4 quarters
  - 10 \$1dollar bills
- Sentence Stem on a sentence strip or board – **This coin is a \_\_\_\_\_.**
- Sentence Stem on a sentence strip or board – **A \_\_\_\_\_ is worth \_\_\_\_\_ cents.**
- Big Money coins – demo set
- **BLM** Piggy Bank Count – 1 per student
- **BLM** Piggy Bank Record Sheet – 1 per student

**ELPS** (*English Language Proficiency Standard*)  
1C, 2A, 3C, 3D, 5B, 5C

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR  
ELA I.A.2., I.A.3., IV.A.2  
MATH VIII.C.1., X.B.2., X.B.3.

**Unit 1, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up**



**Math Objectives:**

- Identify US coins by name, including pennies, nickels, dimes and quarters.
- Skip count by five, ten, and 25 to 100.
- Determine the value of a set of coins less than or equal to \$1.00.

**Language Objectives:**

- Complete sentence stems.
- Listen and speak with a partner during our math activity.
- Use the math vocabulary during the activity.
- Share-write math journal response.

**Practice and Application, Math**

We are going to use our skip counting skills to count a collection of coins. (*Show the Big Money quarter.*)

*(If your students need more skip counting practice, begin with the following, using the coins for which they need the practice.)*

If we were going to count by the value of this coin (*show a quarter*), where would we start counting? (25)

Why? (*A quarter is worth 25 cents; OR a quarter is a group of 25; OR any reasonable answer indicating students know a quarter is 25 cents.*)

Let’s skip count by 25. You may use your hundreds chart if you wish. Hold a quarter in your hand: 25, 50, 75, 100.

Since we are talking about money, we are counting cents. Let’s count again and add the cents label. 25 cents, 50 cents, 75 cents, 100 cents.

We can represent 100 cents with four quarters, but we can also use a bill. What bill? How much is 100 cents in bills? (*one dollar bill, or one dollar*)

**Repeat the process with the dime and nickel as your students’ skip counting needs dictate.**

Now, let’s look at our two handouts for this lesson. First, our Piggy Bank Count. What do you see on the page? (*a piggy bank and a workspace*)

Place all of your coins from your Money Set into the piggy bank. (*Wait till everyone has done so – there are 100 pennies, so students may have to stack them up to fit in all of the coins.*)

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up - continued



#### Technology

Here is a counting coins activity. <http://fen.com/studentactivities/Piggybank/piggybank.html> This could be played in small groups at a center, or as a whole class using a projector. Even easy moves very quickly, and the second game continues on the same board that the first ended. Play a few times before introducing to students.

#### Technology

Either of the two suggested sites could be a self-checking center activity.

Now, look at the second sheet, our Piggy Bank Count Record Sheet. What do you see on this page? (*pictures of the four coins and sentence stems beside them*)

#### *(Model to walk through the page.)*

- Who can read and complete the first sentence stem? (*volunteer*)
- Can you find the word card for the pictured coin?
- Let's all fill in the blank and read the completed sentence. (*do so*)
- The next four sentence stems are problems for us to solve. Let's read the first one together (*do so*). That little symbol that looks like a "c" with a line through it is a mathematical symbol for the word CENTS. We can use that short cut so we don't have to write "cents" all the time. We still read it, cents, though.
- Pull that many (*10*) coins (*pennies*) from your piggy bank to the work space at the bottom of the Piggy Bank Count page (*give time*).
- How many cents do you have? (*for penny, 10 cents*)
- The next part of that sentence stem has another blank. This tells us that the money we just counted (*10 cents*) has a coin to represent it. What coin can be used to show you have 10 cents? (*a dime*)
- What is the word card for the coin, dime? (*volunteer*)
- Fill in the blank (*pause to write*). Now let's read the sentence together.

*(Continue to finish pennies.)*

*If your students need more guided practice, continue this same process. If you have students who can read, or you have buddies that can work together to help one another read, you may assign the page at any time for students to work independently of you to finish the page. Be sure to read through all of the completed sentence stems at the end when everyone has finished.*

#### **QUESTIONS for independent work as you circulate the room**

##### **Probe for Understanding**

- What is the name of this coin?
- What is the value of this coin?
- What does the sentence stem ask you to find?

##### **Extension Questions**

- What would be the answer if we added one more coin?

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Follow-up - continued

#### Money Motion Game

**Setting:** large area where students can move freely.

**Set up:** Four large coin value cards, one each with 1¢, 5¢, 10¢, 25¢. Place one card in each of four corners.

**Play:** Tell students that when you say the name of a coin, they are to skip to the value of that coin. Play slowly at first. Increase the speed as students increase their accurate choices.

#### Student Movement

Students will need time to get up and stretch a bit before going on to Snack Fractions. Do Money Motion Game for a bit to get the students moving. Make the four coin value cards on 8.5 x 11 paper and place in four distinct places in your play area.

Control the activity by reminding students they have to SKIP to the correct value – not run, not fast walk – just skip. Demo and practice as necessary.

#### Math Journal Writing

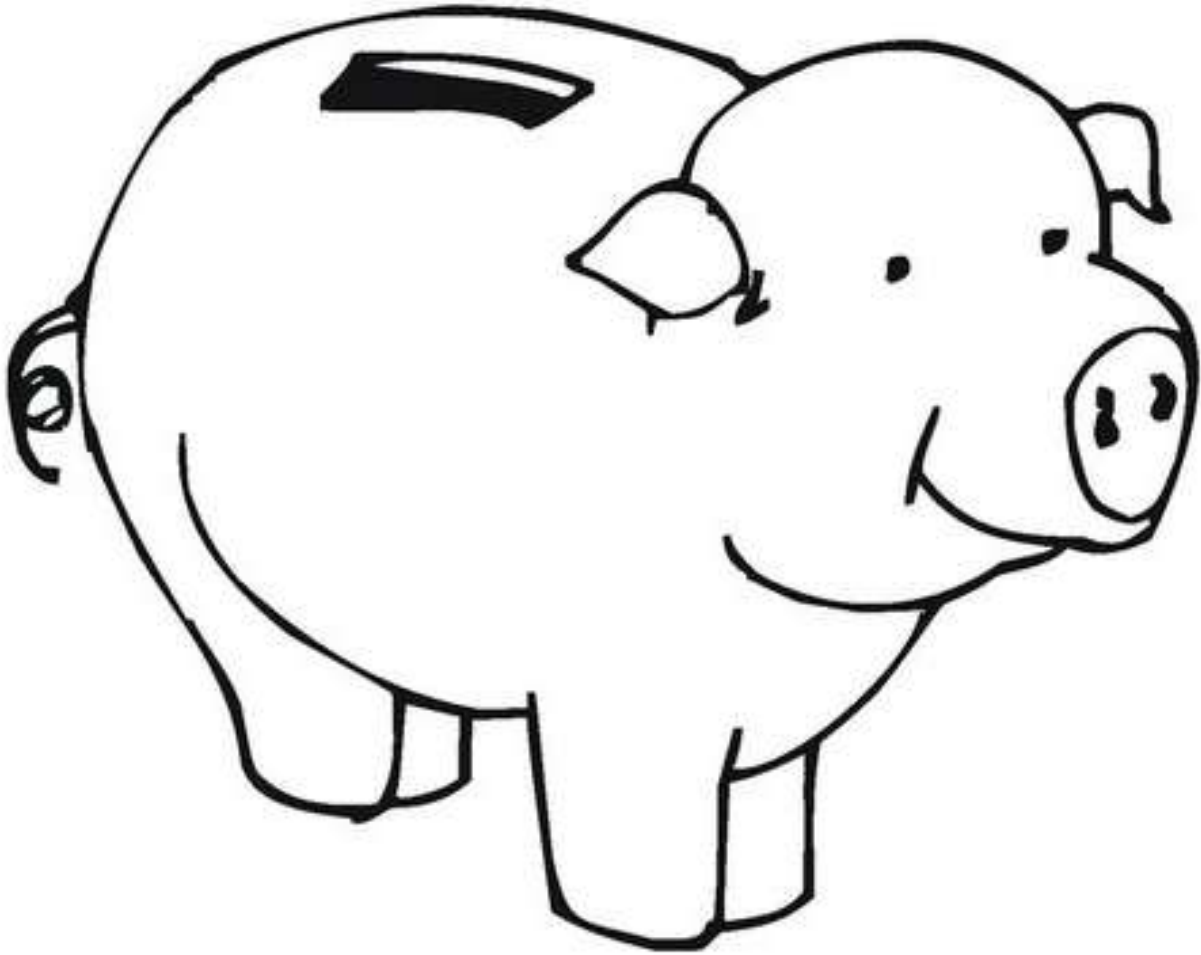
Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



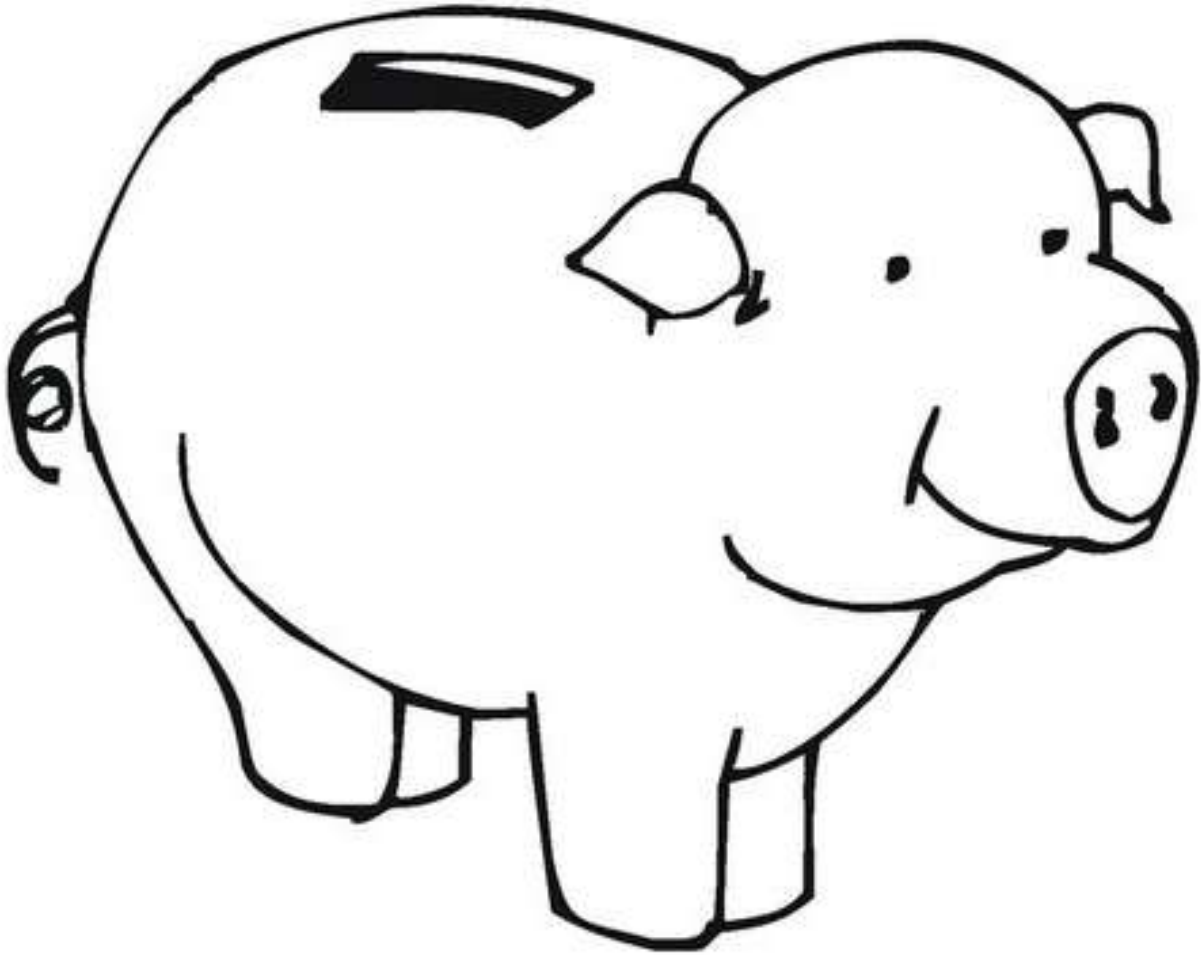
**Explain how you would figure out the value of six nickels.**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.





**This is my workspace to count my coins.**



**Esto es el espacio donde puedo contar mis monedas.**

**BLM Follow-up Lesson Unit 1, Lesson 1 Piggy Bank Count Record Sheet**  
(One page per student)



This coin is a \_\_\_\_\_.

10 pennies equals \_\_\_\_\_ ¢, or a \_\_\_\_\_.

25 pennies equals \_\_\_\_\_ ¢ or a \_\_\_\_\_.

5 pennies equals \_\_\_\_\_ ¢, or a \_\_\_\_\_.

20 pennies equals \_\_\_\_\_ ¢.



This coin is a \_\_\_\_\_.

5 nickels equals \_\_\_\_\_ ¢, or a \_\_\_\_\_.

20 nickels equals \_\_\_\_\_ ¢ or a \_\_\_\_\_.

15 nickels equals \_\_\_\_\_ ¢.

8 nickels equals \_\_\_\_\_ ¢.



This coin is a \_\_\_\_\_.

10 dimes equals \_\_\_\_\_ ¢, or a \_\_\_\_\_.

9 dimes equals \_\_\_\_\_ ¢.

5 dimes equals \_\_\_\_\_ ¢.

4 dimes equals \_\_\_\_\_ ¢.



This coin is a \_\_\_\_\_.

4 quarters equals \_\_\_\_\_ ¢, or a \_\_\_\_\_.

3 quarters equals \_\_\_\_\_ ¢.

2 quarters equals \_\_\_\_\_ ¢.

BLM Follow-up Lesson Unit 1, Lesson 1 Piggy Bank Count Record Sheet



Esta moneda es un \_\_\_\_\_.

10 centavos es igual a \_\_\_\_\_ ¢, o una \_\_\_\_\_.

25 centavos es igual a \_\_\_\_\_ ¢ o una \_\_\_\_\_.

5 centavos es igual a \_\_\_\_\_ ¢, o una \_\_\_\_\_.

20 centavos es igual a \_\_\_\_\_ ¢.



Esta moneda es una \_\_\_\_\_.

5 monedas de 5 centavos es igual a \_\_\_\_\_ ¢, o una \_\_\_\_\_.

20 monedas de 5 centavos es igual a \_\_\_\_\_ ¢ o una \_\_\_\_\_.

15 monedas de 5 centavos es igual a \_\_\_\_\_ ¢.

8 monedas de 5 centavos es igual a \_\_\_\_\_ ¢.



Esta moneda es una \_\_\_\_\_.

10 monedas de 10 centavos es igual a \_\_\_\_\_ ¢, o una \_\_\_\_\_.

9 monedas de 10 centavos es igual a \_\_\_\_\_ ¢.

5 monedas de 10 centavos es igual a \_\_\_\_\_ ¢.

4 monedas de 10 centavos es igual a \_\_\_\_\_ ¢.



Esta moneda es una \_\_\_\_\_.

4 monedas de 25 centavos es igual a \_\_\_\_\_ ¢, o una \_\_\_\_\_.

3 monedas de 25 centavos es igual a \_\_\_\_\_ ¢.

2 monedas de 25 centavos es igual a \_\_\_\_\_ ¢.

## Math Objectives

- Separate a whole into two equal parts and use appropriate language to describe the parts such as one out of two equal parts.
- Partition objects into two equal parts and name the parts halves.
- Write the fraction in numeric form.

## Language Objectives

- Explain why each portion is half.
- Share-write what is a half.

## Vocabulary

half

fair shares

equal pieces

## Materials:

### TEACHER:

*(BLM denotes Blackline Masters found in curriculum)*

- BLM Apple Snack Fractions
- 1 large apple
- sharp knife
- paper towel
- paper plate

### STUDENT ACTIVITY (per partner pair):

- BLM Apple Snack Fractions
- BLM Apple to Share
- 1 apple previously cut in half and put into one Ziploc. You might want dip each half in orange juice to keep from turning brown.
- 2 paper dessert plates
- 2 paper towels
- 1 scissors per student
- 1 ruler and marker per student
- 1 glue stick per student
- Chart paper with question: How do you know that each portion is half? Put a copy of the record sheet apple cut apart at the top of the chart with the question.

## Unit 1, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



**Children should wash their hands before this activity if using food items.**

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

### Objective:

Today you are going to share a snack with one other friend. The snack will be cut into two pieces. You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. You will be able to write the fraction in numbers.

### TODAY: Teacher demonstration of halves

Tell the students: “I have an apple that I want to share with my friend. How can I do that? (*wait for answers*) I want the portions to be fair shares, that is, both of us have the same amount of the apple. We call these “fractional parts of a whole.”

“Here is how I will cut the apple into two pieces so that my friend and I will have fair shares. (*Cut the apple.*) Does anyone know what we call this fractional part of the apple (*holding up a half*)? We call this a half. It is half because it is one out of two equal pieces.

Ask the students:

- What fractional part of my snack will my friend receive? (*one-half*)
- How do you know? (*The piece is one out of two equal pieces.*)
- What fractional part am I receiving? (*half*)
- How do you know? (*You have one out of two equal pieces.*)

Divide the students into partners, giving each pair one bag with the pre-cut apple halves in it, two paper plates and two paper towels. Tell them to share the apple into fair shares, and be able to tell you when you come around if they each have half, and how they know. Circulate and ask.

Give each child the BLM Apple Snack Fractions and the apple. Have the student draw a line, cut the paper apple in half, then glue to the BLM Apple Snack Fractions sheet. Tell students that you want to show them how to write a fraction using numbers, then write  $\frac{1}{2}$ , using a HORIZONTAL fraction bar, not diagonal one. The bottom number, the denominator, tells us how many pieces the whole is cut into. The top number, the numerator, tells us the fractional part we have.

### Snack Fraction Writing: BLM Apple Snack Fractions

Students identify the fractional part and complete the “because” statement on the record sheet.

**Objectives: Review what you learned and how you learned it.**



My name is \_\_\_\_\_

This is my plate and my fair share of the snack.

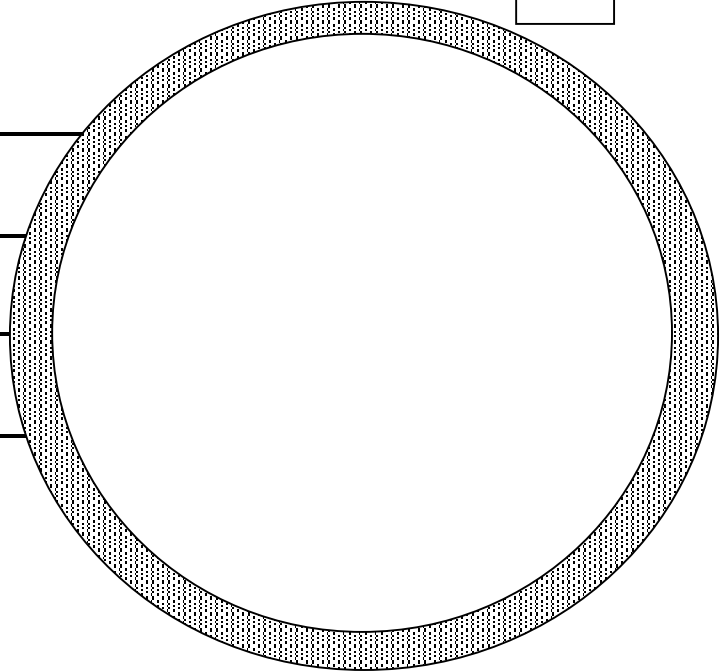

My share is called a \_\_\_\_\_ because

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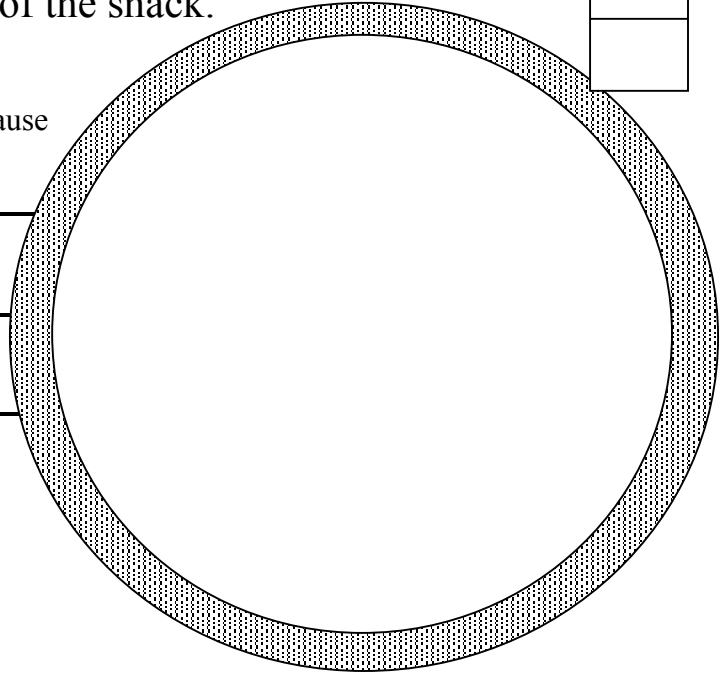
This is my friend's plate and fair share of the snack.


My friend's share is called a \_\_\_\_\_ because

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Mi nombre es \_\_\_\_\_

Esto es mi plato con mi porción igual.

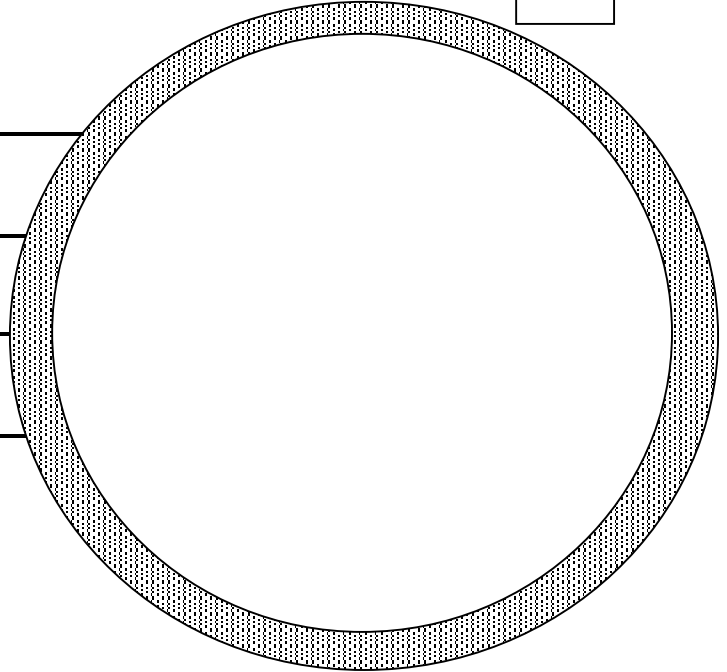

Mi porción se llama \_\_\_\_\_ porque

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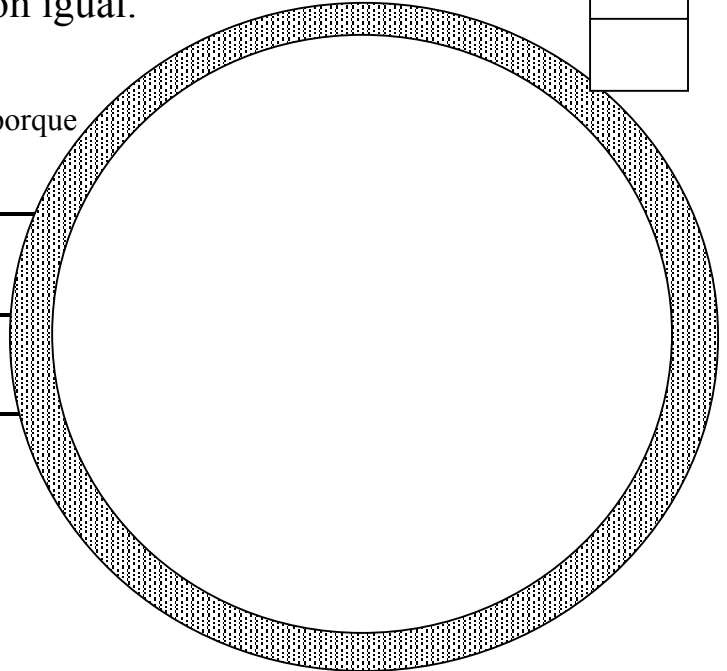
Este es el plato de mi amigo y su porción igual.


La porción de mi amigo/a se llama \_\_\_\_\_ porque

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## BLM Unit 1, Snack Fraction Lesson 1

## Apple to Share

There are apples for four students on this page. Students are to use a straight edge to draw the line to cut the apple in half, then use scissors to cut the apple in half, then glue the half to each plate pictured on the BLM Apple Snack Fractions. If you have a die-cut of a symmetrical apple, you certainly could use that. It is suggested that the apples be pre-cut in the apple shape before giving to the students. If you have not pre-cut the apple shape, students will need to cut out the apple shape before they draw and cut for halves.



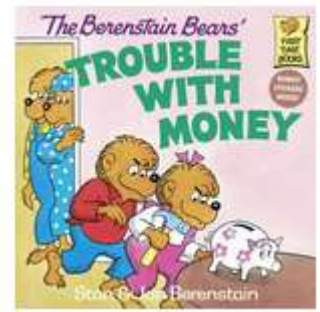


## Family Fun, Unit 1 Lesson 1

We read our first book today,  
*The Berenstain Bears' Trouble with Money.*

This book is about \_\_\_\_\_

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In math we skipped counted by 5s, 10s, and 25s. Can you guess why we skip counted by those amounts?

Maybe we could practice skip counting at home tonight.

Thank you for helping me learn math!

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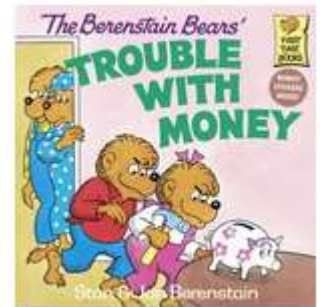
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## Family Fun, Unit 1 Lesson 1

Hoy leímos nuestro primer libro,  
*The Berenstain Bears' Trouble with Money.*

Este libro es sobre \_\_\_\_\_

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En matemáticas contamos saltando, de 5 en 5, de 10 en 10 y de 25 en 25. ¿Puedes adivinar por qué usamos esos números?

Quizá podríamos practicar contar saltando esta noche en casa.

¡Gracias por ayudarme a aprender matemáticas!

---



**Materials**

(BLM denotes Blackline Masters found in curriculum)

**Math Objectives**

Represent a number using multiple representations.  
Compare and order two or more concrete objects according to length.  
Solve math word problems.  
Determine a missing number in an equation regardless of where the number is in the equation.

**Language Objectives**

Listen to, read and speak measurement vocabulary: length, width, unit of measure.  
Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.  
Reason, model and solve oral word problems.

**Materials (Essential) :**

- Unknown Quantity Cards – add and subtract
- Crayons – 1 set per student
- Chart paper and markers – classroom display

**TEKS****Lesson 1**

- 1<sup>st</sup> – 1.6GH
- 2<sup>nd</sup> – 2.3A

**Lesson 2**

- 1<sup>st</sup> – 1.3BF, 1.5DF, 1.6GH
- 2<sup>nd</sup> – 2.3D, 2.3E, 2.2A

**Lesson 3**

- 1<sup>st</sup> – 1.1ABC, 1.2A
- 2<sup>nd</sup> – 2.3D, 2.3E, 2.2A

**ELPS (English Language Proficiency Standard)**

1E, 2E, 3B, 3D, 3G

**Unit 1, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Daily Routine****ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - **Lesson 1 – omit for Pre-assessment**
  - Lesson 2 – 12
  - Lesson 3 – 24
- **CGI Problem** (*1<sup>st</sup> items 1, 2, 5, 6; 2<sup>nd</sup> items 5, 6*)
  - **Lesson 1 – omit for Pre-assessment**
  - Lesson 2 – Join, Result Unknown (*1<sup>st</sup> item 1, 2<sup>nd</sup> item 3*)
  - Lesson 3 – Compare, Difference Unknown (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
- **What’s Missing** (*1<sup>st</sup> and 2<sup>nd</sup> item 2*)
  - **Lesson 1 – omit for Pre-assessment**
  - All lessons other than Assessment Lessons: Use the Unknown Quantity cards as outlined in the overview of the Daily Routines (*1<sup>st</sup> and 2<sup>nd</sup> Item 2 – both are subtraction*).

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – omit for Lesson 1, but catch up on Lesson 2.
- **Straws** – omit for Lesson 1, but catch up on Lesson 2.
- **Pennies** – omit for Lesson 1, but catch up on Lesson 2
- **Measurement**
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2 – Find four objects in the room that are about five pennies long.
  - Lesson 3 – Find four objects in the room that are about five quarters long. Compare the length of the five penny objects to the five quarter objects. Which are longer? Why?

**(Assessment Items 1<sup>st</sup> grade 8 and 2<sup>nd</sup> grade 7 will be reviewed daily in Snack Fractions. Note: Snacks are the same throughout the grade bands; therefore there will be times when your primary students will experience fractional parts of a set. These do teach “fractionness,” and are a necessary part of the students’ learning.)**

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR  
II.D.1., II.E.1., II.E.2.

ELA II.A.1., II.A.3., III.B.3

MATH VI.B.1., VI.B.2.,  
VI.C.2

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

1<sup>st</sup> - 1, 2, 4, 8

2<sup>nd</sup> - 2, 3, 7

**TEACHERS:**

Azulito's Corner is your class's opportunity to go online to MAS Space and interact with others across the United States who are working on Math MATTERS this summer. Please take the time daily to respond to the activity. Azulito will share during the TV Lesson. Usually the activity will be really quick, asking you to respond to and share one of the Daily Routine experiences. Today, however, it's a little more involved as we would like to know about your class. Please feel free to post a class photo if you wish!

**Azulito's Corner  
Lesson 2**

- Show the hardest equation that you solved today during the "What's Missing?" activity. How did you figure out what was missing?

**Unit 1, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>



**Daily Routine** - continued

• **Graphing**

- Lesson 1 – omit for Pre-assessment
- Lesson 2 – Generate the Birthday Graph (*directions in the overview portion for Daily Routines*).
- Lesson 3 – How many pennies do you think are in the jar? (*Have a plastic screw lid jar with 127 pennies in it – bar graph with choices: less than 50, 50 to 100, 101 to 150, 151 to 200. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by groups of tens and ones.*)

**Graph QUESTIONS**

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Explain how you estimated the number of pennies in the jar.

**Money Matters** (*If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.*)

**Vocabulary Building**

Choose an activity listed in the Daily Routines section.

## Solve It! Problems Unit 1, Lesson 2

Pairs



Josie was given 14 stickers. She bought 9 more stickers. She gave away 4 stickers. How many stickers did Josie have then?

Problem #1 – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

Problem #2 – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

Final Solution – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

You are free to take this apart any way you wish – on your own; together as a team; a mix of both. You are responsible, however, for your own paper having all problems identified and solved; verifying your Team member's page. Be sure to write your final solution with a label in the box.

## Solve It! Problems Unit 1, Lesson 2

Pairs



Josie recibió 14 calcomanías. Luego compró 9 calcomanías. Después regaló 4 calcomanías.  
¿Cuántas calcomanías le quedaron a Josie?

Problema #1 – Nombre: \_\_\_\_\_ Verificación – Nombre: \_\_\_\_\_

Problema #2 – Nombre: \_\_\_\_\_ Verificación – Nombre: \_\_\_\_\_

Solucion final – Nombre: \_\_\_\_\_ Verificación – Nombre: \_\_\_\_\_

Puedes resolver esto del modo que desees - por ti mismo; en equipo; una mezcla de ambos métodos. Sin embargo, tú eres responsable de que tu propio trabajo tenga todos los problemas identificados y resueltos; verificando la página del miembro de tu equipo. Asegúrate de escribir tu solución final con una etiqueta en la caja.



**Literature Selection*****The Berenstain Bears' Trouble with Money***

by Stan &amp; Jan Berenstain

**Materials****Language Materials**

- BLM Word Cards
- BLM Idiom Graphic Organizer
- Poem written on chart paper

**Transition to Math Materials**

- Student Money Sets from Lesson 1 – 1 per student
- BLM TM Hundreds Chart from Lesson 1 – 1 per student
- BLM math word cards

**Literature Vocabulary**

allowance  
greedy  
generous  
spendthrift  
sensible

**Math Vocabulary**

coins  
penny  
nickel  
dime  
quarter  
dollar  
cents  
equals, =, is the same as  
add +  
subtract -

**ELPS (English Language Proficiency Standard)**

1E, 2D, 2F, 2G, 3B, 3E, 4C, 4G, 4J

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.B.2.,  
I.B.3., II.A.1., II.A.2., II.A.4.  
ELA II.A.3., II.A.4., III.A.1.,  
III.A.2., IV.A.2

**Unit 1, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson**

*Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.*

**Math Objectives:**

- Recognize 100 pennies on the hundreds chart as 100 pennies in a dollar.

**Reading Objectives:**

- Read smoothly, accurately, and with expression.

**Language Objectives:**

- Identify, understand, and use idioms.

**BEFORE READING:****Building Background, Vocabulary**

Call the students to the rug. Once students are sitting quietly, tell them to you need to do something from the back of the room. Be sure to tell them to behave while you are away, because you are going “keep an eye on them.” When you get to the back of the room, call a student to the back of the room. Tell him you need him to “give you a hand” with something. When you return to the rug, ask the students if when you said “keep an eye on you” and “need a hand” if you really meant what you said. Was your eye really on them? Did you literally need a hand?

**Comprehensible Input, Vocabulary****Practice and Application, Vocabulary**

Explain that sometimes people say things they don't really mean, like the words “keep an eye on” something or “to give a hand.” These phrases are special figures of speech called idioms. “Butterflies in your stomach,” “hold your horses,” and “a broken heart,” are all examples of idioms. Explain idioms are used in every language, every day. Ask students to share a time they or someone they knew used an idiom. Encourage them to share idioms from their native language.

If it was not already mentioned, remind students that Papa Bear used several idioms in the book “Trouble with Money.” Tell the students that today they are going to revisit the text to learn more about the four special figures of speech Papa used in story.

## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

Ask students if they can remember what Papa said when the cubs asked him for money for video games in the beginning of the book. Turn to the appropriate page and read to confirm. Ask if Papa is really “made of money?” What did he really mean when he said, “made of money?” Have you ever heard someone use that expression? If so, when? Record response on chart paper. See BLM for possible format.

Repeat discussion for “money grows on trees” “saving for a rainy day” and “nest egg.” Use a new piece of paper for each idiom.

### Building Background, Literature

Read page aloud to the students two times. The first time you read it, do so very slowly and without expression, Use poor phrasing and misread a word or two. Read the passage again. This time read it accurately, smoothly, and with expression. Change your voice during dialogue to reflect different characters. Have students compare the two readings. Ask questions like: How were they different? Which sounded like a good reader? Which one was easier to understand? Which was more enjoyable to listen to? Explain to students that good readers are fluent, accurate, and they read with expression.

### DURING READING

#### Comprehensible Input, Literature

Tell students that you are not going stop to ask questions or think aloud during the reading. Instead you are going to concentrate on reading fluently. Ask students to note accuracy, expression, and phrasing.

### AFTER READING

#### Practice and Application, Literature

Tell students they are now going to learn to read the poem fluently by reading it multiple times. Tell them you will point to each word as it is said. Emphasize to students the importance of tracking each word with their eyes as you do with the pointer.

Display the poem on chart paper in a place visible to all students.

1. Read the poem slowly. Be sure to clearly announce each word.
2. Read the poem again at a natural speed with proper phrasing and expression.
3. Read the poem one line at a time. Instruct students to echo and track the words at the end of each line.
4. Teacher and students read the poem together several times.
5. If time allows, students can practice reading the poem fluently independently or with a partner.

### Literature Center

Students can use an idiom dictionary to research different idioms. If a dictionary is unavailable, teacher can provide a list of idioms from the internet. Students can select one idiom and draw a picture of the literal meaning. Students can share their picture and the figurative meaning with the class if time permits.

### Readers' Theater

Students can read the poem to the whole class or to students in other grade bands.

**Math Objectives:**

- Recognize 100 pennies on the hundreds chart as 100 pennies in a dollar.

**Materials for TM Lesson****Transition to Math Materials**

- Student Money Sets from Lesson 1 – 1 per student
- **BLM TM** Hundreds Chart from Lesson 1 – 1 per student
- **BLM** math word cards

**Technology:****ELPS (English Language Proficiency Standard)**

1E, 1F, 3A, 3D, 3F, 4I

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.B.2.,  
I.C.1  
MATH I.A.2., I.C.1., IV.B.2,  
IV.B.4.

**Unit 1, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math****Building Background, Math**

What are the US coins that we are studying this unit? (*pennies, nickels, dimes, quarters*)

And what is the value of each coin? (*penny equals one cent, nickel equals five cents, dime equals ten cents, quarter equals twenty-five cents*)

What are the coins that we have been using to skip count? (*nickels, dimes, quarters*)

Which coin have we NOT used to skip count? (*penny*)

Why do you think we have not used the penny? (*Accept all answers without comment unless a misconception has been made.*)

Let's take our pennies out of our Money Set bags and use our hundreds chart to count to 100 with pennies.

- Where will we start with our first penny? (*on the one*)
- Why? (*because one penny equals one cent*)
- What number will the second penny cover? (*two*)
- Why? (*because the penny is only one cent, you can only cover one square at a time*)
- Before we start, how many pennies do you think it will take to count to 100? (*Accept all answers, then tell the students to find out by skip counting on the hundreds board by pennies to one dollar. They may talk to their partners.*)

*Circulate the room to make sure all of the students understand the concept of skip counting by one. If you see students having difficulty, ask:*

- What is the value of this penny? (*one cent*)
- How many squares can I move if this is worth one cent?
- When we used our dime, it was worth ten cents, so we could skip over TEN NUMBERS at a time. This coin is worth ONE cent, so how many numbers can we skip over at a time?

*As students reach 50, ask them again how many pennies they think it will take to skip count to a dollar on the hundreds board. Hopefully more see that they need 100. Those that still haven't seen the correlation, ask again at 75, and ask:*

- How many pennies have you used so far?
- What number is under this last penny?
- What number will be under the hundredth penny?
- How many pennies will you need to cover all 100 squares?

## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### TRANSITION to Math

#### Building Background, Math

*(Continue when everyone has covered their hundreds board with pennies.)*

- How many pennies did it take to cover the hundreds board? (100)
- How do you know? *(They either counted again, or they matched the penny to the 100 on the board.)*
- When we counted in nickels, dimes and quarters, we said that we could call this board a Dollar Board because it takes 100 cents to make a dollar. What does that tell you about 100 pennies? *(There are 100 pennies in one dollar.)*

We just counted by ones to 100.

- What coin did we use? *(penny)*
- How much is a penny worth? *(one cent)*
- How many pennies are in one DOLLAR? *(100)*

In lesson 1 we counted by five to 100.

- What coin did we use? *(nickel)*
- How much is a nickel worth? *(five cents)*
- Let's count by five to see how many nickels there are in a dollar. *(Do so, keeping track with marks on the board for each count, then count the marks.)*
- How many nickels are there in one DOLLAR? *(20)*

We counted by TENS to ONE HUNDRED.

- What coin did we use? *(dime)*
- What is a dime worth? *(ten cents)*
- Let's count by ten to see how many dimes there are in a dollar. *(This time, every time students say a number, have them use their fingers, one finger at a time, to keep track of the ten until all ten fingers are waving in the air.)*
- How many dimes are in a dollar? *(ten)*
- What is the last coin we counted by? *(quarter)*
- What is a quarter worth? *(25 cents)*
- How many quarters do you think are in a dollar *(responses)*
- Let's count and check. I will help you. Keep track with your fingers. *(Count 25, 50, 75, 100, raising one finger in the air with each count.)*
- How many quarters in a dollar? *(four)*

**Objectives:** Read the math and language objectives and have students explain how they learned them.

#### Distribute the TV Materials:

##### TV Materials:

- **BLM TM** Hundreds Chart
- **BLM** Piggy Bank Count from Lesson 1 – 1 per student
- **BLM** Money Problems – 1 per student
- Student Money Sets in Ziploc (1 set per student)
  - 100 pennies
  - 20 nickels
  - 10 dimes
  - 4 quarters
  - 10 \$1dollar bills
- Sentence Stem on a sentence strip or board – **This coin is a \_\_\_\_\_.**
- Sentence Stem on a sentence strip or board – **A \_\_\_\_\_ is worth \_\_\_\_\_ cents.**
- Big Money coins

**BLM Unit 1 Classroom Lesson 2**  
(One page per student)

**Idiom Graphic Organizer**




Idiom	Illustration
Meaning	Use it in sentence

**BLM Unit 1 Classroom Lesson 2**  
(One page per student)

**Idiom Graphic Organizer**



Modismo	Dibujo
Significado	Úsalo en una oración

<p><b>Literature Vocabulary</b> allowance greedy generous spendthrift sensible</p> <p><b>Math Vocabulary</b> coins penny nickel dime quarter dollar cents equals, = is the same as add + subtract -</p> <p><b>TV Materials:</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Piggy Bank Story Board – 1 per student</li> <li>• <b>BLM</b> Money Problems – 1 per student</li> <li>• Student Money Sets in Ziploc (1 set per student) <ul style="list-style-type: none"> <li>○ 100 pennies</li> <li>○ 20 nickels</li> <li>○ 10 dimes</li> <li>○ 4 quarters</li> <li>○ 10 \$1dollar bills</li> </ul> </li> </ul> <p><b>ELPS</b> (<i>English Language Proficiency Standard</i>) 1E, 2I, 3D, 3H, 4F</p> <p><b>CCRS</b> (<i>College and Career Readiness Standards</i>) CROSS-CURRICULAR I.B.1., I.C.2., I.C.3 ELA III.A.2., III.B.2., IV.A.3. MATH I.C.1., II.A.1., VIII.A.2., VIII.A.3., VIII.A.4.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b></p> <p style="text-align: right;"></p> <p><b>Unit 1, Lesson 2</b></p> <p><b>TV Lesson</b></p> <p><i>Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.</i></p> <p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Solve addition and subtraction story problems.</li> <li>• Use number sentences to represent story problems.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>• Use the math vocabulary during the activity.</li> <li>• Discuss solution strategies.</li> </ul> <p><b>Building Background, Math</b></p> <p><b>TEACHER:</b> Welcome back, boys and girls! We have some fun problems to work with today!</p> <p><b>AZULITO:</b> I like solving problems. Are these money problems about Brother and Sister Bear?</p> <p><b>TEACHER:</b> Yes they are, Azulito. Let’s look at our objectives to see what we are going to do. (<i>do so</i>)</p> <p><b>AZULITO:</b> And I’ll bet we are going to use a lot of math words, too! Can we read through those, too?</p> <p><b>TEACHER:</b> We certainly can. Boys and girls, read with us, please. (<i>Do so, and use each in a sentence.</i>)</p> <p>You will need your Money Kits, your Piggy Bank Count, and a new handout today, Money Problems. (<i>Show each BLM and the money kit.</i>)</p> <p>We are going to use the piggy bank as our story board, Azulito. You will use your coins to solve the problem.</p> <p>Here is what we will do.</p> <ul style="list-style-type: none"> <li>• I will read the story one time, and I want you to close your eyes and try to see the math movie as I read the story. The characters will do something, and you will be able to see them in your mind. The ACTION in the story will let you know whether you will add, which means to join, or to subtract, which means to separate.</li> <li>• Then I will read the story a second time, and you can gather the coins you need to represent the story on the storyboard.</li> </ul>
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## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

Before we begin, let's empty our money sets on our desks (*do so and slight pause*). Now, sort all of your coins by kind – pennies, nickels, dimes, quarters. (*Give plenty of time.*) We'll have our coins sorted for us when we are ready to use them.

Look at the Money Problems sheet. After you solve the problem with the storyboard, we will write number sentences on this page to show what we did.

### Comprehensible Input, Math

**TEACHER:** All right boys and girls, Azulito, are you ready to begin? We will do the first two problems very slowly so you see how to watch for the math movie.

**AZULITO:** I am ready! This is going to be fun!!!

**TEACHER:** (*Read problem #1.*) What is the math movie you saw in your mind, boys and girls? Tell your Classroom Teacher what was happening in your math movie. (*generous pause*) Azulito, what math movie did you see?

**AZULITO:** (*pause*) I saw two boxes of berries. Brother Bear gets three nickels for a box, and five nickels for the other box. He has all those nickels in his hand.

**TEACHER:** Good movie, Azulito. Now I want everyone to listen again as I read the story and you can pull your materials to the storyboard. (*Read problem #1 a second time, pausing slightly after each box of berries so students can pull the nickels to the storyboard.*)

Now boys and girls, on the count of three, tell your Classroom Teacher how many nickels Brother Bear has. Ready, 1....., 2....., 3! (*pause*)

**AZULITO:** (*pause*) EIGHT nickels! Brother Bear has EIGHT nickels!

**TEACHER:** Well done! Now, let's go to our Money Problems sheet and read the story again, filling in the blanks as we go.

Brother Bear sold boxes of berries.  
One box of berries cost three nickels.

**AZULITO:** I had put three nickels into my Piggy Bank, so we should put the number three on that first line! (*do so*)

**TEACHER:** Another box of berries cost five nickels.

### SMARTBOARD

Close your eyes and watch the math movie in your mind. (first reading)

What math movie did you see? (pause)

AZULITO's math movie – (pictures as he explains).

Now listen and gather what you need to solve the problem (second reading).

(After second reading, as Azulito explains, show the nickels going onto the storyboard.)

(Relate the storyboard materials to the numbers and symbols you put in the equation on the Money Problems sheet as Azulito explains.)



## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**AZULITO:** *(pause)* I had put another five nickels on my storyboard, so I can record those five nickels on the next line.

**TEACHER:** You are very good, Azulito. How many nickels did Brother Bear make on the berries? We have to decide whether we are adding or subtracting. What do you think, boys and girls? *(pause)*

**AZULITO:** *(Pause)* I heard them – they said we are adding, and we are because we are joining the three nickels and the five nickels! We can write the addition sign in the first circle *(do so)*. And I think we need an equals sign in the second circle because I want to find out what number is the same as three add five. *(do so)*

**TEACHER:** Well done. And you have already told me that there are eight nickels – I can see the eight nickels in your storyboard, so let's record that answer in the box.

This is how we will solve the rest of our problems, boys and girls.

**AZULITO:** OK, we are ready to rock!

**TEACHER:** *(Use the same format to solve the next two problems. Notice that problem three is subtraction.)*

Well done! Now let's solve our last problem together!  
*(First Reading, close eyes and watch the math movie.)*

**AZULITO:** *(pause)* Hmm, my math movie is a little different this time. I know they are spending something, but I can't see it! Let me think about this *(thinking)*. Boys and girls, what did you do? Please tell your Classroom teacher so I can hear you and get your help! *(generous pause)*

**TEACHER:** Did that help you, Azulito?

**AZULITO:** Yes, I think I will be able to see what they spent when I model to see what is left. Please read the story again.

**TEACHER:** *(second reading)* Boys and Girls, what did you model? Tell your teacher how many nickels the Bears spent on snacks. *(pause)*

**AZULITO:** Oh, let me show you how I modeled that problem.

## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**AZULITO:** I knew the Bears had made 12 nickels on the tours, so I put 12 nickels into my Piggy Bank. This time, I took the seven nickels and moved them down to the bottom of my bank – I want to keep those. And YAHOO, I can see that there are five nickels – that is what they spent on the snacks! So I can take those OUT of the bank!

**TEACHER:** Excellent! Boys and girls, you may have modeled that a little differently. You will have the opportunity to tell your Classroom Teacher how you modeled that one and others like it during the Follow-up Lesson. For now, let's go to the Money Problem handout and fill in our number sentence.

**AZULITO:** I see right away that something is different about this number sentence. Do you boys and girls? *(pause)* The box is in a different place. This is like our Missing Number game during the Daily Routines. That box can be anywhere in the equation.

**TEACHER:** Very good observation, Azulito and boys and girls. Let's fill in what we know.

**AZULITO:** We know they started out with 12 nickels. That is what I modeled first. So this first line is 12. We don't know yet how much they spent, but we do know what they had left – that's the last line. They had seven nickels left.

I know that I subtracted, because I removed some nickels to get the seven left at the bottom of my piggy bank, so I can use the subtraction symbol *(write that in the first circle)*.

**TEACHER:** So how does this number sentence read right now, Azulito, boys and girls? *(pause)*

**AZULITO:** 12 subtract some number equals – oh yes, we can write in the equals symbol in the last circle – equals or is the same as seven. And when I modeled, I had five nickels that I had to take from my piggy bank to leave the seven. The box is a five!

**TEACHER:** That was very good thinking from all of you!

**AZULITO:** That math movie in my mind and the storyboard sure help me see what the problem is asking. I like this way of solving problems!

**Azulito's Corner**  
**Lesson 2**

- Show the hardest equation that you solved today during the "What's Missing?" activity. How did you figure out what was missing?

**Unit 1, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>



**TV Lesson** - continued

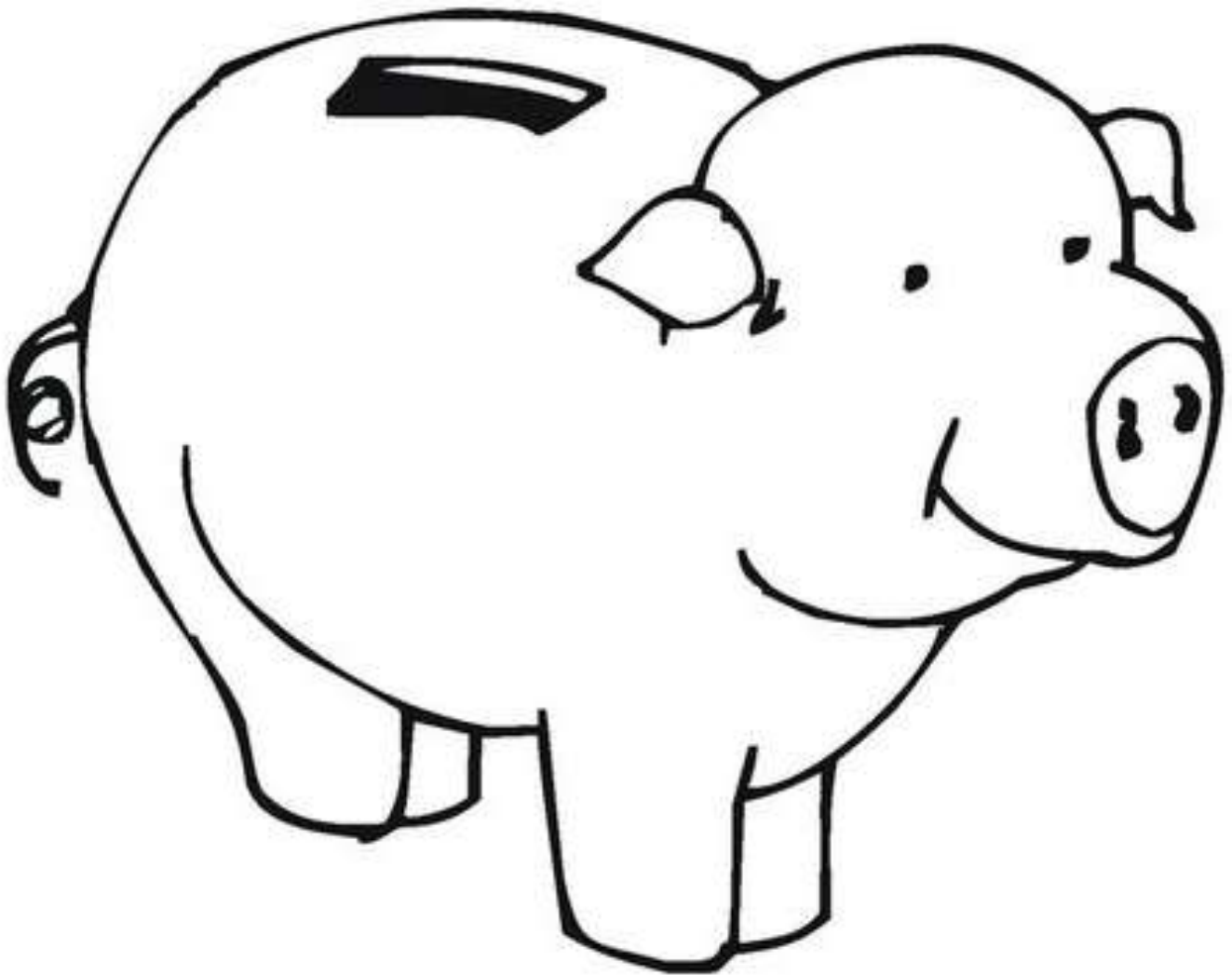
**TEACHER:** I'm very glad that you do, and I hope the boys and girls find it helpful, too! Azulito, I think that your corner on MAS Space is related to what we did today, right?

**AZULITO:** Oh yes! Every day in your Daily Routines, you play the "What's Missing" game where you use cards that have that little missing number anywhere in the equation. We'd like to know what your hardest problem was today, and how you solved it.

**TEACHER:** Good question, Azulito! I hope we see lots of answers on MAS Space!

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)









1. Brother Bear sold boxes of berries.  
One box of berries cost 3 nickels.  
Another box of berries cost 6 nickels.  
How many nickels did Brother Bear make on the berries?

\_\_\_\_\_ ○ \_\_\_\_\_ ○ □

2. Sister Bear sold bunches of wildflowers.  
One bunch of flowers cost 5 dimes.  
Another bunch of flowers cost 4 dimes.  
How many dimes did Sister Bear make on the flowers?

\_\_\_\_\_ ○ \_\_\_\_\_ ○ □

3. The Bears made 3 quarters minding pets.  
They spent 1 quarter on pet food.  
How many quarters did they have then?

\_\_\_\_\_ ○ \_\_\_\_\_ ○ □

4. The Bears made 12 nickels on guided tours.  
After they spent some money on snacks, they had 7 nickels left.  
How many nickels did they spend on snacks?

\_\_\_\_\_ ○ □ ○ \_\_\_\_\_



(Una página por estudiante)

1. Hermano Oso vendió cajas de bayas.  
Una caja de bayas costaba 3 monedas de 5 centavos.  
Otra caja de bayas costaba 6 monedas de 5 centavos.  
¿Cuántas monedas de 5 centavos ganó Hermano Oso con las bayas?

\_\_\_\_\_ ○ \_\_\_\_\_ ○ □

2. Hermana Osa vendió ramos de flores silvestres.  
Un ramo de flores costaba 5 monedas de 10 centavos.  
Otro ramo de flores costaba 4 monedas de 10 centavos.  
¿Cuántas monedas de 10 centavos ganó Hermana Osa con las flores?

\_\_\_\_\_ ○ \_\_\_\_\_ ○ □


3. Los Osos ganaron 3 monedas de 25 centavos cuidando mascotas.  
Gastaron una moneda de 25 centavos en comida para mascotas.  
¿Cuántas monedas de 25 centavos les quedaron?

\_\_\_\_\_ ○ \_\_\_\_\_ ○ □

5. Los Osos ganaron 12 monedas de 5 centavos como guías de turistas.  
Después de gastar algo de dinero en golosinas, les quedaron 7 monedas de 5 centavos.  
¿Cuántas monedas de 5 centavos gastaron en golosinas?

\_\_\_\_\_ ○ □ ○ \_\_\_\_\_



<p><b>Literature Vocabulary</b> allowance greedy generous spendthrift sensible</p> <p><b>Math Vocabulary</b> coins penny nickel dime quarter dollar cents equals, = is the same as add + subtract -</p> <p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• Student Money Sets in Ziploc (1 set per student) <ul style="list-style-type: none"> <li>○ 100 pennies</li> <li>○ 20 nickels</li> <li>○ 10 dimes</li> <li>○ 4 quarters</li> <li>○ 10 \$1dollar bills</li> </ul> </li> <li>• <b>BLM</b> Piggy Bank Storyboard from TV lesson – 1 per student</li> <li>• <b>BLM</b> Bear Problems to Model – 1 per student</li> </ul> <p><b>ELPS</b> (<i>English Language Proficiency Standard</i>) 1C, 2A, 3C, 3D, 5B, 5C</p> <p><b>CCRS</b> (<i>College and Career Readiness Standards</i>) CROSS-CURRICULAR ELA I.A.2., I.A.3., IV.A.2 MATH VIII.A.2., VIII.A.3., VIII.C.1., X.B.2., X.B.3.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b> </p> <p><b>Unit 1, Lesson 2</b> <b>Follow-up</b></p> <p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Solve addition and subtraction story problems.</li> <li>• Use number sentences to represent story problems.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>• Complete sentence stems.</li> <li>• Listen and speak with a partner during our math activity.</li> <li>• Use the math vocabulary during the activity.</li> <li>• Share-write math journal response.</li> </ul> <p><b>Practice and Application, Math</b> We're going to continue solving story problems the same way we did in the TV Lesson. We have four more problems. I will read these to you twice, just as the TV Teacher read them to us.</p> <p>The first time I read the problem, what should you do? (<i>Listen carefully and see the math movie in the mind.</i>)</p> <p>Can anyone tell me what the math movie does for us and why it is important to see the math movie in your mind? (<i>Helps you see the action so you know how to solve the problem.</i>)</p> <p>Let's try our first problem. Listen carefully as I read. (<i>Read problem #1 slowly, making sure the students are listening carefully.</i>)</p> <p>Now, I'll read it again, and you may use your money and the storyboard to model the math movie. (<i>Read the problem slowly again. Circulate the room.</i>)</p> <p>I'm going to read the problem a third time. We will stop after each part to see what the math movie is doing and how you modeled it.</p> <p>Brother and Sister Bear sold bunches of wildflowers. <b>Someone tell me what you see – (bunches of flowers to sell)</b> <b>Do you have anything to model? (not yet)</b></p> <p>By noon the Bears had made four dimes. <b>Someone tell me what you see – (four dimes in the piggy bank)</b> <b>Do you have anything to model? (yes, the four dimes)</b> <b>How did you model? (Put four dimes into the bank.)</b></p>
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## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up - continued



They sold more boxes of berries after lunch.

**Someone tell me what you see** – *(more sold, but we don't know how much)*

At the end of the day, Brother and Sister Bear had ten dimes.

**Someone tell me what you see** – *(add more dimes to make a total of ten)*

#### Technology

Here is a counting coins activity. <http://fen.com/studentactivities/Piggybank/piggybank.html> This could be played in small groups at a center, or as a whole class using a projector. Moves very quickly, and the second game continues on the same board that the first ended. Play a few times before introducing to students.

#### Technology

Either of the two suggested sites could be a self-checking center activity.

**How did you model?** *(Accept any reasonable model as long as they can tell you it took six more dimes to make the ten, and those six dimes are the missing dimes from the "sold more boxes.")*

How many dimes did they make after lunch? *(six dimes)*

How do you know? *(Have students answer this question who did not volunteer to explain how to model – some might know the basic fact; some might add on; others may have another strategy – any reasonable strategy is acceptable.)*

Now let's fill in the number sentence beneath the problem.

What do we know from the problem? *(made four dimes in the morning, and a total of ten dimes for the day)*

We started with four dimes. Tell me where you would place the four in this equation. *(volunteer)*

Why would you place it there? *(You know there are four dimes and you are adding some to it. We are using the square to represent the number we don't know, so the four has to go on the first line.)*

Who knew that we had a total of ten dimes? Where would you place the ten in this equation? *(at the end of this equation)*

What would you place in the two circles of this equation? *(You may need to start to read the equation so students realize they need an addition sign and an equals sign – four dimes add some number of dimes equals ten dimes: addition sign and an equals sign, or is the same as sign.)*

And what is our missing number? *(six)*

Why? *(because four add six equals or is the same as ten)*

We'll do the rest of the problems without the third reading; but when we finish the problem, I am going to ask you to explain your math movie and how you modeled the math movie, and then we'll fill in the number sentence to show how we modeled the problem.

## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up - continued



#### *Format for next three problems:*

- *Read the problem two times.*
- *After they model and have an answer, have students explain their math movies.*
- *Ask students to tell you the answer to the problem in a complete sentence.*
- *Fill in the number sentence.*

#### **Student Movement**

Repeat the Movement game if your students need a break before Snack Fractions.

#### **Math Journal Writing**

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



**Explain how you can use a math movie to help you solve the problem.**

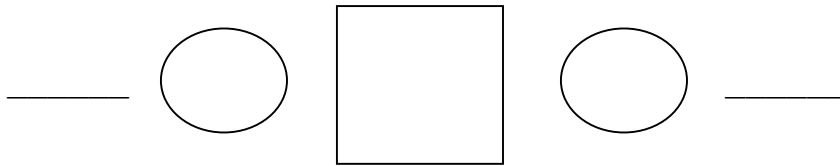
**Objectives:** Read through the language and math objectives for this portion of the lesson, and have the students tell you how they accomplished each.



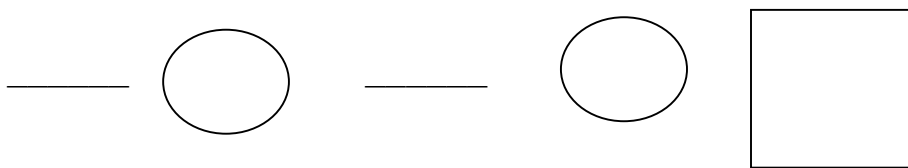
1. Brother and Sister Bear sold bunches of wildflowers.  
By noon the Bears had made 4 dimes.  
They sold more boxes of berries after lunch.  
At the end of the day, Brother and Sister Bear had 10 dimes.  
How many dimes did they make after lunch?



2. Sister Bear made 15 nickels from selling boxes of berries.  
She used some of them to buy Brother Bear a cold drink.  
Then she had 9 nickels left.  
How many nickels did Sister Bear spend on Brother Bear's cold drink?



3. The Bears made 12 nickels selling bunches of flowers.  
They spent 5 nickels on honey combs for snacks.  
How many nickels did they have then?



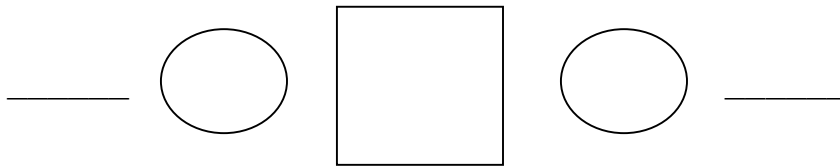
4. The Bears made 15 nickels on guided tours.  
After they spent some money on snacks, they had 10 nickels left.  
How many nickels did they spend on snacks?



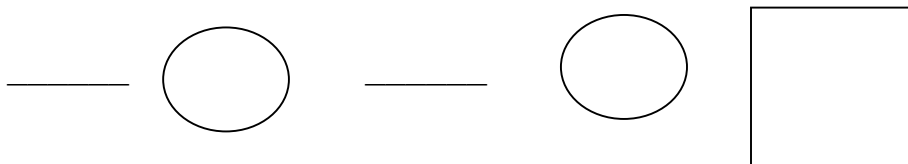
1. Hermano Oso y Hermana Osa vendieron ramos de flores silvestres. Para el mediodía los Osos habían ganado 4 monedas de 10 centavos. Vendieron más cajas de bayas después de la comida. Al final del día, Hermano Oso y Hermana Osa tenían 10 monedas de 10 centavos.  
¿Cuántas monedas de 10 centavos ganaron después de la comida?



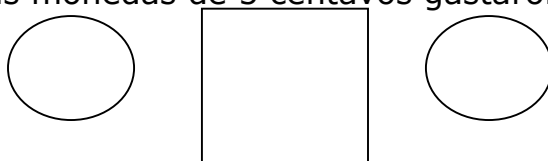
2. Hermana Osa ganó 15 monedas de 5 centavos vendiendo cajas de bayas. Ella usó algunas monedas para comprarle a Hermano Oso una bebida fría. Después le quedaron 9 monedas de 5 centavos.  
¿Cuántas monedas de 5 centavos gastó Hermana Osa en la bebida fría de Hermano Oso?



3. Los Osos ganaron 12 monedas de 5 centavos vendiendo ramos de flores silvestres. Gastaron 5 monedas de 5 centavos en panales de miel para comer.  
¿Cuántas monedas de 5 centavos les quedaron?



4. Los Osos ganaron 15 monedas de 5 centavos como guías de turistas. Después de gastar algo de dinero en golosinas, les quedaron 10 monedas de 5 centavos.  
¿Cuántas monedas de 5 centavos gastaron en golosinas?



### Math Objectives

- Separate a whole into two equal parts and use appropriate language to describe the parts such as one out of two equal parts.
- Partition objects into two equal parts and name the parts halves.
- Represent the fraction half numerically.

### Language Objectives

- Explain why each portion is half.
- Share-write what is a half.

### Vocabulary

half  
fair shares  
equal pieces

### Materials:

#### STUDENT ACTIVITY (per partner pair):

- BLM Ice Cream Sandwich Snack Fractions
- BLM Ice Cream Sandwich to Share
- 1 ice cream sandwich per pair.
- 1 plastic knife
- 2 paper dessert plates
- 2 paper towels
- 1 scissors per student
- 1 ruler and marker per student
- 1 glue stick per student

Chart paper with three questions:

- **How do you know that each portion is half?**
- **How do you describe this fraction?**
- **How do you represent this fraction in numbers?**
- Put a copy of the record sheet ice cream sandwich cut apart at the top of the chart with the question

## Unit 1, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



**Children should wash their hands before this activity if using food items.**

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

### Objective:

Today you are going to share a snack with one other friend. You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. And you will be able to write the number representation of the fraction.

### TODAY:

Divide the students into partners, giving each student first the BLMs Ice Cream Sandwich Snack Fractions and the paper representation of an ice cream sandwich (*either the BLM Ice Cream Sandwich or brown paper*).

Ask each student to share the paper ice cream sandwich as if s/he were cutting in fair shares for one other person. Let students share their cuts. Did they all share the same (*could be horizontal, vertical, or diagonal cuts*)? Prove that the parts are halves by laying the pieces on top of one another – these are congruent halves, same size, same shape. Show students how to write the fraction numerically, making sure you use a horizontal line and NOT a diagonal fraction line. Tell students that the bottom number, or denominator, tells you how many pieces the whole is cut into, and the upper number, or numerator, tells you how many pieces in your portion – one out of two equal pieces. Students then complete the record sheet as before, but adding the numerical representation of half.

Now distribute the actual snacks, having the students share one ice cream sandwich between them. If the partners had divided the paper differently, they will have to decide how to share the real snack.

### Snack Fraction Writing: Chart Paper

Have the students answer the three chart questions. A student may scribe, or you may scribe for them. Leave the chart in the room for reference.

### Objectives:

Read the objectives. How did we accomplish these in our snack fraction lesson?





My name is \_\_\_\_\_

This is my plate and my fair share of the snack. I write this as:

—
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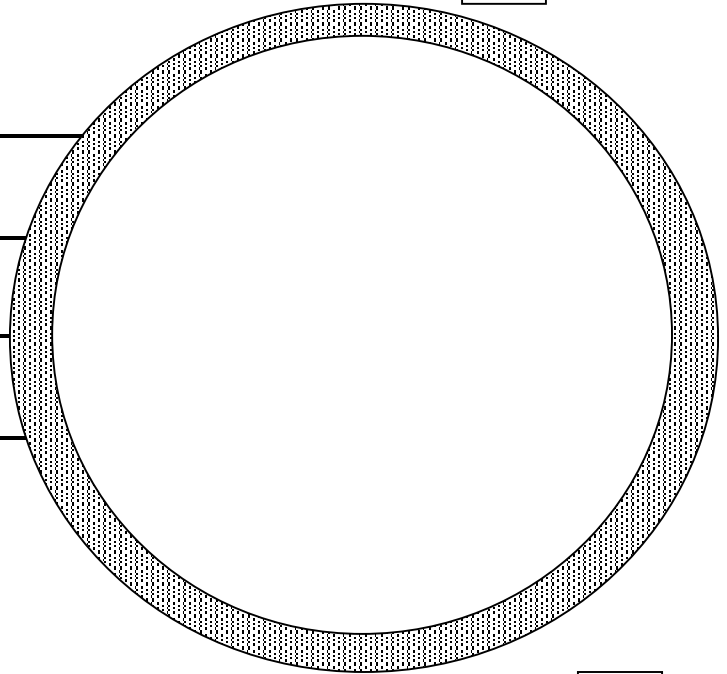
My share is called a \_\_\_\_\_ because

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This is my friend's plate and fair share of the snack.

—
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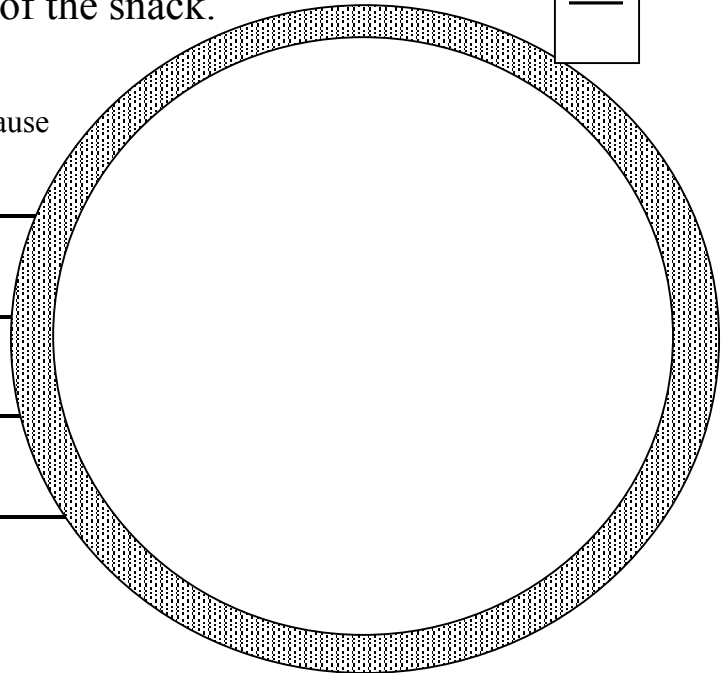
My friend's share is called a \_\_\_\_\_ because

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Mi nombre es \_\_\_\_\_

Esto es mi plato y mi porción igual. La escribe así:

—

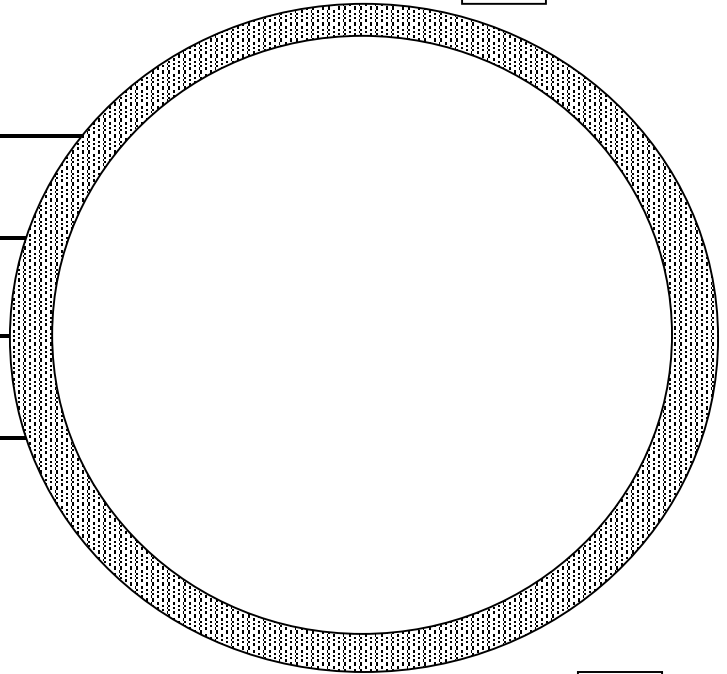
Mi porción se llama \_\_\_\_\_ porque

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Esto es el plato de mi amigo/ y su porción igual.

—

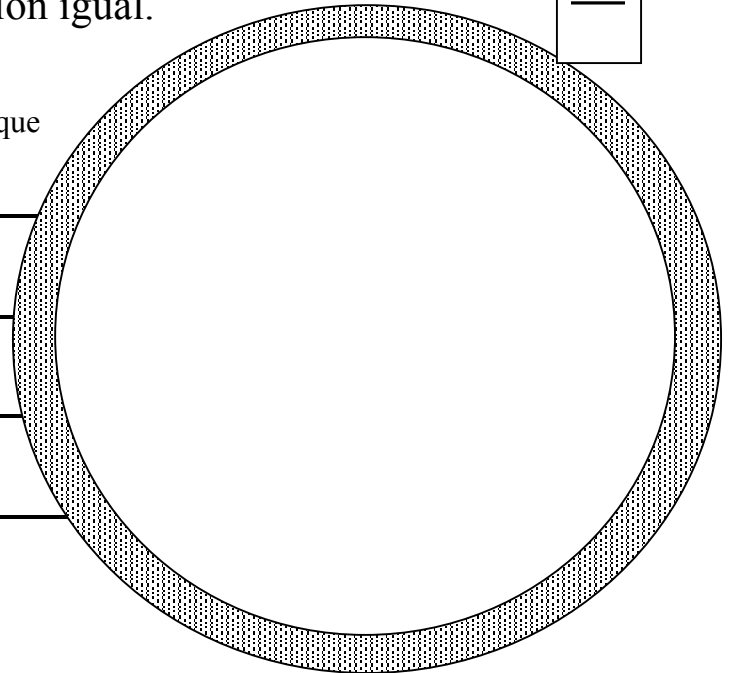
La porción de mi amigo/a se llama \_\_\_\_\_ porque

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**BLM Unit 1, Snack Fraction Lesson 2**

**Ice Cream Sandwich to Share**



There are snacks for six students on this page. Students are to use a straight edge to draw the line to cut the snack in half, then use scissors to cut the snack in half, then glue the half to each plate pictured on the BLM Ice Cream Sandwich Snack Fractions. You could certainly cut a brown rectangle about the same size as the real ice cream sandwich instead of using this BLM.





## Family Fun, Unit 1 Lesson 2

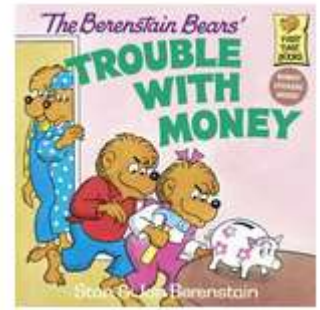
We solved math story problems today.  
I can tell you what a math movie is. Please ask me.

Here is a number sentence for me to make a story problem  
for tonight:

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Thank you for helping me learn math!

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## Diversión familiar, Unidad 1, Lección 2

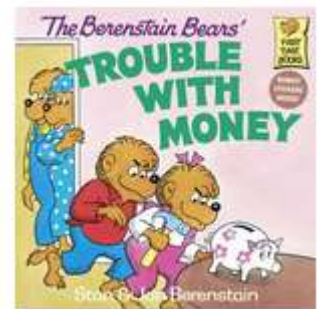
Hoy resolvimos problemas razonados de matemáticas.  
Puedo decirles qué es una película matemática. Por favor pregúnt

Aquí hay una oración numérica para que yo haga un problema raz  
para esta noche:

---

¡Gracias por ayudarme a aprender matemáticas!

---





**Materials**

(BLM denotes Blackline Masters found in curriculum)

**Math Objectives**

- Solve math word problems.
- Pre-assess program skills.

**Balanced Literacy****Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS****Lesson 1**

- 1<sup>st</sup> – 1.6GH
- 2<sup>nd</sup> – 2.3A

**Lesson 2**

- 1<sup>st</sup> – 1.3BF, 1.5DF, 1.6GH
- 2<sup>nd</sup> – 2.3D, 2.3E, 2.2A

**Lesson 3**

- 1<sup>st</sup> – 1.1ABC, 1.2A
- 2<sup>nd</sup> – 2.3D, 2.3E, 2.2A

**ELPS** (*English Language Proficiency Standard*)

1E, 2E, 3B, 3D, 3G

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR II.D.1., II.E.1., II.E.2.

ELA II.A.1., II.A.3., III.B.3

MATH VI.B.1., VI.B.2., VI.C.2

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

1<sup>st</sup> - 1, 2, 4, 8

2<sup>nd</sup> - 2, 3, 7

**(Assessment Items 1<sup>st</sup> grade 8 and 2<sup>nd</sup> grade 7 will be reviewed daily in Snack Fractions. Note: Snacks are the same throughout the grade bands; therefore there will be times when your primary students will experience fractional parts of a set. These do teach “fractionness,” and are a necessary part of the students’ learning.)**

**Unit 1, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Daily Routine****ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2 – 12
  - Lesson 3 – 24
- **CGI Problem** (*1<sup>st</sup> items 1, 2, 5, 6; 2<sup>nd</sup> items 5, 6*)
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2 – Join, Result Unknown (*1<sup>st</sup> item 1, 2<sup>nd</sup> item 3*)
  - Lesson 3 – Compare, Difference Unknown (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
- **What’s Missing** (*1<sup>st</sup> and 2<sup>nd</sup> item 2*)
  - Lesson 1 – omit for Pre-assessment
  - All lessons other than Assessment Lessons: Use the Unknown Quantity cards as outlined in the overview of the Daily Routines (*1<sup>st</sup> and 2<sup>nd</sup> Item 2 – both are subtraction*).

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – omit for Lesson 1, but catch up on Lesson 2.
- **Straws** – omit for Lesson 1, but catch up on Lesson 2.
- **Pennies** – omit for Lesson 1, but catch up on Lesson 2
- **Measurement**
  - Lesson 1 – omit for Pre-assessment
  - Lesson 2 – Find four objects in the room that are about five pennies long.
  - Lesson 3 – Find four objects in the room that are about five quarters long. Compare the length of the five penny objects to the five quarter objects. Which are longer? Why?

## Unit 1, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

#### Azulito's Corner Lesson 3

- What were some of the ways you represented 24 during Target Number today?

#### • Graphing

- Lesson 1 – omit for Pre-assessment
- Lesson 2 – Generate the Birthday Graph (*directions in the overview portion for Daily Routines*)
- Lesson 3 – How many pennies do you think are in the jar? (*Have a plastic screw lid jar with 127 pennies in it – bar graph with choices: less than 50, 50 to 100, 101 to 150, 151 to 200. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by groups of tens and ones.*)

#### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Explain how you estimated the number of pennies in the jar.

**Money Matters** (*If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.*)

#### Vocabulary Building

Choose an activity listed in the Daily Routines section.



**Solve It! Problems Unit 1, Lesson 3**      Pairs



Solve your own problem today, showing your work. Verify your partner's problem solution when you both finish your own. Discuss your work.

**Partner 1 Problem**      Name \_\_\_\_\_ Date \_\_\_\_\_

It was 12 miles from Josie's house to her friend's house. Josie rode her bicycle 4 of the miles to her cousin's house. She and her cousin walked 3 miles. Her Aunt picked them up in her car and drove them the rest of the way. How far did Josie ride in the car?

<b>Problem Solution</b> Name:	<b>Problem Verification</b> Name:

**Solve It! Problems Unit 1, Lesson 3**      Pairs



Solve your own problem today, showing your work. Verify your partner's problem solution when you both finish your own. Discuss your work.

**Partner 2 Problem**      Name \_\_\_\_\_ Date \_\_\_\_\_

Josie and her mother drove shopping on Saturday. They drove 12 miles to the mall, 4 miles to eat lunch, and home again. How many miles did Josie and her mother drive?

<b>Problem Solution</b> Name:	<b>Problem Verification</b> Name:

**Solve It! Problems Unit 1, Lesson 3**      Pairs



Hoy, resuelve tu propio problema, mostrando el procedimiento. Verifica la solución de tu compañero cuando ambos terminen de hacerlo por sí mismos. Hablen sobre su trabajo.

**Problema del compañero 1**      Nombre \_\_\_\_\_  
**Fecha** \_\_\_\_\_

Hay una distancia de 12 millas de la casa de Josie a la casa de su primo. Josie recorrió en bicicleta 4 de las millas a casa de su primo. Ella y su primo caminaron 3 millas. Su tía los recogió en su carro y los llevó el resto del camino. ¿Cuánta distancia recorrió Josie en el carro?

<b>Solución del problema</b> Nombre:	<b>Verificación del problema</b> Nombre:

**Solve It! Problems Unit 1, Lesson 3**      Pairs




Hoy, resuelve tu propio problema, mostrando el procedimiento. Verifica la solución de tu compañero cuando ambos terminen de hacerlo por sí mismos. Hablen sobre su trabajo

**Problema del compañero 2**      Nombre \_\_\_\_\_  
**Fecha** \_\_\_\_\_

Josie y su mamá fueron de compras en el carro el sábado. Recorrieron 12 millas al centro comercial, 4 millas para comer, y regresaron a casa. ¿Cuántas millas recorrieron Josie y su mamá?

<b>Solución del problema</b> Nombre:	<b>Verificación del problema</b> Nombre:

<p><b>Literature Selection</b>  <i>The Berenstain Bears' Trouble with Money</i>          by Stan &amp; Jan Berenstain</p> <p><b>Materials</b>  <b>Language Materials</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Word Cards</li> </ul> <p><b>Transition to Math Materials</b></p> <ul style="list-style-type: none"> <li>• Student Money Sets from Lesson 1 – 1 per student</li> <li>• <b>BLM TM</b> Hundreds Chart from Lesson 1 – 1 per student</li> <li>• <b>BLM</b> Math Word Cards</li> <li>• <b>BLM</b> Piggy Bank Story Board from Lesson 2 – 1 per student</li> </ul> <p><b>Literature Vocabulary</b>          allowance          greedy          generous          spendthrift          sensible</p> <p><b>Math Vocabulary</b>          coins          penny          nickel          dime          quarter          dollar          cents          equals, =, is the same as          add +          subtract -</p> <p><b>ELPS (English Language Proficiency Standard)</b>          1E, 2D, 2F, 2G, 3B, 3E, 4C, 4G, 4J</p> <p><b>CCRS (College and Career Readiness Standards)</b>          CROSS-CURRICULAR I.B.2., I.B.3., II.A.1., II.A.2., II.A.4. ELA II.A.3., II.A.4., III.A.1., III.A.2., IV.A.2</p> <p><b>Language Center Connection</b></p>	<p><b>Unit 1, Lesson 3</b> <span style="float: right;">1<sup>st</sup> – 2<sup>nd</sup></span></p> <p><b>Classroom Lesson</b> </p> <p><i>Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.</i></p> <p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences.</li> </ul> <p><b>Reading Objectives:</b></p> <ul style="list-style-type: none"> <li>• Use illustrations and text to infer character feelings.</li> <li>• Reflect and actively participate in class discussion.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>• Understand, use, and apply new vocabulary.</li> </ul> <p><b>BEFORE READING:</b>  <b>Practice and Application, Vocabulary</b></p> <p>Review vocabulary words on word wall.</p> <p>Play Mystery Word Game</p> <ol style="list-style-type: none"> <li>1. Display and read a vocabulary word from the word wall. Have students repeat the word aloud. Repeat for each word.</li> <li>2. Gather the words cards. Place them face down so no one can see them.</li> <li>3. Choose one word at random and make a big show of sneaking a look at the word without letting students see it.</li> <li>4. Give students clues to help them guess the mystery word. Clues can emphasize meaning and/or spelling.</li> <li>5. Students can write down their guess or give it orally. If responding orally, students should be given time to think and instructed not to respond until signaled to do so.</li> <li>6. Teacher can give multiple clues before revealing the mystery word.</li> </ol> <p>Show students the cover of the book. Ask, “What is the title of the book we have been reading?” Review vocabulary words on the word wall. Ask students to use a vocabulary word to describe a character or an event from the story. Use the Rug Partner Routine.</p> <p>Be sure to circulate while students are talking to assess whether or not they are using the vocabulary words correctly. Encourage students to use the text if they need help using the word in a sentence.</p>
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Students can play Mystery Word Game with a partner.

### **Independent Reading Connection**

For students to improve as readers, they have to actually read a text themselves. It seems obvious, but often we emphasize reading aloud a text and never release the responsibility of reading to the students. In this unit, your students have had multiple opportunities to read the Shared Reading text in Lessons 1 and 2. If you set up a Listening Center, then they have also been able to read along with the recorded text of *Trouble with Money*. For the final lesson, consider creating heterogeneous **reading partners** based on reading ability (a stronger reader with a weaker reader). Give each partnership a copy of *Trouble with Money* from the classroom set, and have them read it together as partners. The stronger reader will be the one carrying the reading, with the other student listening and joining in when possible.

### **Writing Workshop Connection**

You can use Interactive Writing with individual students during the Writing Workshop. Ask a student what they want to write. Then, help them write that word/phrase/sentence in the same way you did during this activity. You have students supply the parts they already know how to write, and you write down the parts they don't know how to spell. This helps young writers create a written message that is more complex than what they could have created on their own.

## **Unit 1, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>



### **Classroom Lesson** - continued

Regroup the class and have several students share. Rephrase what students say, as needed. Emphasize the vocabulary words as you speak in a natural way. Point to the words on the interactive word wall. As students share, you can also point to those parts in the book so they connect the oral language with the illustrations.

### **DURING READING**

#### **Comprehensible Input, Literature**

Tell children that as you read the story today, you want them to pay special attention to the things Papa Bear says and does.

Say, “Good readers try to understand the characters in their stories. Today are going to act like detectives. We are going to look at the pictures and the text for clues as to how Papa Bear is feeling.”

#### **Page 13**

Ask, “The text says that Papa roared and knocked down a chair. How do you think Papa feels?”

#### **Page 19**

Think aloud: Look at Father Bear’s face. He looks unsure and doubtful.

#### **Page 22**

Think aloud: The text says that he was startled. I’m not sure what that means, but looking at the picture it seems Papa is very surprised.

#### **Last Page**

Ask, “Papa is giving his children a hug and is smiling. How do you think Papa is feeling?”

### **AFTER READING**

#### **Practice and Application, Literature and Vocabulary**

#### **Oral language Development**

Provide students an opportunity to have an authentic discussion about the text. The goals for students are to think critically and to have a deeper understanding of text. Encourage students to use the text to support their ideas. Ask the following questions:

- How did Papa feel at the beginning of the story when the cubs wanted to spend money on an arcade game? How do you know?
- How did Papa feel at the end of the story when the cubs wanted to spend money on an arcade game? How do you know?
- In the beginning of the story, was Papa angry about the cub playing a game or was it something else?
- Why did Papa react differently at the end of the story? What changed?
- Can someone spend on frivolous things like candy and games and still be sensible with money? Why or why not?

**Math Objectives:**

- Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences.

**Materials for TM Lesson  
Transition to Math Materials**

- Student Money Sets from Lesson 1 – 1 per student
- **BLM** Piggy Bank Story Board from Lesson 2 – 1 per student
- **BLM TM** – Bear Money Problems
- **BLM** Math Word Cards

**ELPS** (*English Language Proficiency Standard*)  
1E, 1F, 3A, 3D, 3F, 4I

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.B.2.,  
I.C.1  
MATH I.A.2., I.C.1., IV.B.2,  
IV.B.4.

**Unit 1, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math****Practice and Application of Lesson 2 Math**

During our Lesson 2 TV and Follow-up lessons, we solved story problems using our Piggy Bank story board and our Money Kits. We'll practice a little more of those problems today.

First, though, let's read through our math wall words for math, and use each in a sentence. (*Do so, having student volunteers read the words, using each in a sentence.*)

Now, everyone please take all of your money from your Money Kits and sort them by value of coins. Put the coins above your Piggy Bank Story Board (*pause while students do so*).

Let's solve some problems.

**Format:**

1. Read the problem for students to listen carefully to see the math movie in their minds.
2. Read the problem the second time so students can model using their coins and story board.
3. Read the problem a third time and have the students complete the number sentences.
4. Have student volunteers explain the math movie, the model and their number sentence. Always let as many students share as possible, making sure to compare different strategies in the room for each problem.
  - Questions during Sharing:
    - How is that strategy like the one you used?
    - How is the strategy different from the one you used?
    - Are the answers the same?

**Objectives:** Read the math and language objectives and have students explain how they learned them.

**Distribute the TV Materials**

- **BLM** Models to Numbers – 1 per student
- **BLM** Choose the Number Sentence – 1 per student







Brother and Sister Bear made 15 nickels.  
They spent 12 nickels and put the rest in their piggy bank.  
How many nickels did they put in their piggy bank?



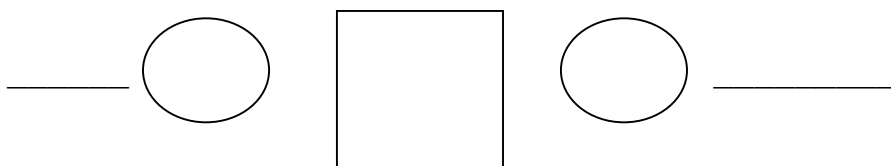
Sister Bear sold a bunch of flowers for a dime.  
She sold 5 bunches one day, and 5 bunches another day.  
How many dimes did she make?




Brother Bear sold berries for a penny.  
He sold 15 berries one day, and 15 berries another day.  
How many pennies did he make?



Brother Bear and Sister Bear sold berries for 1 penny.  
They made 12 pennies in the morning and more in the afternoon.  
If they made 25 pennies in all, how many pennies did they make in the afternoon?



**Problemas de dinero con los Osos**   
(Una página por estudiante)

Hermano Oso y Hermana Osa ganaron 15 monedas de 5 centavos.  
Se gastaron 12 monedas de 5 centavos y guardaron el resto en su alcancía.  
¿Cuántas monedas de 5 centavos pusieron en su alcancía?



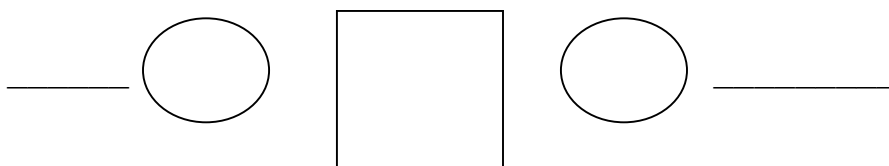
Hermana Osa vendía un ramo de flores silvestres por una moneda de 10 centavos.  
Ella vendió 5 ramos un día, y 5 ramos otro día.  
¿Cuántas monedas de 10 centavos ganó?



Hermano Oso vendió bayas por un centavo.  
Él vendió 15 bayas un día, y 15 bayas otro día.  
¿Cuántos centavos ganó?



Hermano Oso y Hermana Osa vendieron bayas por 1 centavo.  
Ganaron 12 centavos en la mañana, y más en la tarde.  
Si ganaron 25 centavos en total, ¿cuántos centavos ganaron en la tarde?



**Literature Vocabulary**

allowance  
greedy  
generous  
spendthrift  
sensible

**Math Vocabulary**

coins  
penny  
nickel  
dime  
quarter  
dollar  
cents  
equals, = is the same as  
add +  
subtract -

**TV Materials:**

- **BLM** Models to Numbers – 1 per student
- **BLM** Choose the Number Sentence – 1 per student

**ELPS** (*English Language Proficiency Standard*)  
1E, 2I, 3D, 3H, 4F

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.B.1., I.C.2., I.C.3  
ELA III.A.2., III.B.2., IV.A.3.  
MATH I.C.1., II.A.1., VIII.A.2., VIII.A.3., VIII.A.4.

**Unit 1, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives:**

- Match number sentences to models of story problems.

**Language Objectives:**

- Use the math vocabulary during the activity.
- Discuss solution strategies.

**Building Background, Math**

**TEACHER:** This is our final day with the Berenstain Bears!

**AZULITO:** I will miss them!

**TEACHER:** I will too, Azulito, but I think they have helped us learn a lot, don't you! Let's see what they will help us do today! (*Read the math and language objectives and talk about what the math objective means.*)

**AZULITO:** Oh, matching number sentences to models is like a little puzzle to solve!

**TEACHER:** Yes, it is, Azulito.

First, we're going to solve a few problems together and talk about the math movie that we see in the models and how we would represent that math movie in numbers.

**COMPREHENSIBLE INPUT**

Let's look at our first blackline master, Models to Numbers. It looks like this, boys and girls (*show the BLM*).

Check out the first piggy bank on the page. What math movie do you see when you look at this piggy bank? Boys and girls, talk to your elbow partner. What do you think is happening in this model? (*Pause to give students time to respond.*)

**AZULITO:** (*pause*) Well, I see pennies. And it looks like there are two different groups that have been added to the piggy bank.

## Unit 1, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**TEACHER:** Very good, Azulito. Yes, this picture models an ADDITION math movie. Now, look to the side of the piggy bank. The blanks for our number sentence look a little different. What do you see, boys and girls? *(pause)*

**AZULITO:** I know there isn't a box this time. We just have to write in the numbers.

**TEACHER:** And what are those numbers? Boys and girls, tell your teacher the number sentence that you think describes the model in this piggy bank. *(generous pause)*

**AZULITO:** That's easy! I see a group of four pennies and a group of four pennies. The number sentence is 4 add 4 equals or is the same as 8.

**TEACHER:** Well done! Now look at the second piggy bank. What math movie do you see modeled on this piggy bank? This one is a little different from the way we were modeling this type of problem. But see if you can figure out what is happening in the story. Talk in your classroom to explain the model. *(generous pause)*

**AZULITO:** Well, usually when you X something out, you are getting rid of it. I think the story was telling us that someone spent or took three dimes out of the piggy bank.

**TEACHER:** Yes, indeed, Azulito! Since we do not have our coin set to actually take OUT the dimes, this is a way to show that we are separating dimes from the bank – we can cross them out.

Now, what about the number sentence? What will that look like? Tell your teacher, boys and girls. *(pause)*

**AZULITO:** Well, we have to look at the total of the dimes *(count them)*. We had nine dimes in the bank, and we took out three of them, so nine subtract three is *(count)* six dimes!

**TEACHER:** Excellent! Now see if you can complete the last piggy bank on your own. *(Give them plenty of work time.)*

**AZULITO:** *(pause)* This one is really easy! We have two groups of dimes, a group of eight and a group of three. We are adding them together. I can write 8 add 3 equals, or is the same as, 11 dimes.

## Unit 1, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**TEACHER:** Terrific! We are ready for the second blackline master now. Please look at the sheet, Choose the Number Sentence. How is this sheet different from the first sheet? Tell your teacher all of the differences you see, boys and girls. *(pause)*

**AZULITO:** I see the piggy banks, but there are already number sentences beside each one. What do we do?

**TEACHER:** Yes, Azulito. This time, you look at the piggy bank to see the math movie; then you have to choose the number sentence that describes the math movie. Try the first one. Boys and girls, first describe what is happening in the bank (*point to the first bank*), then find the number sentence in this box (*point to the answer box*). The directions say: “Look at the coins in the piggy bank. Which number sentence below matches the picture?” Be sure to circle your answer. *(Provide a generous pause for students to respond.)*

**AZULITO:** *(pause)* Well, there are three pennies and four pennies that we are adding together. So I need to find the number sentence that describes 3 add 4. And here it is! It’s choice A – 3 add 4 equals or is the same as 7!

**TEACHER:** Good job! Now, tell me why it isn’t the other choices! Boys and girls, why ISN’T the answer B *(pause)*?

**AZULITO:** *(pause)* Because choice B is a subtraction problem. So is answer choice C – we want addition!

**TEACHER:** And what about D – I see a 7 and a 4? Boys and girls – look carefully at answer choice D – why didn’t we choose that number sentence to describe the piggy bank? *(pause)*

**AZULITO:** *(pause)* Because the answer to that number sentence is 11. We don’t have 11 pennies in our piggy bank! We only have 7. Answer choice A,  $3 + 4 = 7$  is the only correct answer.

**TEACHER:** Right you are! Boys and girls, you are going to finish this page in the Follow-up Lesson. Then, your teacher is going to teach you the Family Fun Game that you will be taking home today to play with everyone in your family!

**AZULITO:** That will be fun. And speaking of fun, we have a quick task for you on MAS Space in Azulito’s Corner!

**OBJECTIVES:** Close with the objectives.

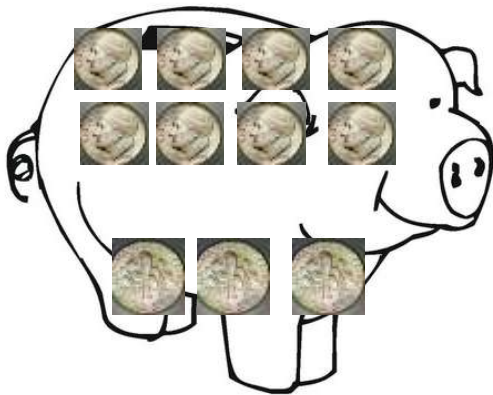
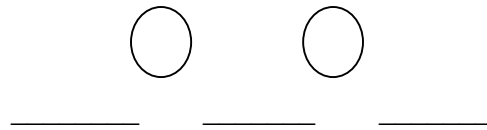
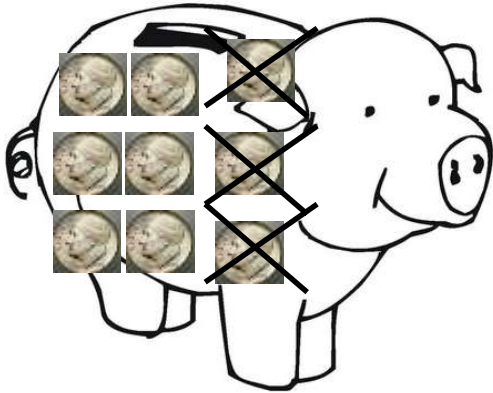
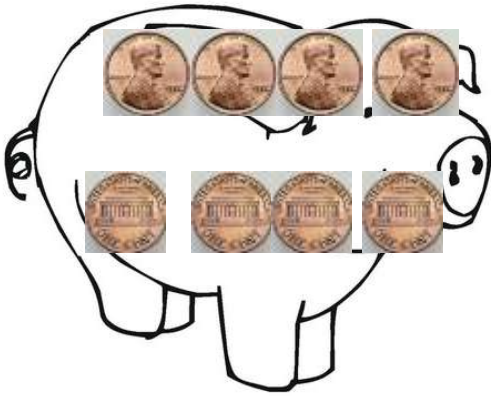
### Azulito’s Corner Lesson 3

- What were some of the ways you represented 24 during Target Number today?



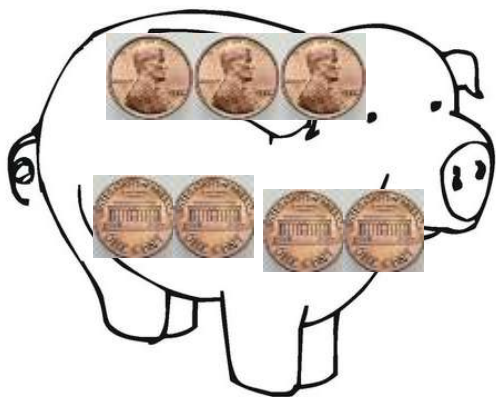
**BLM Unit 1 TV Lesson 3**  
(One page per student)

**Models to Numbers** 









Look at the coins in the piggy bank.

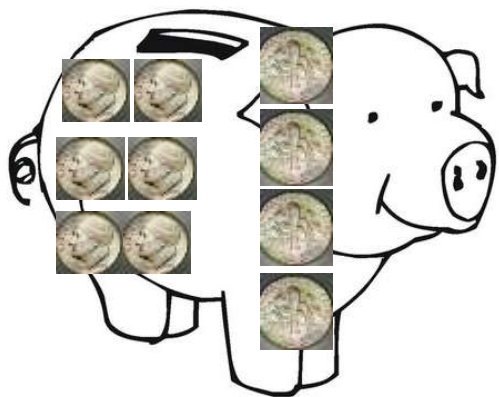
Which number sentence below matches the picture?

A.  $3 + 4 = 7$

C.  $7 - 3 = 4$

B.  $7 - 4 = 3$

D.  $7 + 4 = 11$



Look at the coins in the piggy bank.

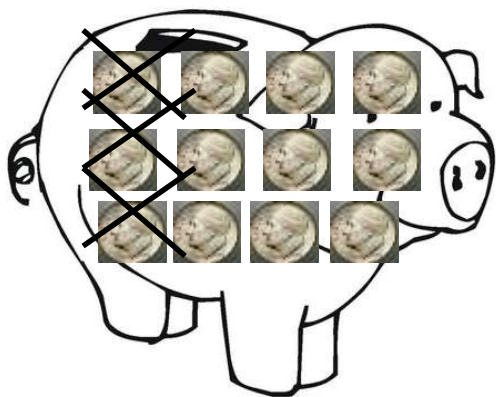
Which number sentence below matches the picture?

A.  $10 - 4 = 6$

C.  $10 + 4 = 14$

B.  $10 - 6 = 4$

D.  $6 + 4 = 10$



Look at the coins in the piggy bank.

Which number sentence below matches the picture?

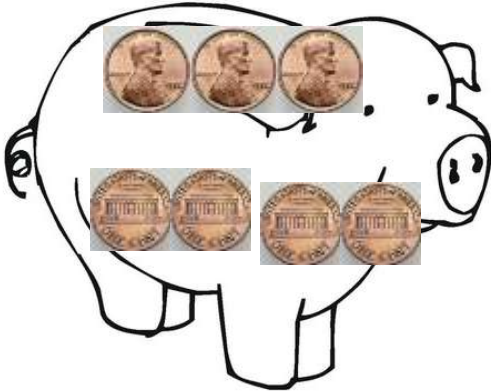
A.  $12 + 3 = 15$

C.  $12 - 3 = 9$

B.  $3 + 9 = 12$

D.  $12 - 9 = 3$

Elige la oración numérica  
(Una página por estudiante)



Mira las monedas en la alcancía.

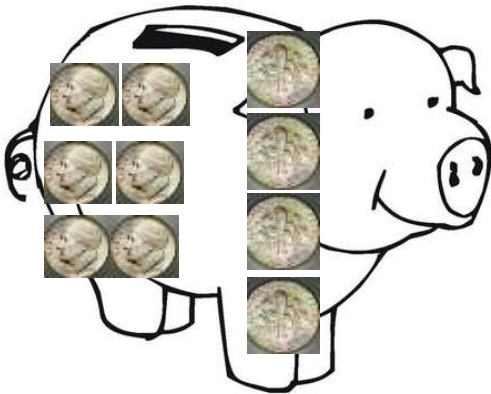
¿Cuál de las siguientes oraciones numéricas coincide con la imagen?

A.  $3 + 4 = 7$

C.  $7 - 3 = 4$

B.  $7 - 4 = 3$

D.  $7 + 4 = 11$



Mira las monedas en la alcancía.

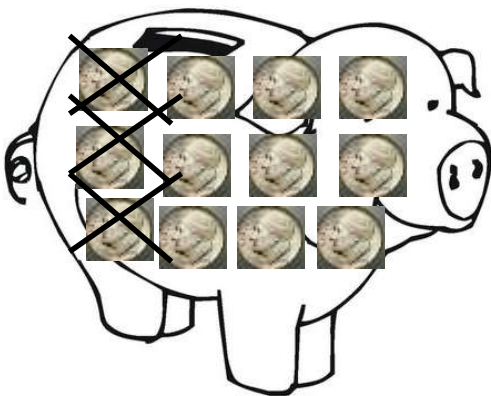
¿Cuál de las siguientes oraciones numéricas coincide con la imagen?

A.  $10 - 4 - 6$

C.  $10 + 4 = 14$

B.  $10 - 6 = 4$

D.  $6 + 4 = 10$



Mira las monedas en la alcancía.

¿Cuál de las siguientes oraciones numéricas coincide con la imagen?

A.  $12 + 3 = 15$

C.  $12 - 3 = 9$

B.  $3 + 9 = 12$

D.  $12 - 9 = 3$

**Literature Vocabulary**

allowance  
greedy  
generous  
spendthrift  
sensible

**Math Vocabulary**

coins  
penny  
nickel  
dime  
quarter  
dollar  
cents  
equals, = is the same as  
add +  
subtract -

**Materials**

- **BLM** Choose the Number Sentence (TV Lesson) – 1 per student
- **BLM** Family Fun Game board
- game pieces
- game board
- movement cards
- all-level answer key
- problem cards (blue for grades 1-2)
- special instructions for grades 1-2
- money kit
- hundreds chart
- piggy bank story board

**ELPS** (*English Language Proficiency Standard*)

1C, 2A, 3C, 3D, 5B, 5C

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR

ELA I.A.2., I.A.3., IV.A.2

MATH VIII.A.2., VIII.A.3.,

VIII.C.1., X.B.2., X.B.3

**Technology**

Either of the two suggested sites could be a self-checking center activity.

**Unit 1, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up****Math Objectives:**

- Solve addition and subtraction story problems.
- Use number sentences to represent story problems.
- Match number sentences to models of story problems.

**Language Objectives:**

- Complete sentence stems.
- Listen and speak with a partner during our math activity.
- Use the math vocabulary during the activity.
- Discuss answers and strategies during a game activity.
- Share-write math journal response.

**Practice and Application, Math**

*(Complete the Choose the Number Sentence sheet from the TV Lesson, using the same process the TV Teacher and Azulito used with the first problem.)*

*(Before teaching the students the Family Fun Game, have them stand up and stretch, or take some type of physical break to get them out of their seats and moving.)*

*(Teach the Family Fun Game. This same board will be traveling home today with all grade bands, each band having their own set of problem cards. Make sure that the students understand the process of the game and are comfortable with the strategies before they take the materials home.)*

**Math Journal Writing**

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



**Describe the picture you could draw for this number sentence.  $6 + 4 = 10$**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have the students tell you how they accomplished each.



## Family Fun Unit 1 Lesson 3

### Family Fun Game!

Today is the day that the Family Fun Game comes home with all grade bands!! YEAH!

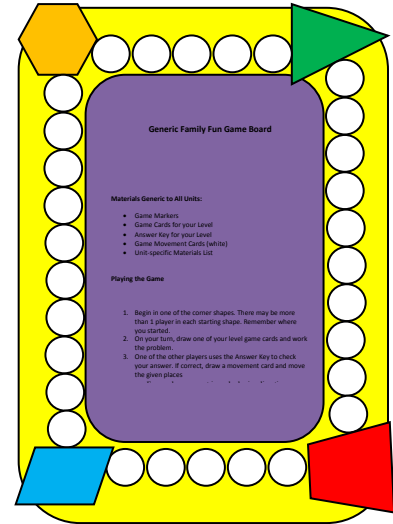
Attached are the following:

- game pieces
- game board
- movement cards
- all-level answer key
- problem cards (blue for grades 1-2)
- special instructions for grades 1-2
- money kit
- hundreds chart
- Piggy bank story board

Please put the game materials in a convenient place so that you can play frequently. We hope you take advantage of and enjoy these Family Fun Games. We'll be sending home new problem cards, answer keys and special instructions sheets at the close of each unit.

Thank you for sharing time with your children! You are a valuable part of their education!

Your Child's Teacher,

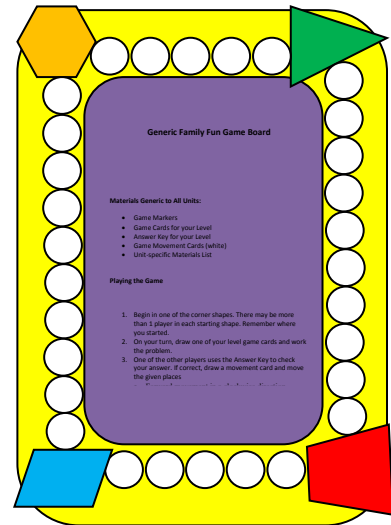


## ¡Juego de Diversión Familiar!

¡Hoy es el día en que el juego de Diversión Familiar se va a casa con todos los grados! ¡SÍ!

Van incluida:

- Las piezas de juego
- El tablero de juego
- Las cartas de movimiento
- La guía de respuestas para todos los
- Tarjetas con problemas (de color azul para los grados 2)
- Juego de dinero
- Table de centenas



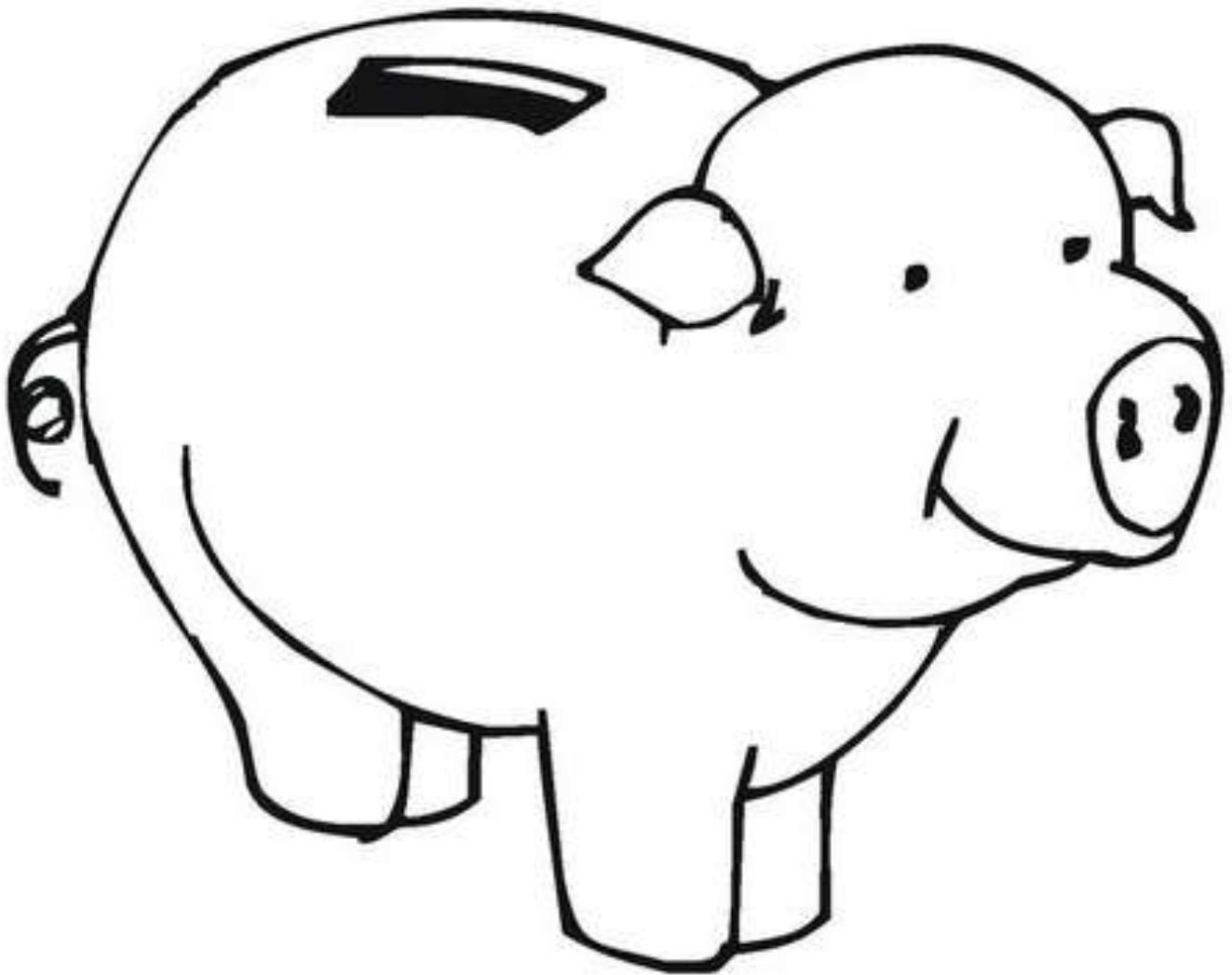
1-

Por favor coloque las piezas de juego, cartas, tabla, juegos de dinero y otras partes del juego en un lugar especial, ¡para que puedan jugarlo como familia una y otra vez!

Esperamos que aproveche y disfrute de estos juegos de Diversión Familiar. Le enviaremos a casa nuevas cartas de problemas, guías de respuestas y hojas con instrucciones especiales al terminar cada unidad.

¡Gracias por pasar tiempo con sus hijos! ¡Usted es una parte muy valiosa de su educación!

El maestro de su hijo,







**BLM Unit 1, Family Fun Game Lesson 3****Hundreds Chart**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>
<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>
<b>51</b>	<b>52</b>	<b>53</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>58</b>	<b>59</b>	<b>60</b>
<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>	<b>66</b>	<b>67</b>	<b>68</b>	<b>69</b>	<b>70</b>
<b>71</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>77</b>	<b>78</b>	<b>79</b>	<b>80</b>
<b>81</b>	<b>82</b>	<b>83</b>	<b>84</b>	<b>85</b>	<b>86</b>	<b>87</b>	<b>88</b>	<b>89</b>	<b>90</b>
<b>91</b>	<b>92</b>	<b>93</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>99</b>	<b>100</b>





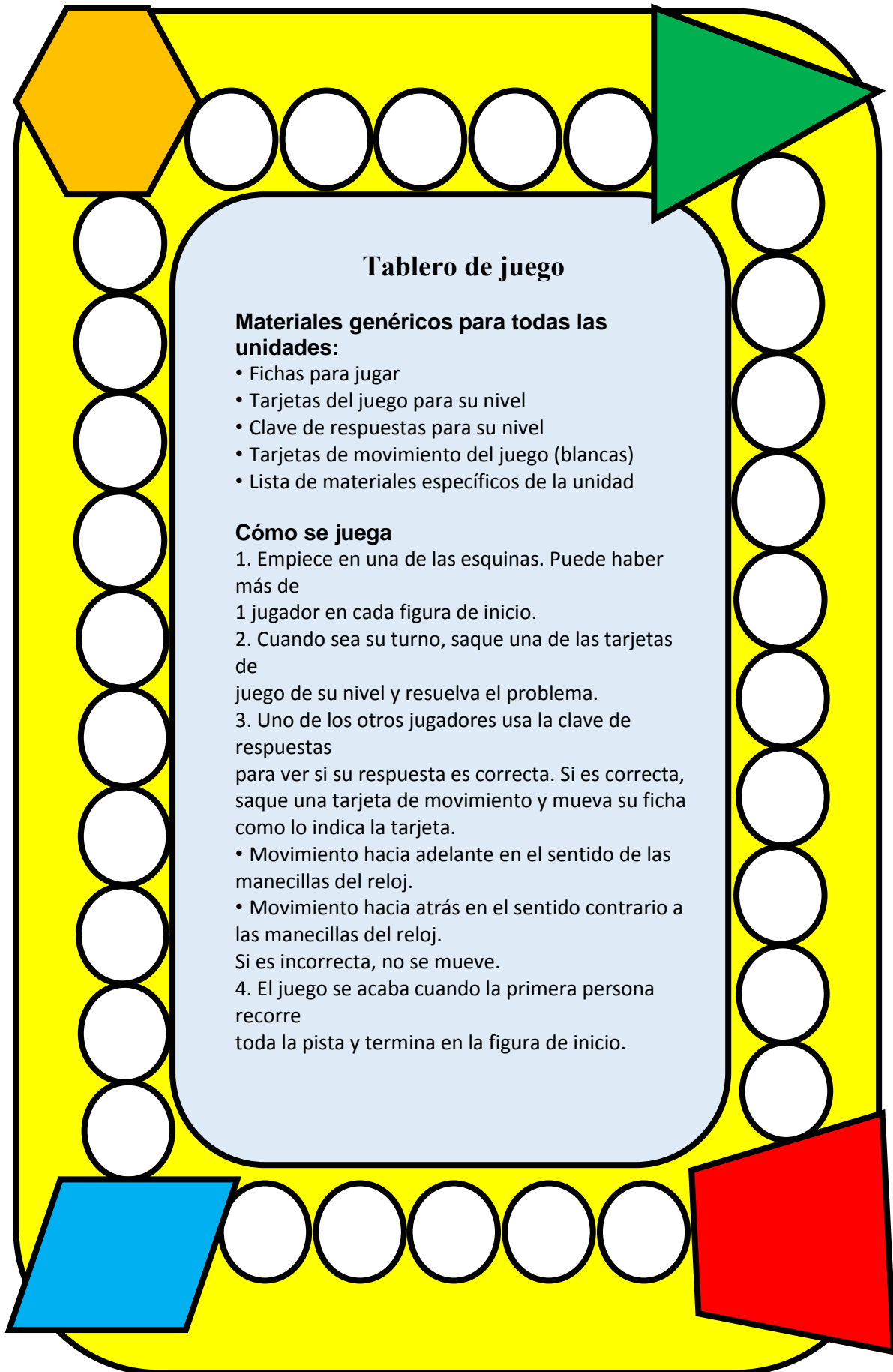
## Generic Family Fun Game Board

### Materials Generic to All Units:

- Game Markers
- Game Cards for your Level
- Answer Key for your Level
- Game Movement Cards (white)
- Unit-specific Materials List

### Playing the Game

1. Begin in one of the corner shapes. There may be more than one player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, draw a movement card and move the given places
  - Forward movement in a clockwise direction.
  - Backward movement in a counter clockwise direction.If incorrect, do not move.
4. Game is over when the first person runs the entire track, ending back on the starting shape.



**BLM All-School Unit 1, Lesson 3**

**Family Fun Game Answer Key**

<b>Problem Letter</b>	<b>Kinder</b>	<b>1-2</b>	<b>3-4</b>	<b>5-6</b>	<b>7-8</b>
<b>A</b>	This coin is a quarter.	(listen to the skip counting)	x x x x x x x x x x x x	633.29 miles	$\frac{22 \text{ boys}}{30 \text{ girls}}$
<b>B</b>	This coin is a dime.	(listen to the skip counting)	x x x x x x	\$3237.88	$\frac{15 \text{ girls}}{26 \text{ total}}$
<b>C</b>	This coin is a penny.	(listen to the skip counting)	x x x x x x x x x x	perimeter = 99.5 meters	$\frac{14 \text{ boys}}{33 \text{ total}}$
<b>D</b>	This coin is a quarter.	5 cents	$3 \times 5 = 15$	width = 10.75 meters	$\frac{21 \text{ red}}{33 \text{ total}}$
<b>E</b>	This coin is a dime.	10 cents	$2 \times 5 = 10$	334.325 yards	6 cups of flour
<b>F</b>	This coin is a penny.	1 cent	$2 \times 3 = 6$	\$451.09	$\frac{1}{4}$ cup of onions
<b>G</b>	This coin is a nickel.	25 cents	There were 4 nickels in each bank.	\$35 for each yard	12 cups of flour
<b>H</b>	This coin is a nickel.	14 nickels	There were 2 stacks of 5 nickels.	\$2800	$12 \frac{1}{2}$ cups sugar
<b>I</b>	This coin is a dime.	11 quarters	any model equivalent to $\frac{1}{2}$	\$744	11.5 oz of chocolate
<b>J</b>	Benny had 4 pennies.	19 pennies	4.05	\$205	16 baskets
<b>K</b>	Benny had 2 pennies.	11 pennies	27.12	\$675	20 baskets
<b>L</b>	Benny had 4 pennies.	4 pennies	$3 \frac{5}{10}$ or $3 \frac{1}{2}$	\$11.75 per hr	Same. Ratios are equivalent at 2:3
<b>M</b>	Benny had 5 pennies.	3 pennies	Four and twenty-three hundredths	\$660 (double \$330)	12 blue
<b>N</b>	Benny had 5 pennies.	7 pennies	2 tenths	\$165 (half of \$330)	18 red
<b>O</b>	Benny had 0 or no pennies.	14 pennies	4 tenths	$x = \$100$ (double 25, double 50)	16 yellow
<b>P</b>	(counts out 15 pennies)	Make a group of 5 and a group of 6	$1.5 < 1.75$ Less than	$x = 56$ (half of 112)	\$72.00
<b>Q</b>	(counts out 12 pennies)	Make a group of 8 and a group of 8	$1.51 > 1.49$ Greater than	\$412.50 (half of \$825)	50 minutes
<b>R</b>	(counts out 20 pennies)	Show 12 pennies and remove 6.	$1.2 > 1.02$ Greater than	\$150 (50% = \$100, 25% = \$50, combine)	Alicia – She runs $1 \frac{2}{3}$ blocks per min.





Printed on White –one set per partners for class; one set per student for home.

<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>
<b>Move back 1 space</b>	<b>Move back 1 space</b>	<b>Move back 1 space</b>
<b>Move forward 3 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 3 spaces</b>

Units 1 – 2 – 3 -- FAMILY FUN

One per student for home

One per partner pair in class



Print on white paper.

Family Fun – Movement Cards

<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>
<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>
<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>



**BLM Unit 1, Follow-up Lesson 3**

**Family Fun Game Cards** 

Printed on **Blue** —one set per partners for class; one set per student for home. (There are two pages of cards.)

**A.**

Skip count from 5 to 100.

**B.**

Skip count from 10 to 100.

**C.**

Skip count from 25 to 100.

**D.**

What is the value of a nickel?  
One nickel is worth \_\_\_\_ cents.

**E.**

What is the value of a dime?  
One dime is worth \_\_\_\_ cents.

**F.**

What is the value of a penny?  
One penny is worth \_\_\_\_ cent.

**G.**

What is the value of a quarter?  
One quarter is worth \_\_\_\_ cents.

**H.**

Brother Bear had 5 nickels.  
Sister Bear had 9 nickels.  
How many nickels did they have together?

**I.**

Brother Bear had 3 quarters.  
Sister Bear had 8 quarters.  
How many quarters did they have together?

**BLM Unit 1, Follow-up Lesson 3**

**Family Fun Game Cards** 

Printed on **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**A.**

Cuenta salteando desde 5 hasta 100.

**B.**

Cuenta salteando desde 10 hasta 100.

**C.**

Cuenta salteando desde 55 hasta 100.

**D.**

¿Cuánto vale una moneda de 5 centavos?  
Una moneda de 5 centavos vale \_\_\_ centavos.

**E.**

¿Cuánto vale una moneda de 10 centavos?  
Una moneda de 10 centavos vale \_\_\_ centavos.

**F.**

¿Cuánto vale una moneda de 1 centavos?  
Una moneda de 1 centavos vale \_\_\_ centavo.

**G.**

¿Cuánto vale una moneda de 25 centavos?  
Una moneda de 25 centavos vale \_\_\_ centavos.

**H.**

Hermano Oso tenía 5 monedas de 5 centavos.  
Hermana Osa tenía 9 monedas de 5 centavos.  
¿Cuántas monedas de 5 centavos tenían entre los dos?

**I.**

Hermano Oso tenía 3 monedas de 25 centavos.  
Hermano Oso tenía 8 monedas de 25 centavos.  
¿Cuántas monedas de 25 centavos tenían entre los dos?

**BLM Unit 1, Follow-up Lesson 3**

**Family Fun Game Cards** 

Printed on **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.**

There were 15 pennies in the piggy bank. 4 more pennies were put into the bank. How many pennies were in the piggy bank then?

**K.**

There were 15 pennies in the piggy bank. Brother Bear took out 4 of them. How many pennies were in the piggy bank then?

**L.**

Sister Bear had 12 pennies. She spent 8 of them. How many pennies did she have then?

**M.**

Brother Bear had 10 pennies. He spent some of them and had 7 pennies left. How many pennies did Brother Bear spend?

**N.**

Sister Bear had some pennies. After she added 5 to the piggy bank, she had 12 pennies. How many pennies were there to start with?

**O.**

Brother and Sister Bear each had 7 pennies. How many pennies did they have together?

**P.**

**Use your pennies to model:**

$$5 + 6 = 11$$

**Q.**

**Use your pennies to model:**

$$8 + 8 = 16$$

**R.**

**Use your pennies to model:**

$$12 - 6 = 6$$

**BLM Unit 1, Follow-up Lesson 3****Family Fun Game Cards** 

Printed on **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.**

Había 15 monedas de un centavo en la alcancía. Se metieron 4 monedas de un centavo más en la alcancía. ¿Cuántas monedas de un centavo había en la alcancía entonces?

**K.**

Había 15 monedas de un centavo en la alcancía. Hermano Oso sacó 4 de ellas. ¿Cuántas monedas de un centavo había en la alcancía entonces?

**L.**

Hermana Osa tenía 12 monedas de un centavo. Gastó 8 de ellas. ¿Cuántas monedas de un centavo le quedaron?

**M.**

Hermano Oso tenía 10 monedas de un centavo. Se gastó algunas y le quedaron 7 monedas de un centavo. ¿Cuántas monedas de un centavo gastó Hermano Oso?

**N.**

Hermana Osa tenía algunas monedas de un centavo. Después de que agregó 5 a la alcancía, tenía 12 monedas de un centavo. ¿Cuántas monedas de un centavo había para empezar?

**O.**

Hermano Oso y Hermana Osa tenían 7 monedas de un centavo cada uno. ¿Cuántas monedas de un centavo tenían entre los dos?

**P.**

**Usa tus centavos para modelar:**

$$5 + 6 = 11$$

**Q.**

**Usa tus centavos para modelar:**

$$8 + 8 = 16$$

**R.**

**Usa tus centavos para modelar:**

$$12 - 6 = 6$$

**Materials:**

- Money Sets – 20 pennies, 20 nickels, 10 dimes, 4 quarters
- **BLM** Hundreds Chart (to help students skip count)
- **BLM** Piggy Bank Storyboard (students use money to model the word problems)
- **BLM** Family Fun Game Board
- **BLM** Family Fun Game Movement Cards (white card stock – all grade bands have the same movement cards)
- **BLM** Family Fun Game Cards, 2 pages (1<sup>st</sup> -2<sup>nd</sup> grade band cards are printed in blue)
- **BLM** Family Fun Game Special 1<sup>st</sup> – 2<sup>nd</sup> Instructions (this sheet)

**Solution Expectations****Problems A - C**

- Students are expected to begin to skip count by 5s, 10s, and 25s. They may use the Hundreds Chart to help them if they wish.

**Problems D – G**

- Students simply tell the value of the coin on the card. They should answer in a complete sentence using the sentence stem on the card.

**Problems H – L**

- Students model the problem using the **BLM** Piggy Bank Storyboard and the money kit. It is acceptable for older students or adults to read the problem to the students.

**Problems M - O**

- These word problems are a little more difficult. Modeling is very important so that students see how to solve these problems.

**Problems P - R**

- Students use their money kits and the **BLM** Piggy Bank Storyboard to model a story that could describe the number sentence.

## **BLM Unidad 1, Lección de seguimiento 3 Diversión Familiar para 1º-2º**

## **Instrucciones especiales para**

### **Materiales:**

- Juegos de monedas – 20 monedas de un centavo, 20 monedas de 10 centavos, 10 monedas de 5 centavos, 4 monedas de 25 centavos
- Tabla de centenas de **BLM** (para ayudar a los estudiantes a contar saltando)
- Guión gráfico de alcancía de **BLM** (los estudiantes usan dinero para modelar los problemas razonados)
- Tablero de juego de Diversión Familiar de **BLM**
- Cartas de movimiento del juego de Diversión Familiar de **BLM** (cartulina blanca - todos los grados usan las mismas cartas de movimiento)
- Cartas del juego de Diversión Familiar de **BLM**, 2 páginas (las cartas para 1º -2º grados se imprimen en azul)
- Instrucciones especiales del juego de Diversión Familiar para 1º -2º de **BLM** (esta hoja)

### **Expectativas de solución**

#### **Problemas A – C**

- Se espera que los estudiantes cuenten saltando, de 5 en 5, de 10 en 10 y de 25 en 25. Pueden usar la tabla de centenas como ayuda si lo desean.

#### **Problemas D – G**

- Los estudiantes simplemente dicen el valor de la moneda en la carta. Debe responder con una oración completa, usando la raíz de oración en la carta.

#### **Problemas H - L**

- Los estudiantes modelan el problema usando el guión gráfico de alcancía de BLM y el juego de monedas. Es aceptable que los estudiantes mayores o un adulto lea el problema a los estudiantes.

#### **Problemas M -- O**

- Estos problemas razonados son un poco más difíciles. Modelar es muy importante para que los estudiantes vean cómo resolver estos problemas.

### Math Objectives

- Separate a whole into two equal parts and use appropriate language to describe the parts such as one out of two equal parts.
- Partition objects into two equal parts and name the parts halves.
- Represent the fraction half numerically.

### Language Objectives

- Explain why each portion is half.
- Share-write what is a half.

### Vocabulary

half  
fair shares  
equal pieces

### Materials:

#### STUDENT ACTIVITY (per partner pair):

- BLM String Cheese Snack Fractions
- BLM String Cheese to Share
- 1 string cheese per pair
- 1 plastic knife
- 2 paper dessert plates
- 2 paper towels
- 1 scissors per student
- 1 ruler and marker per student
- 1 glue stick per student
- Chart paper with three questions:

1) *How do you know that each portion is half?*

2) *How do you describe this fraction?*

3) *How do you represent this fraction in numbers?*

Put a copy of the record sheet string cheese snack fraction cut apart at the top of the chart with the question.

## Unit 1, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



**Children should wash their hands before this activity if using food items.**

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

### Objective:

Today you are going to share a snack with one other friend. You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. And you will be able to write the number representation of the fraction.

### TODAY:

Divide the students into partners, giving each student first the BLMs String Cheese Snack Fractions and the paper representation of an ice cream sandwich (*either the BLM String Cheese to share or cream-colored strips of paper cut to size of string cheese*).

Ask each student to share the paper string cheese as if s/he were cutting in fair shares for one other person. Let students share their cuts. Did they all share the same (*could be horizontal, vertical*)? Prove that the parts are halves by laying the pieces on top of one another – these are congruent halves, same size, same shape. Show students how to write the fraction numerically, making sure you use a horizontal line and NOT a diagonal fraction line. Tell students that the bottom number, or denominator, tells you how many pieces the whole is cut into, and the upper number, or numerator, tells you how many pieces in your portion – one out of two equal pieces. Students then complete the record sheet as before, but adding the numerical representation of half.

Now distribute the actual snacks, having the students share string cheese between them. If the partners had divided the paper differently, they will have to decide how to share the real snack.

### Snack Fraction Writing: Chart Paper

Have the students answer the three chart questions. A student may scribe, or you may scribe for them. Leave the chart in the room for reference.

### Objectives:

Read the objectives. How did we accomplish these in our snack fraction lesson?





My name is \_\_\_\_\_

This is my plate and my fair share of the snack.

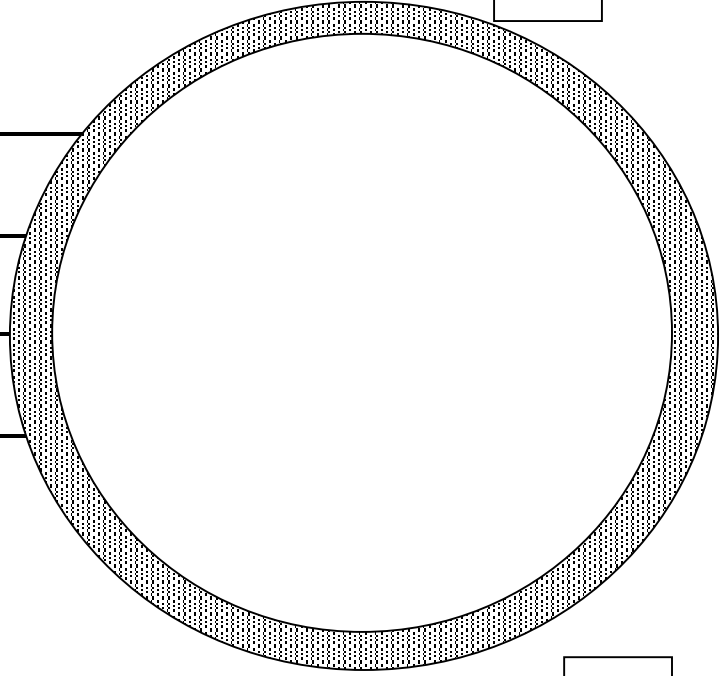

My share is called a \_\_\_\_\_ because

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This is my friend's plate and fair share of the snack.

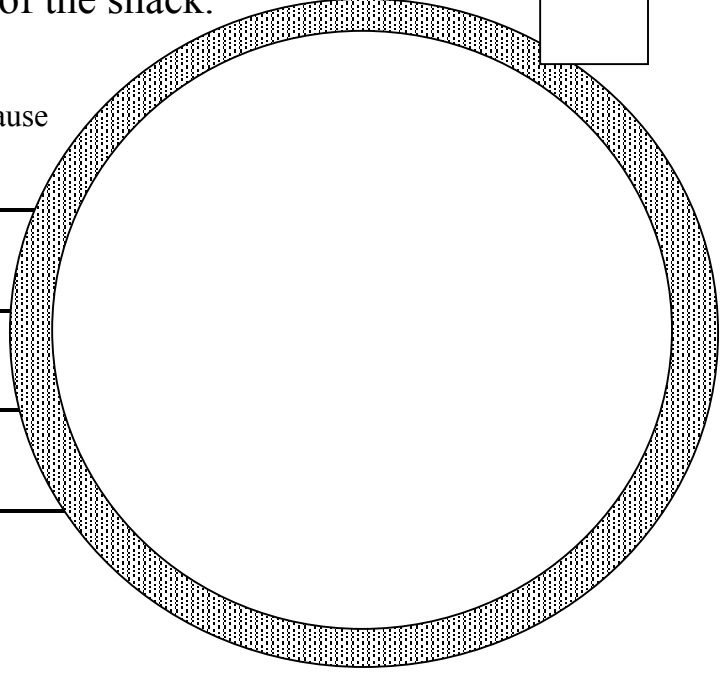

My friend's share is called a \_\_\_\_\_ because

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My name is \_\_\_\_\_

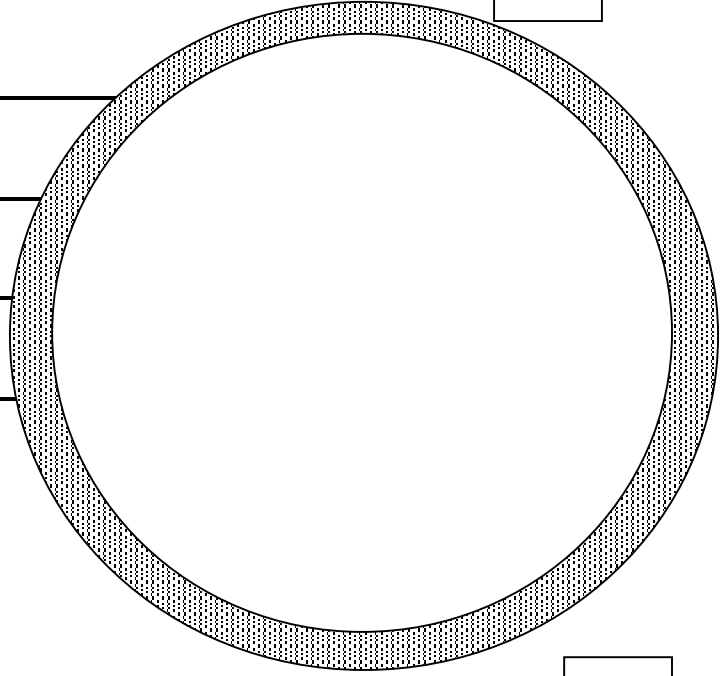
Esto es mi plato y mi porción igual.  
Mi porción se llama \_\_\_\_\_ porque


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Esto es el plato de mi amigo/ y su porción igual..

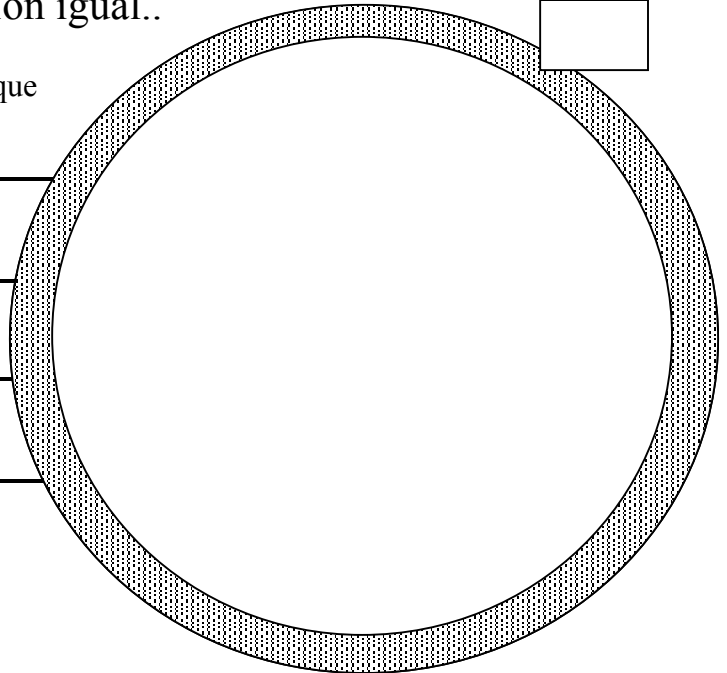
La porción de mi amigo/a se llama \_\_\_\_\_ porque


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**BLM Kinder Unit 1, TV Lesson 3****String Cheese to Share**

There are snacks for two students on this page. Students are to use a straight edge to draw the line to cut the snack in half, then use scissors to cut the snack in half, then glue the half to each plate pictured on the BLM String Cheese Snack Fractions. Notice that the cheese is at an angle. It will be interesting to see how the students overcome that perspective.





## FAMILY FUN - Sharing Halves

All ages are studying fractions this summer. Your child has been sharing snacks with a friend during Snack Fractions. They each received half of the snack.



Please help your child share snacks with you or a sibling. Although you will need to supervise, especially if a knife must be used to cut the snack, please let your child direct the sharing – where to cut, how much to give. Your child should also be able to tell you why the two shares are halves. (They are equal parts. I have one-half because I have one of two equal parts). And by now should be able to write the fraction as a number.

Thank you for helping us teach your child. You are a valuable part of the education process.

I shared \_\_\_\_\_ with \_\_\_\_\_.  
Name of snack Name of person

Each of us received one-half of the snack. We each received 1 of 2 equal parts.

I shared \_\_\_\_\_ with \_\_\_\_\_.  
Name of snack Name of person

Each of us received one-half of the snack. We each received 1 of 2 equal parts.

I shared \_\_\_\_\_ with \_\_\_\_\_.  
Name of snack Name of person

Each of us received one-half of the snack. We each received 1 of 2 equal parts.

## DIVERSIÓN FAMILIAR - Compartiendo mitades

Niños de todas las edades están estudiando fracciones. Su hijo ha estado compartiendo refrigerios con un amigo durante las "fracciones de refrigerio". Cada uno recibió la mitad del refrigerio.



Por favor ayude a su hijo a compartir sus refrigerios. Aunque usted necesite supervisarlos, especialmente al partir el refrigerio, deje que su hijo tome el control del proceso de compartir - dónde cortar, cuánto dar. Su hijo también debe ser capaz de decirle por qué las dos partes son mitades. (Son partes iguales. Yo tengo una mitad porque tengo 1 de 2 partes iguales). Y ya debe ser capaz de escribir la fracción como número. Gracias por ayudarnos a enseñar a su hijo. Usted es una parte muy valiosa del proceso educativo.

Compartí \_\_\_\_\_ con \_\_\_\_\_.  
Nombre del refrigerio                      Nombre de la persona

Cada uno de nosotros recibió un medio del refrigerio. Cada uno recibió 1 de 2 partes iguales.

Compartí \_\_\_\_\_ con \_\_\_\_\_  
Nombre del refrigerio                      Nombre de la persona

Cada uno de nosotros recibió un medio del refrigerio. Cada uno recibió 1 de 2 partes iguales.

Compartí \_\_\_\_\_ con \_\_\_\_\_  
Nombre del refrigerio                      Nombre de la persona

Cada uno de nosotros recibió un medio del refrigerio. Cada uno recibió 1 de 2 partes iguales.

*This portion of the curriculum, although NOT required, should be used as needed to supplement and enrich the Unit's activities.*

**Family Fun Suggestions:**

- Art Project – coin banks from cans or plastic jars with plastic lids
- Make coin rubbings at home.

**Possible Center Suggestions:**

- Online Math Games
- Art Project

**ENRICHMENT Suggestions**

1<sup>st</sup> – 2<sup>nd</sup>



Unit 1 *Berenstain Bears' Trouble with Money*

**MATH WALK**

One of the goals of this summer session is to help your students become more observant. Before your walk, rope off a 10' x 10', and secretly write a list of as many things as you can see within that area. On the walk day, tell the students you want them to try to remember as many things as they can within the area. Walk for five minutes, asking the students not to talk. When you come inside, make a list of everything the students can remember; then take the list back outside with you to see what they saw and remembered, and what they missed.

**Technology Connections**

• **Math Practice**

<http://www.smartygames.com/igre/math/learnMoney.html>

Game to select coins to pay for various priced toys.

**iPad App – Count Money** Four levels of difficulty; choice of 10, 25 or 50 problems.

• **Science Connection**

[http://www.ehow.com/info\\_79http://www.ehow.com/info\\_8109377\\_science-floating-coin-different-liquids.html](http://www.ehow.com/info_79http://www.ehow.com/info_8109377_science-floating-coin-different-liquids.html)

Will a coin float? (Probably demo at this age.)

• **Social Studies Connection**

<http://kids.usa.gov/watch-videos/videos/money-factory/index.shtml>

How money is designed and printed.

<http://www.newmoney.gov/newmoney/dyob/index.html>

Interactive designing your own bill.

**More Curriculum Connection Ideas off the Web**

• **Health/Physical Ed Connection**

**Value Race**


1. Divide students into two equal teams and line up in two lines facing each other outdoors about 50 feet apart. Select a CAPTAIN for each team, and place the CAPTAIN at opposite ends of each team.
2. Place two baskets of 10 tennis balls each in the middle between the two teams. Place one basket behind each team line.
3. Every student is given a coin name, and wears a tag showing that name.
4. The teacher calls out an amount, such as \$1.25. Each team gathers together a collection of members which would equal that value. As soon as the value is assembled, the CAPTAIN runs to the nearest basket of balls, grabs a ball, runs back to his/her own team and puts the ball into his/her team's basket.
5. Teacher blows a whistle after 30 seconds, signaling the end of that round. Until the whistle blows, both teams can earn a ball
6. Repeat 10 times. Team with the most balls in their team basket wins.

• **Art Connection**

Coin Rubbings

Make a bank from a coffee can or other can with a plastic lid.

## **FAMILY FUN Involvement**

1<sup>st</sup> – 2<sup>nd</sup> 

Overview for Unit 1, *Berenstain Bears' Trouble with Money*

This overview will provide a one-page view of the suggested Family Fun Activities for this unit, as well as other opportunities provided for Family Involvement.

### **Lesson 1**

- Vocabulary Cards so students can practice language and math vocabulary at home
- Family Fun Unit 1 Lesson 1 Letter

### **Lesson 2**

- Family Fun Unit 1 Lesson 2 Letter inviting parents to help students count to 100 by tens and sending home the Hundreds Chart to help them do it.

### **Lesson 3**

- Family Fun Unit 1 Lesson 3 attached to the Family Fun Game supplies
- Family Fun Sharing Snack Fractions – now that students have had a full unit of sharing in halves, why not invite the families to share snacks at home in fractional parts. You could send this one home with each unit.

### **Enrichment Suggestions**

- Make coin rubbings at home.





<p><b>Math Objectives</b> (TV2) (1<sup>st</sup> grade assessment item 2; 2<sup>nd</sup> grade item 2)</p> <ul style="list-style-type: none"> <li>Solve addition and subtraction story problems.</li> <li>Use number sentences to represent story problems.</li> </ul> <p>(TV3) (1<sup>st</sup> grade assessment item 4)</p> <ul style="list-style-type: none"> <li>Match number sentences to models of story problems.</li> </ul>	<p><b>Materials</b> (TV2)</p> <ul style="list-style-type: none"> <li>BLM Piggy Bank Story Board – 1 per student</li> <li>BLM Money Problems – 1 per student</li> <li>Student Money Sets in Ziploc (1 set per student)                         <ul style="list-style-type: none"> <li>20 nickels</li> <li>10 dimes</li> <li>4 quarters</li> </ul> </li> </ul> <p>(TV3)</p> <ul style="list-style-type: none"> <li>BLM Models to Numbers, – 1 per student</li> <li>BLM Choose the Number Sentence – 1 per student</li> </ul> <p><b>Family Fun</b></p> <ul style="list-style-type: none"> <li>BLM Family Fun Game board</li> <li>BLM Kinder Special Instructions</li> <li>BLM Piggy Bank Story Board</li> <li>BLM Hundreds Chart</li> <li>BLM Family Fun Movement Cards</li> <li>BLM Family Fun Problem Cards (blue)</li> <li>BLM Family Fun Answer Key – all levels</li> <li>Game markers</li> </ul> <p><b>Snack Fractions – TV lesson 1</b></p> <ul style="list-style-type: none"> <li>BLM Apple Snack Fractions</li> <li>BLM Apple to Share</li> <li>1 apple previously cut in half and put into a Ziploc. You might want to dip each half in orange juice to keep from turning brown.</li> <li>2 paper dessert plates</li> <li>2 paper towels</li> <li>1 scissors per student</li> <li>1 ruler and marker per student</li> <li>1 glue stick per student</li> <li>Chart paper with question: How do you know that each portion is half?</li> </ul>
<p><b>Differentiate</b></p> <p>Differentiating comes in your choice of which lesson to teach. You will also want to choose activities in the Daily Routines that teach/review the skills you need for your students to learn/review.</p>	
<p><b>Snack Fraction Notice</b></p> <p>All snack fractions are common throughout the grade bands. All grade bands have daily snack fraction activities provided. All snack fractions for a unit in a specific grade band will practice the same set of skills. Therefore, you may choose from any of the three activities. Lesson 1 has been suggested for its ease of delivery.</p>	

**QUESTIONING**

As a result of this lesson, your students should be able to respond to the following:

- What math movie do you see in your mind when I read this story?
- What is a strategy to find the solution?
- Write a number sentence that also represents the math movie in this story problem.
- Name the coins and their values.



### Math Vocabulary

Coins, penny, nickel, dime, quarter, dollar, cents, equals = is the same as, adds +, subtract -

### CGI Problem (select one)

- Join, Result Unknown (1<sup>st</sup> grade assessment item 1; 2<sup>nd</sup> grade assessment item 3)
- Compare, Difference Unknown (1<sup>st</sup> grade assessment item 5; 2<sup>nd</sup> grade assessment item 6)

### Journal Writing

Explain how seeing the “math movie” can help you solve a story problem.

**Family Fun** (1<sup>st</sup> grade assessment items 4, 6; 2<sup>nd</sup> grade assessment items 3, 5) (A generic game board is being used in all grade levels, differentiated by game cards specific to the grade level.) There is only one type of game this year. All games will have problem cards and an answer key at all levels. Please be sure the 1<sup>st</sup> – 2<sup>nd</sup> grade cards are printed on blue cardstock.

**Snack Fractions** - TV Lesson 1 (1<sup>st</sup> grade assessment item 8; 2<sup>nd</sup> grade item 7) You can select any of the three snacks that are appropriate for your homes – all three snacks in 1<sup>st</sup> – 2<sup>nd</sup> grade level will practice the same skills. However, for ease of delivery, we have suggested Lesson 1, Apple.

Students first “share” a picture of an apple and record on the BLM, showing their halves of apples and explaining how they know they are halves. They then are given two halves of a real apple and must verbally explain why the apples are halves.

**Assessment** – Students will be introduced to and practice skills for items:

1<sup>st</sup> - 1, 2, 4, 8

2<sup>nd</sup> - 2, 3, 5, 7

# 1<sup>st</sup>-2<sup>nd</sup> Unit 2

## Overview

### Dave the Potter

This is a quick snapshot of the three math lessons for this unit. For detailed instructions, balance literacy objectives/extended activities, enrichment ideas refer to the complete lesson plans for each lesson. Notice that the Classroom Lesson has been divided into the Language portion and the Transition to Math portion.

Lesson Segment	Math Objectives	Language Objectives	Activity	Manipulatives	Supplies
<b>Daily Routine</b> Unit 2 Lesson 1 30 – 45 minutes	<b>ESSENTIAL</b> Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.  <b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.	<b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.	<b>ESSENTIAL</b> • Target Number • CGI Problem • What’s Missing • Measurement  <b>OPTIONAL</b> • Solve It! • Calendar • Straws • Pennies • Graphing • Vocabulary Building  <b>OPTIONAL Program</b> <b>Money Matters:</b> found in its own section on MAS Space.	<b>ESSENTIAL</b> • Color tiles – 20 per student • Unknown Quantity Cards  <b>OPTIONAL</b> • Picture graph generic board • Tag for titles • 30 Straws and rubber bands for board and student kits • Pennies, nickels, dimes, quarters for counting days in school	<b>ESSENTIAL</b> • BLM CGI Problems Unit 2 – teacher only • BLM Pots to Measure #1 – 1 per student  <b>OPTIONAL</b> • BLM Solve It! 1 problems • BLMs for Daily Routine Board • BLM Which pot do you like best?
<b>Classroom</b> (Language and Transition to Math Lessons) <b>Unit 2 Lesson 1</b> .5 to 1 hour	<b>Math Objectives</b> Compose 10 with <u>two</u> or more addends with and without concrete objects.	<b>Reading Objectives:</b> Make predictions about a story. Monitor comprehension through the understanding of key ideas and details. Make personal connections. <b>Language Objectives:</b> Understand and use vocabulary words to discuss a story.	<b>Language</b> <i>Dave the Potter</i> by Laban Carrick Hill Classroom Set  Class discussion Read Aloud  <b>Vocabulary</b> gritty, squishy, stiff, smooth, cool	<b>Language</b> • chart paper • markers	<b>Language</b> • BLM Word Cards

		<p><b>Math Language Objectives</b> Define vocabulary words. Discuss the activity with peers.</p>	<p><b>Math Building Background</b> Students begin to investigate compatible number pairs that make sums of 10.</p> <p><b>Vocabulary</b> fact family sums of 10 or compatible numbers addends, sum comparing, more than less than, fewer than</p>	<p><b>Math</b></p> <ul style="list-style-type: none"> <li>Unifix cubes or linking cubes - 2 different colored towers of 10 , per student</li> </ul>	<p><b>Math</b></p> <ul style="list-style-type: none"> <li><b>BLM TM Making 10</b> Problems – 1 per student</li> <li><b>BLM TM Word Cards</b></li> </ul>
<p><b>TV</b> <b>Unit 2 Lesson 1</b> 30 minutes</p>	<p>Given three related numbers, make the fact family. Compose 10 with two or more addends with and without concrete objects.</p>	<p>Use the math vocabulary during the activity. Discuss solution strategies. Explain how to create the fact family number sentences from three related numbers.</p>	<p><b>Building Background</b> Introduce fact families</p> <p><b>Vocabulary Building</b> fact family sums of 10 or compatible numbers addends, sum comparing, more than less than, fewer than</p> <p><b>Mathematics</b> Students use data from TM lesson to generate fact families for 10.</p>	<ul style="list-style-type: none"> <li>Unifix cubes or linking cubes – 4 color trains of 10 per, 2 of 1 color and 2 of another color per student</li> <li>Crayons or markers matching the 2 colors of the trains.</li> </ul>	<ul style="list-style-type: none"> <li><b>BLM-TM Making 10</b> Problems from TM lesson (completed)</li> <li><b>BLM Fact Families of Compatible Number Pairs</b> (3 per student)</li> </ul>
<p><b>Follow-up and Snack Fraction</b> <b>Unit 2 Lesson 1</b> .5 to 1 hour</p>	<p>Given three related numbers, make the fact family. Compose 10 with two or more addends with and without concrete objects.</p>	<p>Listen and speak with a partner during our math activity. Explain what sums of 10 or compatible numbers are. Describe a fact family. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>Continue TV Lesson, circulating the room and asking questions provided in the lesson.</p>	<ul style="list-style-type: none"> <li>Unifix cubes or linking cubes – 4 color trains of 10 per, 2 of 1 color and 2 of another color per student</li> <li>Crayons or markers matching the 2 colors of the trains.</li> </ul>	<ul style="list-style-type: none"> <li><b>BLM-TM Making 10</b> Problems from TM lesson (completed)</li> <li><b>BLM Fact Families of Compatible Number Pairs</b> (from TV Lesson)</li> <li>Flip Chart and marker for the shared writing activity. <b>There are fact families for all subtraction and addition facts. What would be the fact family for 3, 9, 12?</b></li> </ul>

<p><b>SNACK FRACTIONS</b> Use concrete models to represent and name fractional parts of a whole (fourths and halves).</p> <p>Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).</p> <p>Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.</p> <p>Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is a fourth/half. Share-write what is a fourth or half.</p> <p>Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.</p> <p>Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Teacher demo of fourths.</p> <p><b>Vocabulary</b> half, halves fourth, fourths fair shares equal pieces</p> <p><b>Math</b> Model sharing fourths. Students then model while the Teacher demonstrates fourths through questions. Students then work with partners, but divide into fourths.</p>	<p><b>SNACK FRACTIONS</b> <b>TEACHER:</b></p> <ul style="list-style-type: none"> <li>• 1 c guacamole</li> <li>• 12 baby carrots</li> <li>• Two 1/4 c measuring cups</li> <li>• 4 paper plates</li> </ul> <p><b>STUDENT ACTIVITY (per partner pair):</b></p> <ul style="list-style-type: none"> <li>• 1 c guacamole or other dip</li> <li>• 12 baby carrots</li> <li>• Two 1/4 c measuring cups</li> <li>• 4 paper plates</li> <li>• 2 plastic spoons</li> <li>• 2 paper towels</li> <li>• 2 scissors</li> <li>• 2 rulers and 2 markers</li> <li>• 2 glue sticks</li> </ul>	<p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Dip and Veggies</li> </ul> <p>Fractions (1 per student)</p>
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Lesson Segment	Math Objectives	Language Objectives	Activity	Manipulatives	Supplies
<i>Daily Routine</i> Unit 2 Lesson 2 30 – 45 minutes	<b>ESSENTIAL</b> Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.  <b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.	<b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.  <b>OPTIONAL</b> Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones.	<b>ESSENTIAL</b> • Target Number • CGI Problem • What’s Missing • Measurement  <b>OPTIONAL</b> • Solve It! • Calendar • Straws • Pennies • Graphing (none today) • Vocabulary Building  <b>OPTIONAL Program</b> <b>Money Matters</b> found in its own section on MAS Space.	<b>ESSENTIAL</b> • Color tiles – 20 per student • Unknown Quantity Cards  <b>OPTIONAL</b> • 30 Straws and rubber bands for board and student kits • Pennies, nickels, dimes, quarters for counting days in school	<b>ESSENTIAL</b> • <b>BLM</b> CGI Problems Unit 2 – teacher only • <b>BLM</b> Pots to Measure #2 – 1 per student  <b>OPTIONAL</b> • <b>BLM</b> Solve It! 1 problems • <b>BLMs</b> for Daily Routine Board
<i>Classroom</i> Unit 2, Lesson 2 1 to 1.5 hour	Compose 10 with two or more addends with and without concrete objects. Create a book of the fact families for 10.	<b>Reading Objectives:</b> Sequence steps from a story in order from first to last. Develop reading fluency with a Shared Reading text.  <b>Language Objectives:</b> Understand, use, and apply new vocabulary. Find unit vocabulary words in a Shared Reading text.	<b>Language</b> <i>Dave the Potter</i> by Laban Carrick Hill Classroom Set  Class discussions Sequencing events in chronological order Shared Reading  <b>Math</b> <b>Building Background</b> Students create a Fact Family book for sums of 10.	<b>Language</b> • Sentence strips for the sequencing activity. <i>Be sure to prepare the sentence strips, with the sentences included in the During Reading section, prior to the actual lesson.</i> • Text from p. 3 written on a chart for shared reading.	<b>Language</b> • <b>BLM</b> Word Cards  <b>Math</b> • <b>BLM</b> <sup>TM</sup> Teacher Guide • <b>BLM</b> <sup>TM</sup> Fact Family Book for (This sheet does not have

<p><i>TV</i> <b>Unit 2, Lesson 2</b> 30 minutes</p>	<p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>Given three related numbers, make the fact family.</li> <li>Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem</li> </ul>	<p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>Use the math vocabulary during the activity.</li> <li>Discuss solution strategies.</li> <li>Explain how to create the fact family number sentences from three related numbers.</li> </ul>	<p><b>Building Background</b></p> <p><b>Vocabulary Building</b></p> <p><b>Mathematics</b></p>	<p><b>Vocabulary</b> fact family sums of 10 or compatible numbers addends, sum comparing, more than less than, fewer than</p>	<p>students Teacher should make a sample of the Fact Family Book to show students</p>	<p>a heading) -half sheet per student  <ul style="list-style-type: none"> <li><b>BLM TM</b> The 3 related numbers for each of the families for 10 are (This sheet does not have a heading) – half sheet per student</li> </ul> <ul style="list-style-type: none"> <li><b>BLM</b> Fact Families – 4 per student</li> <li><b>BLM</b> Basic Facts Flashcards (1 set per class for TV lesson; 1 set per student for Follow-up lesson)</li> <li><b>BLM</b> Word Problems</li> </ul> </p>
<p><i>Follow-up and Snack Fraction</i> <b>Unit 2 Lesson 2</b> .5 to 1 hour</p>	<p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>Given three related numbers, make the fact family.</li> <li>Compose 10 with two or more addends with and without concrete objects.</li> </ul>	<p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>Listen and speak with a partner during our math activity.</li> <li>Explain what sums of 10 or compatible numbers are.</li> <li>Describe a fact family.</li> <li>Use the math vocabulary during the activity.</li> <li>Share-write math journal response.</li> </ul>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Teacher demo of fourths.</p>	<p>Unifix cubes or linking cubes 2, 15- cube trains each of a different colors per student  <ul style="list-style-type: none"> <li>Crayons or markers matching the two colors of the trains.</li> </ul> Scissors, staplers</p>	<p><b>SNACK FRACTIONS</b> Teacher and Student Pairs</p>	<p><b>BLM</b> Fact Families – 4 per student  <ul style="list-style-type: none"> <li><b>BLM</b> Basic Facts Flashcards</li> <li><b>BLM</b> book cover from TM – half page per student</li> <li><b>BLM</b> front page of Fact family book from TM – half page per student</li> </ul> </p>
<p><b>SNACK FRACTIONS</b> Separate a whole into four equal parts and use</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is one fourth</p>	<p><b>SNACK FRACTIONS</b> Teacher and Student Pairs</p>	<p><b>SNACK FRACTIONS</b> Trail Mix Fractions 1 per student)</p>			

	<p>appropriate language to describe the parts such as one out of 4 equal parts. Partition objects into four equal parts and name the parts fourths. Write the fraction in numeric form.</p>	<p>Share-write what is a fourth.</p>	<p><b>Vocabulary</b>  half  fourth  fair share  equal pieces</p> <p>Model sharing the apple with a partner. Students then model with the Teacher demonstrates half through questions.</p> <p>Students first divide a picture and create a record sheet, then are given 2 pre-cut halves to share with a partner. Students must explain how they know they have halves.</p>	<p><b>NOTE:</b> you can certainly provide the two cups/partner Trail Mix already mixed if you prefer – would cut down on the 1/2 c measuring cups you need to provide, and time to mix</p> <ul style="list-style-type: none"> <li>● 2 cups <b>trail mix/pair</b> mix equal parts of <ul style="list-style-type: none"> <li>○ 1/2 c pecans</li> <li>○ 1/2 c semi-choc chips</li> <li>○ 1/2 c granola</li> <li>○ 1/2 c raisins</li> </ul> </li> <li>● One 2-cup measuring cup</li> <li>● Four 12 oz plastic cups</li> <li>● 2 napkins</li> <li>● Two 1/2 cup measuring cups</li> <li>● 2 scissors</li> <li>● 2 rulers and 2 markers</li> <li>● 2 glue sticks</li> </ul>	
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Lesson Segment	Math Objectives	Language Objectives	Activity	Manipulatives	Supplies
<p><b>Daily Routine</b>  <b>Unit 2 Lesson 3</b>            30 – 45 minutes</p>	<p><b>ESSENTIAL</b>            Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p> <p><b>OPTIONAL</b>            Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem. Estimate coins in a jar and count by tens and ones to verify estimate.</p>	<p><b>ESSENTIAL</b>            Listen, read and write to understand problems and explain solution strategies.</p> <p><b>OPTIONAL</b>            Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones. Graph data from classroom experiences and debrief the data.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Target Number</li> <li>CGI Problem</li> <li>What’s Missing</li> <li>Measurement</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Solve It!</li> <li>Calendar</li> <li>Straws</li> <li>Pennies</li> <li>Graphing</li> <li>Vocabulary Building</li> </ul> <p><b>OPTIONAL Program</b>  <b>Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Color tiles – 20 per student</li> <li>Unknown Quantity Cards</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Bar graph generic board</li> <li>Tag for titles</li> <li>Jar with 57 pennies</li> <li>30 Straws and rubber bands for board and student kits</li> <li>Pennies, nickels, dimes, quarters for counting days in school</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>BLM CGI Problems Unit 2 – teacher only</li> <li>BLM Pots to Measure #3 – 1 per student</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>BLM Solve It! 1 problems</li> <li>BLMs for Daily Routine Board</li> <li>BLM How many pennies do you think are in the jar?</li> </ul>
<p><b>Classroom</b>  <b>Unit 2, Lesson 3</b>            1 to 1.5 hour</p>	<p><b>Math Objectives</b>            Compose 10 with two or more addends with and without concrete objects. Generate fact families. Explore base ten materials.</p>	<p><b>Reading Objectives:</b>            Develop decoding abilities and reading fluency with a Shared Reading text.</p> <p><b>Language Objectives:</b>            Use literature vocabulary words in sentences to talk about our lives. Write a sentence using phonics skills and words we have learned.</p>	<p><b>Language</b>  <i>Dave the Potter</i> by Laban Carrick Hill Classroom Set</p> <p>Shared Reading            Interactive Writing</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>Shared reading text written on chart paper from Lesson 2</li> <li>chart paper</li> <li>markers</li> </ul>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>BLM Word Cards</li> </ul>

<p><b>TV</b> <b>Unit 2, Lesson 3</b> 30 minutes</p>	<p>Generate structures from base ten materials and determine their value.</p>	<p><b>Math Language Objectives</b> Discuss patterns explored in base ten materials. Use unit vocabulary properly in discussions.</p>	<p><b>Math Building Background</b> After creating another fact family book of a hard-to-remember fact, students explore base ten relationships. <b>Vocabulary</b> fact family sums of 10 or compatible numbers addends, sum comparing, more than less than, fewer than</p>	<p><b>Math</b> • Scissors – 1 pair per student • Stapler – 1 per 4 students • Base Ten Sets – 1 per student ○ 2 hundreds ○ 15 tens ○ 15 ones</p>	<p><b>Math</b> • <b>BLM TM</b> Fact Family Book for (from TM Lesson 2 ) -half sheet per student • <b>BLM TM</b> The 3 related numbers for each of the families for 10 are (from TM Lesson 2) – half sheet per student • <b>BLM</b> Fact Families (from TV Lesson 2 – 5 per student • <b>BLM</b> Basic Facts Flashcards (from TV Lesson 2) – 1 set per pair • <b>BLM</b> Base Ten Board – 1 per student</p>
<p><b>TV</b> <b>Unit 2, Lesson 3</b> 30 minutes</p>	<p>Generate structures from base ten materials and determine their value.</p>	<p>Use the math vocabulary during the activity. Discuss solution strategies. Explain how to create the fact family number sentences from three related numbers.</p>	<p><b>Building Background</b> Azulito describes his exploration of the base ten materials. <b>Vocabulary Building</b> fact family sums of 10 or compatible numbers addends, sum comparing, more than less than, fewer than <b>Mathematics</b> Students find the value of the different base ten blocks, and of structures Azulito makes of base ten materials.</p>	<p>• Base Ten Sets – 1 per student ○ 2 hundreds ○ 15 tens ○ 15 ones</p>	<p>• <b>BLM</b> Base Ten Board (from Transition to Math Lesson)– 1 per student</p>
<p><b>Follow-up and Snack Fraction</b> <b>Unit 2 Lesson 3</b> .5 to 1 hour</p>	<p>Given three related numbers, make the fact family. Compose 10 with two or more addends with and without concrete objects. Practice previously learned skills.</p>	<p>Listen and speak with a partner during our math activity. Play a review game with a small group. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>Students play the Family Fun Game in two teams rather than small groups so the teacher can see how well students are learning the objectives, but also to allow all students to benefit from class discussion of strategies</p>	<p>• Game markers – 1 per student • 20 counters – per student</p>	<p>You are going to play whole class today, one team against another so you need 1 set of each; and each child has a set to take home. • <b>BLM</b> Family Fun Game Board • <b>BLM</b> Family Fun Movement Cards</p>

	<p><b>SNACK FRACTIONS</b> Use concrete models to represent and name fractional parts of a whole and parts of a set of objects (fourths and halves). Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red. Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part. Write fraction in numerical form.</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is a fourth/half. Share-write what is a fourth or half. Explain whether you would rather have a fourth or a half of your favorite snack and why.</p>	<p>and answers.</p> <p><b>SNACK FRACTIONS Building Background</b> Teacher demo of fourths.</p> <p><b>Vocabulary</b> half, halves fourth, fourths fair shares equal pieces</p> <p>No modeling necessary today – just circulate the room.</p> <p>Students divide the pictures and record on their BLM, then divide and share their snacks.</p>	<p><b>SNACK FRACTIONS TEACHER DEMO:</b></p> <ul style="list-style-type: none"> <li>No demo today</li> </ul> <p><b>(student supplies follow)</b></p> <p><b>STUDENT ACTIVITY (per partner pair):</b></p> <ul style="list-style-type: none"> <li>24 cherry tomatoes</li> <li>1 cup cheese cubes</li> <li>2 napkins</li> <li>4 paper plates</li> <li>Two ½ cup measuring cups</li> <li>2 scissors</li> <li>2 rulers and 2 markers</li> <li>2 glue sticks</li> </ul>	<ul style="list-style-type: none"> <li>20 counters</li> <li>Game Markers</li> <li>BLM Family Fun Problem Cards, Unit 2</li> <li>BLM Special Instructions</li> <li>BLM All-School Answer Key</li> </ul> <p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li>BLM Tomatoes and Cheese fractions – 1 per student</li> <li>Chart Paper with task: Write two comparison statements for ½ and ¼ using &lt; and &gt;.</li> </ul>
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Unit 2	Lesson 1	Lesson 2	Lesson 3
<p>1<sup>st</sup> Grade TV &amp; FIU Assessment Items</p> <ul style="list-style-type: none"> <li>Lesson 1: 1, 3, 7</li> <li>Lesson 2: 4</li> <li>Lesson 3: 5</li> </ul> <p>Daily Routines</p> <ul style="list-style-type: none"> <li>CGI: 1, 3ab, 5ab</li> <li>What's Missing: 2</li> </ul> <p>Snack Fractions: 8</p>	<p><b>TV and Follow-up</b></p> <p><b>1.3(B)</b> use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as <math>2 + 4 = \square</math>; <math>3 + \square = 7</math>; and <math>5 = \square - 3</math>;</p> <p><b>1.3(C)</b> compose 10 with two or more addends with and without concrete objects.</p> <p><i>Given three related numbers, make the fact family.</i></p>	<p><b>TV and Follow-up</b></p> <p><b>1.3(B)</b> use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as <math>2 + 4 = \square</math>; <math>3 + \square = 7</math>; and <math>5 = \square - 3</math>;</p> <p><b>1.3(C)</b> compose 10 with two or more addends with and without concrete objects.</p> <p><i>Given three related numbers, make the fact family.</i></p>	<p><b>TV and Follow-up</b></p> <p><b>1.3(B)</b> use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as <math>2 + 4 = \square</math>; <math>3 + \square = 7</math>; and <math>5 = \square - 3</math>;</p> <p><b>1.3(C)</b> compose 10 with two or more addends with and without concrete objects.</p> <p><i>Given three related numbers, make the fact family.</i></p>
<p>2<sup>nd</sup> Grade TV &amp; FIU Assessment Items</p> <ul style="list-style-type: none"> <li>Lesson 1: 1, 3, 5, 6</li> <li>Lesson 3: 4</li> </ul> <p>Daily Routines</p> <ul style="list-style-type: none"> <li>CGI: 3ab 5ab, 6</li> <li>What's Missing: 2</li> </ul> <p>Snack Fractions : 7</p>	<p><b>Snack Fractions</b></p> <p><b>1.6(G)</b> partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words;</p> <p><b>1.6(H)</b> identify examples and non-examples of halves and <u>fourths</u>.</p>	<p><b>Snack Fractions</b></p> <p><b>1.6(G)</b> partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words;</p> <p><b>1.6(H)</b> identify examples of halves and <u>fourths</u>.</p>	<p><b>Snack Fractions</b></p> <p><b>1.6(G)</b> partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p><b>1.6(H)</b> identify examples and non-examples of halves and <u>fourths</u>.</p>

## Project SMART/Math MATTERS 2014

Grade Level: 1-2

Unit 2 / Lessons 1 – 2 - 3

### Daily Routine Math Objectives:

Determine the unknown whole number in an addition or subtraction equations when the unknown may be any one of the three or four terms in the equation.

Model and solve oral word problems.

Model and solve 2-step word problems.

Represent numbers in a variety of representations including contextual references (i.e., 12 could be  $7 + 5$ , but could also be a dozen).

Read and use a calendar.

Count objects, group in ones and tens.

Compare item lengths using money as the unit of measure.

Estimate and measure linearly in units that approximate standard units.

Create graphs from everyday experiences.

### Daily Routine Language Objectives:

Reason, model and solve oral word problems.

Listen to, read and speak measurement vocabulary: length, estimate, width, longer, shorter.

Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.

Write graph titles and labels interactively.

### Unit Math Objectives (Integrated Lesson including snack fractions):

Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem.

Compose 10 with two or more addends with and without concrete objects.

Given three related numbers, make the fact family.

Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value including algorithms.

Partition two-dimensional figures into two and four fair shared or equal parts and describe the parts using words.

Identify examples and non-examples of halves and fourths.

Partition objects into equal parts and name the parts including halves, fourths, sixths and eighths, using words.

### Unit Language Objectives:

Think, pair, share questions throughout the unit.

Learn and use new vocabulary.

Listen to the story for enjoyment and to develop an understanding of the vocabulary.

Listen to, speak, read and write unit vocabulary in a variety of group and individual settings.

Share-write math sentences.

Describe why a snack is or is not half.

### Technology Objectives:

Use research skills and electronic communication, with appropriate supervision, to create new knowledge.

Technology suggested in this unit: iPad, SMART Board or other “smart” projection device, Internet

**Key Vocabulary, MATH:** fact family, sums of 10 or compatible numbers, addends, sum, comparing, more than, less than, fewer than

**Key Vocabulary, LANGUAGE:** gritty, squishy, stiff, smooth, cool

**Resources/Literacy Links**

*David the Potter* by Laban Carrick Hill

Related links: <http://joannamarple.com/2012/01/2481/> directed at the teacher for further info on Dave.

**Lesson Sequence**

- Daily Routine: 30 to 45 minutes
- Classroom Lesson: .5 to 1 hour
- TV Lesson: 30 minutes
- Classroom Follow-up including Snack Fractions: .5 to 1 hour

**MATH WALK**

Artists' Walk

**Technology Connections****• Math Practice**

<http://www.ezschool.com/Games/Math/AddSubtract/FactFamily1.html> Fact Family practice

[http://www.coolmath-games.com/0-math-](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FH)

[lines/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+blogspot%2FH](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FH) UFI+%28Higher+Up+and+Further+In%29

Challenging game for making 10.

<http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html>

Adding 2-digit numbers

**• Science Connection**

[http://www.teachengineering.org/view\\_activity.php?url=collection/duk\\_/activities/duk\\_float\\_mary\\_act/duk\\_float\\_mary\\_act.xml](http://www.teachengineering.org/view_activity.php?url=collection/duk_/activities/duk_float_mary_act/duk_float_mary_act.xml) Making clay boats that float.

<http://sciencenetlinks.com/lessons/pottery-1-pottery-quest/> clay investigation

**• Social Studies Connection**

<http://www.pbs.org/wnet/slavery/teachers/virtual.html> Making a virtual museum.

**• Health/Physical Ed Connection**

<http://www.negrospirituals.com/> Teacher resource of songs and dances of Spirituals.

**• Art Connection**

[http://www.firstpalette.com/Craft\\_themes/People/pinchpot/pinchpot.html](http://www.firstpalette.com/Craft_themes/People/pinchpot/pinchpot.html)

Make a bank from a coffee can or other can with a plastic lid.

## Unit 2 OPTIONAL All-School Project

Because all grade bands will be reading, learning and researching within the same unit theme, we are offering OPTIONAL projects in which all ages can participate.

### Unit Theme: Artist Biographies

#### Unit 1: Art Museum Exhibits

##### Defined:

Students work as grade bands to create samples of their artist's medium.

Kinder – music, particularly mambo rhythms

1-2 – pottery

3-4 – murals

5-6 - tessellations

**Materials:** Projects naturally depend upon the medium you are using; however the museum should have wall areas, listening areas and shelving for 3-d displays.

**Objectives:** (add your own objectives to the project)

- Students gain an appreciation of not only their artist's medium, but those of others as well.
- Students work together to present their work to the community.

##### Procedures:

1. You might want a committee that will actually plan the "museum." Where, what type of displays, open to the community or closed to the school; times of presentations, advertising needed – these are all concerns to be addressed before the project presentation.
2. Once students have read about their artist, they should probably do additional research to see and hear all they can about the artist's medium.
3. Students may then work individually, in partners, or small groups within the grade band to create exhibits for the museum.
4. Be sure that all entries are labeled not only with the artist for whom the project was designed, but also the local artist, age, class, etc.
5. A display of photographs of the project while in action would be very impressive to the community.

##### Online Resources:

- <http://americanart.si.edu/education/activities/podcasts/> Did you know that you can have your students make podcasts of their work and display on the Smithsonian American Art? Check this out and see if it fits your timeline.





**Materials**

- Color tiles – 20 per student
- Unknown Quantity Cards
- **BLM** CGI Problems Unit 2 – teacher only
- **BLM** Pots to Measure #1 – 1 per student

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS** (denotes Texas Essential Knowledge and Skills that are taught in this unit)

**Lessons 1, 2, 3**

- 1<sup>st</sup> – 1.3B,C; 1.6GH
- 2<sup>nd</sup> – 2.4C; 2.3A

**ELPS** (English Language Proficiency Standard)  
2F, 2I, 3D, 3J, 4B, 4E, 4I

**CCRS** (College and Career Readiness Standards)  
CROSS-CURRICULAR I.C.1., I.C.3., II.D.3.  
ELA II.A.2., II.A.3., II.A.8  
MATH IV.A.1., VI.C.2., VIII.A.2., VIII.A.4., VIII.C.1.

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 7, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 7

**Unit 2, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Daily Routine**

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (fundamental number sense for all items)
  - Lesson 1 – 48
  - Lesson 2 – 20
  - Lesson 3 – 100
- **CGI Problem** (1<sup>st</sup> items 1, 3ab; 2<sup>nd</sup> items 3ab, 5ab)\*
  - Lesson 1 – Join, Result Unknown
  - Lesson 2 – Join, Change Unknown
  - Lesson 3 – Part-Part-Whole. Whole Unknown
- **What’s Missing** (1<sup>st</sup> and 2<sup>nd</sup> item 2)
  - All lessons: Use the Unknown Quantity cards as outlined in the overview of the Daily Routines (1<sup>st</sup> and 2<sup>nd</sup> Item 2 – both are subtraction).
- **Measurement** (1<sup>st</sup> item 5)\*\*
  - Lesson 1 – Dave’s Pots to Measure #1
  - Lesson 2 – Dave’s Pots to Measure #2
  - Lesson 3 – Dave’s Pots to Measure #3

\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.

\*\* Measurement has been moved to ESSENTIAL activities this unit because students are practicing comparing.

**(Assessment Items 1<sup>st</sup> grade 8 and 2<sup>nd</sup> grade 7 will be reviewed daily in Snack Fractions. Note: Snacks are the same throughout the grade bands; therefore there will be times when your primary students will experience fractional parts of a set. These do teach “fractioness,” and are a necessary part of the students’ learning.)**

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – Which pot do you like best?
  - Lesson 2 – none
  - Lesson 3 – How many pennies do you think are in the jar?  
*(Have a plastic screw lid jar with 57 pennies in it – bar graph with choices: less than 25, 25 to 75, 75 - 100, more than 100. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by grouping in tens and ones.)*

### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

### Vocabulary Building

Choose an activity listed in the Daily Routines section.

#### Azulito's Corner

##### Unit 2, Lesson 1

Tell us how you determined which pot was taller in the measurement lab. Which pot, then, is shorter?

## Unit 2

CGI Problems for *Dave the Potter*

Join	<b>Result Unknown (JRU)</b> Dave had __ pounds of clay in his work area. A slave brought him __ pounds of clay. How much clay does Dave have now? 13, 20    41, 53    66, 27	<b>Change Unknown (JCU)</b> Dave had __ pounds of clay. How many more pounds of clay will he need so that he will have __, enough for a large pot? 15, 35    27, 40    18, 57	<b>Start Unknown (JSU)</b> Dave had some clay. A slave brought him __ pounds of clay and now Dave has __ pounds. How many pounds of clay did Dave have to start? 30, 45    25, 40    17, 42
	<b>Result Unknown (SRU)</b> Dave had __ pounds of clay in his wheelbarrow. He hit a bump and lost __ pounds of clay. How many pounds of clay does Dave have now? 15, 8    27, 13    30, 14	<b>Change Unknown (SCU)</b> Dave was throwing a pot __ cm tall. He spun the wheel so fast that some of the top caved in. Now the pot is __ cm tall. How many cm did the pot lose in height? 27, 10    36, 25    31, 18	<b>Start Unknown (SSU)</b> Dave made some pots one year. He gave away __ pots. Now he has __ pots. How many pots did he have to start? 18, 8    22, 13    61, 37
Part-Part-Whole	<b>Whole Unknown (PPW-WU)</b> Dave made __ pots and __ jugs out of clay. How many vessels did he make? 12, 40    49, 20    28, 36		<b>Part Unknown (PPW-PU)</b> Dave made __ vessels of clay. __ were jugs and the rest were pots. How many were pots? 17, 9    26, 15    32, 19
	<b>Difference Unknown (CDU)</b> A jar held __ ounces of water. A pot held __ ounces of water. How many fewer ounces of water did the pot hold than the jar? 22, 12    64, 30    32, 16	<b>Quantity Unknown (CQU)</b> Dave used __ pounds of clay to make a pot. He used __ fewer pounds of clay to make a jar that the pot. How many pounds of clay did he use for the jar? 16, 7    25, 14    52, 23	<b>Referent Unknown (CRU)</b> Dave started with a lump of clay on his wheel. When his jar was finished, it was __ cm tall, __ cm taller than the original lump of clay. How tall was the lump of clay to start? 32, 12    44, 24    52, 17
Multiply and Divide	<b>Multiplication</b> Dave wants to make __ pots. Each pot requires __ pounds of clay. How many pounds of clay does Dave need? 5, 5    7, 5    9, 10	<b>Measurement Division (MD)</b> Dave has __ pounds of clay. He uses __ pounds for each jar. How many jars can he make? 60, 10    60, 5    27, 3	<b>Partitive Division (PD)</b> Dave has __ pounds of clay. If he wants to make __ jugs, how many pounds of clay will he use for each? 30, 3    30, 6    60, 15



Unit 2

CGI Problems for *Dave the Potter*



Unir	<p><b>Resultado Desconocido (JRU)</b></p> <p>Dave tenía ____ libras de barro en su área de trabajo. Un esclavo le trajo ____ libras de barro. ¿Cuánto barro tiene Dave ahora?</p> <p>13, 20    41, 53    66, 27</p>	<p><b>Cambio Desconocido (JCU)</b></p> <p>Dave tenía ____ libras de barro. ¿Cuántas más libras de barro necesitará para tener _____, lo suficiente para una olla grande?</p> <p>15, 35    27, 40    18, 57</p>	<p><b>Empiezo Desconocido (JSU)</b></p> <p>Dave tiene barro. Un esclavo le trajo ____ libras de barro y ahora Dave tiene _____ libras. ¿Con cuántas libras de barro empezó Dave?</p> <p>30, 45    25, 40    17, 42</p>
	<p><b>Resultado Desconocido (SRU)</b></p> <p>Dave tiene ____ libras de barro en su carretilla. Le pegó a una abolladura y perdió ____ libras de barro. ¿Cuántas libras de barro tiene Dave ahora?</p> <p>15, 8    27, 13    30, 14</p>	<p><b>Cambio Desconocido (SCU)</b></p> <p>Dave estaba lanzando una olla de ____ cms. de altura. El giró la rueda giratoria tan rápido que la parte superior se hundió. Ahora la olla mide ____ cms. de altura. ¿Cuántos cms. de altura perdió la olla?</p> <p>27, 10    36, 25    31, 18</p>	<p><b>Empiezo Desconocido (SSU)</b></p> <p>Dave hizo unas ollas hace un año. El regaló _____ ollas. Ahora él tiene _____ ollas. ¿Cuántas ollas tenía al principio?</p> <p>18, 8    22, 13    61, 37</p>
Parte-Parte-Entero	<p><b>Entero Desconocido (PPW-WU)</b></p> <p>Dave hizo ____ ollas y ____ jarrones de barro. ¿Cuántas vasijas hizo?</p> <p>12, 40    49, 20    28, 36</p>		<p><b>Parte Deconocida (PPW-PU)</b></p> <p>Dave hizo ____ vasijas de barro. _____ eran jarrones y el resto eran ollas. ¿Cuántas eran ollas?</p> <p>17, 9    26, 15    32, 19</p>
	<p><b>Diferencia Desconocida (CDU)</b></p> <p>Un jarrón contenía ____ onzas de agua. Una olla contenía ____ onzas de agua. ¿Cuántas onzas menos contiene la olla que el jarrón?</p> <p>22, 12    64, 30    32, 16</p>	<p><b>Cantidad Desconocida (CQU)</b></p> <p>Dave uso ____ libras de barro para hacer una olla. El uso ____ libras de barro menos que la olla para hacer un jarrón. ¿Cuántas libras de barro uso para el jarrón?</p> <p>16, 7    25, 14    52, 23</p>	<p><b>Referente Desconocido (CRU)</b></p> <p>Dave empezó con un bulto de barro en su rueda giratoria. Cuando terminó su jarrón, medía _____ centímetros de altura, _____ centímetros más alto que el bulto de barro original. ¿De qué altura era el bulto de barro al principio?</p> <p>32, 12    44, 24    52, 17</p>

<b>Multiplicación y división</b>	<b>Multiplicación</b>	<b>División de Medidas (MD)</b>	<b>División Partitiva (PD)</b>
	<p>Dave quiere hacer _____ ollas. Cada olla requiere de _____ libras de barro. ¿Cuántas libras de barro necesita Dave?</p> <p style="text-align: center;">5, 5    7, 5    9, 10</p>	<p>Dave tiene _____ libras de barro. Él usa _____ libras para cada jarrón. ¿Cuántos jarrones puede hacer?</p> <p style="text-align: center;">60, 10    60, 5    27, 3</p>	<p>Dave tiene _____ libras de barro. Si él quiere hacer _____ jarrones, ¿cuántas libras de barro usará para cada jarrón?</p> <p style="text-align: center;">30, 3    30, 6    60, 15</p>

This is a photograph of one of Dave's pots. Use the color tiles to measure the picture of the pot.

How many color tiles tall is the pot?

The pot is \_\_\_\_\_ color tiles tall.

How many color tiles wide is the pot?

The pot is \_\_\_\_\_ color tiles wide.

Is the pot taller or wider?

The pot is \_\_\_\_\_ than it is \_\_\_\_\_.

How do you know?



Esta es una fotografía de una de las ollas de Dave. Usa las fichas de colores para medir la imagen de la olla.

¿De cuántas fichas de alto es la olla?

La olla tiene \_\_\_\_\_ fichas de alto.

¿Cuántas fichas de ancho mide la olla?

La olla tiene \_\_\_\_\_ fichas de ancho.

¿La olla es más alta o más ancha?

La olla es \_\_\_\_\_ que \_\_\_\_\_.

¿Cómo lo sabes?





**BLM Unit 2, Daily Routine, Graphing Lesson 1 Which Pot Do you Like Best?** 

One set for the picture graph. Enough extras so every student can choose one s/he likes best. **OPTIONAL** Activity





## Unit 2, Lesson 1-Daily Routines – Solve It! Pairs

### Problema 1:

- Mark tenía 15 barras de chicle. Le dio 3 barras de chicle a su amigo. ¿Cuántas barras de chicle le quedaron a Mark?
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.


<b>Solución del Problema</b> (Solucionador del problema #1) Nombre:	<b>Solución del Problema</b> Solucionador del problema #2) Nombre:

### Problema 2:

- Mark le dio a su hermano 6 barras de chicle de los que le quedaron. ¿Cuántas barras de chicle le quedaron ahora?
  - ¿Qué necesitas del problema 1 para resolver este problema?
  - Asegúrate de verificar la respuesta del problema 1 antes de resolver este problema.
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.

<b>Solución del Problema</b> (Solucionador del problema #1) Nombre:	<b>Solución del Problema</b> (Solucionador del problema #2) Nombre:



<p><b>Literature Selection</b> <i>Dave the Potter</i> by Laban Carrick Hill</p> <p><b>Materials for Language Lesson</b></p> <ul style="list-style-type: none"> <li>• BLM Word Cards</li> <li>• Chart paper</li> <li>• markers</li> </ul> <p><b>Materials for TM Lesson</b></p> <ul style="list-style-type: none"> <li>• Unifix cubes - 2 different colored towers of 10, per student</li> <li>• BLM TM Making 10 Problems – 1 per student</li> </ul> <p><b>Literature Vocabulary</b> gritty squishy stiff smooth cool</p> <p><b>Math Vocabulary</b> fact family sums of 10 or compatible numbers addends sum comparing more than less than fewer than</p> <p><b>ELPS (English Language Proficiency Standard)</b> 4C, 4D, 4F, 4J, 4K</p> <p><b>CCRS (College and Career Readiness Standards)</b> CROSS-CURRICULAR II.A.2., II.A.3., II.A.4., II.A.7 ELA II.A.3., II.A.4., II.A.6, III.A.1., IV.A.2.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b> </p> <p><b>Unit 2, Lesson 1</b></p> <p><b>Classroom Lesson</b></p> <p><i>Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.</i></p> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Compose 10 with two or more addends with and without concrete objects</li> </ul> <p><b>Reading Objectives</b></p> <ul style="list-style-type: none"> <li>• Make predictions about a story.</li> <li>• Monitor comprehension through the understanding of key ideas and details.</li> <li>• Make personal connections.</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Understand and use vocabulary words to discuss a story.</li> </ul> <p><b>BEFORE READING</b> <b>Building Background, Vocabulary</b> Tell the students that they will be touching objects and telling the class how those objects feel. Explain to them that they will be using special words called texture words to describe the way things feel. (<i>Texture is the way something feels to your touch. If your clothes feel fuzzy or soft when you touch them, you could say they have a fuzzy or soft texture.</i>)</p> <p>Begin with the words hard and soft. Ask the students to touch something in the classroom (<i>a desk, the floor, a book cover, etc.</i>) that is hard. Then have them touch a part of the body that is hard (<i>head, elbow, knee, tooth</i>). Ask, “Can anyone touch a soft part of his or her head? (<i>cheek, lip, hair</i>) What other words could describe how the soft part feels? (<i>smooth, warm, dry, etc.</i>) Continue having the students touch objects around the classroom until they have an extensive list of texture words.</p> <p>Write these words on chart paper. Next to each word draw or glue an example (<i>a picture or sample</i>) of that texture, such as a piece of sandpaper or cotton, or a picture of a rough rock or a soft rabbit.</p> <p>Introduce the literature vocabulary by showing the students the word card and allowing them to feel an object that is textured accordingly.</p> <ul style="list-style-type: none"> <li>• gritty – ex: sand, salt, sandpaper</li> <li>• squishy – ex: clay, play-dough, a soft ball</li> <li>• stiff</li> <li>• smooth</li> <li>• cool</li> </ul>
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## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

The book I am going to read to you today is about a very special person who used his hands to create beautiful pottery. I already shared with you some on the texture words that will be mentioned in the story. Next I am going to show you a video of an artist creating a ceramic pot from a mound of clay.

For students to have a clear understanding of a potter's wheel and the process of creating a ceramic pot from a mound of clay, share the video clip below. *The video is approximately six minutes in length. It is not necessary to show the entire video. The first three minutes give a great introduction to the process. Be sure to preview the video to decide how much you will show the class.*

<http://www.youtube.com/watch?v=P8styuac15I>

Today we will be reading a true story about a man named Dave. This type of a story is called a biography because it is a true story written about someone's life. Introduce the title, author, and illustrator of the story.

Take the students on a picture walk through the end of the book. Have the students describe what they see in the pictures. Ask the students to make predictions about what they think may happen in the story. Can you tell me what is happening in the drawings?

*When having a discussion about a book, prior to reading, accept a child's reasonable answers, even if they are incorrect. Predictions made during the picture walk will be confirmed or corrected when the text is read.*

### DURING READING

#### Comprehensible Input, Vocabulary and Literature

During this first reading, the goal is to support students' comprehension of the text by modeling and practicing two reading strategies:

- **Predicting**
- **Monitoring for Comprehension**
- **Making personal connections**

This section indicates places in the text where you can:

- Briefly pause to model a reading strategy by thinking aloud.
- Briefly pause to have students practice a reading strategy by answering a question you pose.

Keep in mind that pausing the reading for too long at any of these places will make the reading very disconnected. This interferes with students' comprehension and enjoyment of the text, so keep the reading as fast-paced as possible. Listed below are possible places to stop and model or practice targeted strategies.

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

p. 5

#### Making personal connections

- Teacher Think Aloud: The author says that we might use the pot to hold marbles or flowers. I wonder what other types of items we could store in the pot.
- Teacher Question: What do you think you would use the pot to hold? Have students turn and talk to their rug partners. Then have one or two students share with the whole group.

p. 12

#### Predicting

- Teacher Think Aloud: The illustration on this page shows Dave standing over a huge mound of clay. I wonder what he will create.
- Teacher Question: What do you think Dave is going to make with the clay? Have students turn and talk to their rug partners. Then have one or two students share with the whole group.

p. 22

#### Monitoring for Comprehension - Rereading

- Teacher Think Aloud: *After reading the page:* Wow, that seemed like very important information, but I am not sure that I completely understood what the author was trying to tell me. I am going to go back and reread that page again so I can make sure I understand the author's message. *Go back and reread p.22 then have the students act out the motions described by the author.* Hold out your arms in front of you and imagine something so big that your arms couldn't even go all the way around it. Now, curl up into a ball and imagine that you could actually fit inside the jar. Point out that the word embraced means covered.

#### AFTER READING

##### Check for Understanding

##### Practice and Application, Vocabulary

Have a discussion with the students to check their understanding of the story. Possible comprehension questions to discuss:

- How could we describe Dave?
- Describe the steps Dave took to create a jar from a mound of clay.
- How do you think Dave was feeling when he working with clay? Explain.
- Why do you think Dave wrote on the jar before it hardened?

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



#### Interactive Word Wall activity

1. Take each literature vocabulary word card presented in the Before Reading section.
2. For each card, show the word to students and read it aloud. Then have students read the word with you.
3. Use the word naturally in a sentence as you tell students:
  - something about the story
    - Ex: **gritty** “The dirt felt gritty in Dave’s hands.”
    - Ex: **squishy** “When the dirt was wet it felt squishy.”
  - Add the word cards to an Interactive Word Wall. Preferably, this should be a place where the words can be manipulated (*taken on and off easily, moved around*). It could be a pocket chart, a magnetic board, or even a piece of chart paper that can be easily seen by all of the students.



gritty

cool

squishy

stiff



smooth

arenoso

fresco

blando



rígido

liso



gritty

cool

squishy

stiff





**Math Objectives:**

- Compose 10 with two or more addends with and without concrete objects

**Materials for TM Lesson**

- Unifix cubes or linking cubes - two different colored towers of 10, per student
- **BLM TM** Making 10 Problems – 1 per student

**Math Vocabulary**

fact family  
 sums of 10 or compatible numbers  
 addends  
 sum  
 comparing  
 more than  
 less than  
 fewer than

 **Technology:**

<http://gotkidsgames.com/tt/tt.html>  
**Making 10** Free online game for making 10 practice.

**ELPS (English Language Proficiency Standard)**

1E, 2D, 2G, 3C, 3D, 3E, 3G

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.C.3., I.C.1.

MATH I.A.2., II.A.1., V.A.1., IX.A.1., X.B.1

**Unit 2, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math****Building Background, Math**

Let's read through our math vocabulary words and see how many of these word cards you already know.

- *Read one card;*
- *ask students to read the card with you;*
- *ask for a volunteer to tell you what the word card means;*
- *define and use in a sentence;*
- *repeat with all words.*

We are going to work with sums of 10 or compatible numbers right now.

We have been adding and subtracting during math. Today I have some special problems for you to solve. They all have something in common, or have something alike. Let's see if you can find how they are alike.

*(Distribute the cubes and BLM Making 10 Record Sheet to each student.)*

I'm going to read a word problem to you, and I would like for you to

1. listen for the math movie;
2. listen a second time and model with the cubes. You will want your model to have two different colors of cubes in it.
3. write a number sentence that represents your model.

*(Work through one problem at a time, filling in the record sheet after each problem. Ask students:*

- Show me your trains. *(Make sure all trains are two colors, in the first problem, the train should have nine cubes of one color and one cube of the second color.)*
- How can you represent your model with numbers? *(Model the first equation with them –*
  - Which number did you model first? *(probably nine, but one is OK, too)*
  - Write that number on the first blank.
  - What action did you see in your math movie? *(add)* Write that addition sign in the first circle.
  - Which number did you model second in your train? *(probably one, but nine is OK, too)*
  - Write that number on the second blank.
  - Let's read what we have so far: 9 add 1..... *(OR (1 add 9) How will we finish this number sentence? What shall we write in the next circle? (equals)*

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### TRANSITION to Math

#### Building Background, Math

- What does 9 add 1 (*or 1 add 9*) equal? Ten!
- How did you know that? (*either they counted, or they just knew the basic fact*)
- Now, let's read our number sentence that represents our model. 9 add 1 equals (*or is the same as*) ten.
- What are the addends? (*9 and 1 because we add them together*)
- What is the sum? (*10 because that is our answer when we added*)

*If the majority of your students have no trouble with this exercise, they may work in partners to finish the page. Circulate the room to see if any students are struggling. Take the struggling students to an area and work in a small group with them using the same process as above.*

*When the class has completed all problems, continue.*

Look carefully at your record sheet. Talk to your elbow partner. Can you find something that all of the problems have? Can you find what they have in common? (*Give students enough time to answer – hopefully someone sees that all of the sums are 10. If not, you will need to lead them.*)

We have just found number pairs that you can add together to find the SUM of 10. We call these compatible numbers. They are compatible because they make a number that is easy for us to add to other numbers. You'll be working more with compatible numbers in the TV Lesson.

**Objectives:** Read the math and language objectives and have students explain how they learned them.

#### Distribute TV Lesson Materials

#### TV Materials

- Unifix cubes or linking cubes – 4 color trains of 10 per , 2 of 1 color and 2 of another color per student
- Crayons or markers matching the 2 colors of the trains.
- **BLM-TM** Making 10 Problems from TM lesson (completed)
- **BLM** Fact Families of Compatible Number Pairs

fact family

**sums of 10,  
compatible numbers**

addends

sum



familia de hechos

sumas de 10,  
números compatibles

sumandos

suma



comparing

more than

less than

fewer than





comparando

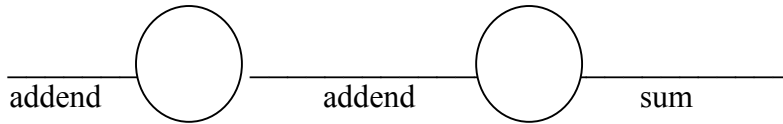
más que

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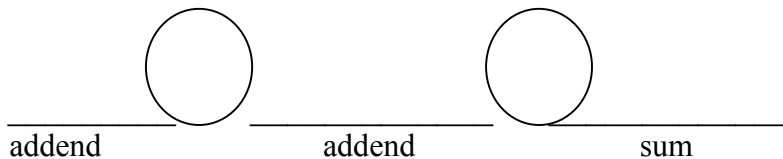
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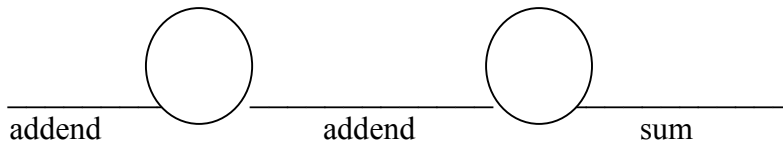
1. Dave prepared 9 pounds of clay. Then he prepared 1 more pound of clay. How many pounds of clay did Dave prepare?



2. In Dave's workshop there were 5 tall pots and 5 short pots. How many pots were in Dave's workshop?



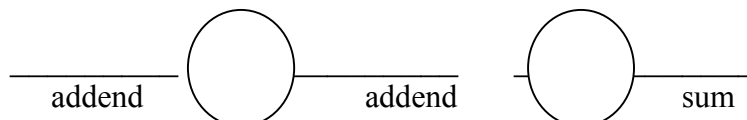
3. Dave made 6 large pots on Monday. He made 4 large pots on Tuesday. How many pots did Dave make?



4. Dave threw the big clay 7 feet. Then he threw the clay another 3 feet. How many feet did Dave throw his clay?



5. Dave walked 8 miles on Wednesday to gather dirt for his clay. He walked 2 miles on Saturday for more dirt for his clay. How many miles did Dave walk in the 2 days for his clay?



**BLM-TM Unidad 2****Hacer 10 problemas** 

(Una hoja por estudiante)

1. Dave preparó 9 libras de arcilla. Después preparó 1 libra más de arcilla. ¿Cuántas libras de arcilla preparó Dave?

\_\_\_\_\_ sumando          \_\_\_\_\_ sumando          \_\_\_\_\_ suma

2. En el taller de Dave había 5 ollas altas y 5 ollas bajas. ¿Cuántas ollas había en el taller de Dave?

\_\_\_\_\_ sumando          \_\_\_\_\_ sumando          \_\_\_\_\_ suma

3. Dave hizo 6 ollas grandes el lunes. Hizo 4 ollas grandes el martes. ¿Cuántas ollas hizo Dave?

\_\_\_\_\_ sumando          \_\_\_\_\_ sumando          \_\_\_\_\_ suma

4. Dave lanzó la arcilla 7 pies. Luego lanzó la arcilla 3 pies más. ¿Cuántos pies lanzó Dave la arcilla?

\_\_\_\_\_ sumando          \_\_\_\_\_ sumando          \_\_\_\_\_ suma

5. Dave caminó 8 millas el miércoles para reunir tierra para su arcilla. Caminó 2 millas el sábado para reunir más tierra para su arcilla. ¿Cuántas millas caminó Dave los 2 días por su arcilla?

\_\_\_\_\_ sumando          \_\_\_\_\_ sumando          \_\_\_\_\_ suma

**Literature Vocabulary**

gritty  
squishy  
stiff  
smooth  
cool

**Math Vocabulary**

fact family  
sums of 10 or compatible numbers  
addends  
sum  
comparing  
more than  
less than  
fewer than

**TV Materials:**

- Unifix cubes or linking cubes – 4 color trains of 10 per , 2 of 1 color and 2 of another color per student (40)
- Crayons or markers matching the 2 colors of the trains.
- **BLM-TM** Making 10 Problems from TM lesson (completed)
- **BLM** Fact Families of Compatible Number Pairs

**ELPS** (*English Language Proficiency Standard*)

1B, 1F, 3D, 3F, 3J, 4A, 4B

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.C.1., I.C.2., I.C.3  
ELA II.A.2., II.A.6., III.A.2., III.B.2.  
MATH II.B.1., V.A.1., VI.C.1. VII.B.1.

**Unit 2, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives**

- Given three related numbers, make the fact family.
- Compose 10 with two or more addends with and without concrete objects.

**Language Objectives**

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to create the fact family number sentences from three related numbers.

**Building Background, Math**

**TEACHER:** Welcome back, Boys and Girls. Dave was an amazing man, wasn't he? He was very talented. You saw a picture of one of his pots in the measurement lab. It has lasted for more than 200 years! That is a very strong pot!

Well, Azulito and I are ready for some math fun, are you?

**AZULITO:** Yes, we are ready for math fun! I know that the boys and girls practiced finding compatible numbers today in their Classroom Lesson. What are we going to do?

**TEACHER:** We're going to take those compatible number pairs, and we're going to find their fact families, Azulito!

**AZULITO:** OOOH, families – that sounds like fun!

**TEACHER:** I think it will be. First, look at your materials. This time you have FOUR trains of 10. I have two blue trains and two yellow trains. Show us your four trains. Do you have two trains of one color and two trains of another color? (*slight pause*) And you should have two crayons that match the color of your trains (*show your crayons*).

Now look at your new record sheet, Family Facts of Compatible Numbers. We are going to make little houses to show that certain numbers are related when we add and subtract. They belong to a family. They are related.

This is our house on the left (*point*). On the right we are going to model the number sentences we can make with our fact family.

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

#### Comprehensible Input

**TEACHER:**

Let's get started by looking at the first problem that you solve during your Transition to Math lesson today.

**Dave prepared 9 pounds of clay. Then he prepared 1 more pound of clay. How many pounds of clay did Dave prepare?**

You've already modeled this problem with the cubes, but let's model it again. As I read the problem again, please model the math movie with your cubes. Remember that you want TWO colors (*do so, and Azulito models as well*).

- Show your class your train. (*slight pause*)
- Use your crayons now to color in the train to match your model. (*Color in the top table using the two different color of crayons – 9 sections one color; one section the other color. Give students time to color theirs in as well.*)
- What number sentence did you use to represent this model? Write that number sentence on this top ( $9 + 1 = 10$ ).
- At the very top, or roof, of the house, we have a title for this house which says, Our Family \_\_\_\_, \_\_\_\_, \_\_\_\_\_. The Fact Family is the three numbers that are related in the model and the number sentence: the two addends and the sum.
- What is the Fact Family for this house? ( $9, 1, 10$ )

**AZULITO:** Cool! A family of numbers! I like that. But there are more number sentences to fill in the house. What are those?

**TEACHER:** Great observation, Azulito. Yes, there are more number sentences in the Fact Family. Usually there are FOUR number sentences.

**AZULITO:** Let's find them!

**TEACHER:** Alright. Boys and Girls, suppose I wanted you to add 1 pound of clay and 9 pounds of clay. Do you think we would have a different sum? (*slight pause*) Tell your teacher why you think as you do. (*longer pause*) Let's use our cubes to check that out.

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

- Please use your other trains of 10 to make a train that is ONE cube of the first color and NINE cubes of the second color (*pause*). How many cubes are there in the train? (*10*)
- Now place this train underneath your first train. What do you notice? (*Students may or may not notice that the number sentences are just the opposite of each other  $9 + 1$  and  $1 + 9$ .*)

**AZULITO:** (*pause*) The number trains are just opposite of each other!  $9 + 1$  and  $1 + 9$ . They have the same number of cubes in each, TEN! So that must mean that  $9 + 1$  is the same as or equal to  $1 + 9$ !

**TEACHER:** Yes it does, Azulito. These number sentences both use the three numbers in our Fact Family. Let's color in our next train to match our new model (*do so*).

**AZULITO:** There are still two more number sentences to fill in.

**TEACHER:** Yes there are. These are SUBTRACTION number sentences that can be made from the three numbers in our Fact Family.

- Take your 9 cube and 1 cube train. How many cubes do you have? (*10*)
- Suppose I remove 9 from the train and put them away. How many cubes would have then? (*1*)
- What number sentence can represent what we just modeled? Tell your Classroom Teacher (*pause*)

**AZULITO:** I know! (*Show model as you talk through the action.*) We had 10 cubes (*show whole train*); we took away or subtracted 9 cubes (*do so*) and we had 1 cube left! The number sentence (*write on board*) is 10 cubes subtract 9 cubes = 1 cube.  $10 - 9 = 1$ .

**TEACHER:** Excellent! Now, let's see how to represent this number sentence using our train on the paper.

- Color in the 9 of one color and the 1 of another color. (*demo and give time for students to do so*)
- Now put great big Xs on the 9 cubes you want to subtract (*do so, making sure your Xs are sticking outside of the boxes – one x on each box*).
- We can see that we have 1 cube that is not crossed out! Circle that so we can see it easily. (*do so*)

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**TEACHER:** Let's take our other train. What can we model with this train? Talk in your classroom about how you can use only the numbers 1, 9, 10 to make a subtraction sentence that will be part of this fact family. *(pause)*

**AZULITO:** I can model that! We have 10 cubes *(show train)*. This time I will subtract ONE cube, and I will have NINE left.

**TEACHER:** You are exactly correct, Azulito. And boys and girls, what is the number sentence that you will use to represent 10 subtract 1 is the same as or equals 9? *(pause)*

**AZULITO:** That's easy. It's  $10 - 1 = 9!$

**TEACHER:** Well done! When you know your fact families, you know FOUR facts to help you add and subtract!

Let's read the second problem and you watch for the math movie in your mind *(do so)*.

Now, use your cubes to represent the math movie *(pause, then show a five of one color and a five)*. And we can represent the second five with another color *(do so for the second five)*. How many cubes do we have in the train? Count the cubes if you'd like *(pause)*.

**AZULITO:** There are 10 cubes in the train!

**TEACHER:** Super!

- What is the number sentence we can use to represent our model? Five add five is the same as or equals 10. Let's fill in the first number sentence  $(5 + 5 = 10)$ .
- How will we color in the train on the paper? Five one color, five another color – do so.
- Let's make the second train *(do so, five of one color, and five of another color)*.

**AZULITO:** Wait a minute, turn that train around *(do so)*. They are the SAME TRAIN!

**TEACHER:** Yes, Azulito. They are the same train. We don't have to write a second addition sentence because the trains are the very same train. What makes  $5 + 5$  different from  $1 + 9$ ? *(The addends are the same.)*



## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**TEACHER:** The addends are the same number – five and five. We only have one addition sentence when the addends are the same. Let's investigate the subtraction. What do you think, boys and girls? Will we have a second number sentence to represent our subtraction? Tell you teacher what you think and why you think as you do (*pause*).

**AZULITO:** I think that since the numbers are the same, we will only have one subtraction problem.

**TEACHER:** Let's find out. Take your cube train and remove five cubes. (*do so*) What is left? (*five cubes*) You are right Azulito. It is the very same subtraction model. We might have a different color in our hand, but we still have five cubes! What is our number sentence?

**AZULITO:** Ten cubes subtract five cubes is the same as or equals five cubes.

**TEACHER:** Now, let's color in our paper train model to represent our action. Five of one color, five of the other color; now X out five cubes in a row (*do so*).

Why do we only have one addition and one subtraction problem for this Fact Family? (*pause*)

**AZULITO:** Because the two addends are the same number!

**TEACHER:** We are going to continue, but we are only going to find the Our Family related numbers and the first number sentence in the family. You will finish the rest of the family in your Follow-up Lesson.

*(Use the same format as you did initially to find all of the Our Family numbers, the drawn model, and the first addition sentence for each problem.)*

*(When you are finished...)*

**AZULITO:** We are out of problems, but there is one more Fact Family house. What is that fact family?

**TEACHER:** That is true, Azulito. We are going to leave that discovery for the students in the Follow-up Lesson! And now, do you have something to share with us about your Corner?

**AZULITO:** Oh, yes I do! Remember your measurement lab today? We want you to share what you found when you measured the picture of one of Dave's pots (*read the assignment*).

#### Format:

- Read the problem and model with two colors.
- Color in the paper train according to the model.
- Write the number sentence.
- Find the three numbers that are the related numbers in this problem.

#### Azulito's Corner

##### Unit 2, Lesson 1

Tell us how you determined which pot was taller in the measurement lab. Which pot, then, is shorter?

**Unit 2, Lesson 1**

**1<sup>st</sup> – 2<sup>nd</sup>**

**TV Lesson** - continued



**TEACHER:** Great task! It will be interesting to see if everyone measured the same way, Azulito! And now, let's see what we accomplished today during our lesson.

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)

**BLM Unit 2, TV Lesson 2**

**Family Facts of Compatible Numbers** 

(Three sheets per student. Students also need their completed sheets from the TM lesson. Cut lines are for lesson 2.)

Our Family \_\_\_\_\_

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

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Our Family \_\_\_\_\_

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

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## Literature Vocabulary

gritty  
squishy  
stiff  
smooth  
cool

## Math Vocabulary

fact family  
sums of 10 or compatible numbers  
addends  
sum  
comparing  
more than  
less than  
fewer than

## TV Materials:

- Unifix cubes or linking cubes – 4 color trains of 10 per , 2 of 1 color and 2 of another color per student
- Crayons or markers matching the 2 colors of the trains.
- **BLM-TM** Making 10 Problems from TM lesson (completed)
- **BLM** Fact Families of Compatible Number Pairs (from TV Lesson)

**ELPS** (*English Language Proficiency Standard*)  
2D, 2G, 2H, 5B, 5C, 5F

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.E.2., II.B.1., II.B.2  
ELA I.A.2. III.A.1., III.A.2., III.B.1. IV.A.2, IV.A.3., MATH I.A.2., I.B.1., II.A.1., V.A.1.



## Technology

<http://www.roomrecess.com/page/s/BlockBuster.html> . Fast moving game to find fact families.

Either of the two suggested sites could be a self-checking center activity.

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

## Follow-up



### Math Objectives

- Given three related numbers, make the fact family.
- Compose 10 with two or more addends with and without concrete objects.

### Language Objectives

- Listen and speak with a partner during our math activity.
- Explain what sums of 10 or compatible numbers are.
- Describe a fact family.
- Use the math vocabulary during the activity.
- Share-write math journal response.

### Practice and Application, Math

Let's finish the Fact Family houses for the last three problems, then let's see if we can discover which fact family for 10 is missing from our problem group.

*(Use the same format the TV Teacher used to find the fact family sentences for problem #3 houses. If you feel students need more help, guide them through #4. As soon, though as you feel students can complete the sheet through the 5<sup>th</sup> house, let them work in partners to do so.)*

### Format:

- Recreate the first addition model in cubes.
- Generate the second addition model, write number sentence, and color in the paper train.
- Use one of the models to model the subtraction, color the train accordingly and X out the subtracted blocks, write the subtraction sentence that represents the model.
- Repeat for second subtraction problem.

### QUESTIONS for independent work as you circulate the room

#### Probe for Understanding

- Which numbers are addends? Sum?
- What is a sum? (*Answer when you add two addends.*)
- We are finding fact families of a very special kind. What are all of these fact families? (*compatible numbers or sums of 10*)

### Extension Questions

- **There are fact families for all addition and subtraction facts. What would be the fact family for 3, 9, 12?**

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Follow-up - continued

Now that we have completed all of the fact families for 10 that were posed in our problems, let's see if we can find the missing fact family.

First, let's put all of our fact families in order from smallest to largest number (*do so in the Our Family rectangle*).

Now, let's put all of these number sentences in order on the board, beginning with our lowest starting addend. That would be  $1 + 9 = 10$ . Which fact would come next?

$$1 + 9 = 10$$

$$2 + 8 = 10$$

$$3 + 7 = 10$$

$$4 + 6 = 10$$

$$5 + 5 = 10$$

Hmm, what two addends are missing that when added give us ten? Talk to your partner and see if you can find the missing number sentence. Remember to write the smallest number first so we can keep our pattern. (*Give students time to find  $0 + 10 = 10$ .*)

That's correct! If Dave found 10 pounds of clay dirt, but couldn't find anymore, how much clay dirt would he have? He would have 10 pounds of clay dirt.

Let's use that now to fill in our last Fact Family for Compatible Numbers.

*(Follow previous format.)*

Please put your names at the tops of each of the Family Facts of Compatible Numbers. We're going to make a book with them tomorrow.

### Math Journal Writing

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



**Explain what compatible numbers of sums of 10 are.**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

## Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths and halves).
- Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

## Language Objectives

- Explain why each portion is a fourth/ half.
- Share-write what is a fourth or a half.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

## Vocabulary

half, halves  
fourth, fourths  
fair shares  
equal pieces

## Materials:

### TEACHER:

- BLM Guacamole and Veggies
- 1 c guacamole
- 12 baby carrots
- Two 1/4 c measuring cups
- 4 Paper plates

### STUDENT ACTIVITY (per partner pair):

- BLM Dip and Veggies Fractions (1 per student)
- 1 c guacamole or other dip
- 12 baby carrots
- Two 1/4 c measuring cups
- 4 paper plates
- 2 plastic spoons
- 2 paper towels
- 2 scissors
- 2 rulers and 2 markers
- 2 glue sticks

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

## Snack Fractions



**Children should wash their hands before this activity if using food items.**

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

### Objective:

Today you and a partner are going to pretend to share a snack with two other friends. The snack will be shared in four portions. (*Show the four plates in your demo set.*) You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. You will be able to write the fraction in numbers, and to explain the fractional parts you have divided into.

### TODAY: Teacher demonstration of fourths

Show the students the measuring cup with one cup of guacamole (*or dip*). Ask students if they know what the cup represents (*response*). Tell them it is a measuring cup. Tell them to look at the two measuring cups they have with their partner. One is a whole cup. It will represent a WHOLE to divide into equal fractional parts. So, let me pretend to share my foods with three more friends. If there are four of us, what fractional parts will we divide into? (*fourths*) And if I really did share among four people, what part would I get? (*one or the four parts, or one-fourth*)

Now look at the smaller cup. What measure do they see on the side of the cup (*one-fourth*)? How many of these measuring tools do they think there are in the whole cup? (*four*) Why? (*It measures one-fourth. That means one out of four parts of the whole cup.*) How could they use this portion cup to divide the dip into equal parts for four people? (*response*) Tell students that you are going to measure out one-fourth cup of dip on each of the four plates. As you are dividing the dip, ask the students to divide their dip as well equally among the four plates they have.

### When everyone has finished the dip, ask the students:

- If this plate represents MY portion, what fractional part of the dip will I get? (*one-fourth*)
- How many more people will receive one-fourth? (*three more*)
- How many total people could share this snack? (*four – teacher and three more people*)
- How do you know they are fourths? (*There are equal-sized portions of the dip on four plates.*)

Tell them they have share a whole into four equal parts.

## Unit 2, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Snack Fractions - continued

Now ask the students to look at the carrots. How many carrots are there? (12) Tell the students that this time instead of sharing a WHOLE portion, they will be sharing parts of a GROUP. Referring to the pretend four people, how could they share the 12 carrots in fair shares with all four people? (*Students should talk to their partners, then have an answer ready to share with the class.*)

You are going to divvy out the carrots, one carrot to each plate until all of the carrots are shared equally. As you do so, ask the students to share among their carrots among their four plates, too.

#### When everyone has finished dividing the carrots, ask the students:

- How many carrots are on each plate? (3)
- If this plate represents MY portion, what fractional part of the carrots will I get? (*one-fourth*)
- How many **more** people will receive one-fourth? (*three more*)
- How many total people could share this snack? (*four – teacher and three more people*)
- How do you know they are fourths? (*There are equal-sized portions – that is, every one of the plates received the same number of carrots.*)

They have just found fractional part of a GROUP.

Before you have them take their snacks, walk the students through the BLM Dip and Veggies Fractions. Students are to cut out the dip rectangle fold it into fourths, cut and glue one-fourth to the plate on the record sheet, then answer the dip question on the BLM. Next, cut out the carrot rectangles, divvy into the four groups, glue one-fourth to the plate on the record sheet and answer the carrot question. You may write a class answer to the “because,” but students should also write their own, or at least copy the class to the BLM, as the Snack Fraction Writing task.

**SNACK Eating:** Now tell the partners that they may each have half of the snack. How much will each receive? (*two plates worth*) Ask, “Which is the greater amount of the snack, one-fourth or one-half?” (*response*) How do you know?

#### Snack Fraction Writing: BLM Dip and Veggies Fractions

Students identify the fractional part and complete the “because” statement on the record sheet.

**Objectives: Review what you learned and how you learned it.**



My name is \_\_\_\_\_

This is my plate and my fair share of the snack if sharing in fourths.

\_\_\_\_\_

My share of the dip would be called a \_\_\_\_\_.

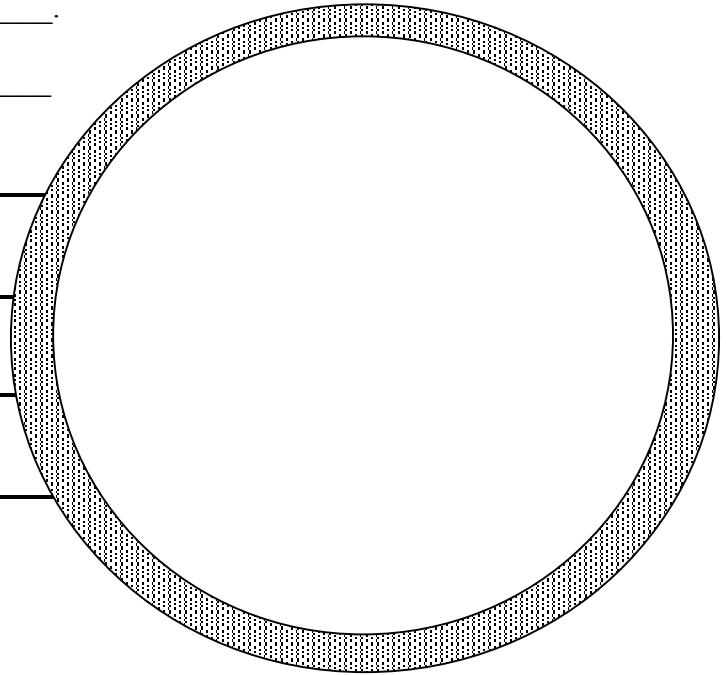
My share of the carrots would be called a \_\_\_\_\_  
because...

\_\_\_\_\_

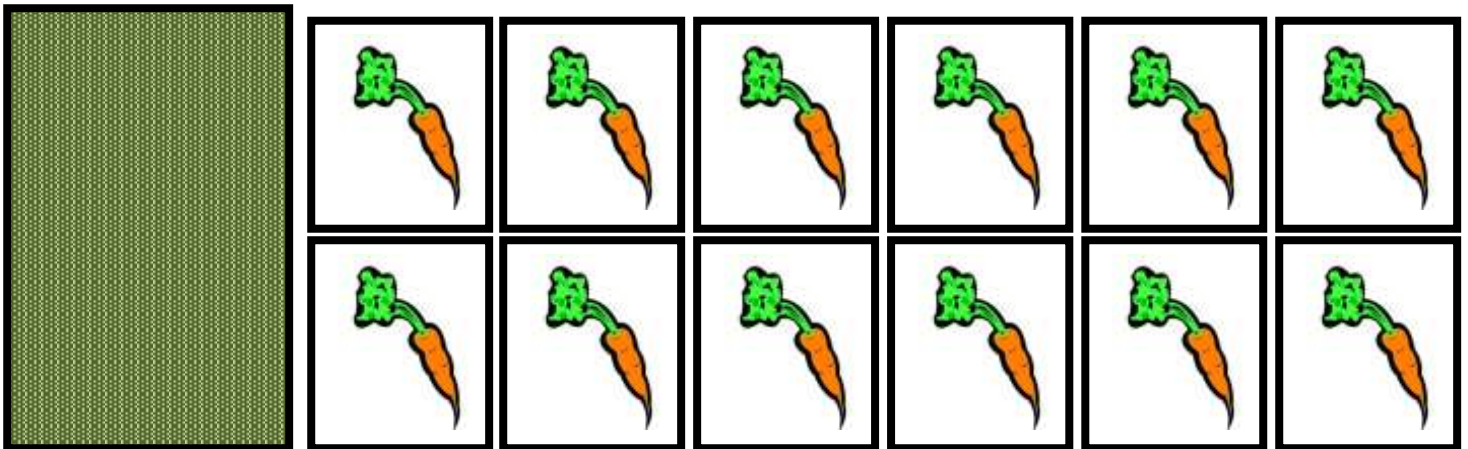
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Cut out the rectangles below. Divide the group into fourths so that all of the carrots are equally shared among four people. The large rectangle represents the dip. Cut the dip into fourths so that the rectangle is shared equally among four people. Glue a fourth of the dip and carrots to the snack plate above.



Mi nombre es \_\_\_\_\_

Esto es mi plato y mi porción igual del refrigerio si lo compartimos en cuartos. \_\_\_\_\_

Mi porción de la salsa es \_\_\_\_\_.

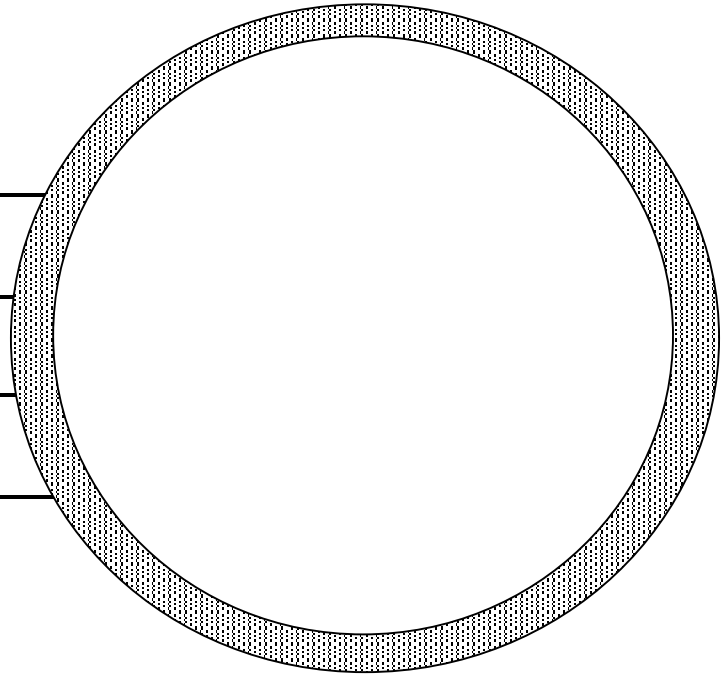
Mi porción de zanahorias es \_\_\_\_\_  
porque...

\_\_\_\_\_

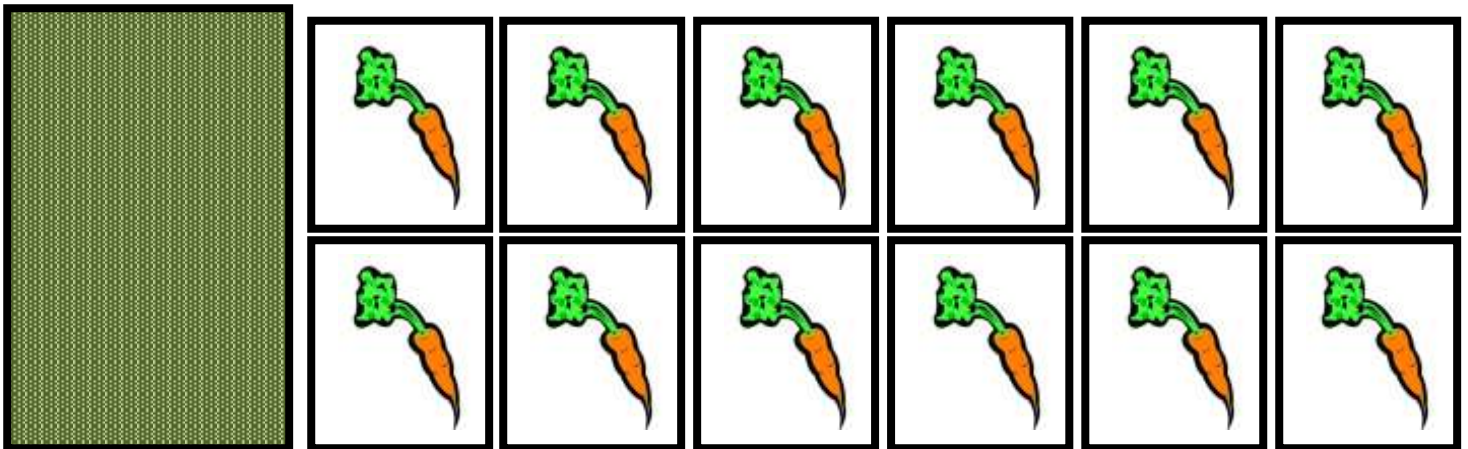
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Recorta los rectángulos abajo. Divide el grupo en cuartos para que todas las zanahorias sean divididas igualmente para cuatro personas. El rectángulos grande representa la salsa. Recorta la salsa en cuartos para que el rectángulos se divide igualmente entre cuatro personas. Pega un cuarto de la salsa y las zanjahorias en el platillo arriba.

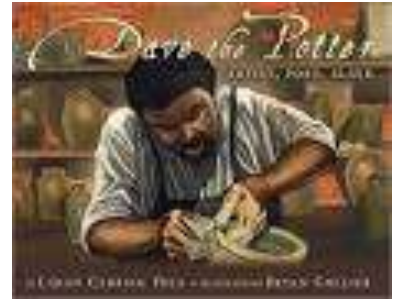


## Family Fun, Unit 2 Lesson 1

We read our first book today,  
*Dave the Potter.*

This book is about \_\_\_\_\_

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In math we learned about compatible numbers, or numbers that make 10 when we add them, and we learned about fact families. I can tell two fact families for 10.

Thank you for helping me learn math!

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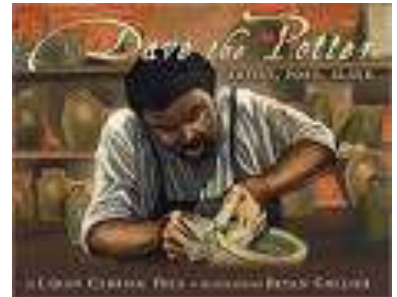
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## Diversión familiar, Unidad 2 Lección 1

Hoy leímos nuestro primer libro,  
*Dave the Potter.*

Este libro es sobre \_\_\_\_\_

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En matemáticas aprendimos sobre números compatibles, o números que forman 10 cuando los sumamos, y aprendimos sobre familias de hechos. Puedo decirles dos familias de hechos para 10.

¡Gracias por ayudarme a aprender matemáticas!

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**Materials**

- Color tiles – 20 per student
- Unknown Quantity Cards
- **BLM CGI Problems Unit 2** – teacher only
- **BLM Pots to Measure #1** – 1 per student

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy****Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS** (denotes Texas Essential Knowledge and Skills that are taught in this unit)

**Lessons 1, 2, 3**

- 1<sup>st</sup> – 1.3B,C; 1.6GH
- 2<sup>nd</sup> – 2.4C; 2.3A

**ELPS** (English Language Proficiency Standard)  
2F, 2I, 3D, 3J, 4B, 4E, 4I

**CCRS** (College and Career Readiness Standards)

CROSS-CURRICULAR I.C.1., I.C.3., II.D.3.

ELA II.A.2., II.A.3., II.A.8  
MATH IV.A.1., VI.C.2., VIII.A.2., VIII.A.4., VIII.C.1.

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 7, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 7

**Unit 2, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Daily Routine**

The following daily activities will help prepare your students for the Post-assessment. **They are essential and are not optional.**

**ESSENTIAL**

- **Target Number** (fundamental number sense for all items)
  - Lesson 1 – 48
  - **Lesson 2 – 20**
  - Lesson 3 – 100
- **CGI Problem** (1<sup>st</sup> items 1, 3ab; 2<sup>nd</sup> items 3ab, 5ab)\*
  - Lesson 1 – Join, Result Unknown
  - **Lesson 2 – Join, Change Unknown**
  - Lesson 3 – Part-Part-Whole. Whole Unknown
- **What’s Missing** (1<sup>st</sup> and 2<sup>nd</sup> item 2)
  - All lessons: Use the Unknown Quantity cards as outlined in the overview of the Daily Routines (1<sup>st</sup> and 2<sup>nd</sup> Item 2 – both are subtraction).
- **Measurement** (1<sup>st</sup> item 5)\*\*
  - Lesson 1 – Dave’s Pots to Measure #1
  - **Lesson 2 – Dave’s Pots to Measure #2**
  - Lesson 3 – Dave’s Pots to Measure #3

\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.

\*\* Measurement has been moved to ESSENTIAL activities this unit because students are practicing comparing.

**Assessment Items 1<sup>st</sup> grade 8 and 2<sup>nd</sup> grade 7 will be reviewed daily in Snack Fractions.** Note: Snacks are the same throughout the grade bands; therefore there will be times when your primary students will experience fractional parts of a set. These do teach “fractioness,” and are a necessary part of the students’ learning.)

**Azulito's Corner**  
**Unit 2, Lesson 2**

What is your strategy for finding the missing number in What's Missing?

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – Which pot do you like best?
  - **Lesson 2 – none**
  - Lesson 3 – How many pennies do you think are in the jar? *(Have a plastic screw lid jar with 57 pennies in it – bar graph with choices: less than 25, 25 to 75, 75 - 100, more than 100. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by grouping in tens and ones.)*

### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

### Vocabulary Building

Choose an activity listed in the Daily Routines section.

This is a photograph of one of Dave's pots. Use the color tiles to measure the picture of the pot.

How many color tiles tall is the pot?

The pot is \_\_\_\_\_ color tiles tall.

How many color tiles wide is the pot?

The pot is \_\_\_\_\_ color tiles wide.

Is the pot taller or wider?

The pot is \_\_\_\_\_.

How do you know? Talk about this with your classmates.



## BLM Unidad 2, Ollas para medir #2



Esta es una fotografía de una de las ollas de Dave. Usa las fichas de colores para medir la imagen de la olla.

¿De cuántas fichas de alto es la olla?

La olla tiene \_\_\_\_\_ fichas de alto.

¿Cuántas fichas de ancho mide la olla?

La olla tiene \_\_\_\_\_ fichas de ancho.

¿La olla es más alta o más ancha?

La olla es \_\_\_\_\_.

¿Cómo lo sabes? Habla sobre esto con tus compañeros.





## Unit 2, Lesson 2-Daily Routines – Solve It! Pairs

- Mark jugó a canicas con su amigo. Perdió tres canicas y ganó siete canicas en el juego. Si empezó el juego con 12 canicas, ¿cuántas canicas tiene ahora?

Problema #1 – Nombre: \_\_\_\_\_  
\_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Problema #2 – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Solución Final – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Puedes tomar esta página aparte de la forma que deseas - por tu cuenta; junto con un compañero como un equipo; una mezcla de ambos. Eres responsable, sin embargo, por tu propio papel que tiene todos los problemas identificados y resueltos; verificando la página del miembro de tu equipo. Asegúrate de escribir tu solución final con una etiqueta en la caja.



**Literature Selection**

*Dave the Potter*  
by Laban Carrick Hill

**Materials for Language Lesson**

- **BLM** Word Cards
- Sentence strips for the sequencing activity. *Be sure to prepare the sentence strips, with the sentences included in the During Reading section, prior to the actual lesson.*
- Text from p. 3 written on a chart for shared reading.

**Materials for TM Lesson**

- Unifix cubes - 2 different colored towers of 10 , per student
- **BLM TM** Making 10 Problems – 1 per student

**Literature Vocabulary**

gritty  
cool  
squishy  
stiff  
smooth

**Math Vocabulary**

fact family  
sums of 10 or compatible numbers  
addends  
sum  
comparing  
more than  
less than  
fewer than

**ELPS** (*English Language Proficiency Standard*)  
4A, 4C, 4D, 4F, 4J, 4K

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR II.A.2., II.A.3., II.A.4., II.A.7  
ELA II.A.1., II.A.3., II.A.4., II.A.6, III.A.1., IV.A.2.

**Unit 2, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson**



*Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.*

**Math Objectives**

- Compose 10 with two or more addends with and without concrete objects.
- Create a book of the fact families for 10.

**Reading Objectives**

- Sequence steps from a story in order from first to last.
- Develop reading fluency with a Shared Reading text.

**Language Objectives**

- Understand, use, and apply new vocabulary.
- Find unit vocabulary words in a Shared Reading text.

**BEFORE READING:**

**Practice and Application, Vocabulary**

Review vocabulary words on word wall

Play Mystery Word Game

- Display and read a vocabulary word from the word wall. Have students repeat the word aloud. Repeat for each word.
- Gather the words cards. Place them face down so no one can see them.
- Choose one word at random and make a big show of sneaking a look at the word without letting students see it.
- Give students clues to help them guess the mystery word. Clues can emphasize meaning and/or spelling.
- Students can write down their guess or give it orally. If responding orally, students should be given time to think and instructed not to respond until signaled to do so.
- Teacher can give multiple clues before revealing the mystery word.

Show students the cover of the book. Ask, “What is the title of the book we have been reading?” Review vocabulary words on the word wall. Ask students to use a vocabulary word to describe an event from the story. Use the Rug Partner Routine.

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### Language Center Connection

Put extra sets of the vocabulary word cards in a language center.

Students can write a sentence using the word.

Students who are just beginning to learn how to write can practice tracing each word in a tray filled with sand.

#### Listening Center Connection

Create a recorded version of this Shared Reading text, and have students listen to it during independent reading time. Show students how to read along softly with the recording. Each time they listen, they should try to read more and more of the words.

For stronger readers, you may want to have them use a recording device to record themselves reading this text, once they feel comfortable with the Shared Reading text.

Be sure to circulate while students are talking to assess whether or not they are using the vocabulary words correctly. Encourage students to use the text if they need help using the word in a sentence.

Regroup the class and have several students share. Rephrase what students say, as needed. Emphasize the vocabulary words as you speak in a natural way. Point to the words on the interactive word wall. As students share, you can also point to those parts in the book so they connect the oral language with the illustrations.

Show students the cover of the book. Ask, “What is the title of the book we read yesterday? What happened in this book? Turn and talk to your rug partner.”

Circulate while students are talking to see what kind of language they are using. Are they using any of the literature vocabulary words?

Regroup the class and have several students share. Paraphrase what students say, as needed, to include more detail and key vocabulary words. Emphasize the vocabulary words as you speak, in a natural way. You can point to the words on the interactive word wall. As students orally share, you can also point to those parts in the book so they connect the oral language with the illustrations.

### DURING READING

#### Comprehensible Input, Literature

Today’s reading is meant to help students better understand the story by identifying the sequence of the steps in creating a ceramic jar.

Display, in front of the students, the five sentences written on sentence strips for the sequencing activity.

- *Begin by placing a mound of raw clay on the potter’s wheel.*
- *Next, start the spinning motion of the potter’s wheel to begin shaping the jar.*
- *Use your hands and the spinning motion of the wheel to create and shape the walls of the jar.*
- *Then, roll long clay ropes and place them on the jar and smooth the sides of the jar with your fingers.*
- *Finally, when the clay has dried, add a glaze to the jar so it will last for a long time.*

Explain that each sentence strip has an important step for creating a ceramic jar. *Read each of the sentences to the students. Be sure to read the sentences in a random order.* Further explain that the steps to create a ceramic jar are not organized in the order in which they would need to happen.

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### Language Center Connection

Put extra copies of the Shared Reading text in a language center, and give students different challenges, depending on their age/reading level.

For example:

- Circle all of the periods / commas.
- Circle all of the capital letters.
- Color/highlight or underline certain key words.
  - wet
  - cool
  - squishy
  - clay
  - Dave
- Color/highlight or underline certain high frequency words.
  - the
  - it
  - is
  - and
  - to
  - he
  - as
  - a
  - was

Today when you reread the story, direct students to pay close attention to the steps Dave follows when creating the ceramic jar and the order in which they happen. Let them know that once you have reread the story to them, you are going to need their help putting the steps for creating a ceramic jar back in the order in which they need to occur.

#### AFTER READING

##### Sequencing Activity

Allow the students to reorder the steps for creating a ceramic jar in sequential order. Discuss as a group which step should happen first. Be sure to emphasize time order words (*first, next, finally*) during the discussion. Encourage students to explain their thinking. Be sure everyone agrees on the order of the steps as they are being rearranged. This would be an excellent opportunity to use the rug partner routine in an effort to engage all students in the discussion. Allow students to use the book as a reference, if needed.

Once the activity is complete, explain to students that they have successfully ordered the steps to create a ceramic jar. “We just created a “how to” for creating a ceramic jar.”

You may want to include that the students are going to have the opportunity to create their own “how to” sequences during Writer’s Workshop.

##### Shared Reading activity

- Show students the Shared Reading text, written on chart paper or sentence strips ahead of time:

On wet days,  
heavy with rainwater,  
it is cool and squishy,  
mud pie heaven.

But to Dave  
it was clay,  
the plain and basic stuff  
upon which he learned to  
form a life  
as a slave nearly  
two hundred years ago.

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

- Read aloud the sentences slowly for students, pointing to the words as you read.
- Read aloud the text again, this time at a more normal reading pace. Continue to point to the words as you read.
- Have students read aloud the text with you several times.
- Ask, “Did you hear any of our vocabulary words? Which ones?” (*cool, squishy*)
- Have students help find each vocabulary word in the text, and underline each word with a different color.
- Have students read aloud the text with you several more times, emphasizing in particular the two vocabulary words to help them connect the oral language with the written words.

**Math Objectives:**

- Compose 10 with two or more addends with and without concrete objects.
- Create a book of the fact families for 10.

**Materials for TM Lesson**

- Scissors – 1 pair per student
- Stapler – 1 per 4 students
- Teacher should make a sample of the Fact Family Book to show students.
- **BLM TM** Teacher Guide
- **BLM TM** Fact Family Book for (This sheet does not have a heading) -half sheet per student
- **BLM TM** The 3 related numbers for each of the families for 10 are (This sheet does not have a heading) – half sheet per student

**Math Vocabulary**

fact family  
 sums of 10 or compatible numbers  
 addends  
 sum  
 comparing  
 more than  
 less than  
 fewer than

**Technology:**

<http://gotkidsgames.com/tt/tt.html>  
**Making 10** Free online game for making 10 practice.

**ELPS (English Language Proficiency Standard)**

1E, 2D, 2G, 3C, 3D, 3E, 3G

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.C.3.,  
 II.C.1.  
 MATH I.A.2., II.A.1., V.A.1.,  
 IX.A.1., X.B.1

**Unit 2, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math****Building Background, Math**

Let's read through our math vocabulary words and see how many of these word cards you already know.

- *Read one card;*
- *ask students to read the card with you;*
- *ask for a volunteer to tell you what the word card means and how you have been using it in the lessons;*
- *define and use in a sentence;*
- *repeat with all words.*

We are going to make a book for our Fact Families of 10. Here is a sample of our book.

*(Show your premade sample, then distribute the parts of the book. The cover and first page should be precut.*

*Students should be given their own BLMs from Lesson 1 TV and Follow-up Lessons. They should cut the pages apart on the dotted lines.)*

First, let's put our Fact Family pages that we completed in Lesson 1 together in order to help us remember our facts.

If we make sure that the smallest value is the first number of the three related numbers, which fact family will come first? (0, 10, 10)

- Tell me which numbers are the addends (0, 10)
- Which number is the sum? (10)

Second? (1, 9, 10)

- Tell me which numbers are the addends. (1, 9)
- Which number is the sum? (10)

Third? (2, 8, 10)

- Tell me which numbers are the addends. (0, 10)
- Which number is the sum? (10)

*and so on to 5, 5, 10.*

Place these pages in a neat stack to the side of your desk. We'll use them in a little bit.

Now, let's work on our cover. What is the title of our book? (*Fact Family Book for \_\_\_\_\_*)

What do you think we should write in that blank space? (*10, do so*)

Why (*because we have a book of all of the three-number related facts that add to ten.*)

And what do you think we write on the By line? (*individual student names – do so*)

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued TRANSITION to Math



Now, let's look at the page we will put behind our cover. *The three related numbers for each of the families for 10 are:*

The first fact family number members have been given to you on the top line.

- What are the first three related numbers for 10? (0, 10, 10)
- What will you write on the second line if we keep all of the related numbers in the same order we have our Fact Family pages? (1, 9, 10) Record those numbers (*do so*).
- The next line? (2, 8, 10) Record those numbers (*do so*).
- Fill out the rest of the lines. Remember to keep your numbers in the same order we have our Fact Family pages in.

Now, let's read what we have in the box. (*Ask a volunteer to read the first sentence "the addends for each family are special because they add up to, their sum is, 10."*)

Someone explain what that sentence means (*use as many volunteers to expand the meaning to compatible numbers*).

Let's read our second sentence. "We call them \_\_\_\_\_ numbers."

What shall we use to complete that sentence? (*compatible*)

Find the word compatible on our word wall. (*volunteer*)

We can write compatible in the blank. (*Write compatible on the board, spelling it aloud for students to use to fill in the blank.*)

Who can read our last two sentences for us? (*volunteer*)

Ten is a friendly number. It makes adding easier!

We are going to learn more about ten in later lessons!

Let's put our book together now.

Take your stack of Fact Family pages.

Please the sheet we just finished on top of the stack.


Place the cover on top of everything.

Do you see the two little lines that run down the page on the left of the title and house? These are our staple guides.

Make sure all of your pages are neat and tidy, then help a partner staple the pages together.

This is our Fact Family Book for 10.



<p><b>TV Materials</b></p> <ul style="list-style-type: none"> <li>• Unifix cubes or linking cubes – 4 color trains of 10 per , 2 of 1 color and 2 of another color per student</li> <li>• Crayons or markers matching the 2 colors of the trains.</li> <li>• <b>BLM</b> Fact Families – 4 per student</li> <li>• <b>BLM</b> Basic Facts Flashcards</li> </ul>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b></p> <p style="text-align: right;"></p> <p><b>Unit 2, Lesson 2</b></p> <p><b>Classroom Lesson</b> - continued</p> <p><b>TRANSITION to Math</b></p> <p>I am going to have more book pages in a center so you can create more fact families and put them in a book to take home. Learning fact families will help you learn and remember your basic facts!</p> <p><b>Objectives:</b> Read the math and language objectives and have students explain how they learned them.</p> <p><b>Distribute TV Lesson Materials</b></p>
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## BLM TM Unit 2, Transition to Math, Lesson 2

(Teacher only)

The next two BLMs do NOT have headings because they are cover and first page of the students' fact family book for 10.

Here are the major steps in creating the book.

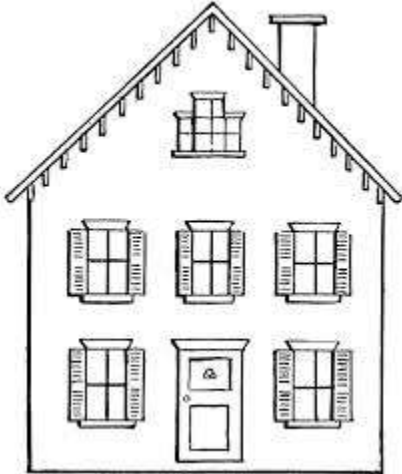
1. Take their completed fact family pages from TV Lesson 1. Students should cut apart their own pages using the dotted lines for guides.
2. Put all of the fact family pages in a stack in order from 0, 10, 10 through 5, 5, 10. There is a script in this lesson to use which continues to develop understanding of both compatible numbers and fact families. Set the stack aside.
3. Create the title page. (script provided)
4. Create the opening page (script provided)
5. Stack the book and staple.
6. If you have time before the TV Lesson, allow students time to color the house on their covers.

You will want to have many copies of the following BLMs and supplies in a center for students so that after today they can create fact family books for facts that are difficult for them to remember.

- **BLM** Fact Families from TV Lesson 1
- **BLM** Fact Family Book, **BLM** The 3 Related Numbers ... from this lesson
- **BLM** Basic Facts to Remember from TV Lesson 2
- Unifix or linking cubes in single-color trains of 10
- scissors, crayons and staplers



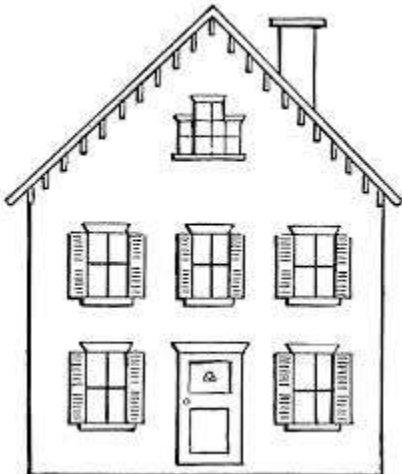
# Fact Family Book for



\_\_\_\_\_

By \_\_\_\_\_

# Fact Family Book for

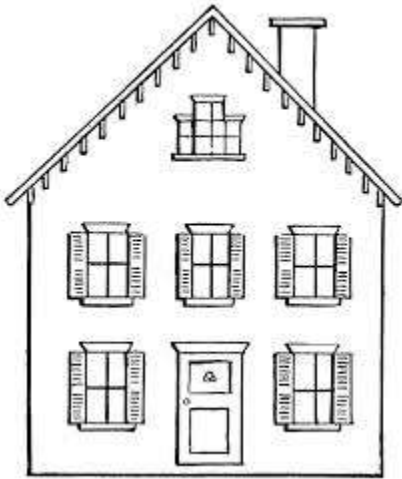


\_\_\_\_\_

By \_\_\_\_\_



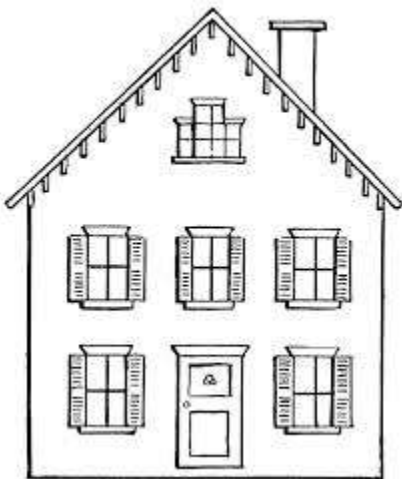
# El libro de la familia de hechos para \_\_\_\_\_



Por \_\_\_\_\_

---

# El libro de la familia de hechos para \_\_\_\_\_



Por \_\_\_\_\_



The three related numbers for each of the families for 10 are:

0, 10, 10

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The addends for each family are special because they add up to, their sum is, 10.

We call them \_\_\_\_\_ numbers.

10 is a friendly number. It makes adding easier!

The three related numbers for each of the families for 10 are:

0, 10, 10

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The addends for each family are special because they add up to, their sum is, 10.

We call them \_\_\_\_\_ numbers.

10 is a friendly number. It makes adding easier!

**BLM TM Unit 2, Transition to Math, Lesson 2**

Los tres números relacionados para cada una de las familias para 10 son:

0, 10, 10

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Los sumandos para cada familia son especiales porque suman, o su suma es igual a, 10.

Los llamamos números

\_\_\_\_\_.

10 es un número amistoso. ¡Así sumar es más fácil!

Los tres números relacionados para cada una de las familias para 10 son:

0, 10, 10

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_


\_\_\_\_\_

Los sumandos para cada familia son especiales porque suman, o su suma es igual a, 10.

Los llamamos números

\_\_\_\_\_.

10 es un número amistoso. ¡Así sumar es más fácil!

<p><b>Literature Vocabulary</b> gritty cool squishy stiff smooth</p> <p><b>Math Vocabulary</b> fact family sums of 10 or compatible numbers addends sum comparing more than less than fewer than</p> <p><b>TV Materials:</b></p> <ul style="list-style-type: none"> <li>• Unifix cubes or linking cubes 2, 15- cube trains each of a different colors per student</li> <li>• Crayons or markers matching the 2 colors of the trains.</li> <li>• <b>BLM</b> Fact Families – 4 per student</li> <li>• <b>BLM</b> Basic Facts Flashcards</li> <li>• <b>BLM</b> Word Problems</li> </ul> <p><b>ELPS (English Language Proficiency Standard)</b> 1B, 1F, 3B, 3D, 3F, 3J, 4A, 4B</p> <p><b>CCRS (College and Career Readiness Standards)</b> CROSS-CURRICULAR I.C.1., I.C.2., I.C.3</p> <p>ELA II.A.2., II.A.6., III.A.2., III.B.2. MATH II.B.1., V.A.1., VI.C.1. VII.B.1.</p>	<p style="text-align: right;">1<sup>st</sup> – 2<sup>nd</sup></p> <p style="text-align: right;"></p> <p><b>Unit 2, Lesson 2</b></p> <p><b>TV Lesson</b></p> <p><i>Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.</i></p> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Given three related numbers, make the fact family.</li> <li>• Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Use the math vocabulary during the activity.</li> <li>• Discuss solution strategies.</li> <li>• Explain how to create the fact family number sentences from three related numbers.</li> </ul> <p><b>Building Background, Math</b> <b>TEACHER:</b> The boys and girls created a special book today during their Transition to Math lesson. What book did you create, boys and girls? Tell you classroom teacher. <i>(pause)</i></p> <p>Yes, It was a Fact Family Book for 10!</p> <p>And why are the addends special in this book? <i>(pause)</i></p> <p><b>AZULITO:</b> I know - because the addends are all compatible numbers. That means that their sum, or the answer you get when you add, is 10!</p> <p><b>TEACHER:</b> Right you are, Azulito! Today, we are going to show the boys and girls how to make the fact families for sums they have a hard time remembering.</p> <p><b>AZULITO:</b> OOOH, I have basic facts that I have a hard time remembering!</p> <p><b>TEACHER:</b> We all do, Azulito. Let’s look at my special flash cards. These cards are some of the basic facts that people often have trouble remembering. Maybe the one you have a hard time remembering is in this set. Let’s run through the cards.</p> <p>I am going to read the two addends to you, and I want all the boys and girls to say the sum.</p> <p>For example, if I said 7 add 5, what would you say boys and girls? <i>(pause)</i></p> <p><b>AZULITO:</b> I would say 12!</p>
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## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

#### Comprehensible Input

**TEACHER:** Right you are Azulito. 7 add 5 equals 12! (*Show the flash card.*) Now, that is not one of the basic facts you have trouble remembering, is it. You knew right away what the sum of 7 and 5 is.

Boys and girls, as we go through the cards, you can write down any of the basic facts you can't remember right away. That will help you later when you want to make your own book of Fact Families for your hard to remember facts. Azulito, we will keep track of your hard to remember facts, too.

**AZULITO:** Cool! This will help us a lot, I think!

**TEACHER:** Let's get started!

*Go through all of the cards, giving students not only time to answer in class, but also to write down the fact they didn't know right away.*

*Azulito's list will be  $7 + 6 = 13$  and  $8 + 5 = 13$*

**AZULITO:** Ooh, I have a hard time remembering  $7 + 6 = 13$  and  $8 + 5 = 13$ . I would like to find the fact family for 13.

**TEACHER:** Boys and girls, did any of you have these on your list, too? Why don't we help Azulito make a Fact Family book for 13! You can make one, too, to have to take home or to keep in your classroom!

We will make a few of the fact family houses, and then we are going to use the fact family we finished to help us solve word problems.

Let's find the fact families for 6, 7, 13 and for 5, 8, 13.

*(Do so, using the same process as in Lesson 1, but only have them use the cubes and fill in the paper train for ONE fact, not all four in the fact family.)*

You will find the rest of the fact families for 13 during the Follow-up Lesson. Now, let's use our fact families to solve problems. You will need BLM Word Problems and your cubes for this next activity.

Let's read problem 1. (*read problem*)

We still want to use our effective problem solving strategies.



## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

First of all, what is the math movie you see when I read the story?  
Please tell your teacher the math movie in your mind. (*generous pause*)

**AZULITO:** (*pause*) Well, I see Vinnie picking flowers, 13 of them. Then he is giving away 6 of those flowers. Looks like a subtraction problem to me!

**TEACHER:** Is that what you saw, boys and girls, in your math movie? Let's take our cubes and model that. You don't have to worry about cube color this time. How long will our train be?

**AZULITO:** (*pause*) 13 cubes. I can build that (*do so*)!

**TEACHER:** What did the math movie show us then? (*pause*)

**AZULITO:** (*pause*) He gave 6 to Rosa. (*model*)

**TEACHER:** Excellent! Now, what is the number sentence we can use to represent what we just modeled? Tell your teacher boys and girls. (*pause*)

(*Write on the Number Representation blanks and circles as you say:*)

13 flowers subtract 6 flowers is – how much is it, boys and girls?

Yes, I heard someone out there say 7 flowers. That is correct. You could have known that by counting your cubes. Or you could have known your basic fact.

**AZULITO:** But that is one of my hard facts!

**TEACHER:** It is for many people, Azulito. Let's see how knowing the related numbers in the fact family would help you here:

We have our three numbers now: 6, 7, 13.

How could knowing that relationship help me solve this problem?

**AZULITO:** I get it! I knew the 13; I knew the 6. And I knew it was a subtraction problem. 13 subtract 6 equals 7! Hmm, this fact family could help me save time solving problems!

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**TEACHER:** Let's try the next problem. Listen to the problem and then tell your teacher the math movie you see. (*generous pause after reading*)

**AZULITO:** Well, that's different. I know that some of the plants were red. I know the total, but I don't know how many yellow plants there were. It sounds like an addition problem, but I'm not sure.

**TEACHER:** There are several ways to solve this. Let's set up the number representation as your addition sentence and see what we can do with it. (*pause*)

**AZULITO:** OK,  $7 + \text{some number} = 13$ .

**TEACHER:** Well done! Now, boys and girls, how can you find that missing number using your fact family? Tell your teacher. (*pause*)

**AZULITO:** Well, I know that one fact family for 13 is 6, 7, 13. (*Write in the Related Numbers box.*) I get it. If I know this fact family, I know that the ONLY number I can add to 6 to find the sum of 13 is 7! 6 add 7 equals 13! (*fill in the blank with 7*)

**TEACHER:** We have two more problems, let's work to finish them.

(*Use the same process to solve the problems.*)

- Read the problem and watch for the math movie.
- Deduce the number representation.
- Write the number sentence with the unknown left blank.
- Fill in the Related Numbers for 5, 8, 13.
- Use the related numbers to fill in the blank.

**AZULITO:** Wow! This fact family is really important! I'm going to finish more for me right away!

**TEACHER:** Great, Azulito! I hope the boys and girls will find the base facts that give them trouble, and will make the fact family for those, too!

Fact Families and related numbers really help us to solve problems! By the way, did any of those fact families contain compatible numbers?

**Azulito's Corner**

**Unit 2, Lesson 2**

What is your strategy for finding the missing number in What's Missing?

**Unit 2, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>



**TV Lesson** - continued

**AZULITO:** No way! Compatible numbers add up to 10. These numbers added up to 13! But we still had fact families!

**TEACHER:** Great job! Now let's see what your Corner has for us today, Azulito.

**AZULITO:** We're going to talk about strategies for finding missing numbers in What's Missing! I wonder if we can add using fact families now.

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)



(One set of cards for classroom now, one set per student for Follow-up. Cut apart before distributing.)

$$7 + 5 = 12$$

$$7 + 6 = 13$$

$$7 + 8 = 15$$

$$7 + 9 = 16$$

$$8 + 5 = 13$$

$$8 + 6 = 14$$

$$8 + 9 = 17$$

$$7 + 9 = 16$$



**BLM Unit 2, TV Lesson 2**  
(Four sheets per student)

**Fact Families** 

Our Family \_\_\_\_\_

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

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Our Family \_\_\_\_\_

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

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1. Vinnie picked 13 flowers. He gave 6 of them to his cousin Rosa. How many flowers did Vinnie have then?

Related Numbers
_____

Number Representation

\_\_\_\_\_ ○ \_\_\_\_\_ ○ \_\_\_\_\_

2. Marcos planted 13 flowers. 7 were red and the rest were yellow. How many flowers were yellow?

Related Numbers
_____

Number Representation

\_\_\_\_\_ ○ \_\_\_\_\_ ○ \_\_\_\_\_

3. Al and his friend Marie planted 13 flowers. Al planted 8 of the flowers. How many did Marie plant?

Related Numbers
_____

Number Representation

\_\_\_\_\_ ○ \_\_\_\_\_ ○ \_\_\_\_\_

4. Gary planted 6 flowers on Monday. By Tuesday, he had planted a total of 13 flowers. How many flowers did Gary plant on Tuesday?

Related Numbers
_____

Number Representation

\_\_\_\_\_ ○ \_\_\_\_\_ ○ \_\_\_\_\_

razonados 

Una por estudiante

1. Vinnie recogió 13 flores. Le dio 6 a su prima Rosa. ¿Cuántas flores le quedaron a Vinnie?

Números relacionados _____
-------------------------------

Representación de número



2. Marcos plantó 13 flores. 7 eran rojas y el resto fueron amarillas. ¿Cuántas flores eran amarillas?

Números relacionados _____
-------------------------------

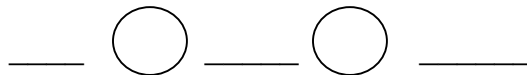
Representación de número



3. Al y su amiga Marie plantaron 13 flores. Al plantó 8 de las flores. ¿Cuántas plantó Marie?

Números relacionados _____
-------------------------------

Representación de número



5. Gary plantó 6 flores el lunes. Para el martes, había plantado un total de 13 flores. ¿Cuántas flores plantó Gary el martes?

Números relacionados _____
-------------------------------

Representación de número



### Literature Vocabulary

gritty  
cool  
squishy  
stiff  
smooth

### Math Vocabulary

fact family  
sums of 10 or compatible numbers  
addends  
sum  
comparing  
more than  
less than  
fewer than

### Materials:

- Unifix cubes or linking cubes 2, 15- cube trains each of a different colors per student
- Crayons or markers matching the two colors of the trains.
- Scissors, staplers
- **BLM** Fact Families – 4 per student
- **BLM** Basic Facts Flashcards
- **BLM** book cover from TM – half page per student
- **BLM** front page of Fact family book from TM – half page per student

**ELPS** (*English Language Proficiency Standard*)  
2D, 2G, 2H, 5B, 5C, 5F

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.E.2., II.B.1., II.B.2  
ELA I.A.2. III.A.1., III.A.2., III.B.1. IV.A.2, IV.A.3., MATH I.A.2., I.B.1., II.A.1.

### Technology

<http://www.roomrecess.com/pages/BlockBuster.html> . Fast moving game to find fact families.

Either of the two suggested sites could be a self-checking center activity.

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up



### Math Objectives

- Given three related numbers, make the fact family.
- Compose 10 with two or more addends with and without concrete objects.

### Language Objectives

- Listen and speak with a partner during our math activity.
- Explain what sums of 10 or compatible numbers are.
- Describe a fact family.
- Use the math vocabulary during the activity.
- Share-write math journal response.

### Practice and Application, Math

Let's finish the fact family pages for 13. Then we will assemble the Fact Family Book for 13.

*(Students should be able to work with a partner to complete the Fact Family pages for 13. You may need to help them assemble the books as you did for the TM. Circulate the room, asking questions.)*

### QUESTIONS for independent work as you circulate the room

#### Probe for Understanding

- Which numbers are addends? Sum?
- What is a sum? (*answer when you add two addends*)
- What is the sum for all of these fact families?
- Suppose I asked you, "What number added to 7 equals 13?"

#### Extension Questions

- Find the fact families for a fact you do not know.

### Math Journal Writing

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



**Explain how fact families can help you solve problems.**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

### Math Objectives

- Use concrete models to represent and name fractional parts of a whole and parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

### Language Objectives

- Explain why each portion is a fourth/ half.
- Share-write what is a fourth or a half.

### Vocabulary

half, halves  
fourth, fourths  
fair shares  
equal pieces

### Materials:

#### Teacher and Student Pairs

**NOTE:** you can certainly provide the two cups/partner Trail Mix already mixed if you prefer – would cut down on the 1/2 c measuring cups you need to provide, and time to mix

- 2 cups **trail mix/pair** mix equal parts of
  - 1/2 c pecans,
  - 1/2 c semi-choc chips,
  - 1/2 c granola
  - 1/2 c raisins
- One 2-cup measuring cup
- Four 12 oz plastic cups
- 2 napkins
- Two ½ cup measuring cups
- 2 scissors
- 2 rulers and 2 markers
- 2 glue sticks
- **BLM** Trail Mix Fractions

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



**Children should wash their hands before this activity if using food items.**

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

### Objective:

Today you and a partner are going to pretend to share a snack with a friend, but the snack will be shared in four portions. (*Show the four plates in your demo set.*) You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. You will be able to write the fraction in numbers, and to explain the fractional parts you’ve divided into.

### TODAY: Teacher demonstration of halves

You have the option today of using pre-mixed trail mix, or having the students mix their own before they divide it up in fractional parts. Either way, once there is a 2-cup portion for each partner and tell students that once again today they must pretend that they are sharing the snack among four people.

### QUESTIONING before division of snack

- How many parts will there be? (*four*)
- What fractional part would each person get if there were four people? (*one-fourth*)
- Would you rather have one-fourth of this snack or one-half? Why? (*Let this discussion run its course so that you can see if students understand fractional comparisons. They probably cannot verbalize yet about relative size of denominators, but they should begin to see that 1/2 is definitely > 1/4.*)
- Will you be sharing fractional parts of a whole, or fractional parts of a set of objects? (*fractional parts of a whole cup*)

If you need to walk through the activity with the students, please feel free to do so; otherwise, let them decide how to divide the snack and what to call the division. Do let them know that the plastic cups are to hold their fractional portions rather than paper plates today – less mess.

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Snack Fractions - continued

Before you have them take their snacks, walk the students through the BLM Trail Mix Fractions. Students are to cut out the rectangle fold it into fourths, cut and glue one-fourth to the plate on the record sheet, then answer the trail mix question on the BLM. You may write a class answer to the “because,” but students should also write their own, or at least copy the class to the BLM, as the Snack Fraction Writing task.

**SNACK Eating:** Now tell the partners that they may each have half of the snack. How much will each receive? (*two plastic cups worth*) Ask, “Which is the greater amount of the snack, one-fourth or one-half?” (*response*) How do you know? If you were going to compare these two fractions, what would you say?  $1/2 - 1/4$  Can you make two comparison statements?

### Snack Fraction Writing: BLM Trail Mix Fractions

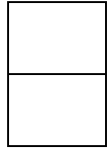
Students identify the fractional part and complete the “because” statement on the record sheet.

**Objectives: Review what you learned and how you learned it.**



My name is \_\_\_\_\_

This is my glass and my fair share of the snack if sharing in fourths.



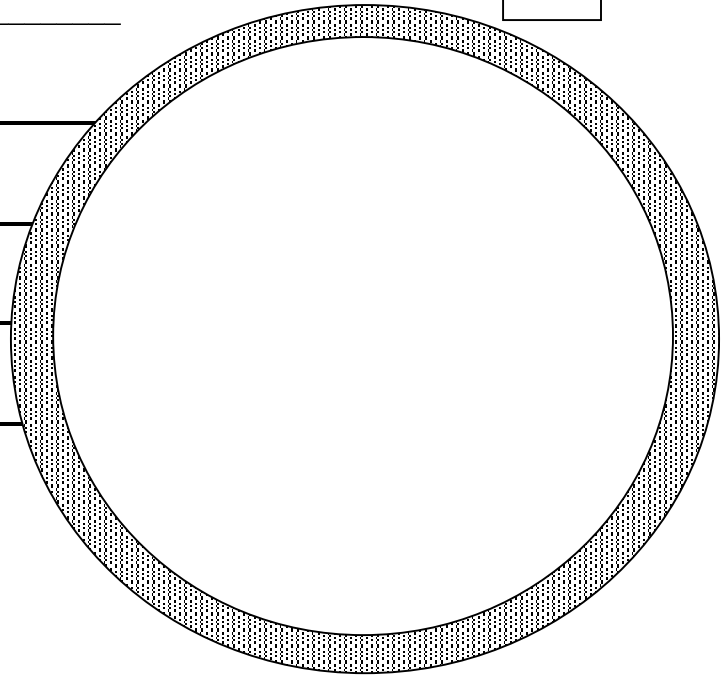
My share of the trail mix would be called a \_\_\_\_\_  
because...

\_\_\_\_\_

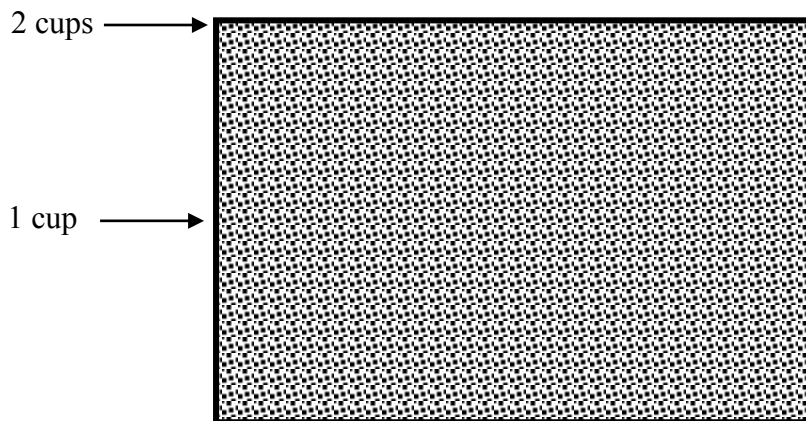
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

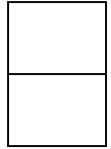


Cut out the rectangle below. Divide it into fourths. Glue your fourth to the snack glass above.



Mi nombre es \_\_\_\_\_

Esto es mi vaso y mi porción igual si compartimos en cuartos.



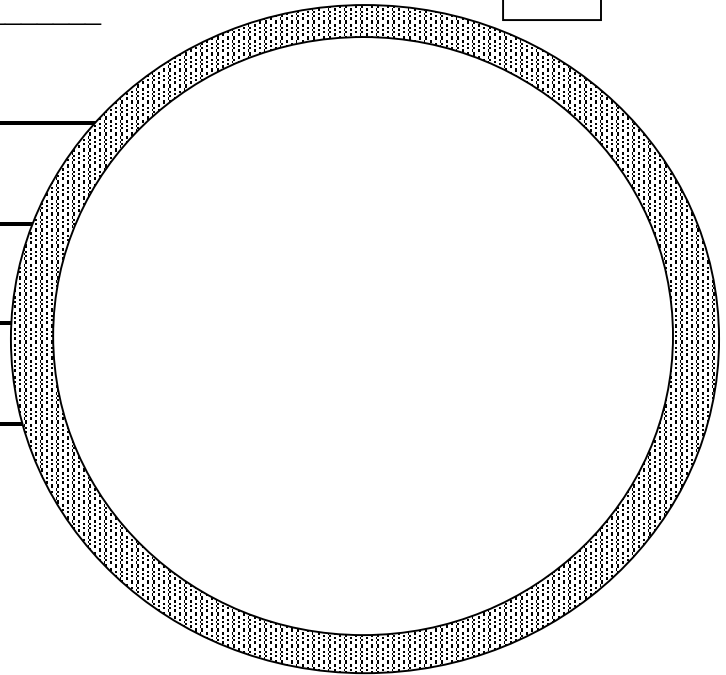
Mi porción del revuelto de frutas secas es \_\_\_\_\_  
porque...

\_\_\_\_\_

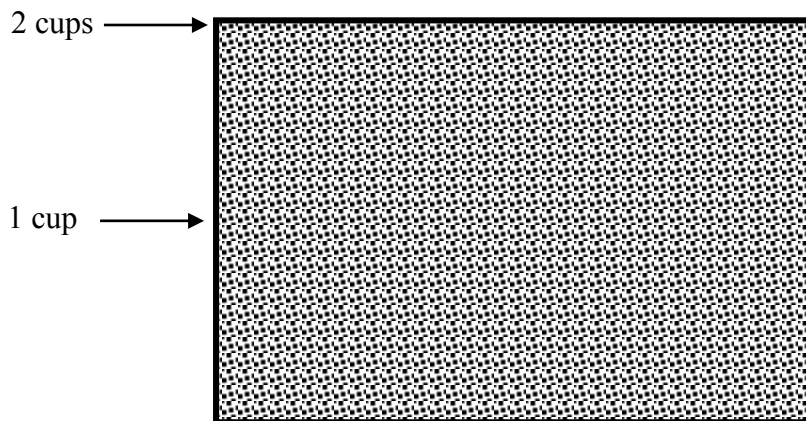
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Recorta el rectángulo abajo. Dividelo en cuartos. Pega el cuarto en el vaso arriba.





**Family Fun – 1<sup>st</sup> – 2<sup>nd</sup>, Unit 2 Lesson 2**



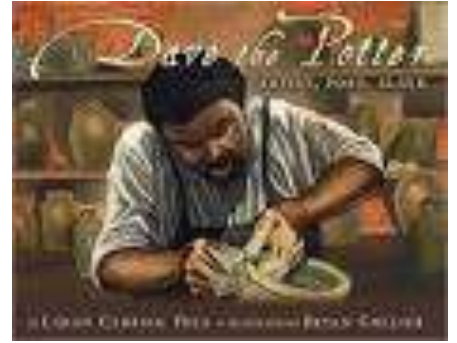
Dave was an amazing man.

Here is something I really liked about our lesson today:

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In math, we worked on fact families again today. One of the basic facts I want to work on is


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The four number sentences for this fact family are:

<hr/>	<hr/>
<hr/>	<hr/>

Thank you for helping me with math this summer!

Your Child's Teacher

**Diversión familiar – 1º – 2º, Unidad 2 Lección 2** 

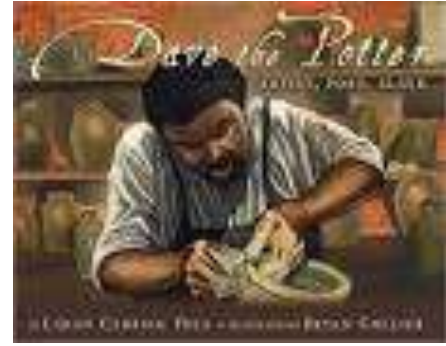
Dave era un hombre increíble.

Esto es algo que realmente me gustó de nuestra lección de hoy:

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En matemáticas, hoy trabajamos de nuevo con familias de hechos. Uno de los hechos básicos en los que quiero trabajar es

---

Las cuatro oraciones numéricas de esta familia de hechos son:

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¡Gracias por ayudarme con las matemáticas este verano!

El maestro de su hijo

**Materials**

- Color tiles – 20 per student
- Unknown Quantity Cards
- **BLM** CGI Problems Unit 2 – teacher only
- **BLM** Pots to Measure #3 – 1 per student

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy****Language Objectives**

- Listen, read and write to understand problems and explain solution strategies

**TEKS** (denotes Texas Essential Knowledge and Skills that are taught in this unit)

**Lessons 1, 2, 3**

- 1<sup>st</sup> – 1.3B,C; 1.6GH
- 2<sup>nd</sup> – 2.4C; 2.3A

**ELPS** (English Language Proficiency Standard)

2F, 2I, 3D, 3J, 4B, 4E, 4I, 5B

**CCRS** (College and Career Readiness Standards)

CROSS-CURRICULAR I.C.1., I.C.3., II.D.3.

ELA I.A.1., I.A.3., II.A.2., II.A.3., II.A.8

MATH IV.A.1., VI.C.2.,

VIII.A.2., VIII.A.4., VIII.C.1.

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 7, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 7

**Unit 2, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Daily Routine**

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (fundamental number sense for all items)
  - Lesson 1 – 48
  - Lesson 2 – 20
  - **Lesson 3 – 100**
- **CGI Problem** (1<sup>st</sup> items 1, 3ab; 2<sup>nd</sup> items 3ab, 5ab)\*
  - Lesson 1 – Join, Result Unknown (1<sup>st</sup> item 1, 2<sup>nd</sup> item 3ab)
  - Lesson 2 – Join, Change Unknown (2<sup>nd</sup> item 5ab)
  - **Lesson 3 – Part Whole. Whole Unknown** (1<sup>st</sup> item 3ab)
- **What’s Missing** (1<sup>st</sup> and 2<sup>nd</sup> item 2)
  - All lessons: Use the Unknown Quantity cards as outlined in the overview of the Daily Routines (1<sup>st</sup> and 2<sup>nd</sup> Item 2 – both are subtraction).
- **Measurement** (1<sup>st</sup> item 5)\*\*
  - Lesson 1 – Dave’s Pots to Measure #1
  - Lesson 2 – Dave’s Pots to Measure #2
  - **Lesson 3 – Dave’s Pots to Measure #3**

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

*\*\* Measurement has been moved to ESSENTIAL activities this unit because students are practicing comparing.*

## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – Which pot do you like best?
  - Lesson 2 – none
  - **Lesson 3 – How many pennies do you think are in the jar?** *(Have a plastic screw lid jar with 57 pennies in it – bar graph with choices: less than 25, 25 to 75, 75 - 100, more than 100. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by grouping in tens and ones.)*

### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**(Assessment Items 1<sup>st</sup> grade 8 and 2<sup>nd</sup> grade 7 will be reviewed daily in Snack Fractions. Note: Snacks are the same throughout the grade bands; therefore there will be times when your primary students will experience fractional parts of a set. These do teach “fractioness,” and are a necessary part of the students’ learning.)**

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

### Vocabulary Building

Choose an activity listed in the Daily Routines section.

### Azulito’s Corner

#### Unit 2, Lesson 3

Explain one of the strategies used in your class to solve today’s CGI problem.

This is a photograph of one of Dave's pots. Use the color tiles to measure the picture of the pot.

How many color tiles tall is the first pot? The first pot is \_\_\_\_\_ color tiles tall.

How many color tiles wide is the second pot? The second pot is \_\_\_\_\_ color tiles wide.

The first pot is (taller or shorter) than the second pot. (Circle one of the words.)

The first pot is \_\_\_\_\_ color tiles (taller or shorter) than the second pot.

Write a number sentence that compares the two pots. \_\_\_\_\_



**BLM Unidad 2, Las ollas para medir de Dave #3**



Esta es una fotografía de una de las ollas de Dave. Usa las fichas de colores para medir la imagen de la olla.

¿De cuántas fichas de alto es la primera olla? La primera olla tiene \_\_\_\_\_ fichas de alto.

¿Cuántas fichas de ancho mide la segunda olla? La segunda olla tiene \_\_\_\_\_ fichas de ancho.

La primera olla es (más alta o más baja) que la segunda olla. (Circula una de las opciones).

La primera olla es \_\_\_\_\_ fichas (más alta o más baja) que la segunda olla.

Escribe una oración numérica que compare las dos ollas. \_\_\_\_\_



## Unit 2, Lesson 3-Daily Routines – Solve It! Pairs

Resuelve tu propio problema hoy, enseñando todo tu trabajo. Verifica la solución del problema de tu compañero(a) cuando ambos terminan su trabajo. Discutan su trabajo.

**Compañero 1 Problema**    **Nombre** \_\_\_\_\_ **Fecha** \_\_\_\_\_

- Mark y su amigo Robbie comieron juntos en un café. Mark comió una orden de hamburguesa por \$6. Su amigo comió una orden de tiritas de pollo por \$7. Si Mark pagó \$20 por las dos ordenes, ¿cuánto cambio recibió antes de impuestos?

<b>Solución del Problema</b> Nombre:	<b>Solución del Problema</b> Nombre:

### Unit 2, Lesson 3-Daily Routines – Solve It! Pairs

Resuelve tu propio problema hoy, enseñando todo tu trabajo. Verifica la solución del problema de tu compañero(a) cuando ambos terminan su trabajo. Discutan su trabajo.

**Compañero 2 Problema**    **Nombre** \_\_\_\_\_ **Fecha** \_\_\_\_\_

- Mark montó el autobús de la ciudad a la escuela. Dado que Mark es un estudiante, recibe un precio especial. El boleto cuesta 25¢ y cada transferencia es una moneda de cinco centavos. Si Mark transfiere tres veces, ¿cuánto paga cada día para viajar en el autobús?

<b>Solución del Problema</b> Nombre:	<b>Solución del Problema</b> Nombre:



**Literature Selection**

*Dave the Potter*  
by Laban Carrick Hill

**Materials for Language Lesson**

- BLM Word Cards
- Shared reading text written on chart paper from Lesson 2
- chart paper
- markers

**Materials for TM Lesson**

- Unifix cubes - 2 different colored towers of 10 , per student
- BLM TM Making 10 Problems – 1 per student

**Literature Vocabulary**

gritty  
cool  
squishy  
stiff  
smooth

**Math Vocabulary**

fact family  
sums of 10 or compatible numbers  
addends  
sum  
comparing  
more than  
less than  
fewer than

**ELPS (English Language Proficiency Standard)**  
4A, 4C, 4D, 4F, 4J, 4K

**CCRS (College and Career Readiness Standards)**  
CROSS-CURRICULAR II.A.2., II.A.3., II.A.4., II.A.7  
ELA I.A.1., I.A.2., II.A.1., II.A.3., II.A.4., II.A.6, III.A.1., IV.A.2.

**Unit 2, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson**



Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.

**Math Objectives**

- Compose 10 with two or more addends with and without concrete objects

**Reading Objectives**

- Develop decoding abilities and reading fluency with a Shared Reading text.

**Language Objectives**

- Use literature vocabulary words in sentences to talk about our lives.
- Write a sentence using phonics skills and words we have learned.

**BEFORE READING**

**Practice and Application, Vocabulary**

Have students choose any word from the Interactive Word Wall, and try to use it in a sentence. Encourage them to use the word beyond the story, to talk about their own experiences. Continue until all words have been used.

- Ex: After the rain, the mud felt **squishy** under my feet.
- Ex: The book has a **smooth** cover.
- Ex: The wind today makes the air feel **cool**.

**DURING READING**

**Practice and Application, Literature**

**Shared Reading activity**

The power of a Shared Reading comes from students having multiple opportunities to read and examine the text, each time with a different purpose. In Lesson 2, students were able to hear what the text sounds like from a fluent reader, recognize key words in the text, and try reading along with the teacher several times. This developed their ability to decode the text, and worked on their reading fluency.

Today, you will provide students with additional opportunities to read the text with you to continue developing their decoding abilities and reading fluency. You will **choose one or two aspects of the text to focus on with the class**, depending on your students’ particular reading abilities.

## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### Independent Reading Connection

For students to improve as readers, they have to actually read a text themselves. It seems obvious, but often we emphasize reading aloud a text and never release the responsibility of reading, to the students. In this unit, your students have had multiple opportunities to read the Shared Reading text in Lessons 2 and 3. If you set up a Listening Center, then they have also been able to read along with the recorded text of *Dave the Potter*. After the final lesson, consider creating heterogeneous **reading partners** based on reading ability (a stronger reader with a weaker reader). Have a copy of *Dave the Potter* available during center time, and have pairs of students read it together as partners. The stronger reader will be the one carrying the reading, with the other student listening and joining in when possible.

Possible areas to focus on:

- **Word Recognition** – You may want to again have students find the key words from Lesson 2. This will be easier since the words are already highlighted, but students will still need to find them from among all of the highlighted words. This is a good option if your students have lower reading abilities and would benefit from this reinforcement.
  - **Phonics** – You can choose to have students search the text for certain letters, and then help them decode those words. Some options could be:
    - **Words that begin with the letter ‘w’:** *wet, with, was, which*
    - **Words that begin with the letter ‘h’:** *heavy, heaven, he, hundred*
  - **Punctuation** - You may want students to focus on how punctuation affects the way they read. Some options:
    - **Search for periods**, and circle them. When there is a period, we pause our reading before we begin the next sentence. Have students practice this with you.
    - **Search for commas**, and circle them. When there is a comma, we pause briefly. Have students practice this with you.
1. Choose one or two of the above aspects that you would like your students to focus on with today’s Shared Reading.
  2. Remind students what the Shared reading text is about, and then read it aloud to them again. Students should follow along with their eyes as you point to the words you are reading with a pointer or wand.
  3. Invite students to join you in reading the text once.
  4. Have students search the text for whichever aspect(s) you decided to focus on (*word recognition, phonics, punctuation*).
  5. Read the text multiple times with the class, emphasizing the aspects you just worked on with them. This will improve their ability to decode those aspects of the text, and should increase their reading fluency.

Make the repeated readings fun! Invite different students to point to the words with the pointer or wand while you and the rest of the class read aloud. Be silly with emphasizing certain words or sounds they worked with. Have fun with intonation based on the punctuation. At the end, see if any students want to try reading part of the text by themselves. (*Even if it’s just a few words!*)

## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



On wet days,  
heavy with rainwater,  
it is cool and squishy,  
mud pie heaven.

But to Dave  
it was clay,  
the plain and basic stuff  
upon which he learned to  
form a life  
as a slave nearly  
two hundred years ago.

#### **AFTER READING**

#### **Practice and Application, Literature**

#### **Interactive Writing**

You will ask students what their favorite part of the story is, and then write one of the student's responses as a whole class using interactive writing.

With **Interactive Writing**, writing the sentence will be a combined effort between you and the students. You will have to decide which aspects of the sentence your students could write on the chart paper, and which parts you would have to write.

1. Ask, "What was your favorite part of the story?"
2. Have students first talk with their rug partner, and then regroup the class and have several students share. You can point to the parts of the book students are talking about to provide visual support.
3. Choose one student's response, and tell students they are going to help you write this sentence. Repeat the response aloud several times.
4. Count on your fingers how many words are in the sentence, having students do this along with you.
5. Begin with the first word. Depending on the writing abilities of your students, you can choose an aspect of this word that students can help write, or you might decide to write that word yourself and have students help with other words.

## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



For example, you may ask a student to come up to the chart paper and:

- Write the **beginning letter** of the word (*and then you write the rest of the word*). Ex: “The first word in our sentence is the word my. The word my, begins just like Maria’s name. Maria, will you come up to the chart paper and write the first sound you hear in the word my.”
  - Provide a **space** after the word. (*You write the word, and then the student places something - such as their finger - after the word. You then write the next word on the other side.*) This develops students’ concept of what a word is, and is something you would have students do only if they need to learn this concept of the word.
  - Write the **last letter** of the word based on the sound they hear at the end of the word. (*You write all of the letters up to the last letter.*)
  - Write the **whole word**, if it is a high frequency word they already know, or if it is a vocabulary word on the word wall.
  - When a word has a capital letter, help students include it, and point out why you need the capital letter (*a name, beginning of sentence*).
6. Continue in this way with each of the words in the sentence until you and the students have collaboratively written it. To keep this activity fast-paced, **make sure there is a balance between what you have students write and what you write.**

**Math Objectives:**

- Compose 10 with two or more addends with and without concrete objects.
- Generate fact families.
- Explore base ten materials.

**Materials for TM Lesson**

- Scissors – 1 pair per student
- Stapler – 1 per 4 students
- Base Ten Sets – 1 per student
  - 2 hundreds
  - 15 tens
  - 15 ones
- **BLM TM** Fact Family Book for (from TM Lesson 2 ) - half sheet per student
- **BLM TM** The three related numbers for each of the families for 10 are (from TM Lesson 2) – half sheet per student
- **BLM** Fact Families (from TV Lesson 2 – 5 per student
- **BLM** Basic Facts Flashcards (from TV Lesson 2) – 1 set per pair
- **BLM** Base Ten Board

**Math Vocabulary**

fact family  
 sums of 10 or compatible numbers  
 addends  
 sum  
 comparing  
 more than  
 less than  
 fewer than

 **Technology:**

<http://gotkidsgames.com/tt/tt.html>  
**Making 10** Free online game for making 10 practice.

**ELPS (English Language**

*Proficiency Standard)*

1E, 2D, 2G, 3C, 3D, 3E, 3G

**CCRS (College and Career**  
*Readiness Standards)*

CROSS-CURRICULAR I.C.3.,  
 II.C.1.

MATH I.A.2., II.A.1., V.A.1.,  
 IX.A.1., X.B.1

**Unit 2, Lesson 3****1<sup>st</sup> – 2<sup>nd</sup>****Classroom Lesson - continued****TRANSITION to Math****Building Background, Math**

Let's read through our math vocabulary words and see how many of these word cards you already know.

- *Read one card;*
- *ask students to read the card with you;*
- *ask for a volunteer to tell you what the word card means;*
- *define and use in a sentence;*
- *repeat with all words.*

*(Use this time for students to create at least one more Fact Family book each for their individual "hard to learn" basic facts. Follow the same process as you did in Lesson 2.)*

Before the TV Lesson, distribute the base ten sets to each student. Tell them that you would like for them to work with a partner and find out as many things as they can about the new materials they are going to work with often for the rest of the summer session. Let them know that the small cube represents ONE.

Just before the TV Lesson, let student pairs tell you what they found. The TV Teacher will take a little time to explore the following:

- It takes 10 of the cubes to equal one of the long rods.
- It takes 100 cubes, or 10 long rods to equal the flat.

**Objectives:** Read the math and language objectives and have students explain how they learned them.

**Distribute TV Lesson Materials****TV Materials**

- Base ten sets -1 set per student
  - 1 flat
  - 15 longs
  - 15 units
- **BLM** Base Ten Board – 1 per student



**BLM-TM Unit 2, Lesson 3**  
(One sheet per student)

**Base Ten Board** 

Hundreds	Tens	Ones										
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**BLM-TM Unit 2, Lesson 3**  
(One sheet per student)

**Base Ten Board**



Centenas	Decenas	Unos										
		<table border="1"><tbody><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>										



### Literature Vocabulary

gritty  
cool  
squishy  
stiff  
smooth

### Math Vocabulary

fact family  
sums of 10 or compatible numbers  
addends  
sum  
comparing  
more than  
less than  
fewer than

### TV Materials:

- Base Ten Sets – 1 per student
  - 2 hundreds
  - 15 tens
  - 15 ones
- **BLM** Based Ten Board (from TM Lesson)

### ELPS (English Language Proficiency Standard)

1B, 1F, 3D, 3F, 3J, 4A, 4B

### CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR I.C.1., I.C.2., I.C.3  
ELA II.A.2., II.A.6., III.A.2., III.B.2.  
MATH II.B.1., V.A.1., VI.C.1. VII.B.1.

## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson



Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.

### Math Objectives

- Generate structures from base ten materials and determine their value.

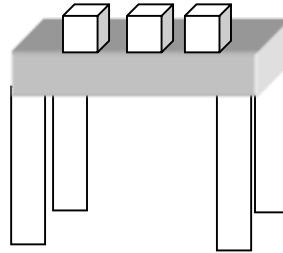
### Language Objectives

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to create the fact family number sentences from three related numbers.

### Building Background, Math

**TEACHER:** You investigated a new material for you to use today called base ten blocks. Your Teacher asked you to find out as many things as you could about the materials. Azulito and I investigated the materials, too. Let's see if Azulito found some of the same things about the blocks as you did.

**AZULITO:** Well, I found out that it takes TEN of these little cubes to make the long rod. And I found out that it takes TEN of the long rods to make the flat. I also found out that I could build something with them, and I built this (*show an actual structure, not the SMARTBOARD*).



**TEACHER:** That's pretty nifty, Azulito! Did you know that we can find the value of what you just built? Let's see if we can work together, Boys and Girls, to find out the value of Azulito's structure.

### Comprehensible Output

I will tell you that this small cube represents ONE.

First, if this cube is ONE, what does one long rod represent? See if you can use the ones to find out. Talk to your partners, boys and girls, then tell your teacher. What does this long rod represent? (*short pause*)

**AZULITO:** I know – it takes 10 cubes to equal the long rod. (*Count to 10 as you line up the cubes against the side of a ten rod.*)

## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

#### SMARTBOARD

Models with cubes  
Number sentences  
Fact Family Houses

**AZULITO:** So the long rod represents TEN!

**TEACHER:** Well done! Do you see that, too, boys and girls?  
The cube represents ONE.  
The long rod represents TEN.

Alright, then what does the flat represent? Use your materials to find out. (*longer pause*)

**AZULITO:** Well, I didn't have enough ones to cover the top of the flat; but I saw that the tens could cover the flat. It took 10 tens. If I count by tens, I will see what the flat represents (*count from 10 to 100, touching each ten as you count*). The flat represents 100 ones!

**TEACHER:** Is that what you see, boys and girls? That is correct!  
The cube represents ONE.  
The long rod represents TEN.  
The flat represents ONE HUNDRED.

Now, let's go back and see what value we could give Azulito's structure. Work with your partner to decide how much the structure is worth by counting up what the blocks represent. (*longer pause*)

**AZULITO:** Well, I have 4 tens – that's 10, 20, 30, 40. I have one hundred – that 100; and I have 3 ones, so that's 3. How do I figure out the total?

**TEACHER:** Boys and girls, Azulito has all the parts of the value. Tell your teacher how Azulito can figure out the total value of his structure. (*pause*) I heard several ideas. One idea was to add up all of the parts to get the whole. Let's try that one.

100 Azulito has 1 hundred  
40 Azulito has 4 tens, that's forty  
+ 3 Azulito has 3 ones, that's three  
143 1 hundred forty-three

Your structure using our base ten materials represent 143, Azulito!

Boys and girls, would you like to build a structure? Let's see if you can build a structure that represents 57. Can you do that without making your structure fall, and without making anyone else's structure fall. Let's see!

Build a structure that represents, or is valued at 57. (*generous pause*)

#### CLASSROOM TEACHERS

Please circulate the room to make sure students understand the task and are building any structure. They do not have materials to build with anything other than 5 tens and 7 ones. Ask each student to count for you to verbally verify the value of the structure.

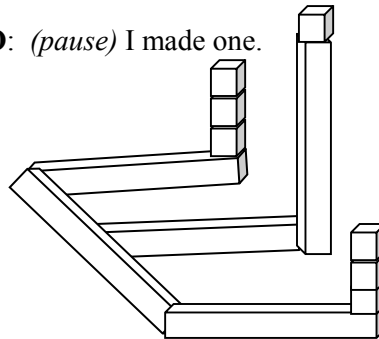
## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**AZULITO:** *(pause)* I made one.



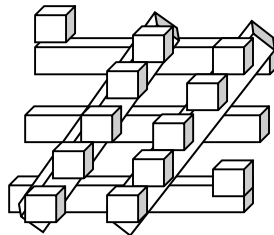
**TEACHER:** Well, boys and girls. What do you think? Does Azulito's structure represent 57? *(pause)* Let's count and see.

**AZULITO:** *(Count each 10)* 10, 20, 30, 40, 50 *(now add on the ones and touch each one as you count)* 51, 52, 53, 54, 55, 56, 57

**TEACHER:** Alright, carefully take your structure down. Please do this carefully – you do not want to lose any of your base ten materials.

Now build a structure that represents 62. *(generous pause)*

**AZULITO:** *(pause)* I have a good one! See!



**TEACHER:** Well, Azulito, this is interesting. What do you think boys and girls? Does Azulito's structure represent 62? Talk in your class to see if it does. *(pause)*

**AZULITO:** I can show you how it does! I can count the tens first – 10, 20, 30, 40, 50. And I can count the ones 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62. See, my structure does represent 62!

**TEACHER:** You made a very fine structure, Azulito. I didn't say you had to use the fewest number of blocks. Can you change your structure so that you would use the fewest number of blocks? Boys and girls, talk as a class to see if you can find a way for Azulito to change his structure so that he uses the fewest number of blocks to build it, but it still represents 62 blocks. *(generous pause)*

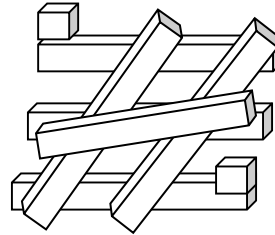
## Unit 2, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### TV Lesson - continued

**AZULITO:** *(pause)* Oh, I see! I heard my friends out there helping me. They said that I can take 10 of the ones and EXCHANGE them for one TEN. *(Do so by taking off the 10 ones atop of the tens, then crossing the new ten over those two tens.)* Thank you, friends, for helping me!



**TEACHER:** Well done! Now you have the fewest number of blocks in your structure. It looks a little different, but the structure still represents 62! EXCHANGING or TRADING is very important in the base ten system. We are going to investigate more about exchanging and trading in our next unit!

Now Azulito, I'd like for you to create a structure and let our friends decide how much the structure represents. Are you ready boys and girls?


**AZULITO:** OK, here goes! *(Create any structure of your choosing that represents 121. Please create with 12 tens and 1 one.)*

**TEACHER:** Alright boys and girls. Looks like Azulito has been a little tricky. Can you find out how much his structure represents? *(generous pause)*

**AZULITO:** Oh, I couldn't fool them. I heard many of them say that this structure represents 121! They are very good at this!

**TEACHER:** Yes they are, Azulito. Let's count this up now. *(Count by tens and add the 1 – 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 120 121.)*

**AZULITO:** I could have made it much easier, though. Boys and girls I can make a TRADE. Do you know what it is? What can I TRADE to have fewer blocks?

<p><b>TV TEACHER</b> If you have time, repeat this last process with 154.</p> <p><b>Azulito's Corner</b> <b>Unit 2, Lesson 3</b> Explain one of the strategies used in your class to solve today's CGI problem.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b> </p> <p><b>Unit 2, Lesson 3</b></p> <p><b>TV Lesson</b> - continued</p> <p><b>TEACHER:</b> Once again, Azulito, they are on to your tricks. Many of the students said that you can TRADE or EXCHANGE 10 tens for 1 hundred. Let's do that. (<i>Count out the 10 tens, take them off the structure and replace them in some fashion with the 1 hundred.</i>)</p> <p><b>AZULITO:</b> Now I have used the fewest number of blocks to represent 121 in my structure. And I can count much faster, too – 100, 110, 120, 121. That was much easier!</p> <p><b>TEACHER:</b> Well done, Azulito and boys and girls! During our next unit be ready to use our base ten to add and subtract! There are lots of strategies we are going to use!</p> <p><b>AZULITO:</b> And speaking of strategies, the boys and girls used many strategies today during their Daily Routines to solve the CGI problems. We would like to see one of your strategies posted on MAS Space in my corner. You can describe the strategy and what the poster looked like; or you can upload a poster to my corner. I can hardly wait to see what you've done!</p> <p><b>TEACHER:</b> Excellent idea, Azulito. It will be fun to compare strategies. You'll need to put up your strategy, too! And now, let's review what we have accomplished today.</p> <p><b>Objectives:</b> And now before we go, let's review what we have learned today! (<i>do so</i>)</p>
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**Literature Vocabulary**

gritty  
cool  
squishy  
stiff  
smooth

**Math Vocabulary**

fact family  
sums of 10 or compatible numbers  
addends  
sum  
comparing  
more than  
less than  
fewer than

**Materials:**

You are going to play whole class today, one team against another so you need one set of each, and each child has a set to take home.

- Family Fun Game Board
- Family Fun Movement Cards
- 20 counters
- Games Markers
- **BLM** Family Fun Problem Cards
- **BLM** Special Instructions
- **BLM** All-School Answer Key

**ELPS** (*English Language Proficiency Standard*)  
2D, 2G, 2H, 5B, 5C, 5F

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.E.2., II.B.1., II.B.2  
ELA I.A.2. III.A.1., III.A.2., III.B.1. IV.A.2, IV.A.3., MATH I.A.2., I.B.1., II.A.1., V.A.1.

**Technology**

<http://www.roomrecess.com/pages/BlockBuster.html>. Fast moving game to find fact families.

**Unit 2, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**Follow-up****Math Objectives**

- Given three related numbers, make the fact family.
- Compose 10 with two or more addends with and without concrete objects.
- Practice previously learned skills.

**Language Objectives**

- Listen and speak with a partner during our math activity.
- Play a review game with a small group.
- Use the math vocabulary during the activity.
- Share-write math journal response.

**Practice and Application, Math**

Today is Family Fun Game Day! Today we are going to play in two teams rather than in small groups.

- Divide the class as equally as possible.
- Select a captain for each team.
- The captain will move the game markers on the class game board.
- Read a problem card to one team. The team must work together to give the answer. The Captain gives the answer.
- Someone else from the team has to explain the solution strategy.
- Be sure to ask the team about any vocabulary words in the problem – what do they mean?
- Play until you have worked through all of the cards.

**QUESTIONS to ask during the class game****Probe for Understanding**

- What are you asked to do?
- Which numbers are addends? Sum?
- What is a sum? (*answer when you add two addends*)
- We are finding fact families of a very special kind. What are all of these fact families? (*compatible numbers or sums of 10*)
- What are fact families?

**Extension Questions**

- **Why were the questions simple which had you add or subtract from a ten or counting number of ten?**

## Unit 2, Lesson 3


1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up** - continued



### **Math Journal Writing**

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.

 **Explain why compatible numbers can make adding and subtracting easier.**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

### Math Objectives

- Use concrete models to represent and name fractional parts of a whole and parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

### Language Objectives

- Explain why each portion is a fourth/ half.
- Share-write what is a fourth or a half.
- Explain whether you would rather have a fourth or a half of your favorite snack and why.

### Vocabulary

half, halves  
fourth, fourths  
fair shares  
equal pieces

### Materials:

#### Teacher and Student Pairs (per partner pair):

- 24 cherry tomatoes
- 1 cup cheese cubes
- 2 napkins
- 4 paper plates
- Two  $\frac{1}{2}$  cup measuring cups
- 2 scissors
- 2 rulers and 2 markers
- 2 glue sticks
- **BLM** Tomatoes and Cheese fractions – 1 per student

## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



**Children should wash their hands before this activity if using food items.**

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

### Objective:

Today you and a partner are going to pretend to share a snack with a friend, but the snack will be shared in four portions. (*Show the four plates in your demo set.*) You will be able to tell each other the fractional name of the pieces. You will be able to draw a line on a picture to show the parts that you have. You will be able to write the fraction in numbers, and to explain the fractional parts you’ve divided into.

### TODAY

This snack fraction is very similar to Lesson 1 in that students are sharing both parts of a whole (*the cup of cheese*) and parts of a set (*20 cherry tomatoes*). Remind them of Lesson 1, then ask which snack they think would be part of the whole, and which would be part of a set.

Students should be able to share this with ease now. Circulate the room asking questions. Once again, partners will pretend to share among four people.

### QUESTIONING before division of snack

- How many parts will there be? (*four*)
- What fractional part would each person get if there were four people? (*one-fourth*)
- Would you rather have one-fourth of this snack or one-half? Why? (*Let this discussion run its course so that you can see if students understand fractional comparisons. They probably cannot verbalize yet about relative size of denominators, but they should begin to see that  $\frac{1}{2}$  is definitely  $> \frac{1}{4}$ .*)
- Will you be sharing fractional parts of a whole, or fractional parts of a set of objects? (*fractional parts of a whole cup, fractional parts of the set of tomatoes*)



## Unit 2, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions - continued



Before you have them take their snacks, walk the students through the BLM Tomatoes and Cheese Fractions. Students are to cut out the rectangle fold it into fourths, cut and glue one-fourth to the plate on the record sheet, then answer the trail mix question on the BLM. You may write a class answer to the “because,” but students should also write their own, or at least copy the class to the BLM, as the Snack Fraction Writing task.

**SNACK Eating:** Now tell the partners that they may each have half of the snack. How much will each receive? (*two plastic cups worth*) Ask, “Which is the greater amount of the snack, one-fourth or one-half?” (*response*) How do you know? If you were going to compare these two fractions, what would you say:  $\frac{1}{2}$   $\frac{1}{4}$ . Can you make two comparison statements?

**Snack Fraction Writing: BLM Tomato and Cheese Fractions**  
Students identify the fractional part and complete the “because” statement on the record sheet.

**Objectives: Review what you learned and how you learned it.**



My name is \_\_\_\_\_

This is my plate and my fair share of the snack if sharing in fourths. \_\_\_\_\_

My share of the cheese would be called a \_\_\_\_\_,

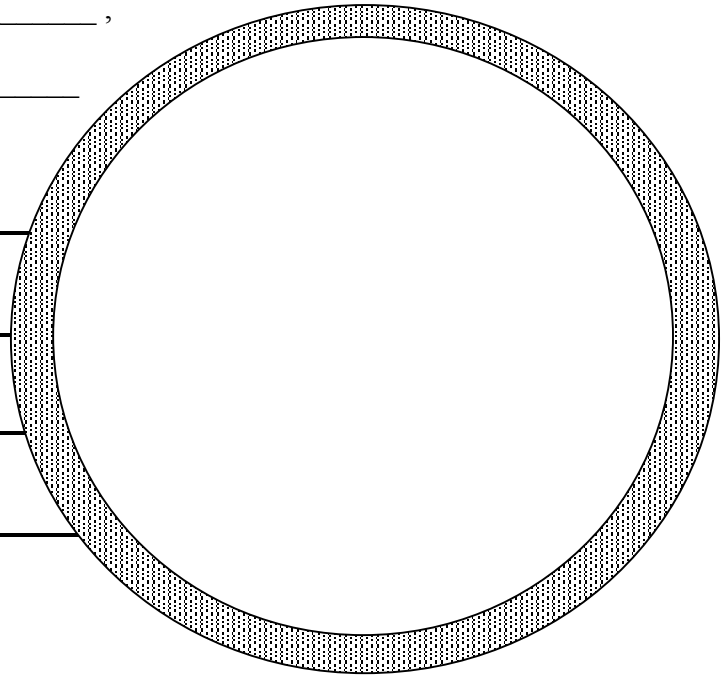
My share of the tomatoes would be called a \_\_\_\_\_  
because...

\_\_\_\_\_

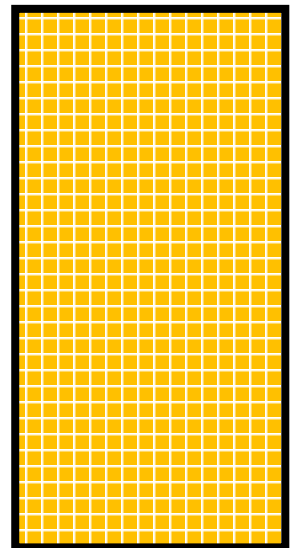
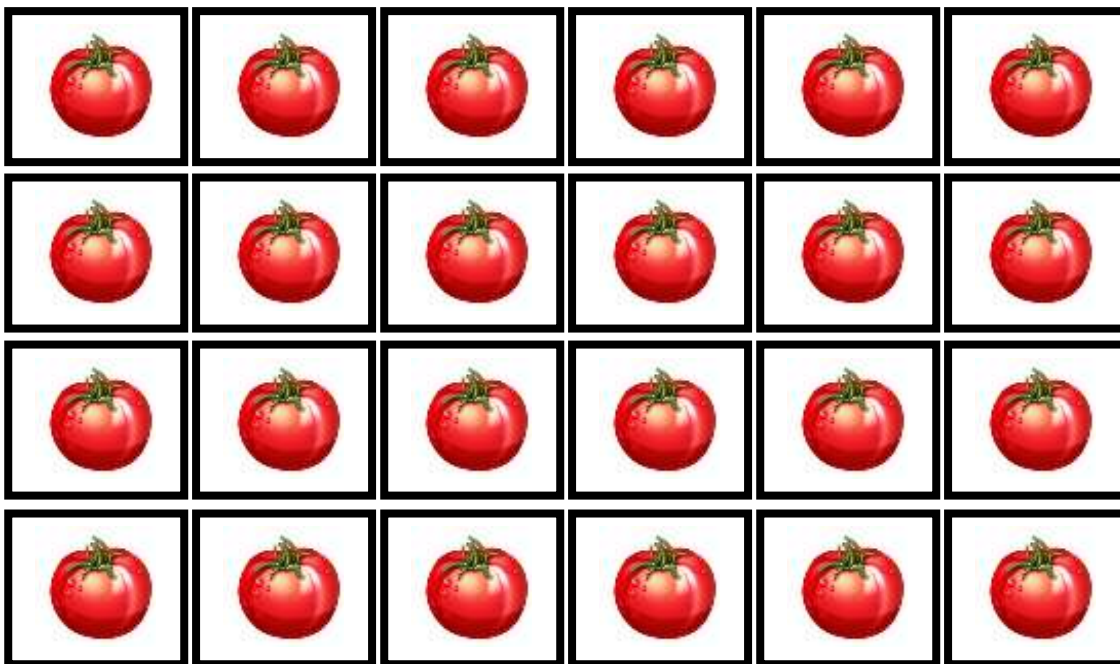
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Divide the two snacks into fourths. Glue your fourth of each snack to the snack plate above.



Mi nombre es \_\_\_\_\_

Esto es mi plato y mi porción igual del refrigerio si lo compartimos en cuartos. \_\_\_\_

Mi porción del queso es \_\_\_\_\_ ,

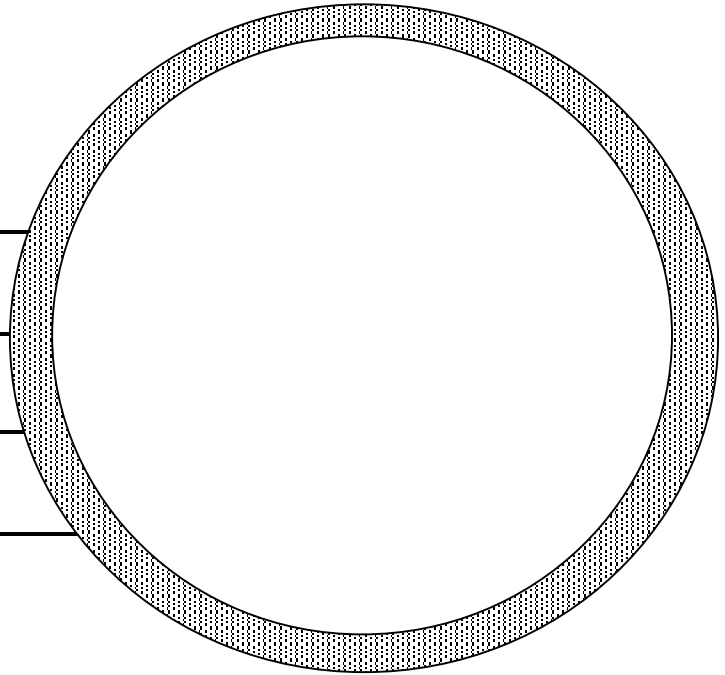
Mi porción de los tomates es \_\_\_\_\_  
porque...

\_\_\_\_\_

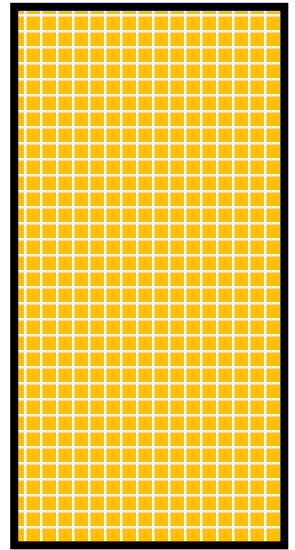
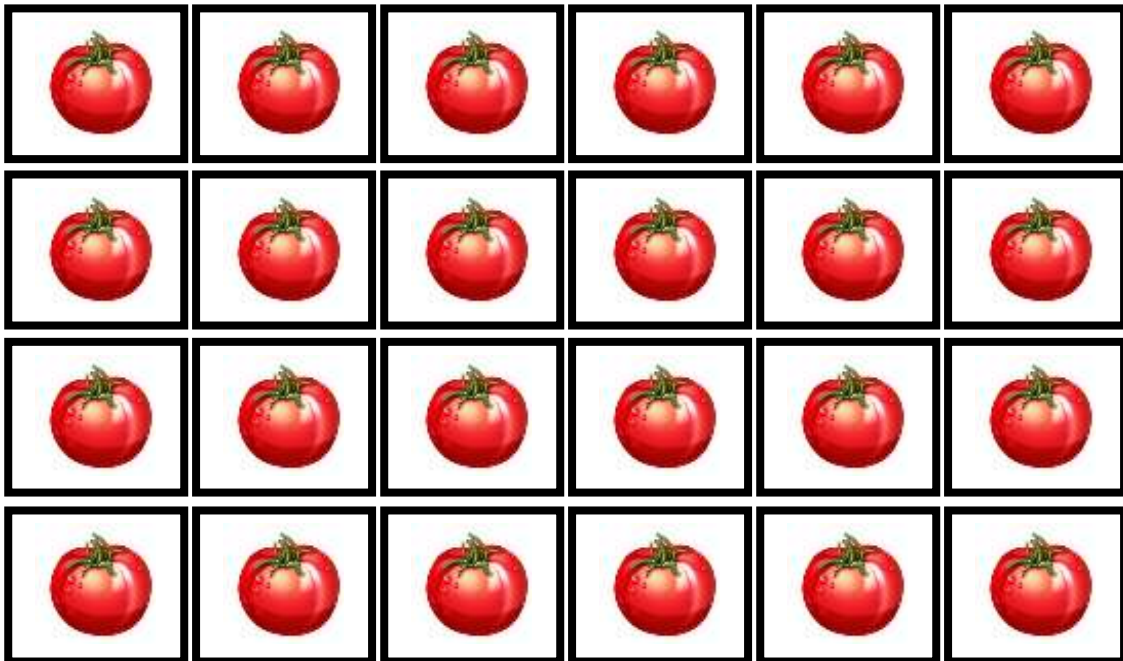
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Divide el refrigerio en cuartos. Pega tu cuarto en el platillo arriba.

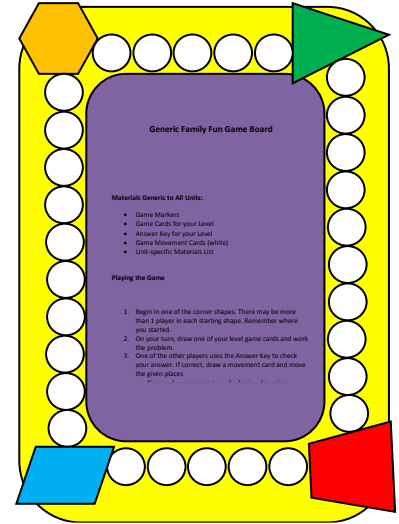


## Family Fun – 1<sup>st</sup> – 2<sup>nd</sup>, Unit 2 Lesson 3

### Family Fun Game day again! Your supplies include:

- Blue Family Fun Problem Cards (for 1<sup>st</sup> – 2<sup>nd</sup> graders)
- Special Instructions (1<sup>st</sup> – 2<sup>nd</sup> graders)
- All-level Answer Key for Unit 2

Please gather 20 counters which could be pebbles, paper clips, beans or anything else small that children can use to model problems.



Thank you for taking the time to enjoy math as a family this summer!

Your Child's Teacher

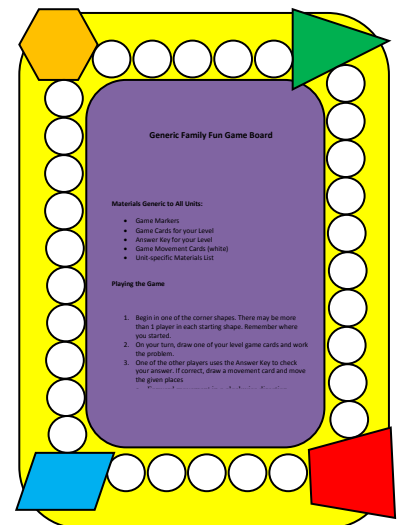
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## Family Fun – 1<sup>st</sup> – 2<sup>nd</sup>, Unit 2 Lesson 3

### ¡Otra vez es el día del juego de Diversión Familiar! Los materiales incluyen:

- Cartas de problemas de Diversión Familiar azules (para estudiantes de 1<sup>o</sup> – 2<sup>o</sup> grado)
- Instrucciones especiales (estudiantes de 1<sup>o</sup> – 2<sup>o</sup> grado).
- Guía de respuestas para todos los niveles para la Unidad 2

Por favor reúna 20 contadores que pueden ser piedritas, clips, frijoles o cualquier otro objeto pequeño que los niños puedan usar para modelar problemas.



¡Gracias por dedicar tiempo a disfrutar de las matemáticas en familia este verano!

Your Child's Teacher





## Generic Family Fun Game Board

### Materials Generic to All Units:

- Game Markers
- Game Cards for your Level
- Answer Key for your Level
- Game Movement Cards (white)
- Unit-specific Materials List

### Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, draw a movement card and move the given places
  - Forward movement in a clockwise direction.
  - Backward movement in a counter clockwise direction.If incorrect, do not move.
4. Game is over when the first person runs the entire track, ending back on the starting shape.





<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>
<b>Move back 1 space</b>	<b>Move back 1 space</b>	<b>Move back 1 space</b>
<b>Move forward 3 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 3 spaces</b>

Units 1 – 2 – 3 -- FAMILY FUN

One per student for home

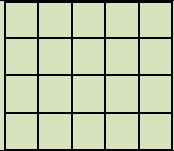
One per partner pair in class



Print on white paper.

Family Fun – Movement Cards

<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>
<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>
<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>

Problem Letter	Kinder	1-2	3-4	5-6	7-8
<b>A</b>	8 sounds	See Special instructions	$7 \times 5 = 35$ $5 \times 7 = 35$ $35 \div 7 = 5$ $35 \div 5 = 7$	6 feet	4.78 cm
<b>B</b>	9 dances	See Special instructions	$7 \times 6 = 42$ $6 \times 7 = 42$ $42 \div 6 = 7$ $42 \div 7 = 6$	5.75 cups dry (or fraction)	550 cm
<b>C</b>	2 people	See Special instructions		48 meters	6 minutes
<b>D</b>	6 people	1 and 9	18 cookies	2760.76 miles	448 miles
<b>E</b>	5 sounds	7 and 3	6 cookies	\$73.22	\$13.00
<b>F</b>	4 sounds	8 and 2	8 boxes	71.7 oz	21 lbs of apples
<b>G</b>	Top train is longer	1 child	3 sets of 2 counters	\$45	588 miles
<b>H</b>	Top train is shorter	29 children	6 sets of 2 counters	\$29.37	20 lbs of potatoes
<b>I</b>	3 cubes are fewer than 5	10 cents	Most common would be 2/8, but any equivalent will do.	\$750	36 oz of chocolate
<b>J</b>	Nickel	13	3.09	\$550	24 oz toffee
<b>K</b>	Dime	9	7.25	\$67.44	15 baskets
<b>L</b>	Quarter	14	4 7/10	\$12.60	4:5 = 8:10
<b>M</b>	penny	6 cookies	0.9	no. ratios are not set up consistently	\$105.00
<b>N</b>	2 pennies	3 miles	0.7	no. scale factor and constant of proportionality not present	9 shirts
<b>O</b>	8 pennies	10 pennies	$2.5 > 2.05$	4 cupcakes	\$5.00
<b>P</b>	2 parts the same size	3 pots	on the middle line	24 hit target	25 oranges
<b>Q</b>	1 parts not the same size	14 pounds	0.9	$\frac{11}{10}$ or an equivalent of	1 hr 30 minutes
<b>R</b>	count to make sure there are 12 counters and use the number 12	1 group of 6 1 groups of 4	Closest line to 1.	$1 \frac{1}{3}$	10.5 miles



**BLM 1<sup>st</sup>-2<sup>nd</sup> Unit 2, Follow-up Lesson 3**

**Family Fun Game Cards** 

Printed in **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**Cards A – I are Unit 2 skills as assessed. Cards J – R review skills from previous units.**

<p><b>A.</b> Use the following numbers to make a fact family. 2, 7, 9</p>	<p><b>B.</b> Use the following numbers to make a fact family. 2, 8, 10</p>	<p><b>C.</b> Use the following numbers to make a fact family. 6, 7, 13</p>
<p><b>D.</b> Look at this number sentence. <b><math>1 + 9 + 6 = 16</math></b> Which numbers are compatible?</p>	<p><b>E.</b> Look at this number sentence. <b><math>9 + 7 + 3 = 19</math></b> Which numbers are compatible?</p>	<p><b>F.</b> Look at this number sentence. <b><math>8 + 7 + 2 = 17</math></b> Which numbers are compatible?</p>
<p><b>G.</b> There were 10 children in the park. 9 were on the swings. The rest were on the slide. How many were on the slide?</p>	<p><b>H.</b> 20 children came to school on a bus. 9 children came to school by car. How many children came to school?</p>	<p><b>I.</b> Marty needed 15 cents. He had 5 cents. How much more money did Marty need?</p>

**A.**

Usa los números  
siguientes para formar  
una  
familia de hecho.  
2, 7, 9

**B.**

Usa los números  
siguientes para formar  
una  
familia de hecho.  
2, 8, 10

**C.**

Usa los números  
siguientes para formar  
una  
familia de hecho.  
6, 7, 13

**D.** Mira esta oración  
numérica.

$$1 + 9 + 6 = 16$$

¿Cuáles números son  
compatibles?

**E.** Mira esta oración  
numérica.

$$9 + 7 + 3 = 19$$

¿Cuáles números son  
compatibles?

**F.** Mira esta oración  
numérica.

$$8 + 7 + 2 = 17$$

¿Cuáles números son  
compatibles?

**G.** Había 10 niños en el  
parque. 9 estaban en los  
columpios. El resto estaba  
en el resbaladero. ¿Cuántos  
estaban en el resbaladero?

**H.** 20 niños vinieron a la  
escuela en autobús. 9 niños  
vinieron a la escuela en  
carro. ¿Cuántos niños  
vinieron a la escuela?

**I.** Marty necesitaba 15  
centavos. Él tenía 5  
centavos. ¿Cuánto dinero  
más necesitaba Marty?

Printed in **Blue**—one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.**

$$\square - 6 = 7$$

**K.**

$$16 - \square = 7$$

**L**

$$\square - 8 = 6$$

**M.**

Katy baked 12 cookies. Marty baked 6 cookies? How many more cookies did Katy bake than Marty?

**N.**

Sarah ran 5 miles. Her cousin ran 8 miles. How many fewer miles did Sarah run than her cousin?

**O.**

Mark and Dee each had 5 pennies. How many pennies did they have together?

**P.**

Dave made 12 pots last week and 9 pots this week. How many fewer pots did he make this week?

**Q.**

Dave used 5 pounds of clay on Monday and 9 pounds of clay on Wednesday. How many pounds of clay did he use?

**R.**

Use counters to represent the number sentence:

$$6 + 4 = 10$$

**J.**

$$\square - 6 = 7$$

**K.**

$$16 - \square = 7$$

**L**

$$\square - 8 = 6$$

**M.**

Katy horneó 12 galletas.  
Marty horneó 6 galletas.  
¿Cuántas galletas horneó Katy más que Marty?

**N.**

Sarah corrió 5 millas. Su primo corrió 8 millas.  
¿Cuántas millas corrió Sarah menos que su primo?

**O.**

Mark y Dee tenían 5 centavos cada uno. ¿Cuántos centavos tenían entre los dos?

**P.**

Dave hizo 12 ollas la semana pasada y 9 ollas esta semana.  
¿Cuántos ollas menos hizo esta semana?

**Q.**

Dave usó 5 libras de arcilla el lunes y 9 libras de arcilla el miércoles. ¿Cuántas libras de arcilla usó?

**R.**

Usa contadores para representar la oración numérica:

$$6 + 4 = 10$$



**Materials:**

- Blue Family Fun Problem Cards (for 1<sup>st</sup> – 2<sup>nd</sup> graders)
- Special Instructions (1<sup>st</sup> – 2<sup>nd</sup> graders)
- All-level Answer Key for Unit 2
- Counters from home – pebbles, beans, paper clips, or any other small object that can be counted

**Solution Expectations****Problems A – C (unit 2 skills)**

- Students are expected to make two addition problems and two subtraction problems using these numbers.
  - A.  $2 + 7 = 9$ ,  $7 + 2 = 9$ ,  $9 - 7 = 2$ ,  $9 - 2 = 7$
  - B.  $2 + 8 = 10$ ,  $8 + 2 = 10$ ,  $10 - 2 = 8$ ,  $10 - 8 = 2$
  - C.  $6 + 7 = 13$ ,  $7 + 6 = 13$ ,  $13 - 7 = 6$ ,  $13 - 6 = 7$

**Problems D-F (unit 2 skills)**

- Students are to find the two numbers that add together to make 10.
  - D. 1 and 9 are the compatible numbers
  - E. 7 and 3 are the compatible numbers
  - F. 8 and 2 are the compatible numbers

**Problems G – I (unit 2 skills)**

- Students are expected to solve the problems. They may use counters, fact families, addition or subtraction or any other strategy that helps them find the correct answer.

**Problems J – L (unit 1 skills)**

- Students are expected to find the missing number. They may use counters, fact families, or any other strategy that helps them find the correct answer.

**Problems M – Q (unit 1 skills)**

- Students are expected to find the missing number. They may use counters, fact families, or any other strategy that helps them find the correct answer.

**Problem R (unit 1 skills)**

- Students are expected to represent the problem using the counters you have provided such as pebbles, beans, paper clips, or other small objects that can be used to count.

## BLM 1º – 2º Unidad 2, Lección de seguimiento 3 Instrucciones especiales para 1º-2º

### Materiales:

- Cartas de problemas de Diversión Familiar azules (para estudiantes de 1º – 2º grado)
- Instrucciones especiales (estudiantes de 1º – 2º grado).
- Guía de respuestas para todos los niveles para la Unidad 2
- Contadores de casa - piedritas, frijoles, clips o cualquier otro objeto pequeño que pueda ser contado (aproximadamente 30)

### Expectativas de solución

#### Problemas A – C (habilidades de la unidad 2)

- Se espera que los estudiantes hagan dos problemas de suma y dos problemas de resta usando estos números.
  - A.  $2 + 7 = 9$ ,  $7 + 2 = 9$ ,  $9 - 7 = 2$ ,  $9 - 2 = 7$
  - B.  $2 + 8 = 10$ ,  $8 + 2 = 10$ ,  $10 - 2 = 8$ ,  $10 - 8 = 2$
  - C.  $6 + 7 = 13$ ,  $7 + 6 = 13$ ,  $13 - 7 = 6$ ,  $13 - 6 = 7$

#### Problemas D – F (habilidades de la unidad 2)

- Los estudiantes deben encontrar los dos números que al sumarlos forman 10.
  - D. 1 y 9 son los números compatibles.
  - E. 7 y 3 son los números compatibles.
  - F. 8 y 2 son los números compatibles.

#### Problemas G – I (habilidades de la unidad 2)

- Se espera que los estudiantes resuelvan los problemas. Pueden usar contadores, familias de hecho, suma o resta o cualquier otra estrategia que les ayude a encontrar la respuesta correcta.

#### Problemas J – L (habilidades de la unidad 1)

- Se espera que los estudiantes encuentren el número faltante. Pueden usar contadores, familias de hecho, o cualquier otra estrategia que les ayude a encontrar la respuesta correcta.


#### Problemas M – Q (habilidades de la unidad 1)

- Se espera que los estudiantes encuentren el número faltante. Pueden usar contadores, familias de hecho, o cualquier otra estrategia que les ayude a encontrar la respuesta correcta.

#### Problema R (habilidades de la unidad 1)

- Se espera que los estudiantes representen el problema usando los contadores que usted les proporcione, tales como piedritas, frijoles, clips u otros objetos pequeños que puedan usarse para contar.

## **FAMILY FUN Involvement**

1<sup>st</sup> – 2<sup>nd</sup> 

Overview for Unit 2, *Dave the Potter*

This overview will provide a one-page view of the suggested Family Fun Activities for this unit, as well as other opportunities provided for Family Involvement.

### **Lesson 1**

- Family Fun Game Video
- Vocabulary Cards so students can practice language and math vocabulary at home
- Family Fun Unit 2 Lesson 1 Letter with many ideas for involving the family in water habitat information.

### **Lesson 2**

- You might send home copies of the Days of the Week songs for families to sing at home. Perhaps you could make a tape?
- Family Fun Unit 2 Lesson 2 Letter

### **Lesson 3**

- Family Fun Unit 2, Lesson 3 attached to the Family Fun Game supplies
- Family Enjoyment of Unit Project

### **Enrichment Suggestions**

- Create a diorama at home of a water habitat.
- Play the Jump the Creek game.

**This portion of the curriculum, although NOT required, should be used as needed to supplement and enrich the Unit's activities.**

**Family Fun Suggestions:**

- Send home a fist full of clay in a Ziploc bag. Ask the family to create a pinch pot with the clay and send it back to school.
- Sing a song of your culture and move to the rhythm.

**Possible Center Suggestions:**

- Online Math Games
- Art Project

**MATH WALK**



Artists' Walk – Although Dave's pots did not have art on them, many cultures do decorate their pottery. Take students on a walk around the campus to find nature they could use to paint on a pot.

**Technology Connections**

• **Math Practice**

<http://www.ezschoo.com/Games/Math/AddSubtract/FactFamily1.html>

Fact Family practice

[http://www.coolmath-games.com/0-math-lines/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29)

Challenging game for making 10

<http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html>

Adding 2-digit numbers

• **Science Connection**

[http://www.teachengineering.org/view\\_activity.php?url=collection/duk\\_/activities/duk\\_float\\_mary\\_act/duk\\_float\\_mary\\_act.xml](http://www.teachengineering.org/view_activity.php?url=collection/duk_/activities/duk_float_mary_act/duk_float_mary_act.xml)

Making clay boats that float.

<http://sciencenetlinks.com/lessons/pottery-1-pottery-quest/>

Clay investigation

• **Social Studies Connection**

<http://www.pbs.org/wnet/slavery/teachers/virtual.html>

Making virtual museum

• **Health/Physical Ed Connection**

<http://www.negrospirituas.com/>

Teacher resource of songs and dances of Spirituals.

• **Art Connection**

[http://www.firstpalette.com/Craft\\_themes/People/pinchpot/pinchpot.html](http://www.firstpalette.com/Craft_themes/People/pinchpot/pinchpot.html)



<p><b>Math Objectives</b> (TV1)</p> <ul style="list-style-type: none"> <li>Given three related numbers, make the fact family.</li> <li>Compose 10 with two or more addends with and without concrete objects.</li> </ul> <p>(TV3)</p> <ul style="list-style-type: none"> <li>Generate structures from base ten materials and determine their value. (precursor to double-digit addition and subtraction)</li> </ul>	<p><b>Materials</b> (TV1)</p> <ul style="list-style-type: none"> <li>Unifix cubes or linking cubes – 4 color trains of 10 per, 2 of 1 color and 2 of another color per student</li> <li>Crayons or markers matching the two colors of the trains.</li> <li><b>BLM-TM</b> Making 10 Problems from TM lesson (completed)</li> <li><b>BLM</b> Fact Families of Compatible Number Pairs</li> </ul> <p>(TV3)</p> <ul style="list-style-type: none"> <li>Base ten set <ul style="list-style-type: none"> <li>2 hundreds</li> <li>15 tens</li> <li>15 ones</li> </ul> </li> </ul>
<p><b>Differentiate</b></p> <p>Differentiating comes in your choice of which lesson to teach. You will also want to choose activities in the Daily Routines that teach/review the skills you need for your students to learn/review.</p>	<p><b>Family Fun</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Family Fun Game board (already home)</li> <li><b>BLM</b> Kinder Special Instructions</li> <li><b>BLM</b> Family Fun Movement Cards (already home)</li> <li><b>BLM</b> Family Fun Problem Cards (blue)</li> <li><b>BLM</b> Family Fun Answer Key – all levels</li> <li>20 counters per student</li> <li>Game markers</li> </ul>
<p><b>Snack Fraction Notice</b></p> <p>All snack fractions are common throughout the grade bands. All grade bands have daily snack fraction activities provided. All snack fractions for a unit in a specific grade band will practice the same set of skills. Therefore, you may choose from any of the three activities. Lesson 2 has been suggested for its ease of delivery. Particularly if you pre-mix the Trail Mix rather than having students mix their own.</p>	<p><b>Snack Fractions – TV lesson 2</b></p> <p><b>NOTE:</b> you can certainly provide the 2 cups/partner Trail Mix already mixed if you prefer – would cut down on the 1/2 c measuring cups you need to provide, and time to mix</p> <ul style="list-style-type: none"> <li>2 cups <b>trail mix/pair:</b> mix equal parts of <ul style="list-style-type: none"> <li>1/2 c pecans,</li> <li>1/2 c semi-chocolate chips,</li> <li>1/2 c granola</li> <li>1/2 c raisins</li> </ul> </li> <li>One 2-cup measuring cup</li> <li>Four 12 oz plastic cups</li> <li>2 napkins</li> <li>Two 1/2 cup measuring cups</li> <li>2 scissors</li> <li>2 rulers and 2 markers</li> <li>2 glue sticks</li> <li>2 paper towels</li> <li>1 scissors per student</li> <li>1 ruler and marker per student</li> <li>1 glue stick per student</li> </ul>

**QUESTIONING**

As a result of this lesson, your students should be able to respond to the following:

- What is a Fact Family? How can it help you learn your basic facts?
- What are compatible numbers? How can they help you add and subtract?
- How can fact families help you learn your basic facts?

**Math Vocabulary**

fact family, sums of 10 or compatible numbers, addends, sum, comparing, more than, less than, fewer than

**CGI Problem (select one)**

- Join, Result Unknown (*1<sup>st</sup> item 1, 2<sup>nd</sup> item 3ab*)
- Join, Change Unknown (*2<sup>nd</sup> item 5ab*)
- Part Whole, Whole Unknown (*1<sup>st</sup> item 3ab*)

**Journal Writing**

Explain how sums of ten fact families are compatible numbers.

**Family Fun** (A generic game board is being used in all grade levels, differentiated by game cards specific to the grade level.) There is only one type of game this year. All games will have problem cards and an answer key at all levels. Please be sure the 1<sup>st</sup> – 2<sup>nd</sup> grade cards are printed on blue cardstock. Beginning with this unit, the first 12 problem cards will review previous unit skills. The last 12 problem cards will review current unit skills.

**Snack Fractions** TV lesson 2, Trail Mix. You can select any of the three snacks that are appropriate for your homes – all three snacks in 1<sup>st</sup> – 2<sup>nd</sup> grade level will practice the same skills.

You have the choice of providing a pre-mixed trail mix, or having the students create their own from the recipe provided. Students then divide the trail mix into fourths and represent the fourths on the record sheet, having cut apart paper models and gluing this to a picture of a plate.

**Assessment** – Students will be introduced to and practice skills for items

1<sup>st</sup> - 1, 2, 3, 4, 5, 7, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 7

# 1<sup>st</sup>-2<sup>nd</sup> Unit 3

## Overview

### Where the Wild Things Are

This is a quick snapshot of the three math lessons for this unit. For detailed instructions, balance literacy objectives/extended activities, enrichment ideas refer to the complete lesson plans for each lesson. Notice that the Classroom Lesson has been divided into the Language portion and the Transition to Math portion.

Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<b>Unit 3</b> <b>Lesson 1</b> <b>Daily Routine</b> 30 – 45 minutes	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Solve math word problems. Measure to compare.</li> <li>Represent whole numbers in a variety of ways.</li> <li>Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Solve multi-step word problems.</li> <li>Read and understand the calendar.</li> <li>Use coins to track the number of days of school.</li> <li>Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Listen, read and write to understand problems and explain solution strategies.</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Listen, read and write to understand problems and explain solution strategies.</li> <li>Read a calendar and explain patterns.</li> <li>Explain coin exchanges and grouping by tens and ones.</li> <li>Graph data from classroom experiences and debrief the data.</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Target Number</li> <li>CGI Problem</li> <li>What’s Missing</li> <li>Measurement</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Solve It!</li> <li>Calendar</li> <li>Straws</li> <li>Pennies</li> <li>Graphing</li> <li>Vocabulary Building</li> </ul> <p><b>OPTIONAL Program</b></p> <p><b>Money Matters is on MAS Space.</b></p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>50 base ten units per student</li> <li>Unknown Quantity Cards</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Picture graph generic board</li> <li>Tag for titles</li> <li>30 Straws and rubber bands for board and student kits</li> <li>Pennies, nickels, dimes, quarters for counting days in school</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>BLM CGI Problems Unit 3 – teacher only</li> <li>BLM Measurement Wild Thing Trees #1 – 1 per student</li> <li>BLM Measurement Wild Thing Trees #1 Teacher Guide and Key</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>BLM Solve It! Lesson 1 problems</li> <li>BLMs for Daily Routine Board</li> <li>BLM Graphing Wild Things – enough for each child to select their preferred picture</li> </ul>
<b>Classroom</b> (Language and Transition to Math Lessons) <b>Lesson 1</b> .5 to 1 hour	<p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>Use objects and pictorial models to solve word problems involving comparing sets within 20.</li> </ul>	<p><b>Reading Objectives:</b></p> <ul style="list-style-type: none"> <li>Visualize what is happening in a story.</li> <li>Infer (figure out) what the author is trying to say.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>Discuss vocabulary and understand it when listening to a story.</li> <li>Act out vocabulary words.</li> </ul>	<p><b>Language</b></p> <p><i>Where the Wild Things Are</i></p> <p>by Maurice Sendak</p> <p>Read Aloud</p> <p>Class Discussion</p> <p>Visualizing Activity</p> <p><b>Vocabulary:</b> mischief, gnashed, wild, tame, rumpus, terrible, vine, forest</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>Crayons or colored pencils</li> </ul>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>BLM Word Cards</li> <li>BLM Picture vocabulary cards: vine, forest</li> <li>BLM Illustrating the Text, one copy per student</li> </ul>

		<p><b>Math Language Objectives</b> Define vocabulary words. Discuss the activity with peers.</p>	<p><b>Math Building Background</b> Investigate comparison terms.</p> <p><b>Vocabulary</b> fact family sums of 10 or compatible numbers addends, sum comparing, more than less than, fewer than</p>	<p><b>Math</b></p> <ul style="list-style-type: none"> <li>50 Base ten units per student</li> </ul>	<p><b>Math</b></p> <ul style="list-style-type: none"> <li><b>BLM TM Wild Thing Story</b> Board – 1 per student used in all three lessons</li> </ul>
<p><b>TV Lesson 1</b> 30 minutes</p>	<p>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p>Use the math vocabulary during the activity. Discuss solution strategies. Explain how to regroup in addition and subtraction.</p>	<p><b>Building Background</b> Add base ten columns to story board.</p> <p><b>Vocabulary Building</b> trading exchanging regrouping (also repeated words)</p> <p><b>Mathematics</b> Solve simple word problems with simple regrouping.</p>	<p><i>Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.</i></p> <ul style="list-style-type: none"> <li>base ten sets – 1 set per student <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units (or units they already have from measuring)</li> </ul> </li> <li>dark wide marker – 1 per student</li> </ul>	<ul style="list-style-type: none"> <li><b>BLM Max and Wild Things</b> – 1 per student</li> <li><b>BLM TM Wild Thing Story</b> Board – 1 per student from Transition to Math</li> <li><b>BLM Teacher Key</b></li> </ul>
<p><b>Follow-up and Snack Fraction Lesson 1</b> .5 to 1 hour</p>	<p>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p>Listen and speak with a partner during our math activity. Explain how the base ten model relates to the number representation. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>Continue TV Lesson, circulating the room and asking questions provided in the lesson format.</p>	<ul style="list-style-type: none"> <li>Wild Thing Story Board as amended in TV lesson – 1 per student from TV</li> <li>base ten sets – 1 set per student <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units (or units they already have from measuring)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>BLM Max and Wild Things #2</b> – 1 per student</li> <li><b>BLM TM Wild Thing Story</b> Board – 1 per student from TM</li> </ul>
	<p><b>SNACK FRACTIONS</b> Use concrete models to represent and name fractional parts of a whole (fourths and halves).</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is a fourth/ half. Share-write what is a fourth or a half.</p>	<p><b>SNACK FRACTIONS Building Background</b> Teacher explains the activity – pretend they are sharing with three</p>	<p><b>SNACK FRACTIONS STUDENT ACTIVITY (per partner pair):</b></p> <ul style="list-style-type: none"> <li>1 big dill pickle</li> </ul>	<p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li><b>BLM Dill Pickle Fractions</b> – 1 per student</li> </ul>



	<p>Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).          Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.          Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p>Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.          Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p>other friends.  <b>Vocabulary</b>          half, halves          fourth, fourths          fair shares          equal pieces  <b>Math</b>          Students pretend share in fourths on the record sheet, then share the real snack with a friend.          Compare halves and fourths.</p>	<ul style="list-style-type: none"> <li>● 2 Paper plates</li> <li>● Plastic knife</li> <li>● 2 paper towels</li> <li>● 2 scissors</li> <li>● 2 rulers and 2 markers</li> <li>● 2 glue sticks</li> <li>● Chart paper with question: <b>How do you know that each portion is half?</b> Put a copy of the record sheet at the top of the chart with the question.</li> </ul>	
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Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<p><b>Unit 3 Lesson 2</b> <i>Daily Routine</i></p> <p>30 – 45 minutes</p>	<p><b>ESSENTIAL</b> Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p> <p><b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p>	<p><b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.</p> <p><b>OPTIONAL</b> Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Target Number</li> <li>CGI Problem</li> <li>What’s Missing</li> <li>Measurement</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Solve It!</li> <li>Calendar</li> <li>Straws</li> <li>Pennies</li> <li>Graphing (none today)</li> <li>Vocabulary building</li> </ul> <p><b>OPTIONAL Program</b> <b>Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>50 base ten units per student</li> <li>Unknown Quantity Cards</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>30 Straws and rubber bands for board and student kits</li> <li>Pennies, nickels, dimes, quarters for counting days in school</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> CGI Problems Unit 3 – teacher only</li> <li><b>BLM</b> Wild Thing Trees #2 – 1 per student</li> <li><b>BLM</b> Teacher Guide and KEY</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Solve It! 1 problem</li> <li><b>BLMs</b> for Daily Routine Board</li> </ul>
<p><b>Classroom Lesson 2</b></p> <p>1 to 1.5 hour</p>	<p>Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.</p>	<p><b>Reading Objectives:</b></p> <ul style="list-style-type: none"> <li>Visualize what is happening in a story.</li> <li>Recognize words in a text and develop reading fluency.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>Use vocabulary to retell the story.</li> <li>Understand and locate unit vocabulary words in a shared reading text.</li> </ul>	<p><b>Language</b> <i>Where the Wild Things Are</i> by Maurice Sendak</p> <p>Shared Reading Building Vocabulary Activity Retelling</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>Students’ Illustrating the text activity from lesson 1</li> <li>Shared reading text prewritten on chart paper.</li> </ul>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Word Cards</li> </ul>

			<p><b>Math Language Objectives</b> Define vocabulary words. Discuss the activity with peers.</p>	<p><b>Math</b> <b>Building Background</b> Directed toward the assessment item which has students matching picture to number sentence. <b>Vocabulary</b> trading, exchanging, regrouping (review words) comparing, more than less than, fewer than</p>	<p><b>Math</b> • Base ten set – 1 per student ○ 15 tens ○ 20 units</p>	<p><b>Math</b> • <b>BLM TM</b> Sample Problem – teacher only • <b>BLM TM</b> Answer Choice Cards – 1 set of 4 per student on cardstock (laminated, if possible) • <b>BLM TM</b> Picture This– 1 per student • <b>BLM TM</b> Teacher Key</p>
<p><b>TV</b> <b>Lesson 2</b> 30 minutes</p>	<p>Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p>Use the math vocabulary during the activity. Discuss solutions strategies. Explain how to regroup in addition and subtraction.</p>	<p><b>Building Background</b> <b>Vocabulary Building</b> <b>Mathematics</b></p>	<p>• Base ten sets – 1 set per student ○ 15 longs ○ 20 units (or units they already have from measuring)</p>	<p>• <b>BLM</b> Wild Thing Trading – 1 per student • <b>BLM</b> Wild Thing Story Board from Lesson 1 – 1 per student from</p>	
<p><b>Follow-up and Snack Fraction</b> <b>Lesson 2</b> .5 to 1 hour</p>	<p>Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p>Listen and speak with a partner during our math activity. Explain how the base ten models relate to the number representation. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>Continue solving problems in the same fashion as the TV Lesson.</p>	<p>• Base ten sets – 1 set per student ○ 15 longs ○ 20 units (or units they already have from measuring) • Wild Thing Story Board</p>	<p>• <b>BLM</b> Wild Thing Trading 1 per student from TV Lesson • <b>BLM</b> Teacher Guide &amp; KEY</p>	
	<p><b>SNACK FRACTIONS</b> • Use concrete models to represent and name fractional parts of a whole (fourths and halves). • Use concrete models to represent and name fractional parts of a set of objects (fourths and</p>	<p><b>SNACK FRACTIONS</b> • Explain why each portion is a fourth/half. • Share-write what is a fourth or a half. • Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red. • Explain that the more</p>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Explain the “pretend” fourths as in Lesson 1. <b>Vocabulary</b> half, fair share equal pieces Students “cut” a picture into</p>	<p><b>SNACK FRACTIONS</b> <b>STUDENT ACTIVITY</b> (per partner pair): • 8 small beef jerky pieces • 2 paper plates • 2 paper towels • Chart paper with question: <b>How do you know that each</b></p>	<p><b>SNACK FRACTIONS</b> • <b>BLM</b> Jerky Fractions • - 1 per students</p>	

	<p>halves).</p> <ul style="list-style-type: none"> <li>• Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.</li> <li>• Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</li> </ul>	<p>fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the parts.</p>	<p>fourths, describe the fractional pieces and explain how they know they are fair shares.</p>	<p><b>portion is a fourth?</b> Put a copy of the record sheet at the top of the chart with the question.</p>	
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Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<p><b>Unit 3 Lesson 3</b> <i>Daily Routine</i></p> <p>30 – 45 minutes</p>	<p><b>ESSENTIAL</b> Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p> <p><b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem. Estimate coins in a jar and count by tens and ones to verify estimate.</p>	<p><b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.</p> <p><b>OPTIONAL</b> Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones. Graph data from classroom experiences and debrief the data.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• Target Number</li> <li>• CGI Problem</li> <li>• What’s Missing</li> <li>• Measurement</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Solve It!</li> <li>• Calendar</li> <li>• Straws</li> <li>• Pennies</li> <li>• Graphing</li> <li>• Vocabulary building</li> </ul> <p><b>OPTIONAL Program</b> <b>Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• 50 base ten units per student</li> <li>• Unknown Quantity Cards</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Bar graph generic board</li> <li>• Tag for titles</li> <li>• Jar with 43 nickels</li> <li>• 30 Straws and rubber bands for board and student kits</li> <li>• Pennies, nickels, dimes, quarters for counting days in school</li> </ul>	<p><b>Blackline Masters</b></p> <p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> CGI Problems Unit 3 – teacher only</li> <li>• <b>BLM</b> Wild Thing Trees #3 – 1 per student</li> <li>• <b>BLM</b> Teacher Guide and KEY</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Solve It! 1 problems</li> <li>• <b>BLMs</b> for Daily Routine Board</li> <li>• <b>BLM</b> How many nickels do you think are in the jar?</li> </ul>
<p><b>Classroom Lesson 3</b></p> <p>1 to 1.5 hour</p>	<p><b>Math Objectives</b> Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.</p>	<p><b>Reading Objectives:</b></p> <ul style="list-style-type: none"> <li>• Recognize words in a text and develop reading fluency.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>• Use vocabulary words to talk about own lives.</li> <li>• Write a sentence using phonics skills and literature vocabulary words.</li> </ul>	<p><b>Language</b> <i>Where the Wild Things Are</i> by Maurice Sendak</p> <p>Vocabulary Building Shared Reading Interactive Writing</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>• Chart paper</li> <li>• Markers</li> <li>• Shared Reading text from lesson 2</li> </ul>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Word Cards</li> </ul>

			<p><b>Math Language Objectives</b> Discuss patterns explored in base ten materials. Use unit vocabulary properly in discussions.</p>	<p><b>Math</b> <b>Building Background</b> Students practice naked 2-digit computation with models, drawings and number sentences. <b>Vocabulary</b> trading, exchanging, regrouping (Review words) <b>Building Background</b> Azulito describes his exploration of the base ten materials. <b>Vocabulary Building</b> regrouping exchanging trading <b>Mathematics</b> Solve substantial word problems all with 2-digit numbers.</p>	<p><b>Math</b> • Base ten set – 1 per student ○ 15 tens ○ 20 units</p>	<p><b>Math</b> • <b>BLM TM</b> Partner Problems– 1 per student • <b>BLM TM</b> Teacher Key</p>
<p><b>TV</b> <b>Lesson 3</b> 30 minutes</p>	<p>Solve one-step word problems involving addition or subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p>Use the math vocabulary during the activity. Discuss solution strategies. Explain how to create the fact family number sentences from three related numbers.</p>	<p>Students play the Family Fun Game in two teams rather than small groups so the teacher can see how well students are learning the objectives, but also to allow all students to benefit from class discussion of strategies and answers.</p>	<p>• Base ten sets – 1 set per student • 15 longs • 20 units (<i>or units they already have from measuring</i>) • Wild Thing Story Board from Lesson 1– 1 per student from</p>	<p>• <b>BLM</b> Max and Wild Thing Trading, page 1 and 2 – 1 per student • <b>BLM TM</b> Wild Thing Story Board – (from previous lesson)</p>	
<p><b>Follow-up and Snack Fraction Lesson 3</b> .5 to 1 hour</p>	<p>Given three related numbers, make the fact family. Compose 10 with two or more addends with and without concrete objects. Practice previously learned skills.</p>	<p>Listen and speak with a partner during our math activity. Play a review game with a small group. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>• Base ten sets – 1 set per student • 15 longs • 20 units (<i>or units they already have from measuring</i>) • Game markers – 1 per student • 20 counters – per student</p>	<p>• Wild Thing Story Board • <b>BLM</b> Wild Thing Trading p 2 – 1 per student from TV • Family Fun Game Board • Family Fun Movement Cards • 20 counters • Games Markers • <b>BLM</b> Family Fun Problem Cards, Unit 2 • <b>BLM</b> Special Instructions • <b>BLM</b> All-School Answer Key</p>		
	<p><b>SNACK FRACTIONS</b> • Use concrete models to represent and name fractional parts of a whole (fourths and</p>	<p><b>SNACK FRACTIONS</b> • Explain why each portion is a fourth/half. • Share-write what is a fourth or a half.</p>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Teacher demo of fourths. <b>Vocabulary</b></p>	<p><b>SNACK FRACTIONS</b> <b>TEACHER DEMO:</b> • No demo today (student supplies follow)</p>	<p><b>SNACK FRACTIONS</b> • <b>BLM</b> Bread and Banana Fractions – 1 per student Chart paper with question: <b>How do you know that each</b></p>	

	<p>halves).</p> <ul style="list-style-type: none"> <li>• Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).</li> <li>• Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.</li> <li>• Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</li> </ul>	<ul style="list-style-type: none"> <li>• Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.</li> <li>• Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</li> </ul>	<p>half, halves fourth, fourths fair shares equal pieces</p> <p>No modeling necessary today – just circulate the room.</p> <p>Students divide the pictures and record on their BLM, then divide and share their snacks</p>	<p><b>STUDENT ACTIVITY (per partner pair):</b></p> <ul style="list-style-type: none"> <li>• 2 slices raisin bread</li> <li>• 1 banana</li> <li>• 4 T peanut butter</li> <li>• 2 paper plates</li> <li>• 2 paper towels</li> <li>• 2 plastic knives</li> </ul>	<p><b>portion is a fourth?</b></p>
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Unit 3	Lesson 1	Lesson 2	Lesson 3			
<p>1<sup>st</sup> Grade TV &amp; FIU Assessment Items</p> <ul style="list-style-type: none"> <li>Lesson 1: 1, 2, 4, 5, 6,</li> <li>Lesson 2: 2, 4</li> <li>Lesson 3: 3, 4, 5</li> </ul> <p>Daily Routines</p> <ul style="list-style-type: none"> <li>CGI: 3ab</li> <li>What's Missing: 2</li> </ul> <p>Snack Fractions: 8</p> <p>2<sup>nd</sup> Grade TV &amp; FIU Assessment Items</p> <ul style="list-style-type: none"> <li>Lesson 1: 1, 2, 3, 5, 6</li> <li>Lesson 2: 4,</li> <li>Lesson 3: 4</li> </ul> <p>Daily Routines</p> <ul style="list-style-type: none"> <li>CGI: 5ab, 6</li> <li>What's Missing: 2</li> </ul> <p>Snack Fractions : 7</p>	<p><b>TV and Follow-up</b></p> <p><b>1.3(B)</b> use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as <math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math>;</p> <p><b>1.5D</b> represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences;</p> <p><b>2.4 C</b> solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms</p> <p><b>2.7C</b> represent and solve subtraction word problems where unknowns may be any one of the terms in the problem.</p>	<p><b>Snack Fractions</b></p> <p><b>1.6G</b> partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p><b>1.6H</b> identify examples and non-examples of halves and <u>fourths</u>.</p> <p><b>2.3 (A)</b> partition objects into equal parts and name the parts, including halves, <u>fourths</u>, and eighths, using words.</p>	<p><b>TV and Follow-up</b></p> <p><b>1.3(B)</b> use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as <math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math>;</p> <p><b>1.5D</b> represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences;</p> <p><b>2.4 C</b> solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms</p> <p><b>2.7C</b> represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.</p>	<p><b>Snack Fractions</b></p> <p><b>1.6G</b> partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p><b>1.6H</b> identify examples and non-examples of halves and <u>fourths</u>.</p> <p><b>2.3 (A)</b> partition objects into equal parts and name the parts, including halves, <u>fourths</u>, and eighths, using words.</p>	<p><b>TV and Follow-up</b></p> <p><b>1.3(B)</b> use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as <math>2 + 4 = [ ]</math>; <math>3 + [ ] = 7</math>; and <math>5 = [ ] - 3</math>;</p> <p><b>1.5D</b> represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences;</p> <p><b>2.4 C</b> solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms</p> <p><b>2.7C</b> represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.</p>	<p><b>Snack Fractions</b></p> <p><b>1.6G</b> partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p><b>1.6H</b> identify examples and non-examples of halves and <u>fourths</u>.</p> <p><b>2.3 (A)</b> partition objects into equal parts and name the parts, including halves, <u>fourths</u>, and eighths, using words.</p>



## Project SMART/Math MATTERS 2014

Grade Level: 1-2

Unit 3 / Lessons 1 – 2 - 3

### Daily Routine Math Objectives:

Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.

Model and solve oral word problems.

Model and solve 2-step word problems.

Represent numbers in a variety of representations including contextual references (i.e. 12 could be  $7 + 5$ , but could also be a dozen).

Read and use a calendar.

Count objects, group in ones and tens.

Compare item lengths using money as the unit of measure.

Estimate and measure linearly in units that approximate standard units.

Create graphs from everyday experiences.

### Daily Routine Language Objectives:

Reason, model and solve oral word problems

Listen to, read and speak measurement vocabulary: length, estimate, width, longer, shorter.

Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.

Write graph titles and labels interactively.

### Unit Math Objectives (Integrated Lesson including snack fractions):

Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem.

Compose 10 with two or more addends with and without concrete objects.

Given three related numbers, make the fact family.

Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value including algorithms.

Partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.

Identify examples and non-examples of halves and fourths.

Partition objects into equal parts and name the parts including halves, fourths, sixths and eighths, using words.

### Unit Language Objectives:

Think, pair, share questions throughout the unit.

Learn and use new vocabulary.

Listen to the story for enjoyment and to develop an understanding of the vocabulary.

Listen to, speak, read and write unit vocabulary in a variety of group and individual settings.

Share-write math sentences.

Describe why a snack is or is not half.

Discuss vocabulary and understand it when listening to a story.

Act out vocabulary words. Use vocabulary to retell the story.

Understand and locate unit vocabulary words in a shared reading text.

Use vocabulary words to talk about own lives.

Write a sentence using phonics skills and literature vocabulary words.

### Technology Objectives:

Use research skills and electronic communication, with appropriate supervision, to create new knowledge.

Technology suggested in this unit: iPad, SMART Board or other “smart” projection device, Internet

**Key Vocabulary, MATH: New Vocabulary:** regrouping, exchanging, trading, **Repeated Vocabulary:** comparing, more than, less than, fewer than

**Key Vocabulary, LANGUAGE:** mischief, gnashed, wild, tame, rumpus, terrible, vine, forest

### Resources/Literacy Links

*Where the Wild Things Are* by Maurice Sendak

Related links: <http://www.teachingideas.co.uk/library/books/wherethewildthingsare.htm>

Read aloud, great ideas to enrich the reading.

### Lesson Sequence

- Daily Routine: 30 to 45 minutes
- Classroom Lesson: 1 to 1.5 hour
- TV Lesson: 30 minutes
- Classroom Follow-up including Snack Fractions: .5 to 1 hour

### MATH WALK

#### Wild Thing Walk

#### Technology Connections

- **Math Practice**

[http://www.coolmath-games.com/0-math-lines/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29)

Challenging game for making 10

<http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html>

Adding 2-digit numbers

- **Science Connection**

<http://www.teachingideas.co.uk/library/books/wherethewildthingsare.htm>

Create a fact sheet about one of the Wild Things

<http://www.easyfunschool.com/article1293.html>

Interesting seed investigations

- **Social Studies Connection**

<http://www.easyfunschool.com/article1293.html>

Where do wild things live?

- **Health/Physical Ed Connection**

Let the wild rumpus start!

- **Art Connection**

<http://www.deepspacesparkle.com/2009/03/where-wild-things-are-watercolor/>

Monster water color drawings and paintings

<http://www.switchzoo.com/>

Make new animals on this site.

## Unit 3 OPTIONAL All-School Project

Because all grade bands will be reading, learning and researching within the same unit theme, we are offering OPTIONAL projects in which all ages can participate.

### Unit Theme: Adventure

#### Unit 1: Adventure Trip

##### Defined:

Students take an Adventure Trip to someplace in your area. This can be a real field trip, or can be a virtual trip. Notes and photographs are taken of areas that most interest the students. When the school “returns” from the trip, students chronicle their adventure by either creating a scrapbook per class that is collated into one large book, or creating an online scrapbook

##### Materials:

- Spiral notebooks for each student
- Pencils or pens
- Teacher (or student) cameras, phones, or other ways to take photographs
- Large scrapbook or virtual scrapbook online where students can chronicle their adventure
- Other materials as indicated by your chosen trip.

##### Objectives: (add your own objectives to the project)



- Students observe their surroundings and select memorable images to share.
- Students chronicle the adventure with times and events of the day.
- Students write brief descriptions of the memorable images.

##### Procedures:

1. Teachers select one field trip or virtual trip for the school to visit.
2. Prepare students for the trip. This will require you and older students to research the destination to find what you want to learn about when you arrive there, and how the trip will be an adventure.
3. Visit the site, whether real time or virtual, each student looking for the keys you’ve decided upon in your preparation of the trip. Students take notes and pictures (younger students might need a recorder to make their on-going commentaries).
4. Return from the trip and generate a scrapbook, either real or online, to chronicle the adventure.
5. Share the scrapbook at a family function. It would be good if each student could keep a copy of the scrapbook for a remembrance.

### Online Resources:

- <http://www.scholastic.com/teachers/article/virtual-field-trips>  
Great Virtual Field Trips from Instructor – *a must read* for every teacher whether you go virtual or real trip.
- <http://www.smilebox.com/scrapbooks/online-scrapbooks.html>  
Free online scrapbook templates
- <http://mashable.com/2008/09/16/online-scrapbooking/>  
How to – would suggest teachers perusing this site first.
- [http://www.cropmom.com/Digital\\_Scrapbooking.aspx](http://www.cropmom.com/Digital_Scrapbooking.aspx)  
Templates and How to

<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• 50 base ten units per student</li> <li>• Unknown Quantity Cards</li> <li>• <b>BLM CGI Problems Unit 3</b> – teacher only</li> <li>• <b>BLM Wild Thing Trees #1</b> – 1 per student</li> <li>• <b>Optional Graph:</b> <ul style="list-style-type: none"> <li>○ <b>BLM Wild Things</b></li> <li>○ Picture graph grid and labels</li> </ul> </li> </ul> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Solve math word problems.</li> <li>• Measure to compare.</li> <li>• Represent whole numbers in a variety of ways.</li> <li>• Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</li> </ul> <p> <b>Balanced Literacy</b></p> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Listen, read and write to understand problems and explain solution strategies.</li> </ul> <p><b>TEKS</b>  <b>Lessons 1, 2, 3</b></p> <ul style="list-style-type: none"> <li>• 1<sup>st</sup> – 1.3B; 1.5D</li> <li>• 2<sup>nd</sup> – 2.4C; 2.7C</li> </ul> <p><b>ELPS (English Language Proficiency Standard)</b>  1E, 2D, 2G, 2H, 3B, 3D, 3F</p> <p><b>CCRS (College and Career Readiness Standards)</b>  <b>CROSS-CURRICULAR I.A.1.</b>,  I.C.1., II.A.1., II.A.4  <b>ELA II.A.2.</b>, II.A.3., II.B.1.,  III.B.2  <b>MATH I.A.1.</b>, IV.A.1., IV.B.1.,  VI.C.2., VIII.A.4</p> <p><b>Assessment Items</b>  (As a result of experiencing this unit, students will be learning skills necessary to be successful on the following assessment items.)</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b>  </p> <p><b>Unit 3, Lesson 1</b></p> <p><b>Daily Routine</b></p> <p><i>The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.</i></p> <hr style="border-top: 1px dashed black;"/> <p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• <b>Target Number</b> (<i>fundamental number sense for all items</i>) <ul style="list-style-type: none"> <li>○ <b>Lesson 1 – 25</b></li> <li>○ Lesson 2 – 50</li> <li>○ Lesson 3 – 75</li> </ul> </li> <li>• <b>CGI Problem</b> <ul style="list-style-type: none"> <li>○ <b>Lesson 1 – Join, Change Unknown</b> (<i>2<sup>nd</sup> item 5</i>)</li> <li>○ Lesson 2 – Compare, Difference Unknown (<i>1<sup>st</sup> item 5, 2<sup>nd</sup> item 6</i>)</li> <li>○ Lesson 3 – Part Whole, Whole Unknown (<i>1<sup>st</sup> item 3ab</i>)</li> </ul> </li> <li>• <b>What’s Missing</b> (<i>1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction</i>) <ul style="list-style-type: none"> <li>○ Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Teacher questions might include: Has anyone used Fact Families? How would using Fact Families help?</li> </ul> </li> <li>• <b>Measurement</b> (<i>1<sup>st</sup> item 5, 2<sup>nd</sup> item 6</i>)** <ul style="list-style-type: none"> <li>○ <b>Lesson 1 – Wild Thing Trees #1</b> <ul style="list-style-type: none"> <li>▪ <b>BLM Wild Thing Trees #1</b></li> <li>▪ <b>BLM Teacher Guide and KEY</b></li> </ul> </li> <li>○ Lesson 2 – Wild Thing Trees #2 <ul style="list-style-type: none"> <li>▪ BLM Wild Thing Trees #2</li> <li>▪ BLM Teacher Guide and KEY</li> </ul> </li> <li>○ Lesson 3 – Wild Thing Trees #3 <ul style="list-style-type: none"> <li>▪ BLM Wild Thing Trees #3</li> <li>▪ BLM Teacher Guide and KEY</li> </ul> </li> </ul> </li> </ul> <p><i>*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.</i></p>
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1<sup>st</sup> - 1, 2, 3, 4, 5, 6, 8  
2<sup>nd</sup> - 1, 2, 3, 4, 5, 6, 7

## Unit 3, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – Which wild thing do you like best?
    - **BLM Wild Things**
  - Lesson 2 – none
  - Lesson 3 – How many nickels do you think are in the jar?  
*(Have a plastic screw lid jar with 43 nickels in it – bar graph with choices: less than 25, 25 to 75, 75 - 100, more than 100. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by grouping in tens and ones.)*

### Azulito's Corner Unit 3, Lesson 1 Measurement Lab

Share with us what you found in your measurement lab today when you measured the two wild thing trees. Did everyone agree with the answers? Were you able to prove that your answer was correct?

### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**Assessment Item 1<sup>st</sup> grade #8 and 2<sup>nd</sup> grade #7 will be reviewed daily in Snack Fractions.**

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

### Vocabulary Building

Choose an activity listed in the Daily Routines section.

Unit 3

CGI Problems for *Where the Wild Things Are*



Join	<p><b>Result Unknown (JRU)</b> There were __ wild things on the shore to greet Max. __ more wild things came running to greet Max. How many wild things now?</p> <p>12, 10   4, 17</p>	<p><b>Change Unknown (JCU)</b> There were __ trees in Max's room. Then some vines grew and now there are __ plants in his room. How many vines grew?</p> <p>8, 12   13, 22   27, 42</p>	<p><b>Start Unknown (JSU)</b> Some trees grew in Max's room. __ more trees grew and now there are __ trees in Max's room. How many trees to start?</p> <p>10, 22   6, 13   15, 31</p>
	<p><b>Result Unknown (SRU)</b> There were __ wild things on the beach. When they saw Max, __ ran away. How many wild things now?</p> <p>14, 8   23, 13   50, 16</p>	<p><b>Change Unknown (SCU)</b> There were __ wild things. Max made some run away by looking into their yellow eyes. Now there are __ wild things. How many ran away?</p> <p>15, 8   37, 21   44, 26</p>	<p><b>Start Unknown (SSU)</b> There were some wild things in the woods. Max hollered "Be still!" so __ ran and hid. Now there are __ wild things in the forest. How many were there to start?</p> <p>7, 14   26, 13   31, 8</p>
Part-Part-Whole	<p><b>Whole Unknown (PPW-WU)</b> There were __ wild things that had horns and __ that did not have horns. How many wild things in all?</p> <p>9, 8   31, 7   26, 18</p>		<p><b>Part Unknown (PPW-PU)</b> There were __ wild things in the woods. __ had horns and the rest did not. How many wild things had no horns?</p> <p>18, 9   30, 10   61, 48</p>
	<p><b>Difference Unknown (CDU)</b> __ wild things had scales and __ had fur. How many fewer had scales than fur?</p> <p>13, 20   25, 45   27, 41</p>	<p><b>Quantity Unknown (CQU)</b> __ wild things had beaks. __ more wild things had teeth than beaks. How many wild things had teeth?</p> <p>5, 15   20, 23   18, 16</p>	<p><b>Referent Unknown (CRU)</b> __ wild things had fur. That was __ more than had feathers. How many wild things had feathers?</p> <p>28, 20   14, 9   52, 17</p>
Multiply and Divide	<p><b>Multiplication</b> There were __ wild things. Each had __ claws. How many claws did the wild things have?</p> <p>6, 6   7, 10   12, 14</p>	<p><b>Measurement Division (MD)</b> There were __ sharp teeth. Each wild thing had __ sharp teeth. How many wild things were there?</p> <p>24, 6   30, 5   42, 6</p>	<p><b>Partitive Division (PD)</b> There were __ claws and __ wild things. How many claws on each wild thing?</p> <p>32, 4   28, 7   60, 6</p>

Unit 3

CGI Problems for *Where the Wild Things Are*



Unir	<p><b>Resultado desconocido (JRU)</b> Había __ monstruos en la orilla para saludar a Max. __ más monstruos llegaron. ¿Cuántos monstruos hay ahora?</p> <p>12, 10 4, 17</p>	<p><b>Cambio desconocido (JCU)</b> Había __ árboles en el cuarto de Max. Entonces algunas enredaderas crecieron y ahora hay __ plantas en su cuarto. ¿Cuántas enredaderas crecieron?</p> <p>8, 12 13, 22 27, 42</p>	<p><b>Inicio desconocido (JSU)</b> Algunos árboles crecieron en su cuarto. __ árboles mas crecieron y ahora hay __ árboles en el cuarto de Max. ¿Cuántos árboles había a empezar?</p> <p>10, 22 6, 13 15, 31</p>
	<p><b>Resultado desconocido (SRU)</b> Había __ monstruos en la playa. Cuando vieron a Max, __ se fueron corriendo. ¿Cuántos monstruos hay ahora?</p> <p>14, 8 23, 13 50, 16</p>	<p><b>Cambio desconocido (SCU)</b> Había __ monstruos. Max hacía que algunos se fueron cuando los miró fijamente a los ojos sin pestañear. Ahora hay __ monstruos. ¿Cuántos se fueron corriendo?</p> <p>15, 8 37, 21 44, 26</p>	<p><b>Inicio desconocido (SSU)</b> Había unos monstruos en el bosque. Max grito "Quietos" y __ se escondieron. Ahora hay __ monstruos en el bosque. ¿Cuántos había a empezar?</p> <p>7, 14 26, 13 31, 8</p>
Parte-Parte-Entero	<p><b>entero desconocido (PPW-WU)</b> Había __ monstruos con cuernos y __ que no tenían cuernos. ¿Cuántos monstruos había en total?</p> <p>9, 8 31, 7 26, 18</p>		<p><b>Parte desconocido (PPW-PU)</b> Había __ monstruos en el bosque. __ tenían cuernos y los demás no los tenían. ¿Cuántos monstruos no tenían cuernos?</p> <p>18, 9 30, 10 61, 48</p>
	<p><b>Diferencia desconocida</b> __ tenían escalas. __ tenían pelo. ¿Cuántos menos tenían escalas en vez de pelo?</p> <p>13, 20 25, 45 27, 41</p>	<p><b>Cantidad desconocida</b> __ monstruos tenían picos. __ monstruos más tenían dientes que picos. ¿Cuántos monstruos tenían dientes?</p> <p>5, 15 20, 23 18, 16</p>	<p><b>Referente desconocido</b> __ monstruos tenían pelo. Este fue __ más que los que tenían plumas. ¿Cuántos monstruos tenían plumas?</p> <p>28, 20 14, 9 52, 17</p>
Multiplicar y dividir	<p><b>Multiplication</b> There were __ wild things. Each had __ claws. How many claws did the wild things have?</p> <p>6, 6 7, 10 12, 14</p>	<p><b>Measurement Division (MD)</b> There were __ sharp teeth. Each wild thing had __ sharp teeth. How many wild things were there?</p> <p>24, 6 30, 5 42, 6</p>	<p><b>Partitive Division (PD)</b> There were __ claws and __ wild things. How many claws on each wild thing?</p> <p>32, 4 28, 7 60, 6</p>



## Solve It! Problems Unit 3, Lesson 1

Pairs



### First Problem

- Carol walked her dog for 4 hours on Saturday. She walked the same number of hours on Sunday. How long did she walk her dog in the two days?
  - What is the answer to the question? Show your solution strategy.

<b>Problem Solution</b> (#1 Problem Solver) Name:	<b>Solution Verification</b> (#2 Problem Solver) Name:

### Second Problem

- On Monday, Carol walked her dog 2 hours less than the total number of hours on Saturday and Sunday. How many hours did Anita walk her dog in those 3 days?
  - What do you need from Problem 1 to solve the problem?
  - Be sure to verify the answer to problem 1 before solving this problem.
  - What is the answer to the question? Show your solution strategy.

<b>Problem Solution</b> (#2 Problem Solver) Name:	<b>Solution Verification</b> (#1 Problem Solver) Name:

## Solve It! Problems Unit 3, Lesson 1

Pairs



### Primer Problema

- Carol sacó a pasear a su perro durante 4 horas el sábado. Caminaron el mismo número de horas el domingo. ¿Cuánto tiempo paseó a su perro en los dos días?
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.

<b>Solución del problems (#1 Problem Solver)</b> Nombre:	<b>Verificación del problema (#1 Problem Solver)</b> Nombre:

### Segundo problema

- El lunes Carol sacó a pasear a su perro 2 horas menos que el número total de horas del sábado y el domingo. ¿Cuántas horas paseó a su perro en esos 3 días?
  - ¿Qué necesitas del problema 1 para resolver este problema?
  - Asegúrate de verificar la respuesta del problema 1 antes de resolver este problema.
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.

<b>Solución del problems (#1 Problem Solver)</b> Nombre:	<b>Verificación del problema (#1 Problem Solver)</b> Nombre:

**Compare the height of these two trees.**

Tree A is \_\_\_\_\_ units tall. (I had \_\_\_\_\_ groups of 10 and \_\_\_\_\_ left over.)

Tree B is \_\_\_\_\_ units tall. (I had \_\_\_\_\_ groups of 10 and \_\_\_\_\_ left over.)

**fewer or more**

It took \_\_\_\_\_ cubes to measure Tree B than Tree A.

**shorter or taller**

Tree B is \_\_\_\_\_ than Tree A.



**Tree A**



**Tree B**

It took \_\_\_\_\_ fewer cubes to measure Tree B than to measure Tree A.

**BLM Unidad 3, Árboles de cosas salvajes #1**



Una hoja por estudiante

**Compara la altura de estos dos árboles.**

El árbol A mide \_\_\_\_\_ unidades de alto. (Yo tenía \_\_\_\_ grupos de 10 y \_\_\_\_ unidades.)

El árbol B mide \_\_\_\_\_ unidades de alto. (Yo tenía \_\_\_\_ grupos de 10 y \_\_\_\_ unidades.)

**menos o más**

Usé \_\_\_\_\_ cubos para medir el Árbol B que el Árbol A.

**más bajo o más alto**

El árbol B es \_\_\_\_\_ que el Árbol A.



**Árbol**



**Árbol**

Usé \_\_\_\_\_ cubos menos para medir el Árbol B que el Árbol A.

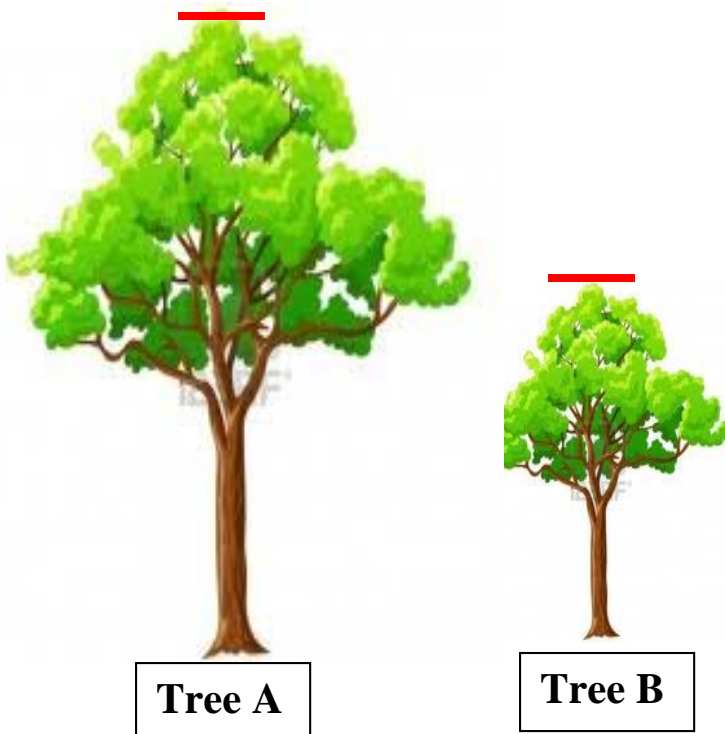
**GUIDE**

- Make sure students understand what height is. They should measure from the base of the tree trunk (top of the Tree A and Tree B signs) to the topmost branch. Your KEY indicates the stopping point.
- Ask students to use the units to make a straight line all the way up to the top of the tree.
- Measure Tree A first. Count the units by counting 10, and adding on. Complete the sentences for Tree A.
- Repeat for Tree B.
- Now look at the sentences beside the trees. Talk about “fewer” and “more.” Which tree took fewer cubes to measure? (tree B) More trees to measure? (tree A) Fill in the blank on the fewer or more sentence.
- Repeat the process now with “shorter” and “taller.”
- Now ask the students to fill in the blank in the sentence at the bottom of the page, “**It took \_\_\_\_\_ fewer cubes to measure Tree B than to measure Tree A.**” Ask students to talk to an elbow partner to find a solution strategy to find that answer. Let student volunteers share their strategies. Be sure that you have them demonstrate the strategies as well.
- Students then answer the question at the bottom of the page.

**KEY** Compare the height of these two trees.

Tree A is   15   units tall. (I had   1   groups of 10 and   5   left over.)

Tree B is   9   units tall. (I had   0   groups of 10 and   9   left over.)



**fewer or more**

It took   fewer   \_\_\_\_\_ cubes to measure Tree B than Tree A.

**shorter or taller**

Tree B is   shorter   \_\_\_\_\_ than Tree A.

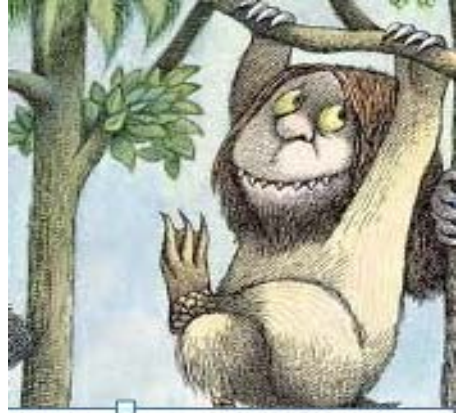
It took   6   fewer cubes to measure Tree B than to measure Tree A.



**BLM Unit 3, Daily Routine, Graphing Lesson 1**

**Wild Things** 

Enough copies so that you have one for the picture graph, and one of each for each student to choose.







**Grade Band: 1-2, Unit Writing Workshop, Units 3-4**



**Genre: Persuasive Letter Writing**

Writing Objective: Students write a letter to persuade the 3<sup>rd</sup> and 4<sup>th</sup> graders to read (or not read) *Where the Wild Things Are*.

- Organization of text:
  - Written in a friendly letter format with:
    - The date
    - A greeting (Dear \_\_\_\_\_,)
    - A body
    - A closing (Ex. Sincerely, \_\_\_\_\_)
  - Following are two sample paper templates you could use.
    - The first is appropriate for students at the beginning writing stages. They have a large space to illustrate why the person should (or should not) read this adventure, and they can write in the space as well (writing letters to represent the sounds they hear in different words; labeling what they've drawn; etc.)

June 1, 2014
Dear _____,
<div style="border: 2px solid black; width: 80%; height: 150px; margin: 0 auto;"></div>
Sincerely,
_____

**Grade Band: 1-2, Unit Writing Workshop, Units 3-4**



- The second template is appropriate for students who are able to write conventionally. They have a small space to illustrate why the person should (or should not) read this adventure, followed by lines to write their letter, explaining why that person should (or should not) read the adventure.

June 1, 2014

Dear \_\_\_\_\_,

---

---

---

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---

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Sincerely,

\_\_\_\_\_



Each student's writing will look differently, depending on the ability level of the child. Writing may be:

▪ **Illustration with dictation**

This option is for pre-writers. You can provide these students with the first writing template. Students illustrate the blank middle section to show why the 3<sup>rd</sup> and 4<sup>th</sup> graders should (or shouldn't) read this book. What was great about it? (or not great?) The student dictates to the teacher the reason(s) why the person should or should not read this adventure.

▪ **Illustration with labels**

Students at this stage of writing can also use the first template. Students will illustrate the blank middle section to show why the 3<sup>rd</sup> and 4<sup>th</sup> graders should (or shouldn't) read this book. What was great about it? (Or not great?) Students who are just beginning to learn how to write using conventional letters can label their pictures with the letters representing the sounds they hear in the word. Students should be encouraged to write the sounds they hear in each word. The teacher may need to help students isolate the sound they hear at the beginning of the word. Ask: What sound do you hear at the beginning/middle/end of the word \_\_\_\_? What letter makes that sound?

▪ **Illustration with conventional writing**

These students are able to write conventionally, and need space for this more expanded writing. Provide these students with the second writing template. Students illustrate the blank middle section to show why the 3<sup>rd</sup> and 4<sup>th</sup> graders should (or shouldn't) read this book. What was great about it? (Or not great?) Then, the student writes a sentence (or multiple sentences that form a paragraph) to explain why the person should or should not read this adventure.

- For students who are just beginning to write a sentence, the teacher can support these students by having them orally share what they want to write, help the student count the number of words in their sentence, and draw that number of lines on the student's paper to help them include each word in their writing.
- For students with stronger writing abilities, encourage them to flesh out their writing with additional sentences. For example, ask students to think about:
  - Why did you like this adventure?
  - What was your favorite part of the adventure? Why might someone else like that same part?

Students can write additional sentences based on the ideas they brainstorm with you.

➤ Possible sequence of mini-lessons:

**Brainstorm:** Explain to students that an important part of writing is brainstorming. When we brainstorm we jot down all of our thought/ideas on a certain topic. The notes that we take before we begin the actual writing helps us to organize our thoughts. Explain to the students that they will be brainstorming reasons why they would recommend this book and reasons why they would not recommend this book. Explain to

**Grade Band: 1-2, Unit Writing Workshop, Units 3-4**



students that the 3<sup>rd</sup> and 4<sup>th</sup> graders are also reading adventure stories this week. They've never read *Where the Wild Things Are*.

Possible discussion questions:

- Do you think the 3<sup>rd</sup> and 4<sup>th</sup> graders would like the adventure we just read: *Where the Wild Things Are*? (Why/Why not?)
- Do you think they should read this adventure? (Why/Why not?)

Create a simple Yes/No T-Chart such as the one below to record the reasons students share.

- To help them brainstorm for the Yes column, ask them what their favorite part of the adventure was and why, what they liked best about Max and why, what was the funniest part, etc.
- For the No column, ask students why they didn't like the adventure. What did they wish were different about the story? Did they want a different ending? Different characters? A longer adventure?

Yes, you should read this mystery!	No, you shouldn't read this mystery.

Tell students that this week they will be writing a letter to the 3<sup>rd</sup> and 4<sup>th</sup> graders, trying to convince them (persuade them) to read this adventure – or to NOT read this adventure. When they finish the letters, they will give them to the 3<sup>rd</sup> and 4<sup>th</sup> grade class. Have students decide today whether they are going to persuade YES or NO when they write their letter.

1. Draft:

- **Model** for students how to draft their persuasive letter. Remember that your modeling should match what your students will be doing. So, you should model how to illustrate your reason(s). Then depending on your students' writing abilities, model the kind of writing you want them to include:
  - Adding letters for the sounds they hear
  - Adding words from the T-Chart they just created with you
  - Writing sentences
  - Elaborating with additional sentences

Then provide time for your students to write independently. This writing time includes the illustrating. Provide students with the writing template paper based on their writing ability.

## Grade Band: 1-2, Unit Writing Workshop, Units 3-4




2. Revise: Based on where each student is at with their writing development, help students add more to their writing. Before expecting the students to attempt this independently be sure to revise the letter previously modeled for the students. How could you revise this piece to model the expectation for the students?
  - Adding more detail to the illustrations
  - Add labels to their illustration
  - Adding more letters to represent the sounds they hear in the word(s)
  - Dictating more details about the illustrations they drew
  - Writing more sentences

You may even want to try a peer editing session with this piece of writing. Students can pair up with their rug partner. The pair of students will read their letter to each other and see if their partner can follow. Students can give feedback or ask clarifying questions.

3. Publish: If possible, join together with the 3<sup>rd</sup>/4<sup>th</sup> grade class for a quick sharing session. Have your students buddy up with one of the older students, and have your students read their letter. Alternatively, make copies of the letters, and “deliver” them to the 3<sup>rd</sup>/4<sup>th</sup> grade class. Later on, you can ask the 3<sup>rd</sup> and 4<sup>th</sup> graders if they plan to read *Where the Wild Things Are*, based on the reviews from the 1<sup>st</sup> and 2<sup>nd</sup> graders.



<p><b>Literature Selection</b> <i>Where the Wild Things Are</i> by Maurice Sendak</p> <p><b>Materials</b> <b>Language Lesson</b></p> <ul style="list-style-type: none"> <li>• BLM Word Cards</li> <li>• BLM Picture vocabulary cards: vine, forest</li> <li>• BLM Illustrating the Text, one copy per student</li> <li>• Crayons or colored pencils</li> </ul> <p><b>Materials for TM Lesson</b></p> <ul style="list-style-type: none"> <li>• 50 Base ten units per student</li> <li>• BLM TM Wild Thing Story Board</li> <li>• BLM TM Wild Thing Problems – 1 per student</li> </ul> <p><b>Literature Vocabulary</b> mischief gnashed wild tame rumpus terrible vine forest</p> <p><b>Math Vocabulary</b> regrouping exchanging trading</p> <p><b>Repeated Vocabulary</b> comparing more than less than fewer than</p> <p><b>ELPS (English Language Proficiency Standard)</b> 2B, 2E, 2G, 3I, 4E, 4J</p> <p><b>CCRS (College and Career Readiness Standards)</b> CROSS-CURRICULAR II.A.2., II.A.4., II.A.5 ELA II.A.4., II.A.5., II.A.6., II.B.1., III.B.2.</p>	<p><b>Unit 3, Lesson 1</b> <span style="float: right;">1<sup>st</sup> – 2<sup>nd</sup></span></p> <p><b>Classroom Lesson</b> </p> <p><i>Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.</i></p> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.</li> </ul> <p><b>Reading Objectives</b></p> <ul style="list-style-type: none"> <li>• Visualize what is happening in a story.</li> <li>• Infer (<i>figure out</i>) what the author is trying to say.</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Discuss vocabulary and understand it when listening to a story.</li> <li>• Act out vocabulary words.</li> </ul> <p><b>BEFORE READING</b> <b>Building Background, Literature</b> Tell students you are going to read a book by Maurice Sendak titled “Where the Wild Things Are.”</p> <p>Ask students:</p> <ul style="list-style-type: none"> <li>• What do you think a wild thing is?</li> <li>• Have you ever acted like a wild thing?</li> <li>• Have you ever gotten into trouble and been sent to your room?</li> </ul> <p>Have a whole class discussion or use the Rug Partner Routine.</p> <p>“Today I am going to read a story to you about a little boy named Max. Max goes on an adventure and has some very exciting experiences. You are going to need to listen very closely as I read the story because when I am finished I am going to ask you some questions about the story.”</p> <p><b>Building Background, Vocabulary</b> Before we read this story about Max I want to discuss some interesting words that are going to be in our story.</p> <p>Show students the vocabulary picture card, vine. This is a picture of a vine. A vine is a kind of plant that grows on trees and other plants. When a vine grows, it winds itself around the tree or another plant. Display the word card labeled “vine.” Read the word “vine” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word.</p>
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## Unit 3, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

Show students the vocabulary picture card, forest. This is a picture of a forest. A forest is a large area where the trees grow very close together. Display the word card labeled “forest.” Read the word “forest” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “wild.” Another word we are going to hear in the story is the word, wild. An animal can be wild. Animals that do not live near people are called wild animals. Sometimes children are called wild, too. When children run around and act crazy, we could say, they are acting wild. Read the word “wild” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “tame.” Tame is the opposite of wild. An animal that is tame can live with or be around people. Raise your hand if you have a pet. A pet, such as a cat or a dog, is an example of a tame animal. Read the word “tame” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “terrible.” Terrible can be used to describe something that scares you, like a wild animal in the woods. Terrible can also be used to describe something very bad, like a big storm. Read the word “terrible” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “gnashed.” Gnash means to grind or strike your teeth together (*show them by gnashing your teeth, then let them try*). Read the word “gnashed” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word. Point out that the letter G at the beginning of the word is silent.

Display the word card labeled “rumpus.” Rumpus means a noisy play or a disturbance. Read the word “rumpus” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “mischief.” Mischief is naughty behavior. Read the word “mischief” slowly and with careful annunciation. Instruct students to read it aloud with you several times as you point to the word.



### Guided Reading Groups & Independent Reading Connection

If you conduct guided reading groups as part of your balanced literacy instruction, or provide time for students to read independently, you can reinforce these same reading strategies.

For a guided reading group, ask the following questions after students have had a chance to read the text on their own. For students who are reading independently, when you sit down next to them, have them pause their reading and ask them one of these questions about what they have already read.

- Visualizing

“What do you imagine in your mind?”

Asking students to describe what they see based on an excerpt of text will help you gauge their comprehension. Which details from the text do they incorporate into their description? Which details did they not include, or mix-up?

- Inferring

While many texts young students read are very straightforward, there are often a few parts where they need to infer, or read between the lines. For example, with narrative texts, inferring could be about:

- Events (What really happened in this part?),  
Setting
- On what it says in this part, where do you think the characters are? What time of day is it?)
- Characters (Based on what it says in this part of the text, how is the character feeling?)

## Unit 3, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

A great way to have the students practice the vocabulary words is to play *Simon Says*. Cues you can use are, Simon says:

- make a face like a **wild** animal.
- **gnash** your teeth.
- show me your **terrible** claws.
- sit on the floor like a **tame** cat.
- have a **rumpus**.

### DURING READING

#### Comprehensible Input, Vocabulary, and Literature Practice and Application, Literature Read Aloud

During today’s reading, the goal is to support students’ comprehension of the text by modeling and practicing two key reading strategies:

- **Visualizing**
- **Inferring**

This section indicates places in the text where you can:

- Briefly pause to model a reading strategy by thinking aloud.
- Briefly pause to have students practice a reading strategy by answering a question you pose.

Keep in mind that pausing the reading for too long at any of these places will make the reading very disconnected. This interferes with students’ comprehension and enjoyment of the text, so keep the reading as fast-paced as possible.

Page 4

Think aloud: The story says that Max was making mischief. The pictures do show Max doing some naughty things.

Question: Do you think Max was making mischief? Why or why not?

Page 10

Think aloud: Wow, look at all those trees growing in Max’s bedroom. I’ve never seen trees grow in the house before.

Question: Could that really be happening?

Page 14

Prediction: Where do you think Max could be going?

Page 18

Think aloud: Oh no! Those wild things look very scary. I wonder if Max is afraid.

Question: What do you think Max will do next?

Based on what you see in this picture, how is the character feeling?)

**Listening Center: Independent Reading**

Have students listen to a recorded version of *Where the Wild Things Are* as part of their independent reading time. Have both the English and Spanish versions available.

If you read aloud the English version, but have Spanish-speaking ELLs with beginning to intermediate English proficiency levels, you can have them listen to the Spanish version of the text to increase their comprehension of this story.

**Launch Writing Workshop for Unit 3**

Students write persuasive review about whether or not people should read *Where the Wild Things Are*.

See Writing Workshop section in Balanced Literacy Extensions for a possible sequence of mini-lessons.

**Suggestion for additional read aloud: *Go Away, Big Green Monster*** by Ed Emberley. This text lends itself well to visualizing and also retelling.

**Unit 3, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>



**Classroom Lesson** - continued

Page 20

Think aloud: Wow, Max tamed the wild things. Now that the wild things are tame I bet Max feels safe.

Page 28

Think aloud: The rumpus was very wild. It looks like they were jumping, stomping their feet, and hanging from the trees.

Page 32

Question: Why do you think Max is leaving? Where do you think he is going?

Page 37

Question: Why do you think Max went home?

**AFTER READING**

Have a discussion with the students to check their understanding of the story. Possible comprehension questions to discuss:

- Why did Max’s mother call him a “wild thing”?
- Why was Max sent to his room?
- Describe what happened to Max’s room.
- What might have happened if Max had been afraid of the wild things?
- How did Max tame the wild things?
- Do you think the wild things liked Max? Why?
- Do you think Max liked the wild things? Why?
- Why do you think Max wanted to return home?
- Who do you think put Max’s supper in his room?
- Do you think Max has a good imagination? Why or why not?

**Creating Illustrations for the Story**

In this activity, you will give students a worksheet with several short excerpts from the text. These excerpts include very descriptive language that give readers a good picture in their minds of what is happening. Students’ task is to create an illustration for each excerpt of text to show what they imagine (*and to show their comprehension*).

1. Explain the task to students.
2. Give each student a copy of the worksheet (*BLM Illustrating the Text*) and art supplies for drawing (*colored pencils, crayons*).
3. While students are illustrating the excerpts of text, circulate. Do the illustrations match the specific language of the text, showing those details? If not, guide students to think about what details they need to add to their drawings.
4. Collect students’ work at the end of the lesson, as you will be sharing it with the class in Lesson 2.

mischief

gnashed

wild

tame



travesura

crujieron

salvaje

domar



rumpus

terrible

vine

forest





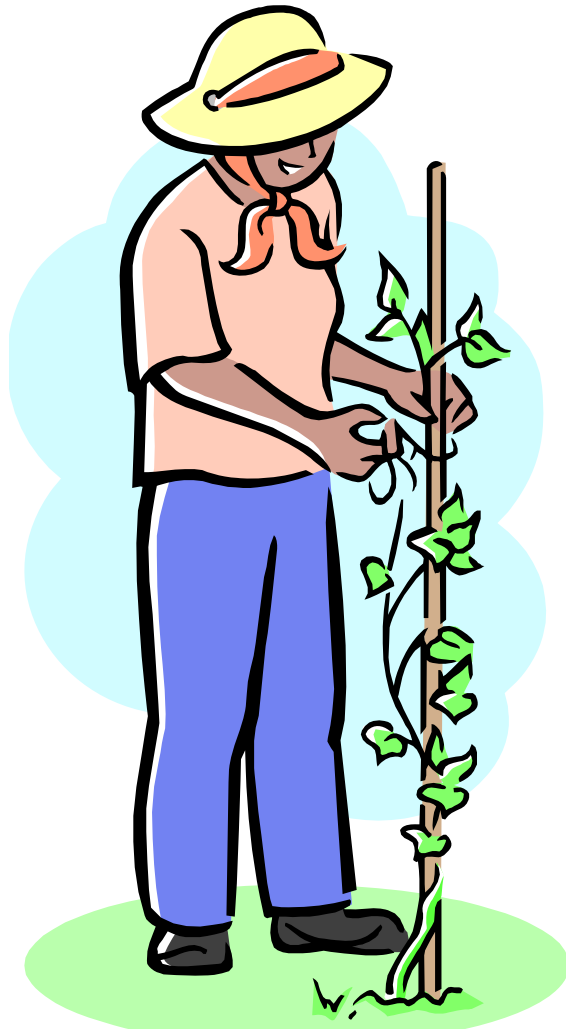
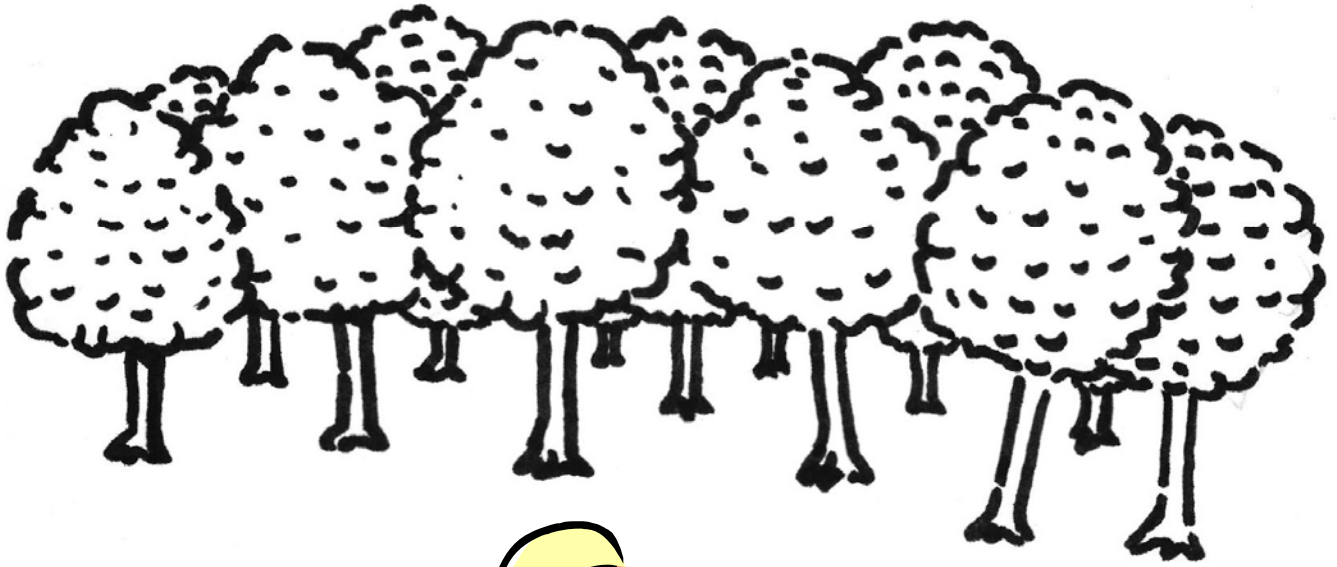
festejos

terrible

enredaderas

bosque







**Math Objectives:**

Use objects and pictorial models to solve word problems involving comparing sets within 20.

**Materials for TM Lesson**

- 50 Base ten units per student
- **BLM TM** Wild Thing Story Board
- **BLM TM** Wild Thing Problems – 1 per student

**Math Vocabulary**

regrouping  
exchanging  
trading

**Repeated Vocabulary**

comparing  
more than  
less than  
fewer than

**Technology:**

<http://www.ixl.com/math/grade-1/comparison-word-problems>

Free online game for comparison problems.

**ELPS (English Language Proficiency Standard)**

2D, 2E, 3B, 3D, 4D, 4G

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.B.1., I.B.2., I.C.2  
MATH I.B.1., II.A.1., IV.A.1., IV.B.1., V.A.1., VIII.A.1., VIII.C.1

**Unit 3, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson - continued****TRANSITION to Math****Building Background, Math**

We have three new words for our Word Wall today (*show word cards and have students read the words with you a second and third time*).

- regrouping
- exchanging
- trading

Has anyone ever heard these words? Does anyone know what they mean? (*volunteers*) All three have to do with adding and subtracting. You will be learning more about these words during the TV Lesson.

We compared today during our Measurement Lab. What did we compare? (*heights of trees*) What are some of the words that we used in comparing those heights?

- taller than
- shorter than
- more cubes than
- fewer cubes than
- compare, comparing

These are all words that are already on our Math Word Wall. Let's see how we can use them in a few word problems before our TV lesson.

Remember, I will read the problem once so that you can see the Math Movie. Then I will read it a second time for you to model what you see in your mind, and solve the problem.

**First Reading:**

Max saw two wild things with long claws. A green wild thing had five claws on each hand. A blue wild thing had eight claws on one hand. How many fewer claws did the green wild thing have than the blue wild thing?

**Second Reading (Repeat and allow students time to solve.)**

**Sharing:** Who will tell and show us how they solved the problem? (*volunteers – as many as want to, even if they repeat the same strategy*) Be sure to tell me what your counters represent, and what your final answer represents (*claws*).

## Unit 3, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



#### TRANSITION to Math

**Teacher Sharing:** If no one lines up the base ten cubes, demonstrate that – line up the cubes, then count how many there are.

Let's write a number sentence that shows what we just modeled.

$$8 - \square = 5$$

Hmm, this is like our “What’s Missing” activity in Daily Routines.

What can I use to find that missing number? (*counting back*) I could have counted back until I got to 5. Let's do that 7, 6, 5 – how many did I count back? *Three* (*fact family*) Or I could have thought of my fact families. Can anyone think of the fact family we would use here? (*Collect responses which could use the other subtraction fact, or could be thinking about what adds to 5 to equal 8.*)

#### Let's solve another problem

##### First Reading:

**Max saw 6 yellow striped wild things.**

**He saw 9 green polka dotted wild things.**

**How many more green polka dotted wild things did he see compared to yellow striped wild things?**

**Second Reading** (*Repeat and allow students time to solve.*)

**Sharing:** Who will tell and show us how they solved the problem? (*volunteers – as many as want to, even if they repeat the same strategy*)

**Teacher Sharing:** *Use the same sharing technique, this time looking for more.*

We are going to do more story problems with our TV Teacher!

**Objectives:** Read the math and language objectives and have students explain how they learned them.

**Distribute TV Lesson Materials**

#### TV Materials

*Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.*

- base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM TM** Wild Thing Story Board – 1 per student from TM

(Create on cardstock – one set for the room, and one set for each student to take home at end of Lesson 1 for practice)

regrouping

exchanging

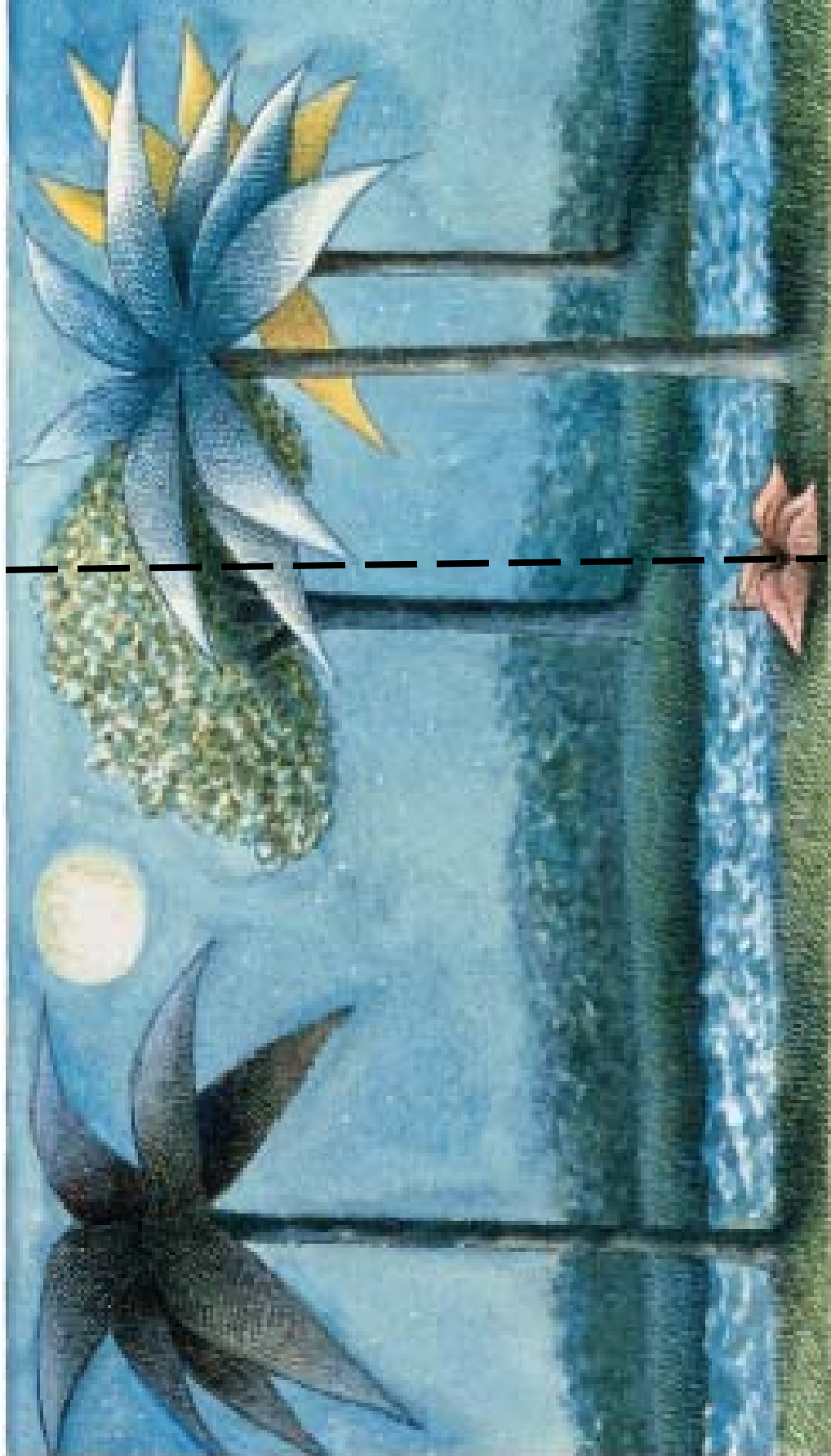
trading






**Wild Thing Story Board** 

**BLM-TM Unit 3, Lesson 1**  
(One sheet per student)





<p><b>Literature Vocabulary</b>  mischief  gnashed  wild  tame  rumpus  terrible  vine  forest</p> <p><b>Math Vocabulary</b>  regrouping  exchanging  trading</p> <p><b>Repeated Vocabulary</b>  comparing  more than  less than  fewer than</p> <p><b>TV Materials:</b>  <i>Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.</i></p> <ul style="list-style-type: none"> <li>• base ten sets – 1 set per student <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> <li>• dark wide marker - 1 per student</li> <li>• <b>BLM</b> Max and Wild Things – 1 per student</li> <li>• <b>BLM TM</b> Wild Thing Story Board – 1 per student from TM</li> <li>• <b>BLM</b> Teacher KEY</li> </ul> <p>ELPS (<i>English Language Proficiency Standard</i>)  1E, 1F, 2G, 3B, 3F, 3I</p> <p>CCRS (<i>College and Career Readiness Standards</i>)  CROSS-CURRICULAR I.C.1., I.C.2., I.C.3., II.A.2., II.A.4.  ELA II.B.1., II.B.3., III.A.1  MATH III.B.1., II.B.2..B.1., I.C.1., II.B.1., II.C.1</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b>  </p> <p><b>Unit 3, Lesson 1</b>  <b>TV Lesson</b></p> <p><i>Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.</i></p> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Use the math vocabulary during the activity.</li> <li>• Discuss solution strategies.</li> <li>• Explain how to regroup in addition and subtraction.</li> </ul> <p><b>Building Background, Math</b>  <b>TEACHER:</b> You and your Classroom Teacher worked with the comparison words during the Transition to Math today. We are going to use the words that will help us add and subtract larger numbers. These words are: regrouping, exchanging and trading.</p> <p>They all really mean the same thing and we are going to use them so much today, that you will understand what they mean!</p> <p>Well, Azulito and I are ready for some math fun, are you?</p> <p><b>AZULITO:</b> I will flash the word on the board every time you use it! I think I will be able to figure out the word meanings from what you are doing!</p> <p><b>TEACHER:</b> Great idea, Azulito! Now, before we start, we are going to make a little change in our Wild Things Story board. So be sure you have your story board and the dark marker in front of you.</p> <p>Do you see that dark dotted line that goes up and down the story board? (<i>Run your finger up and down to show it.</i>) That is going to be our fold line. I would like for each of you to fold the story board over so that line becomes a fold line (<i>demonstrate</i>).</p> <p>Say, have we folded our story board into halves, two equal parts? Tell your teacher if you think this dotted line divides the story board in half.</p> <p><b>AZULITO:</b> Oh no! There is more space on the left side! These are NOT halves at all. They are two parts of the story board, but they are not halves!</p>
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## Unit 3, Lesson 1

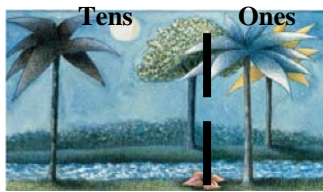
1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



#### SMARTBOARD

Model the story board division and labels.



**TEACHER:** You are very right, Azulito, and I heard many, many boys and girls say NO!, too! These two parts of the story board are not fair shares; they do not represent equal parts. This is NOT a fractional division.

Now, back to our story board. I would like for you to write the word **Ones** at the top of this column (*column on the right, centered top*).

And at the top of this column, I would like for you to write the word **Tens** (*column on the left, centered top*).

We have made our story board into a tens and ones board, and we are going to use it a lot during this unit!

**AZULITO:** Looks like fun! Let's get started!

#### Comprehensible Input

##### TEACHER:

Let's start with a simple problem to see how we **REGROUP** or **TRADE** or **EXCHANGE** our materials. We'll be using the base ten materials – the ones and the tens, so just place those materials up above your story board to have them ready to use.

Let's look at our base 10 materials.

I have these little cubes. I will tell you that these little cubes are going to represent our ONE. We always need to know what is ONE.


Now, if this little cube represents one, what do you think this long rod represents? Talk to your class and see if you can figure out what the long rod represents. (*pause*)

Let's use our story board to count to see how many of the ONES we have (*count the units onto the ones side of the story board – there should be 15*). We have 15 ones.

But here's the fun part. Every time I count 10 of the ones, I can **TRADE, REGROUP,** or **EXCHANGE** those 10 ones for one ten.

Do we have ten or more in our ONES side of the story board (*yes*). Let's count out TEN of them and **TRADE or EXCHANGE** them for or **REGROUP** them to a ten. (*Take the ten rod from above your board and actually line up 10 ones as you count the ones so you see and count when you reach 10. When you reach 10, take the ones and put them above the story board.*)

**Unit 3, Lesson 1**  
**TV Lesson - continued**

1<sup>st</sup> – 2<sup>nd</sup>  


Now THAT is an even **EXCHANGE!**

What do we have on our story boards? How many tens? (*one*)

And how many ones? (*5*)

Do we still have 15 represented? Let's see, we can count on from 10 (*the rod*) 10, 11, 12, 13, 14, 15 (*as you touch each appropriate block*).

**AZULITO:** Well, that's cool! And look, When I write the number 15, my numbers show me that I have 1 ten (*flash the one in 15*) and 5 ones (*flash the 5 in 15*).

**TEACHER:** Absolutely correct! Isn't it nifty the way our numbering systems works like that! Cool is right!

**AZULITO:** May we do some problems now?

**TEACHER:** Of course! You have a copy of these problems, so let's read them together. I'll read through it the first time with you so you can see the Math Movie in your mind.

Max tamed the wild things by saying "Be still!"

Nine of the wild things rolled their eyes. Eight of the wild things gnashed their teeth, but they all were still. How many wild things were still?

What math movie did you see? Tell your Classroom Teacher (*pause*).

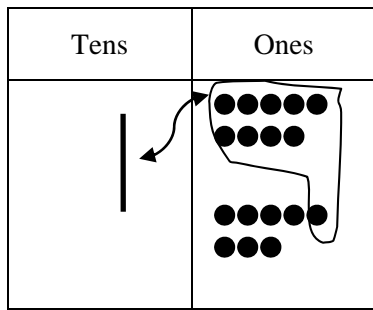
**AZULITO:** (*pause*) I saw those wild things and some of them rolled their eyes and some of them gnashed their teeth, all were still. I need to know how many there were.

**TEACHER:** Great job, Azulito. We are going to use our base ten blocks to model this.

OK, what do we need for the nine wild things that rolled their eyes? (*quick pause*) 9 ones

**AZULITO:** Let's find them and put them on the board in the ones place! (*do so*)

**TEACHER:** And eight of the wild things gnashed their teeth. Find those and put them on the board. These are ones, so they must also go in the ones column. (*do so*)



Tens	Ones
1	7

$$\begin{array}{r} 9 \\ + 8 \\ \hline 17 \end{array}$$

## Unit 3, Lesson 1

### TV Lesson - continued

1<sup>st</sup> – 2<sup>nd</sup>



**AZULITO:** Oh, we have more than ten – I can see that! What can we do now, boys and girls? (*slight pause*) We can **TRADE, EXCHANGE, REGROUP** ten of those ones for a TEN! YEAH. I'll **TRADE** mine and you trade yours! (*do so*)

**TEACHER:** Alright, and what blocks do we have on our board now, boys and girls? (*pause*)

**AZULITO:** (*pause*) One TEN and seven ONES! That is 17! And I see why we learned that Making Ten strategy, too. It's really easy to add to ten.

**TEACHER:** Now, let's record what we have done. First, we want to draw the model of what we did.

**AZULITO:** I know! I can use dots to be my ones and sticks to be my tens. I have nine ones (*draw nine dots*) for the wild things that rolled their eyes, and eight dots (*draw eight dots*) for the wild things that gnashed their teeth. That is 17 ones! Look boys and girls, we have a 10 to **TRADE, REGROUP, EXCHANGE!**

**TEACHER:** Excellent! Let me show you how we can represent our **TRADE, REGROUP, EXCHANGE.**


- First, do I have 10 or more ones? (*YES*)
- I'm going to circle ten ones on my board (*do so*).
- Then I'll just draw a little arrow to show that I **TRADED, EXCHANGED, REGROUPED** those ten ones for a TEN (*do so*).
- And I'll draw in my stick to represent the TEN (*do so*).
- Do I still have 17 on the board? (*YES – one ten and eight ones.*)

**AZULITO:** And the Number Representation is one in the tens column and seven in the ones column. The numbers match our base 10 board. But what is the number sentence?

**TEACHER:** We're going to translate our model into a number that shows what our Math Movie showed us. (*Write as you say the following.*) There were nine wild things that rolled their eyes and we added another eight wild things that gnashed their teeth. The sum of those two addends is..... 17.

**AZULITO:** I notice something about this number sentence. My ones are all lined up, and the ten in the sum is in its own column. Math is so cool – it all makes sense!

**Unit 3, Lesson 1**  
**TV Lesson - continued**

1<sup>st</sup> – 2<sup>nd</sup>  


**TEACHER:** This is a basic fact which we will soon know by heart. But it shows us how we are going to TRADE, EXCHANGE, REGROUP when we use larger numbers.

Let's try one more before we go, Azulito.

**AZULITO:** Great! I'm ready! Are you ready boys and girls?

**TEACHER:** Then let's work on problem #2.

Remember to watch for the Math Movie as I read it to you.

**“Let the wild rumpus start!” Max cried! All 17 of the wild things began to dance, or swing from branches of the trees, or jump up and down at the moon. Pretty soon, though, nine of the wild things tired and sat down. How many were still acting wild in the rumpus?**

**AZULITO:** I see the math movie! What do you see, boys and girls? Tell your teacher. *(pause)*

I see that we start with 17 wild things. The story tells us how they are all acting wild in the rumpus. But then nine of them sit down. I need to remove them from the ones still acting wild. This is a subtraction problem!

Can I start with one ten and seven ones?

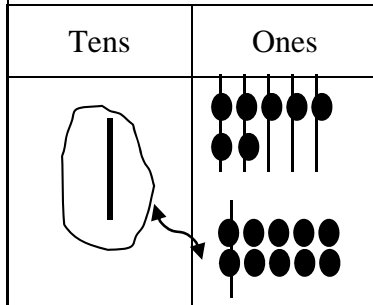
**TEACHER:** That's a very good way to start, Azulito. It is best to represent your problem in tens and ones with the base ten blocks, if that is how they are represented in numbers.

So we will start with ... one ten and seven ones *(do so)*. Please show that on your base ten board, boys and girls. Now what shall we do?

**AZULITO:** Oh, nine wild things sat down to rest. But I don't have NINE ones. How can I make them sit down to rest? What do I do boys and girls? Anyone have any ideas? Tell your Classroom Teacher, and I'll try to listen in. *(pause)*

Thank you! I heard several out there say that we can TRADE, EXCHANGE, REGROUP. We can take that one ten and TRADE, EXCHANGE, REGROUP for 10 ones.

**TEACHER:** Excellent! That is exactly what we will do. Please do this with us boys and girls. Take the one ten above your board and TRADE it, EXCHANGE it, or REGROUP it for 10 ones *(do so)*.



Tens	Ones
<b>0</b>	<b>8</b>

$$\begin{array}{r} 17 \\ -9 \\ \hline 8 \end{array}$$

**Azulito's Corner**  
**Unit 3, Lesson 1**  
**Measurement Lab**

Share with us what you found in your measurement lab today when you measured the two wild thing trees. Did everyone agree with the answers? Were you able to prove that your answer was correct?

**Unit 3, Lesson 1**  
**TV Lesson - continued**

1<sup>st</sup> – 2<sup>nd</sup>



Do we still have 17 on the board? (*pause*) Yes we do – they are all just in ones this time. We needed more ones so we could subtract the nine wild things.

**AZULITO:** OK, so I can make the nine wild things sit down now. Let's do it, boys and girls! (*do so*)

**TEACHER:** And how many ones are still on the board? (8) What does that tell us?

**AZULITO:** That there were still eight wild things acting wild in the rumpus!

**TEACHER:** Now let's see how to represent what we just did on our record sheets. We started with the 17 wild things acting wild in the rumpus. Let's put those 17 wild things on our board. Remember, we record with the same place value that our number reads.

**AZULITO:** That would be one ten and seven ones. Got it!

**TEACHER:** Do I have enough ones to remove nine of them? No, but I can TRADE, EXCHANGE, REGROUP.

I traded in my ten for ten ones. I can show that by circling my ten (*do so*), then putting my arrow over to the ones, and TRADING, EXCHANGING, REGROUPING that ten for ten ones. (*do so*)

No, can I remove the nine wild things from my board? Yes I can. Just like other subtraction models, I can mark out the ones I'm subtracting. (*do so*)

And how many wild things are still acting wild in the rumpus? Eight!

Let's represent what the base ten board shows in numbers. No tens (*zero*) and 8 ones (8).


And we write the number sentence to show our model as 17 subtract 9 equals 8 (*write*).

**AZULITO:** That was really cool! And look how the numbers in our number sentence line up just like our model did – no tens and eight ones.

**TEACHER:** Right you are, Azulito. Once again,  $17 - 9$  is a basic fact. Everyone will learn this so we won't need to go through this process to find this answer; but it makes it easy to think about the process with a fact we know. Now, I think you have something else that's cool, right?



**Unit 3, Lesson 1**  
**TV Lesson - continued**

1<sup>st</sup> – 2<sup>nd</sup>  


**AZULITO:** Oh, yes I do! In the Measurement Lab today, the boys and girls were comparing the wild trees that might have been growing in Max's bedroom. I want to know how they solved that. (*Read the assignment.*)

**TEACHER:** Great task! It will be interesting to see if everyone compared the same way, Azulito! And now, let's see what we accomplished today during our lesson.

Objectives: And now before we go, let's review what we have learned today! (*do so*)



### BLM Unit 3, TV Lesson 1

### Max and Wild Things

One sheet per student

#### Materials:

- Base ten sets – 15 tens, 20 ones
- Wild Things Story Board
- Max and Wild Things Problem Sheet



1. Max tamed the wild things by saying “Be still!”  
9 of the wild things rolled their eyes. 8 of the wild things gnashed their teeth, but they all were still. How many wild things were still?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

2. “Let the wild rumpus start!” Max cried! All 17 of the wild things began to dance, or swing from branches of the trees, or jump up and down at the moon. Pretty soon, though, 9 of the wild things tired and sat down. How many were still acting wild in the rumpus?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

## BLM Unit 3, TV Lesson 1

## Max and Wild Things

One sheet per student

### Materiales:

- Juegos de base diez - 15 decenas, 20 unidades
- Guión gráfico de Cosas Salvajes
- Hoja de problemas de Max y las Cosas Salvajes #2.



1. Max domesticó a las cosas salvajes diciendo “¡Quédate quieto!”. 9 de las cosas salvajes pusieron sus ojos en blanco. 8 de las cosas salvajes rechinaron los dientes, pero todas se quedaron quietas. ¿Cuántas cosas salvajes se quedaron quietas?

Modelos base diez

Diez	Unos

Representación de números

Diez	Unos

Oraciones numéricas

3. “¡Que empiecen los festejos salvajes!” gritó Max. Todas las 17 cosas salvajes empezaron a bailar, o a columpiarse de las ramas de los árboles, o a saltar hacia la luna. Sin embargo, muy pronto 9 de las cosas salvajes se cansaron y se sentaron. ¿Cuántas seguían actuando de manera salvaje en los festejos?

Modelos base diez

Diez	Unos

Representación de números

Diez	Unos

Oraciones numéricas

**Literature Vocabulary**

mischief  
gnashed  
wild  
tame  
rumpus  
terrible  
vine  
forest

**Math Vocabulary**

regrouping  
exchanging  
trading

**Repeated Vocabulary**

comparing  
more than  
less than  
fewer than

**TV Materials:**

- Wild Thing Story Board as amended in TV lesson – 1 per student from TV
- Base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- BLM Max and Wild Things #2 – 1 per student
- BLM Teacher KEY

**ELPS** (*English Language Proficiency Standard*)

**1E, 3B, 3F, 5A, 5B**

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.2., I.C.3., II.B.1., II.B.2.  
ELA I.A.1., I.A.2., II.B.1., III.B.1., III.B.2  
MATH I.B.1., I.C.1., II.A.1., IX.A.1

**Technology**

<http://www.roomrecess.com/pages/BlockBuster.html>. Fast moving

**Unit 3, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up****Math Objectives**

- Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.

**Language Objectives**

- Listen and speak with a partner during our math activity.
- Explain how the base ten model relates to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

**Practice and Application, Math**

Before we start our problems, can anyone tell me what **EXCHANGE, TRADE, REGROUP** mean? (*Accept all reasonable answers and from all volunteers – encourage students to extend the definition and examples.*) Yes, these words can be used when we are working to add and subtract in our grade band. Lesson 2 these will really be handy words!

Now, let's solve two more problems.

(*Use the same format as the TV Teacher used to solve the two problems.*)

**Format:**

- Read the story for the Math Movie and have volunteers tell the class that they saw in their minds as you read the story.
- Model the problem using the base 10 blocks.
  - How should we represent that number?
  - Are we joining or separating? Adding or subtracting?
  - Do the operation.
  - What do we have on our board?
  - Do we have 10 or more in the ones column?
  - What can we do?
  - Do we have enough ones so that we can subtract the wild things from here?
  - What can we do?
  - Do we still have the same number of wild things on the board?
- Let's draw what we just modeled (*same questions, just using the drawings as did the TV Teacher*).
- How do we represent the answer in numbers?

game to find fact families.

Either of the two suggested sites could be a self-checking center activity.

## Unit 3, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Follow-up - continued

What number sentence represents what we just modeled?

I'm going to go a step farther. This is another basic fact. What are the fact family and relate number sentences for this fact?

*(Repeat process for 2<sup>nd</sup> problem.)*

### Math Journal Writing

*Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.*



**Explain how to find the difference 13 – 6 with base ten blocks.**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

**BLM Unit 3, TV Lesson 1**

One sheet per student

**Max and Wild Things #2** 



**Materials:**

- Base ten sets – 15 tens, 20 ones
- Wild Things Story Board
- Max and Wild Things Problem #2 Sheet

1. When Max was made king of all wild things, 16 wild things stood in front of him. Nine of them bowed. How many wild things did not bow?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence & Fact Family

--


2. When Max had to go and said “NO” to being their king, 7 wild things roared their terrible roars and 8 of them showed their terrible claws to show how sad they were that Max was leaving. How many wild things showed how sad that Max was leaving?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence & Fact Family

--


Una hoja por estudiante

**Materiales:**

- Juegos de base diez - 15 decenas, 20 unidades
- Guión gráfico de Cosas Salvajes
- Hoja de problemas de Max y las Cosas Salvajes #2.



1. Cuando Max se convirtió en rey de todas las cosas salvajes, 16 cosas salvajes se pararon frente a él. Nueve de ellas se inclinaron. ¿Cuántas cosas salvajes no se inclinaron?

Modelos base diez

Tens	Ones

Representaciones numéricas

Tens	Ones

Oración numérica y familia de hechos

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2. Cuando Max tuvo que ir y decir “NO” a ser su rey, 7 cosas salvajes rugieron sus terribles rugidos y 8 de ellas mostraron sus terribles garras para demostrar lo tristes que estaban de que Max se fuera. ¿Cuántas cosas salvajes mostraron que estaban tristes de que Max se fuera?

Modelos base diez

Tens	Ones

Representaciones numéricas

Tens	Ones

Oración numérica y familia de hechos

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BLM Unit 3, TV Lesson 1  
Teacher only

TEACHER KEY 

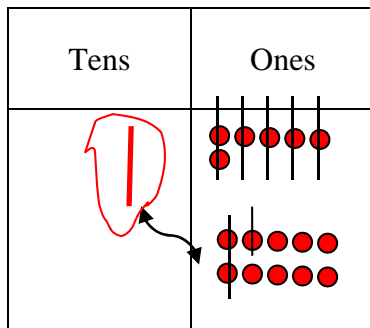


Materials:

- Base ten sets – 15 tens, 15 ones
- Wild Things Story Board
- Max and Wild Things Problem #2 Sheet

1. When Max was made king of all wild things, 16 wild things stood in front of him. Nine of them bowed. How many wild things did not bow?

Base Ten Models



Number Representation

Tens	Ones
<b>0</b>	<b>7</b>

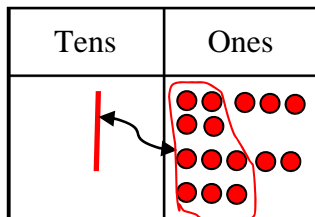
Number Sentence & Fact Family

$$\begin{array}{r} 16 \\ -7 \\ \hline 9 \end{array}$$

$$\begin{array}{l} 7 + 9 = 16 \\ 9 + 7 = 16 \\ 16 - 7 = 9 \\ 16 - 9 = 7 \end{array}$$

2. When Max had to go and said “NO” to being their king, 7 wild things roared their terrible roars and 8 of them showed their terrible claws to show how sad they were that Max was leaving. How many wild things showed how sad that Max was leaving?

Base Ten Models



Number Representation

Tens	Ones
<b>1</b>	<b>5</b>

Number Sentence & Fact Family

$$\begin{array}{r} 15 \\ -7 \\ \hline 8 \end{array}$$

$$\begin{array}{l} 7 + 8 = 15 \\ 8 + 7 = 15 \\ 15 - 7 = 8 \\ 15 - 8 = 7 \end{array}$$



### Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths and halves).
- Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

### Language Objectives

- Explain why each portion is a fourth/ half
- Share-write what is a fourth or a half.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the parts.

### Vocabulary

half, halves  
fourth, fourths  
fair shares  
equal pieces

### STUDENT ACTIVITY (per partner pair):

- **BLM** Dill Pickle Fractions
- 1 big dill pickle
- 2 Paper plates
- Plastic knife
- 2 paper towels
- 2 scissors
- 2 rulers and 2 markers
- 2 glue sticks
- Chart paper with question: **How do you know that each portion is half?** Put a copy of the record sheet at the top of the chart with the question.

## Unit 3, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

### Snack Fractions

*As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.*

Today you are going to share a big dill pickle, but you are going to pretend that there are FOUR of you to share the pickle.

- If you were sharing with four, what would your fractional part of the pickle be? (*one-fourth, or one out of four pieces*)
- If a dill pickle is your favorite snack, would you rather than 1/2 of a pickle or 1/4 of a pickle? Explain your thinking.

**Record Sheet:** Before really sharing the pickle with a partner, decide how to share the paper pickle into fourths. Cut out your portion of the paper pickle, and glue it to the picture of the paper plate.

**SNACK Eating:** (*Now tell the partners that they may each have half of the snack.*)

How much will each of you receive? (*one-half*)

Which is the greater amount of the snack, one-fourth or one-half?

(*response*) How do you know? (*The half is larger. The more pieces I cut the pickle into, the smaller the pieces get.*)

### Snack Fraction Writing: Dill Pickle Fractions



My name is \_\_\_\_\_

This is my plate and my fair share of the snack if I am cutting into 4 equal pieces.

My share of the pickle would be \_\_\_\_\_ .

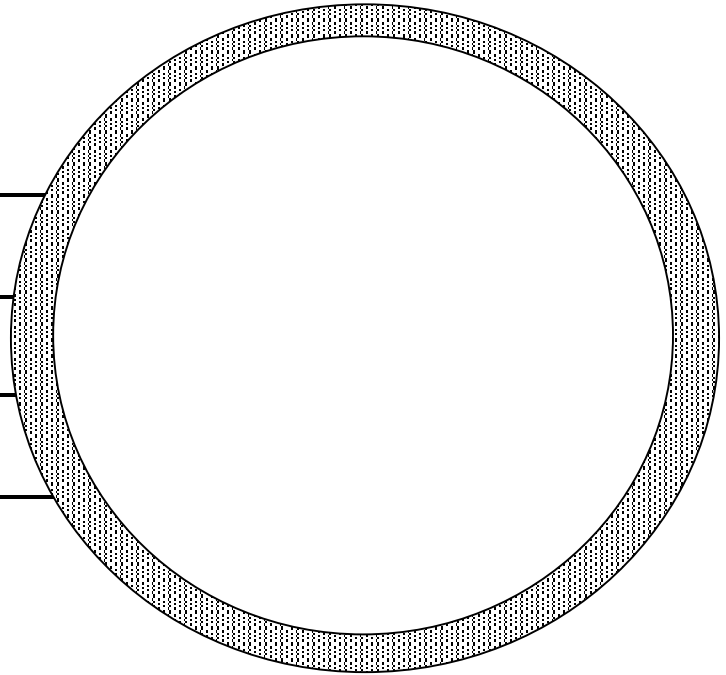
We call this fractional piece a \_\_\_\_\_  
because...

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

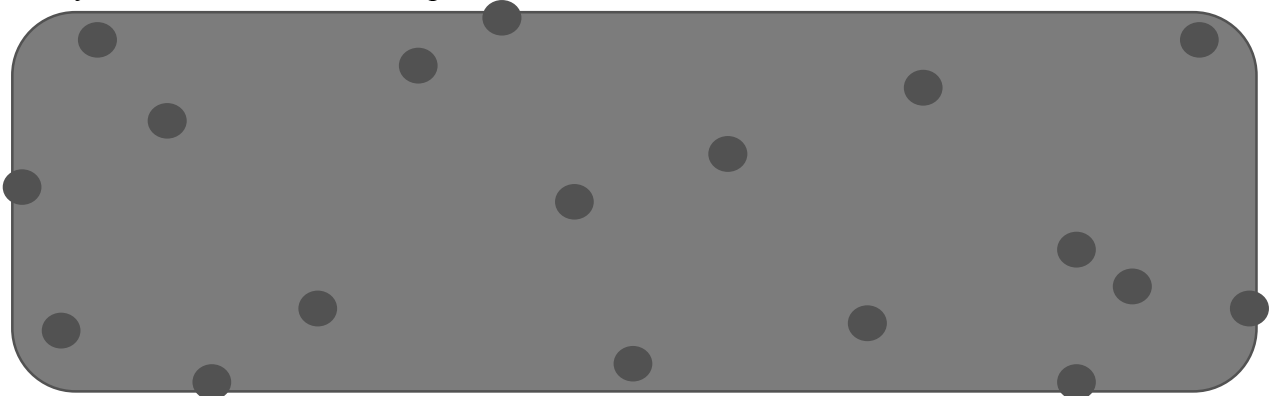
\_\_\_\_\_



This is how I write this fraction in numbers: \_\_\_\_\_



Cut out the pickle below. Divide the paper pickle into fourths, or four equal pieces.  
Glue your fair share to the snack plate above.



Mi nombre es \_\_\_\_\_

Esto es mi plato y mi porción igual del refrigerio si lo divide en cuatro partes iguales. \_\_\_\_\_

Mi porción del pepinillo es \_\_\_\_\_ .

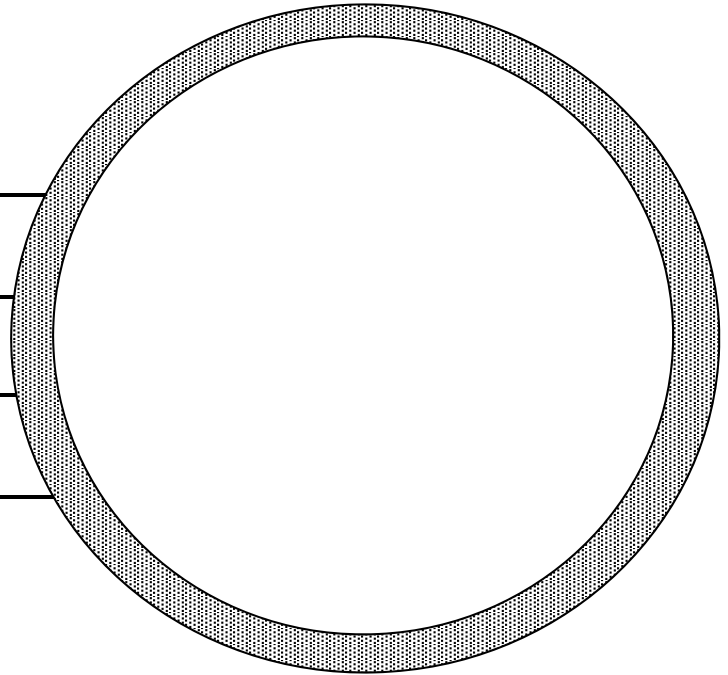
Llamamo esta parte fraccionaria \_\_\_\_\_  
porque...

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

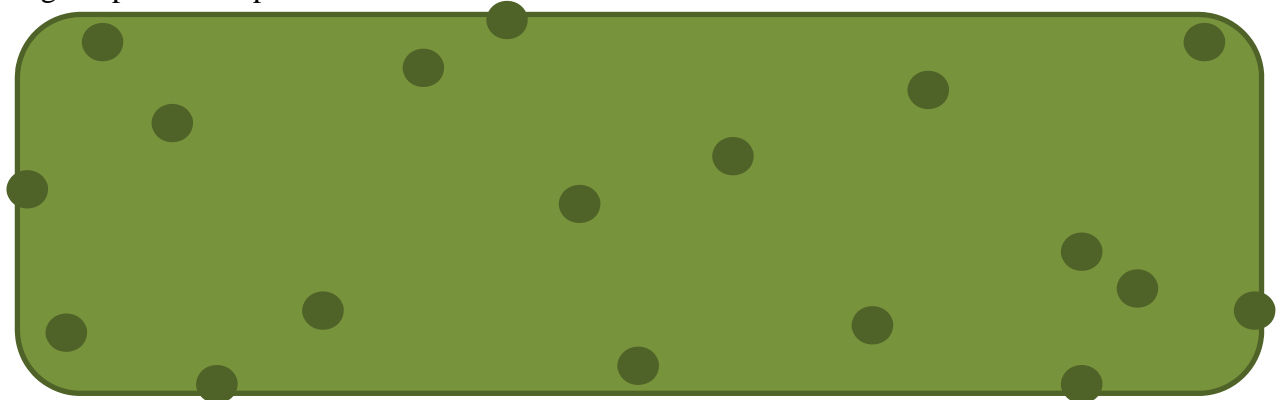
\_\_\_\_\_



Así se escribe esta fracción con números: \_\_\_\_\_



Corte el pepinillo abajo. Divida el pepinillo en cuartos, o cuatro partes iguales.  
Pega tu parte en el plato arriba.



**Family Fun, Unit 3 Lesson 1** 

Our book for this unit is *Where the Wild Things Are*.

My favorite part is \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_.

In math we learned about comparing, and we learned about regrouping. I can show you how to add  $27 + 15$ .

Thank you for helping me learn math!

\_\_\_\_\_

**WHERE THE WILD THINGS ARE**



STORY AND PICTURES BY MAURICE SENDAK

**Family Fun, Unit 3 Lesson 1** 

El libro para esta unidad es *Donde viven los monstruos*.

Mi parte favorita es \_\_\_\_\_

\_\_\_\_\_.

En la clase de matemáticas aprendimos como comparar, cambiar, reagrupar e intercambiar. Te puedo mostrar como sumar  $27+15$ .

¡Gracias por ayudarme aprender matemáticas!

\_\_\_\_\_

**WHERE THE WILD THINGS ARE**



STORY AND PICTURES BY MAURICE SENDAK





**Materials**

- 50 base ten units per student
- Unknown Quantity Cards
- **BLM CGI Problems Unit 3** – teacher only
- **BLM Wild Thing Trees #2** – 1 per student
- **BLM Teacher Guide and KEY**

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy Language Objectives**

- Listen, read and write to understand problems and explain solution strategies

**TEKS****Lessons 1, 2, 3**

- 1<sup>st</sup> – 1.3B; 1.5D
- 2<sup>nd</sup> – 2.4C; 2.7C

**ELPS (English Language Proficiency Standard)**

1E, 2D, 2G, 2H, 3B, 3D, 3F

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1., I.C.1., II.A.1., II.A.4

ELA II.A.2., II.A.3., II.B.1., III.B.2

MATH I.A.1., IV.A.1., IV.B.1., V.A.1., VI.C.2., VIII.A.4

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following assessment items:)

1<sup>st</sup> - 1, 2, 3, 4, 5, 6, 82<sup>nd</sup> - 1, 2, 3, 4, 5, 6, 7**Unit 3, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Daily Routine**

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – 25
  - **Lesson 2 - 50**
  - Lesson 3 – 75
- **CGI Problem**
  - Lesson 1 – Join, Change Unknown (*2<sup>nd</sup> item 5*)
  - **Lesson 2 – Compare, Difference Unknown** (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
  - Lesson 3 – Part Whole, Whole Unknown (*1<sup>st</sup> item 3ab*)
- **What’s Missing** (*1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction*)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Teacher questions might include: Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)\*\*
  - Lesson 1 – Wild Thing Trees #1
    - BLM Wild Thing Trees #1
    - BLM Teacher Guide and KEY
  - **Lesson 2 – Wild Thing Trees #2**
    - **BLM Wild Thing Trees #2**
    - **BLM Teacher Guide and KEY**
  - Lesson 3 – Wild Thing Trees #3
    - BLM Wild Thing Trees #3
    - BLM Teacher Guide and KEY

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

## Unit 3, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

#### Azulito's Corner

##### Unit 3, Lesson 2 – CGI

List two or three strategies that were used in your room today to solve the CGI problem.

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – Which wild thing do you like best?
    - **BLM Wild Things**
  - **Lesson 2 – none**
  - Lesson 3 – How many nickels do you think are in the jar? *(Have a plastic screw lid jar with 43 nickels in it – bar graph with choices: less than 25, 25 to 75, 75 - 100, more than 100. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by grouping in tens and ones.)*

#### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**Assessment Items 1<sup>st</sup> grade, #8 and 2<sup>nd</sup> grade, #7 will be reviewed daily in Snack Fractions.**

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

#### Vocabulary Building

Choose an activity listed in the Daily Routines section.

**Partner 2 Problem**

**Name** \_\_\_\_\_ **Date** \_\_\_\_\_

- There were 56 mice on the farm. Nine of them lived near the piggies in the barn. Twelve of them lived with the horses in the barn. The rest of them lived in the barn loft. How many mice lived in the barn loft?

<b>Problem Solution</b> Name:	<b>Problem Verification</b> Name:

**Partner 2 Problem**

Name \_\_\_\_\_ Date \_\_\_\_\_

- Había 56 ratones en la granja. Nueve de ellos vivían cerca de los cerditos en el granero. Doce de ellos vivían con los caballos en el granero. El resto de ellos vivía en el altillo del granero. ¿Cuántos ratones vivían en el altillo del granero?

<b>Solución del problema</b> Nombre:	<b>Verificación de la solución</b> Nombre:

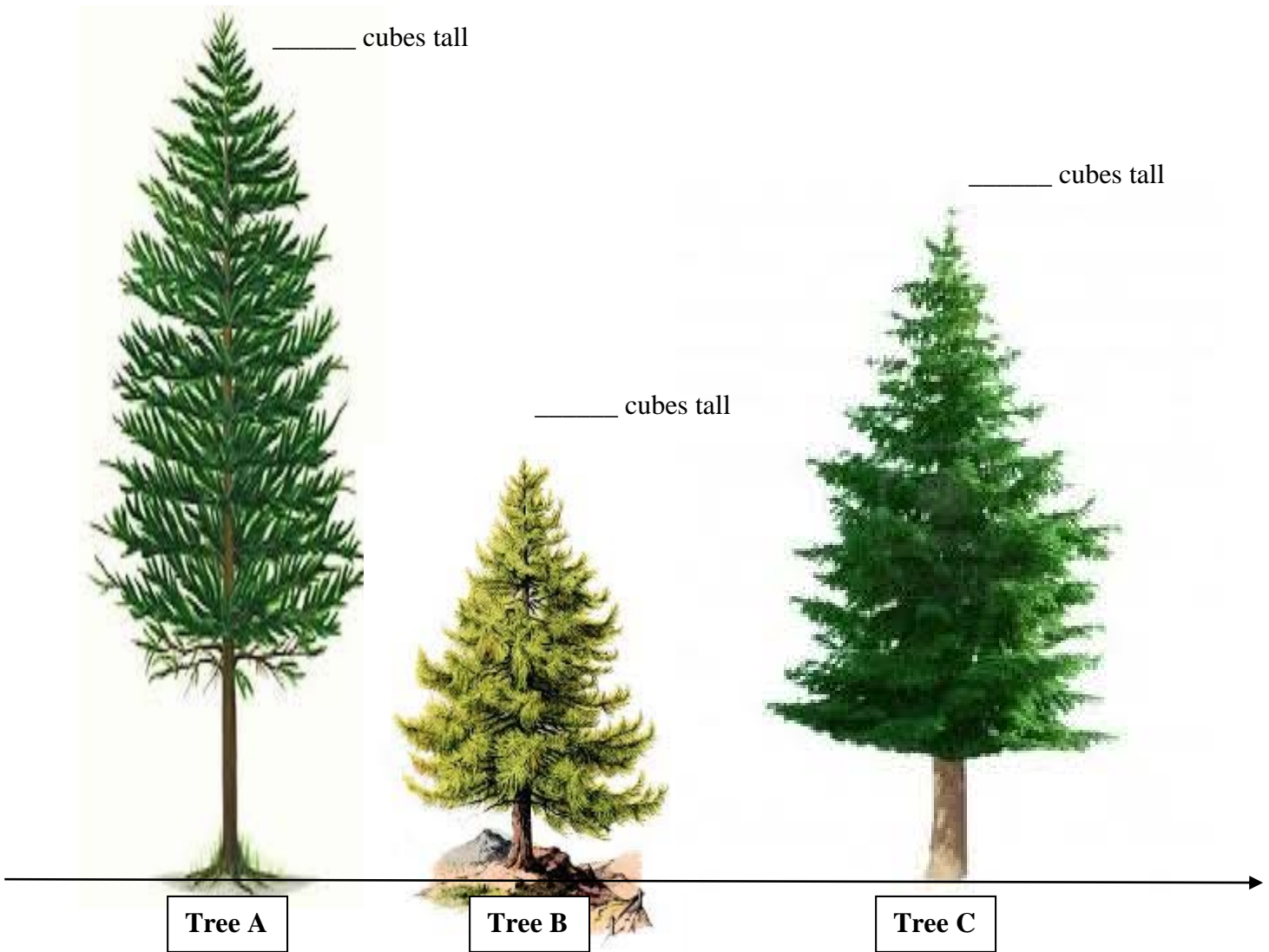
One sheet per student

### Compare the height of these three trees.

Tree \_\_\_\_ is the tallest tree. It is \_\_\_\_ cubes tall. ( \_\_\_\_ tens and \_\_\_\_ ones)

Tree \_\_\_\_ is the middle size tree. It is \_\_\_\_ cubes tall. ( \_\_\_\_ tens and \_\_\_\_ ones)

Tree \_\_\_\_ is the shortest tree. It is \_\_\_\_ cubes tall. ( \_\_\_\_ tens and \_\_\_\_ ones)



There is a fourth tree that you do not see. It takes 6 cubes to measure. How many fewer cubes does the fourth tree take to measure than Tree A? \_\_\_\_\_ cubes

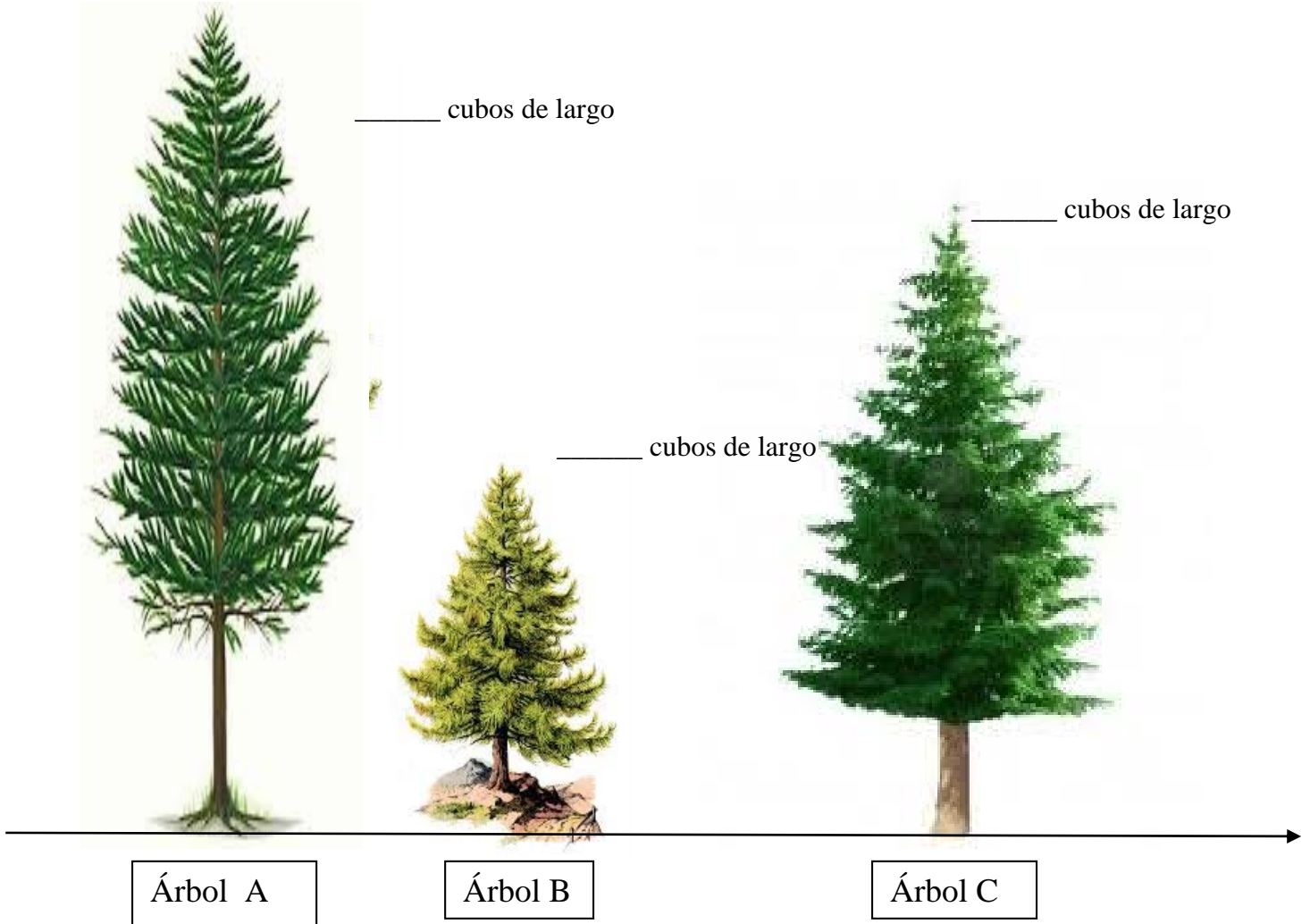
One sheet per student

### Compara la altura de estos tres árboles.

El árbol \_\_\_\_ es el árbol más alto. Mide \_\_\_\_ cubos de alto. ( \_\_\_\_ decenas y \_\_\_\_ unidades)

El árbol \_\_\_\_ es el árbol de tamaño mediano. Mide \_\_\_\_ cubos de alto. ( \_\_\_\_ decenas y \_\_\_\_ unidades)

El árbol \_\_\_\_ es el árbol más bajo. Mide \_\_\_\_ cubos de alto. ( \_\_\_\_ decenas y \_\_\_\_ unidades)



Hay otro árbol que no puedes ver. Se necesita 6 cubos para medir. ¿Cuántos cubos menos se necesita para medir este árbol que Árbol A? \_\_\_\_\_ cubos

**GUIDE**

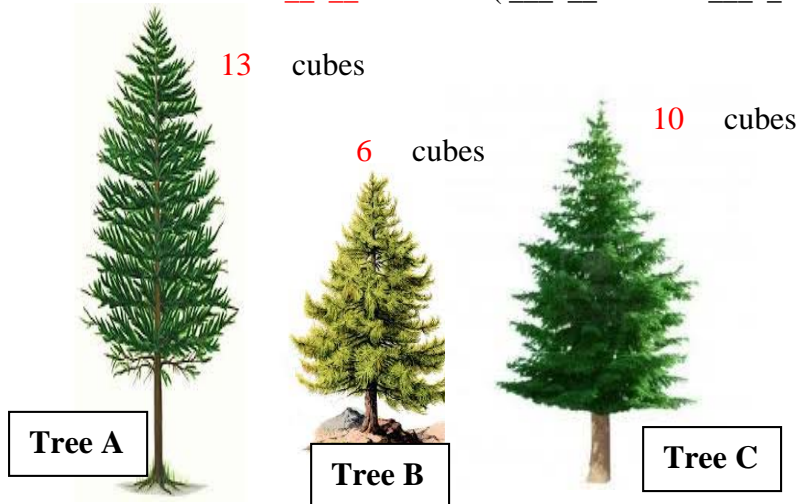
- There are three trees which students must measure this time. Circulate the room to see if they can measure on their own, offering help as needed. Students should label each tree with its height on the line provided.
- When all have measured, ask them to find the tallest tree. (*Tree A*) How many cubes did it take to measure it? (*13 cubes*) How many groups of tens are there? (*1*) and the left over cubes are our ONES. How many ones are there? (*3*) One ten and three ones equals, or is the same as, 13.
- Which is the SHORTEST tree? (*Tree B*) How many cubes did it take to measure it? (*6 cubes*) How many groups of tens are there? (*0*) and the left over cubes are our ONES. How many ones are there? (*6*) No tens and six ones equals or is the same as 6.
- How would you compare the height of Tree C to the other two trees? (Not as tall as A, but taller than B) This tree is the middle size tree. We can complete that sentence (do so). How many cubes did it take to measure it? (*10 cubes*) How many groups of tens are there? (*One* and the left over cubes are our ONES.) How many ones are there? (*0*) One ten and no ones equals, or is the same as, 10.
- There is a problem at the bottom of the page. Let me read it to you and you listen for the math movie as I read it (do so). What are we being asked to do? (Find the height of the tree we cannot see.) Well, if we can't see it, how can we find the height? Let me read the story again, then you and a partner decide how you will determine the height of tree you cannot see. (*Circulate the room listening to strategies. Ask students to share their strategies, then have the class solve the problem.*)

**KEY** Compare the height of these three trees.

Tree **A** is the tallest tree. It is **13** cubes tall. ( **1** tens and **3** ones)

Tree **C** is the middle size tree. It is **10** cubes tall. ( **1** tens and **0** ones)


Tree **B** is the shortest tree. It is **6** cubes tall. ( **0** tens and **6** ones)



There is a fourth tree that you do not see. It takes 8 cubes to measure. How many fewer cubes does the fourth tree take to measure than Tree A? **5** cubes. *Strategies could include using cubes to compare or basic facts.*





<p><b>Literature Selection</b> <i>Where the Wild Things Are</i> by Maurice Sendak</p> <p><b>Materials</b> <b>Language Lesson</b></p> <ul style="list-style-type: none"> <li>• BLM Word Cards</li> <li>• Students’ Illustrating the text activity from lesson 1</li> <li>• Shared reading text prewritten on chart paper.</li> </ul> <p><b>Materials for Transition to Math Lesson</b></p> <ul style="list-style-type: none"> <li>• Base ten set – 1 per student <ul style="list-style-type: none"> <li>○ 15 tens</li> <li>○ 20 units</li> </ul> </li> <li>• BLM TM Sample Problem – teacher only</li> <li>• BLM TM Answer Choice Cards – 1 set of 4 per student on cardstock</li> <li>• BLM TM Picture This– 1 per student</li> <li>• BLM TM Teacher Key</li> </ul> <p><b>Literature Vocabulary</b> mischief gnashed wild tame rumpus terrible vine forest</p> <p><b>Math Vocabulary</b> regrouping exchanging trading</p> <p><b>Repeated Vocabulary</b> comparing more than less than fewer than</p> <p><b>ELPS</b> (<i>English Language Proficiency Standard</i>) 2B, 2E, 2G, 3I, 4E, 4J</p>	<p><b>Unit 3, Lesson 2</b>      1<sup>st</sup> – 2<sup>nd</sup></p> <p><b>Classroom Lesson</b> </p> <p><i>Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.</i></p> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.</li> </ul> <p><b>Reading Objectives</b></p> <ul style="list-style-type: none"> <li>• Visualize what is happening in a story.</li> <li>• Recognize words in a text and develop reading fluency.</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Use vocabulary to retell the story.</li> <li>• Understand and locate unit vocabulary words in a shared reading text.</li> </ul> <p><b>BEFORE READING</b> <b>Practice and Application, Vocabulary</b> Review vocabulary words on word wall.</p> <p><b>Play Mystery Word Game</b></p> <ul style="list-style-type: none"> <li>• Display and read a vocabulary word from the word wall. Have students repeat the word aloud. Repeat for each word.</li> <li>• Gather the words cards. Place them face down so no one can see them.</li> <li>• Choose one word at random and make a big show of sneaking a look at the word without letting students see it.</li> <li>• Give students clues to help them guess the mystery word. Clues can emphasize meaning and/or spelling.</li> <li>• Students can write down their guess or give it orally. If responding orally, students should be given time to think and instructed not to respond until signaled to do so.</li> <li>• Teacher can give multiple clues before revealing the mystery word.</li> </ul> <p>Show students the cover of the book. Ask, “What is the title of the book we read yesterday?” Review vocabulary words on the word wall. Ask students to use a vocabulary word to describe an event from the story. Use the Rug Partner Routine.</p> <p>Be sure to circulate while students are talking to assess whether or not they are using the vocabulary words correctly. Encourage to students to use the text if they need help using the word in a sentence.</p>
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**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR II.A.2., II.A.4., II.A.5

ELA II.A.4., II.A.5., II.A.6., II.A.8., II.B.1., III.B.2.

**Language Center Connection**

Put extra sets of the vocabulary word cards in a language center.

Students can write a sentence using the word.

Students who are just beginning to learn how to write can practice tracing each word in a tray filled with sand.

**Listening Center Connection**

After today’s reading, you can have all students listen to the English version of the story.

Encourage them to identify their favorite part of the story. Have them record themselves reading aloud that particular part (before practicing at the listening center). Then, have them listen repeatedly to that particular part, each time reading along more and more until they feel comfortable with the text. At the end, they can record themselves reading it aloud again. You can use this as an assessment to compare improvements in reading fluency and decoding.

**Unit 3, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson** - continued



Regroup the class and have several students share. Rephrase what students say, as needed. Emphasize the vocabulary words as you speak in a natural way. Point to the words on the interactive word wall. As students share, you can also point to those parts in the book so they connect the oral language with the illustrations.

Show students the cover of the book. Ask, “What is the title of the book we read yesterday? What happened in this book? Turn and talk to your rug partner.”

Circulate while students are talking to see what kind of language they are using. Are they using any of the literature vocabulary words?

Regroup the class and have several students share. Paraphrase what students say, as needed, to include more detail and key vocabulary words. Emphasize the vocabulary words as you speak, in a natural way. You can point to the words on the interactive word wall. As students orally share, you can also point to those parts in the book so they connect the oral language with the illustrations.

**DURING READING**

**Comprehensible Input, Literature & Vocabulary Read Aloud**

Today’s reading is another chance for students to envision what is happening in each part of the story. You will pause your reading in the two places where students drew illustrations of what they were imagining in the text, and discuss how specific details from the text gave them a picture of what was happening.

Today’s reading is also an opportunity for them to hear a more fluent reading of the text, without as many pauses as the Lesson 1 reading.

Pgs. 7-12

*That very night in Max's room a forest grew and grew and grew, until his ceiling hung with vines and the walls became the world all around.*

- Pause after you read this part of the story. Share half of your students’ illustrations of this part. Ask students what specific details from the text they see in the illustrations, and discuss as a class. Set these pages aside; you’ll be sharing examples from other students for the next excerpt.

**Unit 3, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson** - continued



Pgs. 17-18

When Max came to the place where the wild things are, they roared their terrible roars and gnashed their terrible teeth and rolled their terrible eyes and showed their terrible claws.

- Pause after you read this part of the story. Share the other half of your students’ illustrations of this part. Ask students what specific details from the text they see in the illustrations, and discuss as a class.

**AFTER READING**

**Practice and Application, Literature & Vocabulary**

**Shared Reading**

Show students the following Shared Reading text written on chart paper. The text is the second excerpt from the “Illustrating the Text” activity.

When Max came to the place where the wild things are, they roared their terrible roars and gnashed their terrible teeth and rolled their terrible eyes and showed their terrible claws.

**Language Center Connection**

Put extra copies of the Shared Reading text in a language center, and give students different challenges, depending on their age/reading level. For example:

- Circle the periods/commas.
- Circle all of the capital letters.
- Color/highlight or underline certain key words.
  - terrible
  - wild
  - gnashed
  - Max
- Color/highlight or underline certain high frequency words.
  - the
  - to
  - are
  - and

- Read aloud the excerpt to the class, tracking with your finger as you read. Read at a pace that is just a bit slower than your normal reading so students have a chance to follow along with their eyes.
- Tell students they’re going to help you find certain words in the text.
  - a. First, ask them to find the three vocabulary words in the text. To scaffold this more, tell students the words one by one, and have them search the text for that specific word. Highlight the three vocabulary words in a color, such as yellow: *wild, terrible, gnashed.*
  - b. Next, ask students to locate Max’s name in the text. What letter does it start with? /M/ax. Right, Max begins with the letter M. What letter does it end with? Ma/x/. Right, the letter X. Let’s put a circle around Max’s name. Do you notice anything else about Max’s name? It begins with a capital letter. Names always begin with a capital letter.
  - c. Finally, ask students to find the words, wild things. Once they locate them, explain that the author uses the word *they* to refer to the wild things later on in the sentence, instead of repeating *wild things* over and over again. Have students find the word *they* in the text. Highlight the words *wild things* and *they* in the same color.

## Unit 3, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



**Note:** Pronouns like *they* are called referents. They refer to someone (*or something*) that has been identified in an earlier part of the text. Referents can get very confusing, especially for young readers and for ELLs, because they don't necessarily realize who/what the referent is talking about. (*Who are "they"?*) Helping students understand referents greatly improves reading comprehension.

- Have students read the text with you multiple times. This is a more complicated text, and will be difficult in particular for many 1<sup>st</sup> graders. However, you can certainly help students chime in on the highlighted/circled parts they helped find. To do this, read aloud the text and pause just enough at the highlighted parts so students can chorally chime in with you.

The more times you reread this sentence with students, the more parts they will be able to read along with you, including words that aren't highlighted. Student participation will also vary due to the range of reading levels in your classroom. But, the beauty of a shared reading is that all students can participate in a way that extends their current reading ability.

When Max came to the place  
where the **wild things** are,  
**they** roared their **terrible** roars  
and **gnashed** their **terrible** teeth  
and rolled their **terrible** eyes  
and showed their **terrible** claws.

**Math Objectives:**

Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.

**Materials for TM Lesson**

- Base ten set – 1 per student
  - 15 tens
  - 20 units
- **BLM TM** Sample Problem – teacher only
- **BLM TM** Answer Choice Cards – 1 set of 4 per student on cardstock
- **BLM TM** Picture This– 1 per student
- **BLM TM** Teacher Key

**Math Vocabulary**

regrouping  
exchanging  
trading

**Repeated Vocabulary**

comparing  
more than  
less than  
fewer than

**Technology:**

<http://www.ixl.com/math/grade-1/comparison-word-problems>

Free online game for comparison problems.

**ELPS** (*English Language Proficiency Standard*)

2D, 2E, 3B, 3D, 4D, 4G

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.1., I.B.2., I.C.2

MATH I.B.1., II.A.1., V.A.1., VIII.A.1., VIII.C.1

**Unit 3, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson** - continued**TRANSITION to Math****Building Background, Math**

We have a quick lesson today. All I want you to do is to look at a math movie in pictures and select the number sentence that represents the same math model.

Let's do one together.

What story do you think this picture represents? (*BLM TM Sample Problem – fold the answers to the back for now, showing on the picture.*)



Someone share the story you see in this picture. (*Volunteer responses – collect as many as wish to volunteer – you want them to see eight items add five items which equals or is the same as 13 items. They can make the items be anything they want them to be.*)

Now, use your base ten units to represent that number sentence (*Allow time for students to model, then ask for volunteers to model for the class. Naturally, you want a group of eight cubes and a second group of five cubes. Students should tell you that the two groups together equals or is the same as 13.*)

You have four answer choice cards – A, B, C, D. Everyone show me the answer choice C card; the answer choice A card; the answer choice B card; the answer choice D card. (*Make sure all students can identify the correct answer choice, that they know their letters.*)

I have four number sentences at the bottom of this picture (*open the fold to show the whole page now*).

Which number sentences represents the same math movie as this picture – is it number sentence A, number sentence B, number sentence C, or number sentence D? Look carefully, and when I ask for your answer, raise the answer choice card for your answer. Ready 1-2-3 Answer. (*Check to see if everyone has Answer D.*)

## Unit 3, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued TRANSITION to Math



Are there any questions about what to do? I have a *Picture This* page for each of us.

Distribute the **BLM TM** *Picture This*. For each question, ask students to work by themselves to:

- Look carefully at the picture.
- Select the number sentence that represents the picture.
- Circle your answer choice on your paper.
- When I ask for your answer, show me your answer choice card.
- Finally, ask students to explain how they knew the number sentence represented the picture.

Work through all of the problems on the sheet, then prepare for the TV Lesson.

If you have extra time, run through the Family Fun Game cards from last unit, asking students to explain how they would solve the problem.

**Objectives:** Read the math and language objectives and have students explain how they learned them.

### Distribute TV Lesson Materials

#### TV Materials

Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.

- base ten sets – 1 set per student
  - 15 longs
  - 20 units (or units they already have from measuring)
- Wild Thing Story Board from Lesson 1– 1 per student from
- **BLM** Wild Thing Trading – 1 per student



**A.  $13 - 5 = 8$**

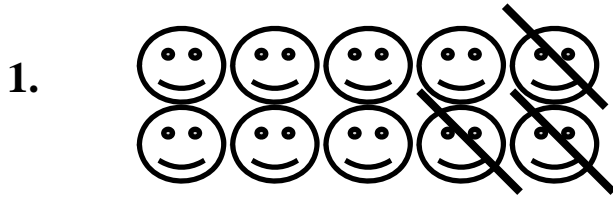
**B.  $8 - 5 = 3$**

**C.  $7 + 8 = 15$**

**D.  $8 + 5 = 13$**





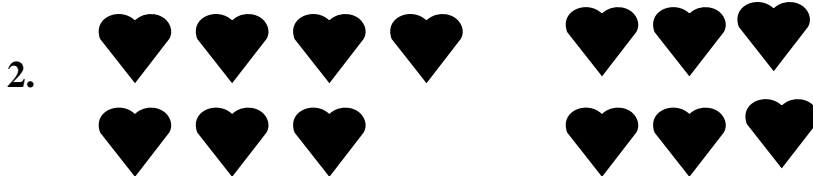


A.  $14 - 4 = 11$

B.  $10 + 3 = 13$

C.  $10 - 3 = 7$

D.  $14 + 3 = 17$

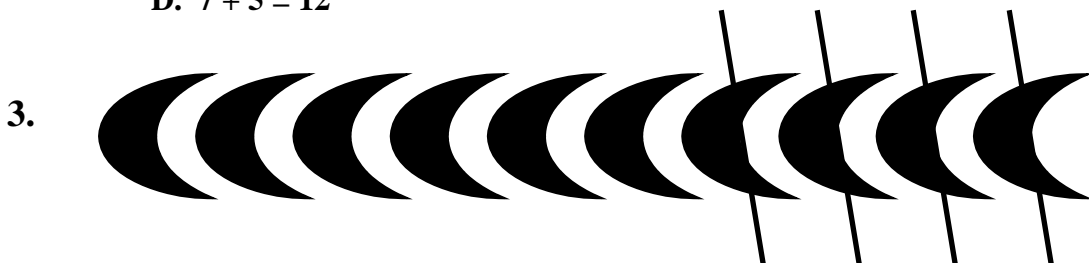


A.  $7 + 6 = 13$

B.  $7 - 6 = 1$

C.  $13 - 7 = 6$

D.  $7 + 5 = 12$

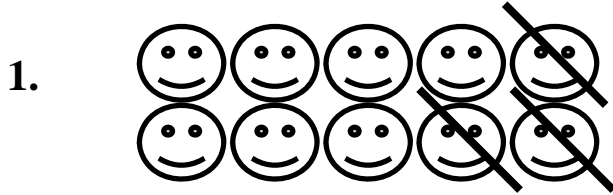


A.  $10 + 4 = 14$

B.  $10 - 4 = 6$

C.  $7 + 4 = 11$

D.  $10 - 3 = 7$



A.  $14 - 4 = 11$

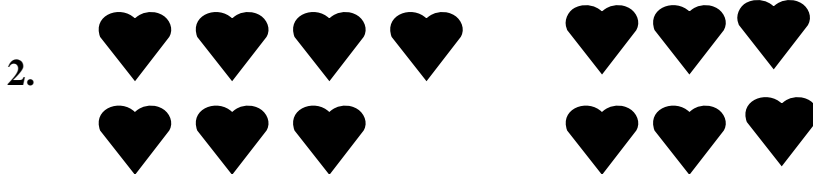
B.  $10 + 3 = 13$

C.  $10 - 3 = 7$

D.  $14 + 3 = 17$

**Format for all problems:**

- Look carefully at the picture
- Select the number sentence that represents the picture.
- Circle your answer choice on your paper.
- When I ask for your answer, show me your answer choice card.
- Finally, ask students to explain how they knew the number sentence represented the picture.



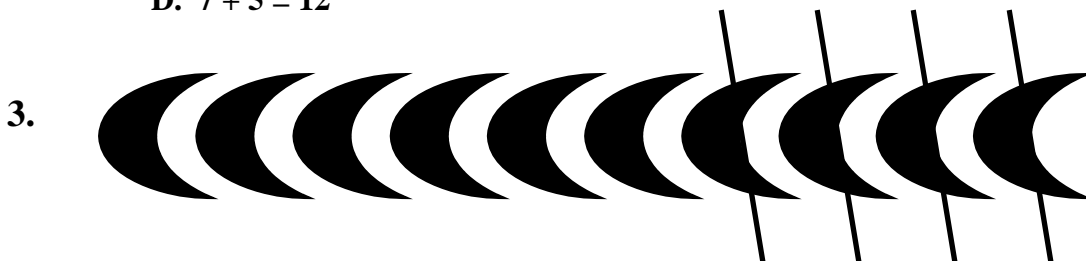
**Pictures can be different, as in the Sample Problem; or they can be the same – as long as the pictures are in separate groups.**

A.  $7 + 6 = 13$

B.  $7 - 6 = 1$

C.  $13 - 7 = 6$

D.  $7 + 5 = 12$



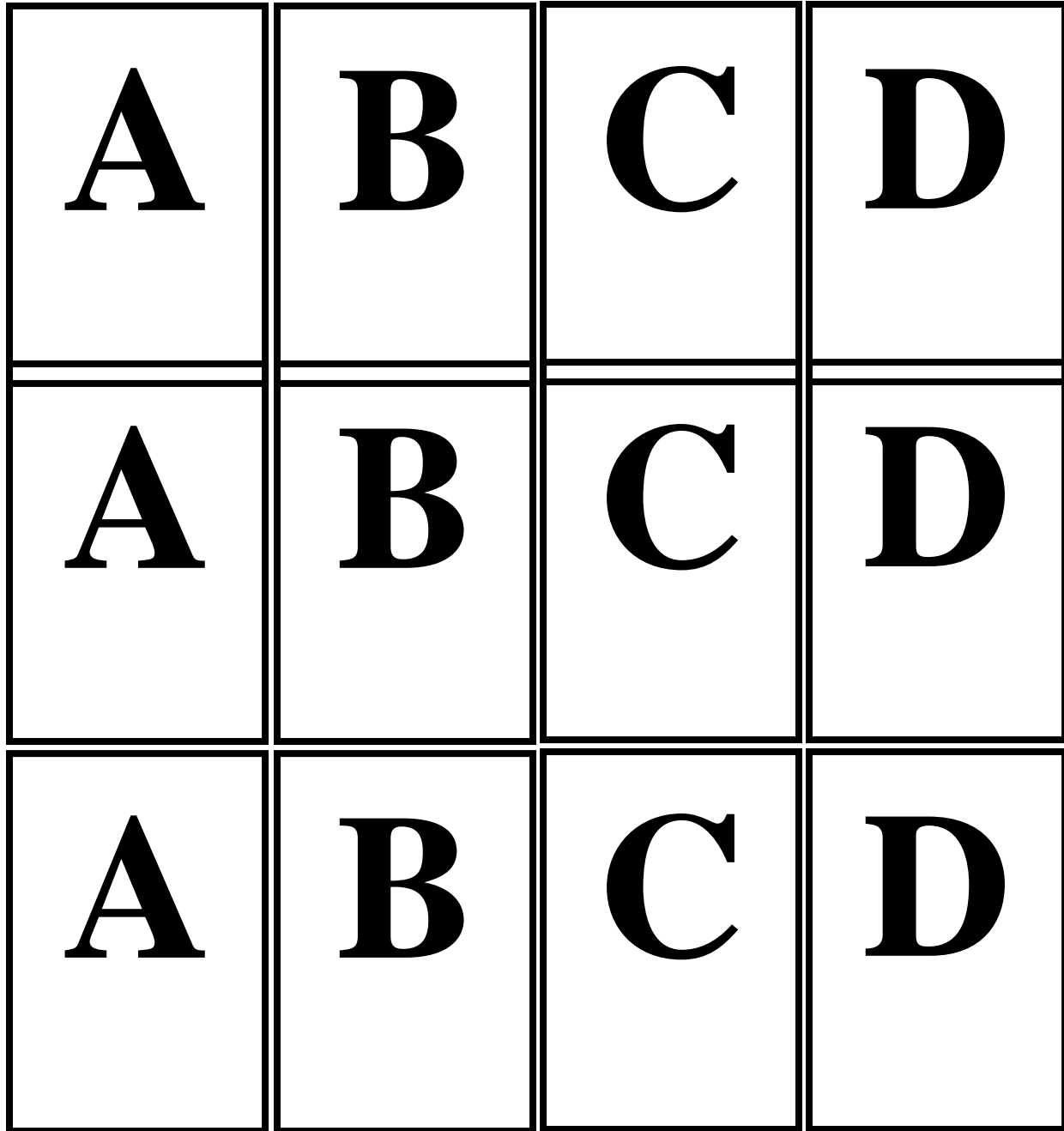
A.  $10 + 4 = 14$

B.  $10 - 4 = 6$

C.  $7 + 4 = 11$

D.  $10 - 3 = 7$

One set per student –Run on cardstock, cut apart and laminate. Cards A, B, C, D comprise a set.





**Literature Vocabulary**

mischief  
gnashed  
wild  
tame  
rumpus  
terrible  
vine  
forest

**Math Vocabulary**

regrouping  
exchanging  
trading

**Repeated Vocabulary**

comparing  
more than  
less than  
fewer than

**TV Materials:**

*Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.*

- base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM Wild Thing Story Board** from Lesson 1– 1 per student from
- **BLM Wild Thing Trading** – 1 per student

ELPS (*English Language Proficiency Standard*)  
1E, 1F, 2G, 3B, 3F, 3I

CCRS (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.C.1., I.C.2., I.C.3., II.A.2., II.A.4.  
ELA II.B.1., II.B.3., III.A.1  
MATH III.B.1., II.B.2..B.1., I.C.1., II.B.1., II.C.1, IV.B.4.

**Unit 3, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives**

- Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.

**Language Objectives**

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to regroup in addition and subtraction.

**Building Background, Math**

**TEACHER:** (*Show supplies as you talk about them and tell students to make sure they have them, too.*) In our lesson1 we used the base ten blocks, the Wild Thing story board that we divided into a side for tens and a side for ones, and a record sheet that allowed us to draw what we had modeled, to show the number sentence, and to write the answer in tens and ones in numbers. We worked on some pretty simple problems for basic facts.

Today we are going to use the same materials in the same way, but we are going to solve more problems beyond basic facts. I think you will really enjoy today!

**AZULITO:** And will we be using our **TRADING, EXCHANGING** and **REGROUPING** vocabulary, too!


**TEACHER:** We certainly will, and I’m going to expect the boys and girls to use those terms, too. You may choose any of the three words to use – just understand that you might hear any of them used in a classroom; so it is good to know them all!

Alright, let’s just solve a number sentence for right now. How about

$$23 + 19$$

**AZULITO:** OK, we are up to this, aren’t we boys and girls! I have my materials ready to go!

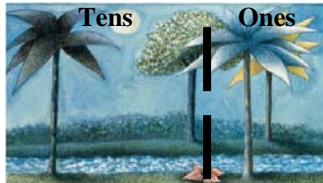
**Unit 3, Lesson 2**  
**TV Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>  





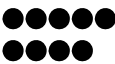
**23 + 19**

 **SMARTBOARD**

Model the story board division and labels.



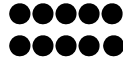


Your Board looks like this but with base ten blocks:

Tens	Ones
	
	

**SMARTBOARD**

Flash vocab words

Tens	Ones
	
	

Tens	Ones

**Comprehensible Input**

**TEACHER:** Super! **23 + 19** Look at 23. Do you see the tens? Do you see the ones?

When we represent a problem at the beginning, we want to use the fewest number of blocks.

How many tens are there? (*pause*) 2

How many ones are there (3)?

What do I use to represent the two tens, and where will I put them?

Please tell your Classroom Teacher. (*pause*)

**AZULITO:** (*pause*) That's easy – we'll use the ten rod, two of them, and we'll put them in the Tens column on our board – see, 10, 20. And the three ones are the little ones cubes. We need three of them and we put them on the ones side of the board (*do so*).

See, I have 23 – 10, 20, 21, 22, 23.

**TEACHER:** Great, now look at the operation sign (*point to addition sign*). This represents the action in the problem. What action does this problem want us to do?

**AZULITO:** Well, add, or join them!

**TEACHER:** Then we need to add the other addend to find the sum. Model the second addend, 19, on your board. (*pause*) What blocks did you use? (*pause*) Did you use one ten and nine ones? Good! 10, 11, 12, 13, 14, 15, 16, 17, 18, 19.

**23 + 19** (*do write horizontally*)


What do you notice when you join the ones? (*pause*)

**AZULITO:** You can **TRADE, EXCHANGE, REGROUP** because you have 10 ones!

**TEACHER:** Exactly. Let's do that. Trade these 10 ones for one ten! And, of course, we need to place the ten rod in the tens column (*do so*). I'm going to place our traded for ten at an angle so we can remember it came from a trade. (*Do so as modeled to the left.*)

4	2
---	---

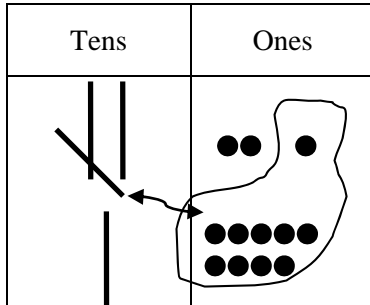
**Unit 3, Lesson 2**  
**TV Lesson - continued**

1<sup>st</sup> – 2<sup>nd</sup>  


Now THAT is an even EXCHANGE!

What do we have on our story boards?  
 How many tens? (4)  
 And how many ones? (2)  
 What is our answer? (42 – count tens and ones as before)  
 Let's write that in our answer box – four tens and two ones.

**Drawing**




Now, Let's draw what we just modeled. Remember that we used sticks and circles in Lesson 1 to represent the tens and one.

Alright, we need to represent our model on the paper board.

**AZULITO:** That would be 23, which is two tens and three ones, and 19 which would be one ten and nine ones (*draw them*).

**TEACHER:** Absolutely correct! We know that we have ten ones that we can trade, so let's do that. How did we show that we **EXCHANGED** in lesson 1? Tell your Classroom Teacher what we should do next. (*pause*)

Fill this algorithm step by step as you talk through the process.

$$\begin{array}{r}
 1 \\
 23 \\
 + 19 \\
 \hline
 42
 \end{array}$$


**AZULITO:** Draw the circle around the ten ones, and put an arrow that tells us that you are REGROUPING the tens ones to make one ten. Draw that one ten in the tens column.

**TEACHER:** Of course! And I think I'll draw my **EXCHANGED** ten at a little slant so I remember where it came from (*do so*).

**AZULITO:** Now it's time for our number sentence, right?


**TEACHER:** Yes, it is, Azulito! Write the number sentence 23 add 19 equals in this vertical form.

- The first thing we did when we started joining the base ten blocks was to join the ones. So let's use what we know about our basic facts to join three and nine. What is the sum of three and nine? (*pause*) I heard it out there – THANKS! The sum is 12.
- Do you see this little cloud I've provided for us? This cloud is like our circle in the paper model. It will help us see our tens and ones. Write 12 in the cloud.
- Which number in 12 represents the ones? (*pause*) Yes, the two. We can record the two in the ones column – look back at our models. Do you see two in the ones column? (*Point to your base ten blocks and to the two dots outside the ten circle.*)

**SMARTBOARD**



Flash vocab words every time they are said throughout the lesson.

**Unit 3, Lesson 2**  
**TV Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>  


**AZULITO:** And just like we did in our models, we **TRADE, EXCHANGE, REGROUP** those tens into one ten.

**TEACHER:** Correct! And I'm going to place that ten in the ten's column like this (*place the one in the tens column*). Do you see that this one in numbers is like our slanted rod or stick in our models – all represent a ten.

Tens	Ones
	




Now, just like we did in both models, we will join our tens together. One ten add two tens add one ten equals what? (*pause*) FOUR!

Our answer is 42, and we found it using objects, and pictures and number sentences!

**AZULITO:** This is really cool! Does this work for subtraction, too?

**TEACHER:** It sure does, Azulito. Here's one we can do together.



$$51 - 23 \text{ (do write horizontally)}$$

Tens	Ones
	 

First, what is the math movie that this operational sign (*point to subtraction sign*) gives us? Tell your teacher whether you are adding or subtracting, joining or separating. (*pause*)

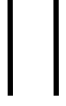

Yes, this time you are separating. We'll start with our 51 blocks, then remove 23 of them.

**AZULITO:** OK, 51 is five tens (*place them*) and 1 one (*place it*). I'm ready to remove those 23 units. Hmm, wait, I only have one unit in my ten's column. What can I do, boys and girls? (*pause*)

Tens	Ones
	

I heard you! We can **TRADE, EXCHANGE, REGROUP!** This time I can trade one of the TENS back to ones because I need them over here. (*Do so with blocks, counting out ten and comparing 10 units to the long rod.*)

**TEACHER:** Let's check – do we still have 51 on the board? (*Count the tens: 10, 20, 30, 40 then the group of tens 50 add unit 51.*)

	
---	---

Now can you remove three ones?

**AZULITO:** Sure! Let's do it boys and girls (*remove three ones*). And the two tens, too! We have 28 left on our board!



Tens	Ones
4	2

Tens	Ones

$$\begin{array}{r}
 4 \quad \text{1} \\
 \cancel{5}1 \\
 -23 \\
 \hline
 28
 \end{array}$$

This little cloud just moves around and helps us regroup where we need it!

## Unit 3, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**AZULITO:** So the answer is 28. We can write that in our answer box – four tens and two ones.

**TEACHER:** Well done! Let’s draw what we just modeled.

**AZULITO:** We had five tens and 1 one. That’s five sticks and one dot (*draw*).

Since this is a subtraction problem, I need to remove 23 from the 51. But I see that I need more ones.

No problem. I can –what are our terms, boys and girls? **TRADE, EXCHANGE, REGROUP** one ten and get 10 ones. This time I will draw a circle around the TEN, and arrow that over to the 10 ones I **TRADED** for it. (*do so*)

**TEACHER:** Now, can you remove the three ones?

**AZULITO:** Sure can, and I’ll use a line to mark them out like we did in lesson 1 and the way the students did in the TM lesson today!

Now I have four tens and eight ones still unmarked on the board. That is my answer!

**TEACHER:** Excellent! Let me show you how we can represent our **TRADE, REGROUP, EXCHANGE** in our number sentence representation.

- I notice that I need more ones if I am going to remove three. So I **TRADE, EXCHANGE, REGROUP** one of the tens for ten ones. I have these 10 ones, and I have the one already here – 10 ones and this 1 one equals 11 ones. Do you remember seeing that on the models – both the base 10 (*refer back*) and the paper drawing (*refer back*)?
- I need to remember that I have **TRADED** a ten, so that only leaves me four tens now in my number sentence, just like it was in the model and drawing (*refer back to both*).
- Now all my **TRADES, EXCHANGES, REGROUPINGS** are done, so I can remove the 23. 11 subtract 3 is 8. 4 subtract 2 is 2. My answer is 28.

**AZULITO:** I notice something about this number sentence. My ones are all lined up, and the ten in the difference is in its own column. Math is so cool – it all makes sense!

**CLASSROOM TEACHERS**

You will most likely have to complete the 3<sup>rd</sup> problem of the TV Lesson. A Process Page has been provided to help you talk students through the process.

*This one is important because there is NO trading. Students need to be prepared to trade or not trade, and be able to tell the difference*

**Azulito's Corner**

**Unit 3, Lesson 2 – CGI**

List 2 or 3 strategies that were used in your room today to solve the CGI problem.

**Unit 3, Lesson 2**

**TV Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>



*(If you have time, you may have the students work with you on the 3<sup>rd</sup> problem – but you probably won't have time. This one is important because there is NO trading. Students need to be prepared to trade or not trade, and be able to tell the difference.)*

**AZULITO:** Now THAT was real **TRADING!** This is a great strategy to use in math. And speaking of strategies, you have been solving CGI problems during this unit. Today was very interesting to me because you were comparing! I would sure like to see your strategies. Could you please go on to MAS Space and show us several of the strategies used in the room? When you share on MAS Space, did you know that students all over the United States can see your response! Let's see how many States respond for this lesson!

**TEACHER:** Great task! It will be interesting to see if everyone compared the same way, Azulito! And now, let's see what we accomplished today during our lesson.

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)

**BLM Unit 3, TV Lesson 2**

One sheet per student

**Wild Thing Trading p. 1** 

**Materials:**

- Base ten sets – 15 tens, 20 ones
- Wild Things Story Board
- Wild Thing Trading pp 1 and 2



**1.  $23 + 19 =$**

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

**2.  $51 - 23 =$**

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

**BLM Unit 3, TV Lesson 2**

**Wild Thing Trading p. 1** 

One sheet per student

**Materiales:**

- Juegos de base diez - 15 decenas, 20 unidades
- Guión gráfico de Cosas Salvajes
- Hoja de problemas de Max y las Cosas Salvajes



**1.  $23 + 19 =$**

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

**2.  $51 - 23 =$**

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

## BLM Unit 3, TV Lesson 2

One sheet per student

## Wild Thing Trading p. 2

### Materials:

- Base ten sets – 15 tens, 20 ones
- Wild Things Story Board
- Max and Wild Things Problem Sheet



$$3. 89 - 28 =$$

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

Choose one of the problems and write a class story problem for your Math Journal today.

**BLM Unit 3, TV Lesson 2**

**Wild Thing Trading p. 2** 

One sheet per student

**Materiales:**

- Juegos de base diez - 15 decenas, 20 unidades
- Guión gráfico de Cosas Salvajes
- Hoja de problemas de Max y las Cosas Salvajes



**3.  $89 - 28 =$**

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

**Elige uno de los problemas y escribe un problema razonado para la clase para tu diario de matemáticas de hoy.**

### Literature Vocabulary

mischief  
gnashed  
wild  
tame  
rumpus  
terrible  
vine  
forest

### Math Vocabulary

regrouping  
exchanging  
trading

### Repeated Vocabulary

comparing  
more than  
less than  
fewer than

### TV Materials:

- Base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- Wild Thing Story Board
- BLM Wild Thing Trading – 1 per student from TV
- BLM Teacher Guide & KEY

**ELPS** (*English Language Proficiency Standard*)

**1E, 3B, 3F, 5A, 5B**

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.2.,  
I.C.3., II.B.1., II.B.2.

ELA I.A.1., I.A.2., II.B.1.,  
III.B.1., III.B.2

MATH I.B.1., I.C.1., II.A.1.,  
IX.A.1



### Technology

<http://www.roomrecess.com/pages/BlockBuster.html>.

Fast moving game to find fact families.

Either of the two suggested sites could be a self-checking center activity.

## Unit 3, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up



#### Math Objectives

- Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.

#### Language Objectives

- Listen and speak with a partner during our math activity.
- Explain how the base ten model relates to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

#### Practice and Application, Math

Before we start our problems, can anyone tell me what **EXCHANGE, TRADE, REGROUP** mean? (*Accept all reasonable answers and from all volunteers – encourage students to extend the definition and examples.*) Yes, these words can be used when we are working to add and subtract in our grade band.

Now, let's solve the last problem from the TV Lesson. (*Follow the BLM Teacher Guide & Key sheet to facilitate the last problem.*)

#### Math Journal Writing

*Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.*





**As a class, write a story problem about Wild Things using one of the problems from the TV Lesson.**



**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

*Teacher Only*

**Use Base Ten Blocks**



Tens	Ones
	

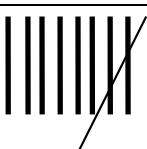

**Subtract 28**

Tens	Ones
	

**Answer Block**

Tens	Ones
<b>6</b>	<b>1</b>

Tens	Ones
	

Tens	Ones
	

$$\begin{array}{r} 89 \\ - 28 \\ \hline 61 \end{array}$$

**89 – 28**

**Base Ten Blocks Representation**

- First, what math movie does the operation sign show for us? (*separate or subtract*)
- Let’s make our first number. What are the fewest number of blocks we can use to make 89? (*8 tens and 9 ones*)
- Count to verify or check that you have 89 on your boards. (*Do so*).
- What do you need to separate or remove from the board? (*28*)
- How will you do that? (*This time, you can remove 8 from the 9 without having to TRADE, EXCHANGE or REGROUP.*)
- Sometimes you don’t have to **TRADE, EXCHANGE** or **REGROUP** – you just need to subtract.
- How many ones will you remove? (*8*)
- How many tens will you remove? (*2*)
- What do you have remaining on your board? (*61*)

**Answer Block**

- Record your answer in the Tens and Ones board Answer Block. What did you record? (*6 tens and 1 one*)

**Drawing the Model**

- What number will we draw first on our board? (*89*)
- How will you represent 89? (*8 sticks for 10s and 9 dots for ones*)
- Draw 89 on your board.
- Now what do we do to represent 89 subtract 28? (*remove 28*)
- Do we need to **TRADE, EXCHANGE** or **REGROUP**? (*no*)
- How will you show subtraction? (*cross out the blocks to be removed*)
- Subtract
- What does your drawing representation show the answer to be? (*61*)

**Number Sentence Representation**

- Do you have enough ones to subtract without regrouping? (*yes*)
- Subtract.
- What does your number sentence representation show the answer to be? (*61*)



### Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths and halves).
- Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

### Language Objectives

- Explain why each portion is a fourth/half.
- Share-write what is a fourth or a half.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the parts.

### Vocabulary

half, halves  
fourth, fourths  
fair shares  
equal pieces

### STUDENT ACTIVITY (per partner pair):

- **BLM Jerky Fractions**
  - 8 small beef jerky pieces
  - 2 paper plates
  - 2 paper towels
- Chart paper with question: **How do you know that each portion is a fourth?** Put a copy of the record sheet at the top of the chart with the question.

## Unit 3, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

### Snack Fractions

*As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.*

Today you are going to share eight pieces of jerky, but you are going to pretend that there are FOUR of you to share the jerky.

- If you were sharing with four, what would your fractional part of the jerky be? (*one-fourth, or one out of four pieces*)
- If jerky is your favorite snack, would you rather than 1/2 of the jerky or 1/4 of the jerky. Explain your thinking.

**Record Sheet:** Before really sharing the jerky with a partner, decide how to share the paper jerky into fourths.

How can you fair share the jerky without cutting each piece into smaller pieces?

Cut out all of the jerky pieces, then glue your portion of the paper jerky to the picture of the paper plate.

**SNACK Eating:** Now tell the partners that they may each have half of the snack.

- How much will each receive?
- Ask, “Which is the greater amount of the snack, one-fourth or one-half?” (*response*)
- How do you know?

### Snack Fraction Writing: BLM Jerky Fractions

Students identify the fractional part and complete the “because” statement on the record sheet.

**Objectives: Review what you learned and how you learned.**



My name is \_\_\_\_\_

This is my plate and my fair share of the snack if I am cutting into 4 equal pieces. \_\_\_\_\_

My share of the jerky would be \_\_\_\_\_ .

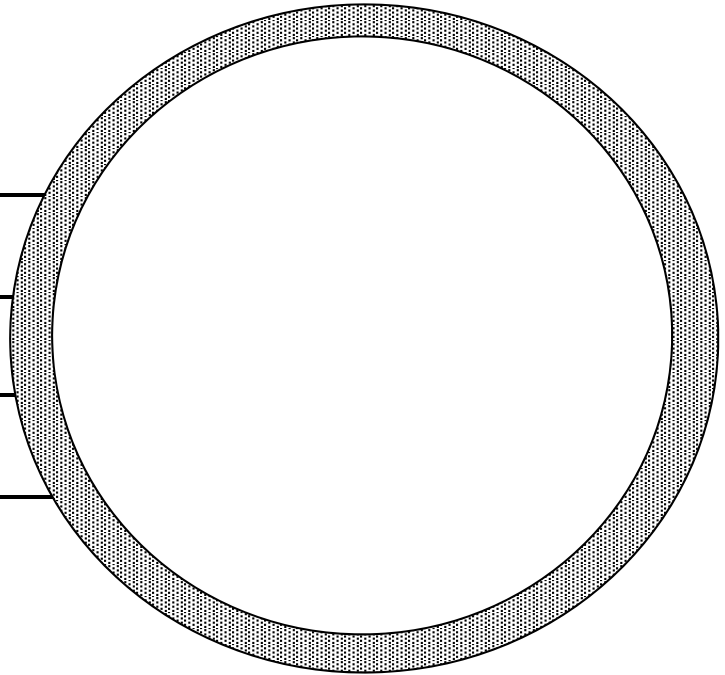
We call this fractional portion a \_\_\_\_\_  
because...

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



This is how I write this fraction in numbers: \_\_\_\_\_



Cut out the jerky pieces below. Divide the jerky pictures into four fair shares. Glue your fair share to the snack plate above.



Mi nombre es \_\_\_\_\_

Esto es mi plato y mi porción igual de la carna seca si la divido en 4 partes iguales es \_\_\_\_\_

Mi porción igual de la carna seca es \_\_\_\_\_.

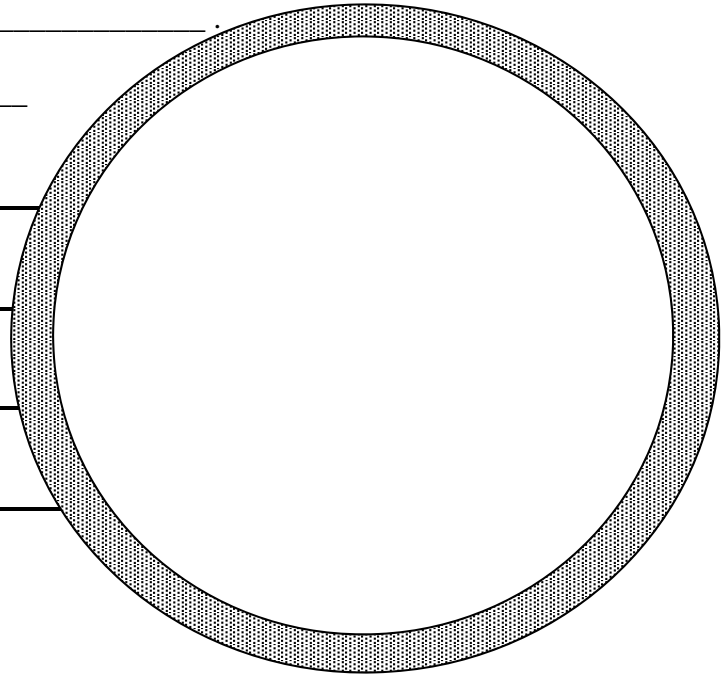
Se dice que esta porción fraccionaria es \_\_\_\_\_ porque...

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Se escribe esta fracción en números así: \_\_\_\_\_



Recorta las porciones de carna seca abajo. Divide los dibujos de carna seca en cuatro porciones iguales. Pega tu porción al plato arriba.



**Family Fun, Unit 3 Lesson 2** 

Dear \_\_\_\_\_.

The math strategy we learned today was

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---

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This will be very helpful when I \_\_\_\_\_

---

---

One thing I'd like to do at home using this math with the family is

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---

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Thank you,

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**WHERE THE WILD THINGS ARE**



**STORY AND PICTURES BY MAURICE SENDAK**

**Family Fun, Unit 3 Lesson 2** 

**WHERE THE WILD THINGS ARE**



**STORY AND PICTURES BY MAURICE SENDAK**

Querido \_\_\_\_\_.

La estrategia de matemáticas que aprendimos hoy fue

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---

---

Esto será muy útil cuando yo \_\_\_\_\_

---

---

Una cosa que me gustaría hacer en casa usando estas matemáticas con la familia es

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Gracias,

---

### Materials

- 50 base ten units per student
- Unknown Quantity Cards
- **BLM CGI Problems Unit 3** – teacher only
- **BLM Wild Thing Trees #3** – 1 per student
- **BLM Teacher Guide and KEY**
- **Optional Graph:** How many nickels do you think are in the jar?

### Math Objectives

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.



### Balanced Literacy Language Objectives

- Listen, read and write to understand problems and explain solution strategies.

### TEKS

#### Lessons 1, 2, 3

- 1<sup>st</sup> – 1.3B; 1.5D
- 2<sup>nd</sup> – 2.4C; 2.7C

### ELPS (English Language Proficiency Standard)

1E, 2D, 2G, 2H, 3B, 3D, 3F

### CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR I.A.1., I.C.1., II.A.1., II.A.4  
ELA II.A.2., II.A.3., II.B.1., III.B.2  
MATH I.A.1., IV.A.1., IV.B.1., V.A.1., VI.C.2., VIII.A.4

### Assessment Items

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 6, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 6, 7

## Unit 3, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Daily Routine



*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

#### ESSENTIAL

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – 25
  - Lesson 2 – 50
  - **Lesson 3 – 75**
- **CGI Problem**
  - Lesson 1 – Join, Change Unknown (*2<sup>nd</sup> item 5*)
  - Lesson 2 – Compare, Difference Unknown (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
  - **Lesson 3 – Part Whole. Whole Unknown** (*1<sup>st</sup> item 3ab*)
- **What's Missing** (*1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction*)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Teacher questions might include: Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)\*\*
  - Lesson 1 – Wild Thing Trees #1
    - BLM Wild Thing Trees #1
    - BLM Teacher Guide and KEY
  - Lesson 2 – Wild Thing Trees #2
    - BLM Wild Thing Trees #2
    - BLM Teacher Guide and KEY
  - **Lesson 3 – Wild Thing Trees #3**
    - **BLM Wild Thing Trees #3**
    - **BLM Teacher Guide and KEY**

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

## Unit 3, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – Which wild thing do you like best?
    - **BLM Wild Things**
  - **Lesson 2 – none**
  - Lesson 3 – How many nickels do you think are in the jar? (*Have a plastic screw lid jar with 43 nickels in it – bar graph with choices: less than 25, 25 to 75, 75 - 100, more than 100. After everyone has responded to the graph, and the graph has been debriefed, have students count the pennies by grouping in tens and ones.*)

### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**Assessment Items 1<sup>st</sup> grade #8 and 2<sup>nd</sup> grade #7 will be reviewed daily in Snack Fractions.**

**Money Matters** (*If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.*)

### Vocabulary Building

Choose an activity listed in the Daily Routines section.

#### Azulito's Corner

#### Unit 3, Lesson 3 – Writing

Create a class story problem for Azulito to solve. There has to be regrouping involved in the solution strategy.





**The picture shows a tree that is \_\_\_\_ cubes tall.**

**Draw a tree next to it that is 5 fewer cubes in height.**

**The tree you draw will be \_\_\_\_\_ cubes tall.**



**El dibujo muestra un árbol que mide \_\_\_\_ cubos de alto.**

**Dibuja un árbol al lado que mida 5 cubos menos de alto.**

**El árbol que dibujes medirá \_\_\_\_\_ cubos de alto.**

**GUIDE**

- (Read the page to the students.) Ask students what they are to do first. (Measure the tree picture and fill in the blank to complete the sentence.)
- Have students complete the first portion of the problem.
- Discuss how they found the answer and what the answer is.
- Read the page again. What does the sentence mean when it says, “**Draw a tree next to it that is 5 fewer cubes in height?**” Students should discuss this with a partner, then report back to the group.
- How will you find out how tall that tree is? (Listen to various strategies which might include measuring the 15 cubes and taking 5 off, or using basic facts  $15 \text{ cubes} - 5 \text{ cubes} = 10 \text{ cubes}$ ; or they might have another viable strategy – whatever works IS acceptable as long as the student can explain the strategy.)
- Students solve the problem, then fill in the last blank. Student volunteers then talk about and verify their answers through demonstration.
- Students then draw their trees that are 10 cubes tall. Circulate the room to see how they actually perform this task. The only rule is that they must start the baseline at the line across the bottom of the page. How they make sure the tree is only 10 cubes tall is up to them.
- Share pictures when everyone is done, and have students verify each other’s measures.

**KEY**

**Tree sketch – anything is acceptable. Height - should be reasonably close to 10 cm tall.**

The picture shows a tree that is **15** cubes tall.

Draw a tree next to it that is 5 fewer cubes in height.

The tree you draw will be **10** cubes tall.



**Literature Selection**

*Where the Wild Things Are*  
by Maurice Sendak

**Materials**

**Language Lesson**

- BLM Word Cards
- chart paper
- markers
- shared Reading text from lesson 2

**Materials for Transition to Math Lesson**

- Base ten set – 1 per student
  - 15 tens
  - 20 units
- BLM TM Partner Problems– 1 per student
- BLM TM Teacher Key

**Literature Vocabulary**

mischievous  
gnashed  
wild  
tame  
rumpus  
terrible  
vine  
forest

**Math Vocabulary**

regrouping  
exchanging  
trading

**Repeated Vocabulary**

comparing  
more than  
less than  
fewer than

**ELPS** (*English Language Proficiency Standard*)  
2B, 2E, 2G, 3I, 4E, 4J

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR II.A.2., II.A.4., II.A.5  
ELA II.A.4., II.A.5., II.A.6., II.A.8., II.B.1., III.B.2.

**Unit 3, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson**



Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.

**Math Objectives**

- Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.

**Reading Objectives**

- Recognize words in a text and develop reading fluency.

**Language Objectives**

- Use vocabulary words to talk about own lives.
- Write a sentence using phonics skills and literature vocabulary words.

**BEFORE READING**

**Practice and Application, Vocabulary**

Have students choose any word from the Interactive Word Wall, and try to use it in a sentence. Encourage them to use the word beyond the story, to talk about their own experiences. Continue until all words have been used.

- Ex: The forest is filled with **wild** animals.
- Ex: The **terrible** storm woke me up in the middle of the night.
- Ex: The tiger at the zoo, **gnashed** its teeth at me.

**DURING READING**

**Practice and Application, Literature & Vocabulary Shared Reading**

- Show students the Shared Reading text from Lesson 2.

When **Max** came to the place  
 where the **wild things** are,  
**they** roared their **terrible** roars  
 and **gnashed** their **terrible** teeth  
 and rolled their **terrible** eyes  
 and showed their **terrible** claws.

## Unit 3, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### Listening Center

Have students listen to a recorded version of the Shared Reading text. Then, have them record themselves reading some or part of this text. This will give you an assessment of their current reading fluency and decoding abilities.

- Have students read aloud the highlighted words they found in Lesson 2 as you point to each one.
- Today, you can choose to have students focus on any aspects of the text that you feel are most developmentally appropriate for their reading level(s). In past units, suggestions were made about ways to have students find certain aspects of phonics, high frequency words, and punctuation. You can do the same with this text, based on what you know your students need to develop.

If you choose, you may want to focus on helping students with phrasing. Part of reading fluency comes from the ability to phrase words naturally, instead of reading words in a stilted, separated manner. Some words naturally are read together as a phrase. Helping students identify these phrases is a great way to increase their reading fluency (*and word recognition*). The following are some examples of phrases in the text. You wouldn't need to work on all of them with students.

- to the place
- their terrible roars
- their terrible teeth
- their terrible eyes
- their terrible claws

Tell students the phrase they need to find in the text. Then model how those words are read together. You can add a line underneath the phrase as a reminder that those words are read together. Have students practice saying the phrase with you several times, as you track the words on the text.

When Max came to the place  
where the wild things are,  
they roared their terrible roars  
and gnashed their terrible teeth  
and rolled their terrible eyes  
and showed their terrible claws.

## Unit 3, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

- Have students do a Shared Reading of the text with you. Emphasize whatever aspect of the text you worked on with students today, and of course continue to help students chime in on the parts they practiced with you in Lesson 2.

#### AFTER READING

#### Practice and Application, Literature

##### Interactive Writing

On pages 23-28, the author did not include any text to go with the pictures. You can choose to interactively write text for all of the pages or you can choose the set of pictures for which the class will create text. Show students the pages and allow them to carefully study what is happening. Have a class discussion about what the author might have said on those pages.

With **Interactive Writing**, writing the sentence(s) will be a combined effort between you and the students. You will have to decide which aspects of the sentence(s) your students could write on the chart paper, and which parts you would have to write.

- Ask, “What do you think the author could have written on this page?”
- Have students first talk with their rug partner, and then regroup the class and have several students share. You can display the page of the book students are talking about to provide visual support.
- Choose one student’s response, and tell students they are going to help you write the sentence(s). Repeat the response aloud several times.
- Count on your fingers how many words are in the sentence, having students do this along with you.
- Begin with the first word. Depending on the writing abilities of your students, you can choose an aspect of this word that students can help write, or you might decide to write that word yourself and have students help with other words.

For example, you may ask a student to come up to the chart paper and:

- Write the **beginning letter** of the word (*and then you write the rest of the word*). Ex. “The first word in our sentence is the word my. The word my, begins just like Maria’s name. Maria, will you come up to the chart paper and write the first sound you hear in the word my.”

#### Writing Workshop Connection

You can use Interactive Writing with individual students during the Writing Workshop as well. Ask a student what they want to write. Then, help them write that word/phrase/sentence in the same way you did during this activity. You have students supply the parts they already know how to write, and you write down the parts they don’t know how to spell. This helps young writers create a written message that is more complex than what they could have created on their own.

## Unit 3, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



- Provide a **space** after the word. (*You write the word, and then the student places something - such as their finger or a popsicle stick - after the word. You then write the next word on the other side.*) This develops students' concept of a word.
- Write the **last letter** of the word based on the sound they hear at the end of the word. (*You write all of the letters up to the last letter.*)
- Write the **whole word**, if it is a high frequency word they already know, or if it is a vocabulary word on the word wall.
- When a word has a capital letter, help students include it, and point out why you need the capital letter (*a name, beginning of sentence*).
- Continue in this way with each of the words in the sentence(s) until you and the students have collaboratively written the text. To keep this activity fast-paced, **make sure there is a balance between what you have students write and what you write.**



**Math Objectives:**

Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.

**Materials for TM Lesson**

- Base ten set – 1 per student
  - 15 tens
  - 20 units
- **BLM TM** Partner Problems– 1 per student
- **BLM TM** Teacher Key

**Math Vocabulary**

regrouping  
exchanging  
trading

**Repeated Vocabulary**

comparing  
more than  
less than  
fewer than

**Technology:**

<http://www.ixl.com/math/grade-1/comparison-word-problems> free online game for comparison problems.

**ELPS (English Language Proficiency Standard)**

2D, 2E, 3B, 3D, 4D, 4G

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.B.1., I.B.2., I.C.2

MATH I.B.1., II.A.1., V.A.1., VIII.A.1., VIII.C.1

**Unit 3, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson - continued****TRANSITION to Math****Building Background, Math**

*(Students are going to work in partners today to solve 2-digit problems – one addition and one subtraction. You are to walk the room checking for understanding. If there are more than three students who need more guided practice, please pull a group and use the Teacher Guide from Lesson 2 Follow-up to guide your small group instruction. It is important that students, particularly your 2<sup>nd</sup> graders, have command of 2-digit operations before they leave you.)*

We have two problems today that you and a partner are going to solve using the strategies we have been practicing this unit.

Read the math and language objectives and have students explain how they learned them.

**Distribute TV Lesson Materials****TV Materials**

*Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.*

- Base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM** Max and Wild Things Trading – 1 per student
- **BLM TM** Wild Thing Story Board – 1 per student from TM



### BLM TM Unit 3, Lesson 3

### Partner Problems

One sheet per student

#### Materiales:

- Juegos de base diez - 15 decenas, 20 unidades
- Guión gráfico de Cosas Salvajes
- Hoja de problemas de Max y las Cosas Salvajes



**1.  $45 - 29 =$**

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

**2.  $32 + 49 =$**

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

### BLM TM Unit 3, Lesson 3

One sheet per student

### Partner Problems

#### Materials:

- Base ten sets – 15 tens, 20 ones
- Wild Things Story Board
- Partner Problems



**3.  $45 - 29 =$**

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

**4.  $32 + 49 =$**


Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

<p><b>Literature Vocabulary</b>  mischief  gnashed  wild  tame  rumpus  terrible  vine  forest</p> <p><b>Math Vocabulary</b>  regrouping  exchanging  trading</p> <p><b>Repeated Vocabulary</b>  comparing  more than  less than  fewer than</p> <p><b>TV Materials:</b>  Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.</p> <ul style="list-style-type: none"> <li>• Base ten sets – 1 set per student <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units (or units they already have from measuring)</li> </ul> </li> <li>• Wild Thing Story Board from Lesson 1– 1 per student from</li> <li>• <b>BLM</b> Max and Wild Thing Trading – 1 per student</li> </ul> <p>ELPS (English Language Proficiency Standard)  1E, 1F, 2G, 3B, 3F, 3I</p> <p>CCRS (College and Career Readiness Standards)  CROSS-CURRICULAR I.C.1., I.C.2., I.C.3., II.A.2., II.A.4.  ELA II.B.1., II.B.3., III.A.1  MATH III.B.1., II.B.2..B.1., I.C.1., II.B.1., II.C.1, IV.B.4.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b>  </p> <p><b>Unit 3, Lesson 3</b>  <b>TV Lesson</b></p> <p><i>Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.</i></p> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Solve one-step word problems involving addition or subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Use the math vocabulary during the activity.</li> <li>• Discuss solution strategies.</li> <li>• Explain how to regroup in addition and subtraction.</li> </ul> <p><b>Comprehensible Input</b>  <b>TEACHER:</b> (Use the formats you have been using for story problems and 2-digit addition and subtraction with regrouping. There are three problems provided; however you will probably only complete two. Classroom Teachers will need to complete the 3<sup>rd</sup> during the Follow-up Lesson.)</p> <p>Format</p> <p><b>Word Problem –</b></p> <ul style="list-style-type: none"> <li>• Students read the problem first to identify words they do not know. Have Classroom Teacher write the words on the board.</li> <li>• (pause) Azulito should give TV Teacher some of the challenging words that are not math words – create a Pictionary.</li> <li>• TV Teacher reads the story problem once so students can see the math movie. Students then are given time to explain their math movie to the class.</li> <li>• Azulito explains the math movie he sees based on the action.</li> <li>• Ask students to set up a number sentence, the unknown is the solution, of course.</li> </ul> <p><b>2-Digit Operations</b></p> <ul style="list-style-type: none"> <li>• Students have already identified the math movie, and hence the action they will take in the modeling.</li> <li>• Ask the students to model the first number (pause).</li> <li>• Azulito explains his model.</li> <li>• What does the action expect us to do next? (join or separate?)</li> <li>• Azulito answers based on the problem.</li> <li>• Have the students then solve the problem with the blocks on their own, giving them time.</li> <li>• Azulito demonstrates the block, complete with explanation of regrouping.</li> <li>• Have the students draw their model, and write the solution in the answer block.</li> <li>• Azulito explains his model and the answer.</li> </ul>
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 SMARTBOARD

Model all phases

**Azulito's Corner**

**Unit 3, Lesson 3 – Writing**

Create a class story problem for Azulito to solve. There has to be regrouping involved in the solution strategy.

**Unit 3, Lesson 3**

**TV Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>



- Students then work the algorithm, or number sentence. Encourage the use of the cloud.
- Azulito demonstrates just as was done in Lesson 2.

**TEACHER:** (*If you did not complete problem 3*) There is one more problem for you to work together. You and your Classroom Teacher can work on this during the Classroom Lesson.

**AZULITO:** Now THAT was real **TRADING!** These are super story problems about Max and the Wild Things! And speaking of story problems, I would like for your class to create a story problem about Max and the Wild Things for me to solve! Please make sure you make me have to **TRADE, EXCHANGE, REGROUP!** The only requirement is that your class has to solve the problem before you post it!

**TEACHER:** Now that's fun, Azulito. Do you think any of the classes might stump you with their problem? We will see – be sure to enter this on MAS Space boys and girls – and just think of all the problems you will be able to see, too!

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)

### BLM Unit 3, TV Lesson 3

### Max and Wild Thing Trading

One sheet per student

#### Materials:

- Base ten sets – 15 tens, 20 ones
- Wild Things Story Board
- Wild Thing Trading pp 1 and 2



1. Max and the Wild Things enjoyed the wild rumpus for 32 minutes. Then they rested for a while. They started up the wild rumpus again, and this time it lasted for 48 minutes. How many minutes did the wild rumpus last?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

2. One of the wild thing trees had 52 leaves on it. 19 of the leaves fell off during the wild rumpus. How many leaves were still on the wild thing tree?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

### BLM Unit 3, TV Lesson 3

One sheet per student

### Wild Thing Trading p2

#### Materials:

- Base ten sets – 15 tens, 20 ones
- Wild Things Story Board
- Max and Wild Things Problem Sheet



3. Max and the Wild Things swung on 39 branches during the wild rumpus. They swung on 52 branches during the second wild rumpus. How many branches did they swing on during the two wild rumpuses?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence



### BLM Unit 3, TV Lesson 3

One sheet per student

### Max and Wild Thing Trading

#### Materiales:

- Juegos de base diez - 15 decenas, 20 unidades
- Guión gráfico de Cosas Salvajes
- Intercambios de Cosas Salvajes páginas 1 y 2



1. Max y las Cosas Salvajes disfrutaron de los festejos salvajes durante 32 minutos. Después descansaron un rato. Volvieron a empezar los festejos salvajes, y esta vez duraron 48 minutos. ¿Cuántos minutos duraron los festejos salvajes?

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

2. Uno de los árboles de las cosas salvajes tenía 52 hojas. 19 de las hojas se cayeron durante los festejos salvajes. ¿Cuántas hojas quedaron en el árbol de las cosas salvajes?

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

**BLM Unit 3, TV Lesson 3**

**Wild Thing Trading p2** 

One sheet per student

**Materials:**

**Materiales:**

- Juegos de base diez - 15 decenas, 20 unidades
- Guión gráfico de Cosas Salvajes
- Hoja de problemas de Max y las Cosas Salvajes



3. Max y las Cosas Salvajes se columpiaron en 39 ramas durante los festejos salvajes. Se columpiaron en 52 ramas durante los segundos festejos salvajes. ¿En cuántas ramas se columpiaron durante los dos festejos salvajes?

Modelos de base diez

Dieces	Unos

Representación de números

Dieces	Unos

Oración numérica

**Literature Vocabulary**

mischief  
gnashed  
wild  
tame  
rumpus  
terrible  
vine  
forest

**Math Vocabulary**

regrouping  
exchanging  
trading

**Repeated Vocabulary**

comparing  
more than  
less than  
fewer than

**TV Materials:**

- Base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- Wild Thing Story Board
- **BLM** Wild Thing Trading p 2 – 1 per student from TV
- **All Family Fun Game BLMs** – 1 set for partners and 1 set to take home per student.

**ELPS** (*English Language Proficiency Standard*)

**1E, 3B, 3F, 5A, 5B**

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.2.,  
I.C.3., II.B.1., II.B.2.  
ELA I.A.1., I.A.2., II.B.1.,  
III.B.1., III.B.2  
MATH I.B.1., I.C.1., II.A.1.,  
IX.A.1

**Technology**

<http://www.math-play.com/2nd-grade-math-games.html>. Several games to promote double-digit addition and subtraction.

**Unit 3, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up****Math Objectives**

- Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.

**Language Objectives**

- Listen and speak with a partner during our math activity.
- Explain how the base ten models related to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

**Practice and Application, Math**

Before we start our problems, can anyone tell me what EXCHANGE, TRADE, REGROUP mean? (*Accept all reasonable answers and from all volunteers – encourage students to extend the definition and examples.*) Yes, these words can be used when we are working to add and subtract in our grade band.

Now, let's solve the last problem from the TV Lesson. (*Follow the TV Teacher script to facilitate this final problem.*)

Well, it's the last day of our Unit and time for us to investigate our Family Fun Game cards so you can take it home today after class. Let's look at the cards together to make sure each of you understands how to solve the problems. If we have time, we will play a few rounds of the game before Snack Fraction.

(*Student partners should have copies of the cards and ask each other: How would you solve this problem? Circulate the room to see that students are reading the cards, and are able to understand what the problem is asking. If you see confusion from more than a few students about certain problems, review as a class, letting students who understand share their strategies and explanations.*)

### Unit 3, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up** - continued



#### **Math Journal Writing**

*Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.*



**As a class, write a story problem about Wild Things using one of the problems from the TV Lesson.**

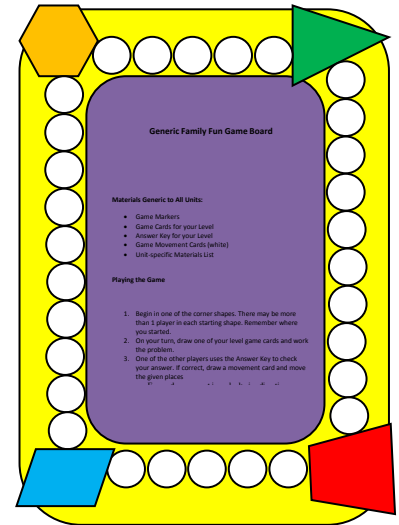
**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

## Family Fun – 1<sup>st</sup> – 2<sup>nd</sup>, Unit 2 Lesson 3

### Family Fun Game day again! Your supplies include:

- Blue Family Fun Problem Cards (for 1<sup>st</sup> – 2<sup>nd</sup> graders)
- Special Instructions (1<sup>st</sup> – 2<sup>nd</sup> graders)
- All-level Answer Key for Unit 2

Please gather 20 counters which could be pebbles, paper clips, beans or anything else small that children can use to model problems.



Thank you for taking the time to enjoy math as a family this summer!

Your Child's Teacher

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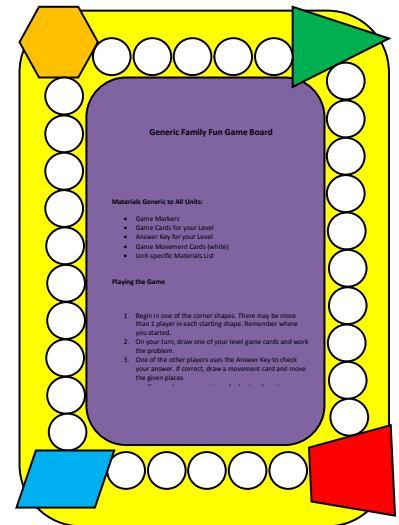
## Family Fun – 1<sup>st</sup> – 2<sup>nd</sup>, Unit 2 Lesson 3

### ¡Otra vez es el día del juego de Diversión Familiar! Los materiales incluyen:

- Cartas de problemas de Diversión Familiar azules (para estudiantes de 1<sup>o</sup> – 2<sup>o</sup> grado)
- Instrucciones especiales (estudiantes de 1<sup>o</sup> – 2<sup>o</sup> grado).
- Guía de respuestas para todos los niveles para la Unidad 2

Por favor reúna 20 contadores que pueden ser piedritas, clips, frijoles o cualquier otro objeto pequeño que los niños puedan usar para modelar problemas.

¡Gracias por dedicar tiempo a disfrutar de las matemáticas en familia este verano!



El maestro de su hijo/a





## Generic Family Fun Game Board

### Materials Generic to All Units:

- Game Markers
- Game Cards for your Level
- Answer Key for your Level
- Game Movement Cards (white)
- Unit-specific Materials List

### Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, draw a movement card and move the given places
  - Forward movement in a clockwise direction.
  - Backward movement in a counter clockwise direction.If incorrect, do not move.
4. Game is over when the first person runs the entire track, ending back on the starting shape.



## Tablero de juego

### Materiales genéricos para todas las unidades:

- Fichas para jugar
- Tarjetas del juego para su nivel
- Clave de respuestas para su nivel
- Tarjetas de movimiento del juego (blancas)
- Lista de materiales específicos de la unidad

### Cómo se juega

1. Empiece en una de las esquinas. Puede haber más de 1 jugador en cada figura de inicio.
2. Cuando sea su turno, saque una de las tarjetas de juego de su nivel y resuelva el problema.
3. Uno de los otros jugadores usa la clave de respuestas para ver si su respuesta es correcta. Si es correcta, saque una tarjeta de movimiento y mueva su ficha como lo indica la tarjeta.
  - Movimiento hacia adelante en el sentido de las manecillas del reloj.
  - Movimiento hacia atrás en el sentido contrario a las manecillas del reloj.Si es incorrecta, no se mueve.
4. El juego se acaba cuando la primera persona recorre toda la pista y termina en la figura de inicio.



<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>
<b>Move back 1 space</b>	<b>Move back 1 space</b>	<b>Move back 1 space</b>
<b>Move forward 3 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 3 spaces</b>

Units 1 – 2 – 3 -- FAMILY FUN

One per student for home

One per partner pair in class



Print on white paper.

Family Fun – Movement Cards



<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>
<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>
<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>

**BLM 1<sup>st</sup>-2<sup>nd</sup> Unit 3, Follow-up Lesson 3**

**Family Fun Game Cards**

Printed in *Blue* –One set per partners for class; one set per student for home. (There are two pages of cards.)

**Cards A – I are Unit 3 skills as assessed. Cards J – R review skills from previous units.**

<p><b>A.</b> Write a number sentence to represent this picture.</p> 	<p><b>B.</b> Write a number sentence to represent this picture.</p> 	<p><b>C.</b> Solve using any strategy.</p> $\begin{array}{r} 52 \\ -19 \\ \hline \end{array}$
<p><b>D.</b> Solve using any strategy.</p> $\begin{array}{r} 32 \\ +29 \\ \hline \end{array}$	<p><b>E.</b> Solve using any strategy.</p> $\begin{array}{r} 32 \\ +17 \\ \hline \end{array}$	<p><b>F.</b> Solve using any strategy.</p> $\begin{array}{r} 55 \\ -12 \\ \hline \end{array}$
<p><b>G.</b> Max saw 13 Wild Things in the trees and 19 wild things on the ground. How many wild things did he see?</p>	<p><b>H.</b> 23 Wild Things danced in the rumpus. Max made 19 of them sit down. How many Wild Things still danced?</p>	<p><b>I.</b> 41 Wild Things said goodbye to Max. Some stayed to see Max go, but 27 of them walked away. How many Wild Things stayed?</p>

A. Escribe una oración numérica que represente este dibujo.



B. Escribe una oración numérica que represente este dibujo.



C. Resuelve usando cualquier estrategia.

$$\begin{array}{r} 52 \\ -19 \\ \hline \end{array}$$

D. Resuelve usando cualquier estrategia.

$$\begin{array}{r} 32 \\ +29 \\ \hline \end{array}$$

E. Resuelve usando cualquier estrategia.

$$\begin{array}{r} 32 \\ +17 \\ \hline \end{array}$$

F. Resuelve usando cualquier estrategia.

$$\begin{array}{r} 55 \\ -12 \\ \hline \end{array}$$

G.  
Max vio 13 cosas salvajes en los árboles y 19 cosas salvajes en el piso. ¿Cuántas cosas salvajes vio?

H.  
23 cosas salvajes bailaron en los festejos. Max hizo que 19 de ellas se sentaran. ¿Cuántas cosas salvajes siguieron bailando?

I. 41 cosas salvajes se despidieron de Max. Algunas se quedaron para ver partir a Max, pero 27 se alejaron. ¿Cuántas cosas salvajes se quedaron?

**BLM 1<sup>st</sup>-2<sup>nd</sup> Unit 3, Follow-up Lesson 3**

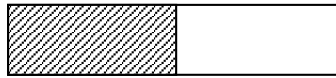
**Family Fun Game Cards**

Printed in **Blue** –One set per partners for class; one set per student for home. (There are two pages of cards.)

**J.** You are fair sharing this cake with yourself and 3 friends. Draw how you would share.



**K.** This rectangle is cut into halves. How do you know they are fair shares?



**L**

$$16 - \square = 7$$

**M.**  
15 tall trees grew in Max's bedroom. 9 short trees grew in Max's bedroom. How many more tall trees grew than short trees?

**N.**  
Max had 13 cookies. One of the Wild Things had 7 cookies. How many fewer cookies did the Wild Thing have?

**O.**  
There were 12 wild things in the trees. 9 were swinging. The rest were climbing. How many were climbing?

**P.**  
9 wild things danced. 11 wild things swung from the trees. How many fewer wild things danced?

**Q.** Look at this number sentence.

$$3 + 9 + 7 = 19$$

Which numbers are compatible?

**R.**

Use the following numbers to make a fact family.  
6, 7, 13

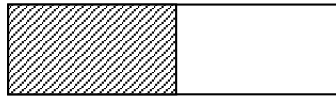
**BLM 1<sup>st</sup>-2<sup>nd</sup> Unit 3, Follow-up Lesson 3****Family Fun Game Cards**

Printed in **Blue** –One set per partners for class; one set per student for home. (There are two pages of cards.)

**J.** Estás compartiendo este pastel de manera justa para ti y 3 amigos. Dibuja cómo lo compartirías.



**K.** Este rectángulo está dividido en mitades. ¿Cómo sabes que son partes justas?



**L**

$$16 - \square = 7$$

**M.**  
15 árboles altos crecían en el dormitorio de Max. 9 árboles bajos crecían en el dormitorio de Max. ¿Cuántos árboles altos había más que árboles bajos?

**N.**  
Max tenía 13 galletas. Una de las Cosas Salvajes tenía 7 galletas. ¿Cuántas galletas menos tenía la cosa salvaje?

**O.**  
Había 12 cosas salvajes en los árboles. 9 se estaban columpiando. El resto estaba trepando. ¿Cuántas estaban trepando?

**P.**  
9 cosas salvajes bailaron. 11 cosas salvajes se columpiaron de los árboles. ¿Cuántas cosas salvajes menos bailaron?

**Q.**  
Mira esta oración numérica.  
 $3 + 9 + 7 = 19$   
¿Cuáles números son compatibles?

**R.**  
Usa los números siguientes para formar una familia de hecho.  
6, 7, 13  
 $6 + 4 = 10$

**Materials:**

- Blue Family Fun Problem Cards (for 1<sup>st</sup> – 2<sup>nd</sup> graders)
- Special Instructions (1<sup>st</sup> – 2<sup>nd</sup> graders)
- All-level Answer Key for Unit 2
- Counters from home – pebbles, beans, paper clips, or any other small object that can be counted
- Base ten blocks – 10 tens, 20 ones

**Solution Expectations****Problems A – B (unit 3 skills)**

- Students are expected to write the number sentence that represents the addition picture.
- Students are expected to write the number sentence that represents the subtraction picture.

**Problems C - F (unit 3 skills)**

- Students are expected to use any strategy (base ten models, drawings, algorithm) to solve the 2-digit addition or subtraction problems, two with regrouping, two without regrouping.

**Problems G – I (unit 3 skills)**

- Students are expected to solve the problems using any strategy (see above) that is reasonable.

**Problems J – K (previous units)**

- Fraction problems
  - J – Students need to catch the “yourself and three more” which makes fourths, and divide a paper rectangle into four equal parts – any fourths is acceptable.
  - K – Students are expected to understand that fair shares means equal pieces.

**Problems L (previous units)**

- Students are expected to find the missing number.

**Problem M – P (previous units)**

- Students are expected to solve the problem using any strategy (counters, basic facts).

**Problem Q (previous units)**

- Students are expected to recognize the compatible numbers – the numbers that make 10.

**Problem R (previous units)**

- Students are expected to make the fact family four number sentences.

## **BLM 1º – 2º Instrucciones especiales para 1º-2º**

### **Materiales:**

- Cartas de problemas de Diversión Familiar azules (para estudiantes de 1º – 2º grado)
- Instrucciones especiales (estudiantes de 1º – 2º grado).
- Guía de respuestas para todos los niveles para la Unidad 2
- Contadores de casa - piedritas, frijoles, clips o cualquier otro objeto pequeño que pueda ser contado.
- Bloques base diez - 10 decenas, 20 unidades

### **Expectativas de solución**

#### **Problemas A – B (habilidades de la unidad 3)**

- Se espera que los estudiantes escriban la oración numérica que representa a la imagen de suma.
- Se espera que los estudiantes escriban la oración numérica que representa a la imagen de resta.

#### **Problemas C – F (habilidades de la unidad 3)**

- Se espera que los estudiantes usen cualquier estrategia (modelos base diez, dibujos, algoritmos) para resolver los problemas de suma o resta de 2 dígitos, dos con reagrupación y dos sin reagrupación.

#### **Problemas G – I (habilidades de la unidad 3)**

- Se espera que los estudiantes resuelvan los problemas usando cualquier estrategia (ver arriba) que sea razonable.

#### **Problemas J – K (unidades anteriores)**

- Problemas de fracciones
  - J - Los estudiantes necesitan comprender el concepto de “tú y tres más” que hace cuartos, y dividir un rectángulo de papel en cuatro partes iguales - cualquier distribución de cuartos es aceptable.
  - K - Se espera que los estudiantes entiendan que partes justas significa trozos iguales.

#### **Problema L (unidades anteriores)**

- Se espera que los estudiantes encuentren el número faltante.

#### **Problemas M – P (unidades anteriores)**

- Se espera que los estudiantes resuelvan los problemas usando cualquier estrategia (contadoras, hechos básicos).

#### **Problema Q (unidades anteriores)**

- Se espera que los estudiantes reconozcan los números compatibles – los números que suman 10.

#### **Problema R (unidades anteriores)**

- Se espera que los estudiantes hagan las cuatro oraciones numéricas de familias de hecho.



Problem Letter	Kinder	1-2	3-4	5-6	7-8
A	10 apples	$5 + 6 = 11$	0.25, 0.55, 0.75	2.45 feet	20 % discount
B	3 lights	$12 - 3 = 9$	6	3.75 cups or $3\frac{3}{4}$ cups	\$69.30 sales price
C	9 pies	33	35	92 feet	\$4.80 saved
D	The bottom group	61	50 feet	4763.76 miles	28 lbs
E	The top group	49	3 eggs	\$180.51	\$498.75
F	The bottom group	43	3 bags	129.7 oz	Approx 33%
G	15	32 wild things	$4 \times 3$ or $3 \times 4$	\$37.60	\$220.00 retail
H	7	4 wild things	There are 2 equal groups of 5 stars	\$14.25	17 pounds
I	8	14 stayed	$5\frac{5}{10}$ or $5\frac{1}{2}$	\$11,250 earned	40% discount
J	nickel	(divide into fourths)	3.12	\$456.00	\$181.13 or \$181.14
K	dime	There are 2 equal pieces	$7 \times 8 = 56$ $8 \times 7 = 56$ $56 \div 7 = 8$ $56 \div 8 = 7$	\$234.06	\$5.40 tip
L	quarter	9	Any model that shows 4 groups of 5 items	\$14.85	\$303.75 total
M	penny	6 more	10 and 5 hundredths	False, inverted ratio	\$9.68 spent
N	Any set with 9 objects in it	6 fewer	Use paper and pencil to model an equivalent fraction such as $\frac{2}{4}$ , $\frac{3}{6}$ , $\frac{4}{8}$	True, scale factor by half	\$26.45 spent
O	Any set with 12 objects in it	3 were climbing	3 tenths, 0.3, is UNshaded	54 students: 1 bus	approx. 33% tip
P	These are halves	2 fewer	5 rows of 8 marks – see special instructions	36 strikes	\$19.80 gratuity (tip)
Q	There are 2 equal pieces	$3 + 7$	First marked benchmark line – See special instructions	$\frac{1}{3}$ or $\frac{2}{6}$ or $\frac{4}{12}$	\$45.80 bill before tip
R	18 objects Number card 18	$6 + 7 = 13$ $7 + 6 = 13$ $13 - 7 = 6$ $13 - 6 = 7$	Between the 0.75 and the 1, but much close to 1- See special instructions	$1\frac{2}{9}$	\$575.00 total



### Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths and halves).
- Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

### Language Objectives

- Explain why each portion is a fourth/half.
- Share-write what is a fourth or a half.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.
- Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.

### Vocabulary

fourths  
fair shares  
equal pieces

### STUDENT ACTIVITY (per partner pair):

- **BLM Bread and Banana Fractions**
- 2 slices raisin bread
- 1 banana
- 4 T peanut butter
- 2 paper plates
- 2 paper towels
- 2 plastic knives
- Chart paper with question: **How do you know that each portion is a fourth?** Put a copy of the record sheet at the top of the chart with the question.

## Unit 3, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

### Snack Fractions

*As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.*

Today you are going to make a sandwich with the bread, peanut butter and banana, but you are going to pretend that there are FOUR of you to share the snack.

- If you were sharing with four, what would your fractional part of the snack be? (*one-fourth, or one out of four pieces*)
- If this snack is your favorite snack, would you rather than 1/2 or 1/4? Explain your thinking.

**Record Sheet:** Before really sharing the snack with a partner, decide how to share the paper sandwich into fourths by drawing lines. (*Students may divide anyway that makes four equal parts – diagonal quarters, square quarters, horizontal or vertical quarters.*)

**SNACK Eating:** Now tell the partners that they may each have half of the snack. How much will each receive?

Ask, “Which is the greater amount of the snack, one-fourth or one-half?” (*response*) How do you know?

### Snack Fraction Writing: BLM Raisin Bread Fractions

Students identify the fractional part and complete the “because” statement on the record sheet.

**Objectives: Review what you learned and how you learned it.**

**ALLERGY WARNING: Peanut butter contains nuts.**



**BLM Unit 3, Snack Fraction Lesson 3**

(One half sheet per student)

**Raisin Bread Fractions** 

You are fair sharing your sandwich with yourself and three friends.  
Use the picture to show how you shared your sandwich.



**What fractional part of the sandwich will each of you receive?**

**Words:** \_\_\_\_\_

**Numbers:** \_\_\_\_\_

**How do you know these are fair shares?**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**BLM Unit 3, Snack Fraction Lesson 3**

(One half sheet per student)

**Raisin Bread Fractions** 

Estás compartiendo tu sándwich en porciones iguales entre tú y tres amigos.  
Usa el dibujo para mostrar cómo compartiste el sándwich.



**¿Qué parte fraccionaria del sándwich va a recibir cada uno?**

**Palabras:** \_\_\_\_\_

**Números:** \_\_\_\_\_

**¿Cómo sabes que son porciones iguales?**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## **FAMILY FUN Involvement**

1<sup>st</sup> – 2<sup>nd</sup>

Overview for Unit 3, *Where the Wild Things Are*

This overview will provide a one-page view of the suggested Family Fun Activities for this unit, as well as other opportunities provided for Family Involvement.

### **Lesson 1**

- Vocabulary Cards so students can practice language and math vocabulary at home
- Family Fun Unit 3 Lesson 1 Letter with many ideas for involving the family

### **Lesson 2**

- You could send home a tape of a reading of the story, or if Internet is available at home, include a link to the Related Links to hear it read online.
- Family Fun Unit 3 Lesson 2 Letter

### **Lesson 3**

- Family Fun Unit 3, Lesson 3 attached to the Family Fun Game supplies
- Family Enjoyment of Unit Project

### **Enrichment Suggestions**

- Create a Wild Thing at home
- Take a walk around their homes and list all the “wild things” that live in the area.

*This portion of the curriculum, although NOT required, should be used as needed to supplement and enrich the Unit's activities.*

**Family Fun Suggestions:**

- Send home materials to make a Wild Thing – anything from a child's imagination. Display the wild things when they come back to school.
- Families could investigate the "wild things" that live around their home.

**Possible Center Suggestions:**

- Online Math Games
- Art Project

**MATH WALK**

Wild Thing Walk – Class walks in an area around the school that they might see in a dream as Max saw his Wild Thing place. What would the Wild Things look like? Where would they live? What would the wild rumpus look like at your site?

**Technology Connections**

• **Math Practice**

[http://www.coolmath-games.com/0-math-lines/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29)

Challenging game for making 10

<http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html>

Adding 2-digit numbers

• **Science Connection**

<http://www.teachingideas.co.uk/library/books/wherethewildthingsare.htm>

Create a fact sheet about one of the Wild Things.

<http://www.easyfunschool.com/article1293.html>

Interesting seed investigations

• **Social Studies Connection**

<http://www.easyfunschool.com/article1293.html>

Where do wild things live?

• **Health/Physical Ed Connection**

Let the wild rumpus start! – Play energizing music and let students dance extemporaneously.

• **Art Connection**

<http://www.deepspacesparkle.com/2009/03/where-wild-things-are-watercolor/>

Monster water color drawings and paintings

<http://www.switchzoo.com/>

Make new animals on this site.





<p><b>Math Objectives</b> (TV1) (simple word problems and numbers)</p> <ul style="list-style-type: none"> <li>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</li> </ul> <p>(TV3)(more challenging word problems and numbers)</p> <ul style="list-style-type: none"> <li>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</li> </ul>	<p><b>Materials</b> (TV1)</p> <ul style="list-style-type: none"> <li>base ten sets – 1 set per student             <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> <li>dark wide marker - 1 per student</li> <li><b>BLM</b> Max and Wild Things – 1 per student</li> <li><b>BLM TM</b> Wild Thing Story Board – 1 per student from TM</li> </ul> <p>(TV3)</p> <ul style="list-style-type: none"> <li>base ten sets – 1 set per student             <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> <li>Wild Thing Story Board from Lesson 1– 1 per student from</li> <li><b>BLM</b> Max and Wild Thing Trading – 1 per student</li> </ul> <p><b>Family Fun</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Family Fun Game board (already home)</li> <li><b>BLM</b> Family Fun Movement Cards (already home)</li> <li><b>BLM</b> 1<sup>st</sup> – 2<sup>nd</sup> Special Instructions</li> <li><b>BLM</b> Family Fun Problem Cards (blue)</li> <li><b>BLM</b> Family Fun Answer Key – all levels</li> <li>Base ten blocks – 10 tens, 20 units</li> <li>Counters (20 – could be pebbles, beans from home)</li> <li>Game markers</li> </ul> <p><b>Snack Fractions – TV lesson 3</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Bread and Banana Fractions</li> <li>2 slices raisin bread</li> <li>1 banana</li> <li>4 T peanut butter</li> <li>2 paper plates</li> <li>2 paper towels</li> <li>2 plastic knives</li> <li>Chart paper with question: <b>How do you know that each portion is a fourth?</b> Put a copy of the record sheet at the top of the chart with the question.</li> </ul>
<p><b>Differentiate</b></p> <p>Differentiating comes in your choice of which lesson to teach. You will also want to choose activities in the Daily Routines that teach/review the skills you need for your students to learn/review. Measurement is particularly important to the assessment.</p>	
<p><b>Snack Fraction Notice</b></p> <p>All snack fractions are common throughout the grade bands. All grade bands have daily snack fraction activities provided. All snack fractions for a unit in a specific grade band will practice the same set of skills. Therefore, you may choose from any of the three activities. Lesson 3 has been suggested for its ease of delivery.</p>	

### QUESTIONING

As a result of this lesson, your students should be able to respond to the following:

- What does it mean to trade, exchange, or regroup?
- Explain the process of trading, exchanging or regrouping when you add / subtract.

## Math Vocabulary

regrouping, trading, exchanging

### CGI Problem (select one)

- Join, Change Unknown (*2<sup>nd</sup> item 5*)
- Compare, Difference Unknown (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
- Part Whole, Whole Unknown (*1<sup>st</sup> item 3ab*)

### Journal Writing

Explain how to regroup (trade, or exchange).

**Family Fun** (A generic game board is being used in all grade levels, differentiated by game cards specific to the grade level.) There is only one type of game this year. All games will have problem cards and an answer key at all levels. Please be sure the 1<sup>st</sup> – 2<sup>nd</sup> grade cards are printed on blue cardstock. The first nine cards are current unit skills. The next nine cards practice previous unit skills.

**Snack Fractions** TV lesson 3, Raisin Bread, Peanut Butter, Banana. You can select any of the three snacks that are appropriate for your homes – all three snacks in 1<sup>st</sup> – 2<sup>nd</sup> grade level will practice the same skills. The record sheet for TV Lesson 3 simulates assessment items.

Students represent the fourths on the record sheet, divide the actual snack into halves and informally compare halves and fourths.

**Assessment** – Students will be introduced to and practice skills for items

**1<sup>st</sup>** - 1, 2, 3, 4, 5, 6, 8

**2<sup>nd</sup>** - 1, 2, 3, 4, 5, 6, 7

# 1<sup>st</sup>-2<sup>nd</sup>

# Overview

## Unit 4

### The Legend of the Lady Slipper

This is a quick snapshot of the three math lessons for this unit. For detailed instructions, balance literacy objectives/extended activities, enrichment ideas refer to the complete lesson plans for each lesson. Notice that the Classroom Lesson has been divided into the Language portion and the Transition to Math portion.

Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<p><b>Daily Routine</b> Unit 3 Lesson 1 30 – 45 minutes</p>	<p><b>ESSENTIAL</b> Solve math word problems. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p> <p><b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p>	<p><b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.</p> <p><b>OPTIONAL</b> Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones. Graph data from classroom experiences and debrief the data.</p>	<p><b>ESSENTIAL</b> • Target Number • CGI Problem • What’s Missing • Measurement</p> <p><b>OPTIONAL</b> • Solve It! • Calendar • Straws • Pennies • Graphing • Vocabulary building</p> <p><b>OPTIONAL Program Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b> • 50 base ten units per student • Unknown Quantity Cards</p> <p><b>OPTIONAL</b> • 30 Straws and rubber bands for board and student kits • Pennies, nickels, dimes, quarters for counting days in school</p>	<p><b>ESSENTIAL</b> • BLM CGI Problems Unit 3 – teacher only</p> <p><b>OPTIONAL</b> • BLM Solve It! 1 problems • BLMs for Daily Routine Board</p>
<p><b>Classroom</b> (Language and Transition to Math Lessons) Unit 3 Lesson 1 .5 to 1 hour</p>	<p><b>Math Objectives</b> Model 2-digit subtraction with base ten materials and connect the models to the algorithm. Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.</p>	<p><b>Reading Objectives</b> Retell the key details of a legend using a Story Map. Explain the lesson of the legend.</p> <p><b>Language Objectives</b> Understand new vocabulary words in a legend, and use them to fill in a Story Map.</p>	<p><b>Language</b> <i>The Legend of the Lady Slipper</i> by Lise Lunge-Larsen and Margi Preus  Story Map Read Aloud Retelling</p> <p><b>Vocabulary:</b> folktale, legend, character, setting, village, journey, moccasins, messenger,</p>	<p><b>Language</b> • BLM Word Cards • BLM Legend Chart • BLM Folktales Chart • BLM Story Map – enlarged, or recreated on chart paper</p>	

<p><b>TV</b> <b>Unit 3 Lesson 1</b> 30 minutes</p>	<p>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p><b>Math Language Objectives</b> Define vocabulary words. Discuss the activity with peers.</p>	<p>medicine</p> <p><b>Math</b> <b>Building Background</b> Review regrouping, trading, exchanging</p> <p><b>Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p> <p><b>Building Background</b> Add base ten columns to story board.</p> <p><b>Vocabulary Building</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p> <p><b>Mathematics</b> Solve more difficult word problems that include regrouping.</p>	<p><b>Math</b> • Base Ten Sets ○ 15 longs ○ 20 units</p> <p><i>Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.</i></p> <ul style="list-style-type: none"> <li>• base ten sets – 1 set per student <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> </ul>	<p><b>Math</b> • <b>BLM TM</b> Teacher’s Guide pages 1 and 2 – teacher only</p> <ul style="list-style-type: none"> <li>• <b>BLM</b>– Lady’s Slipper Base Ten Board - 1 per student</li> <li>• <b>BLM</b> - Lady’s Slipper Problems 1 per student</li> </ul>
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<p><b>Follow-up and Snack Fraction Unit 3 Lesson 1</b></p> <p>.5 to 1 hour</p>	<p>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p>Listen and speak with a partner during our math activity. Explain how the base ten model relates to the number representation. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>Continue TV Lesson, circulating the room and asking questions provided in the lesson format.</p>	<ul style="list-style-type: none"> <li>• Lady's Slipper Base Ten Board – 1 per student from TV (<i>students do NOT have to use this if they do wish to</i>)</li> <li>• base ten sets – 1 set per student <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> Lady's Slipper #2 – 1 per student</li> <li>• <b>BLM Teacher KEY</b></li> </ul>
<p><b>SNACK FRACTIONS</b> Use concrete models to represent and name fractional parts of a whole (fourths and halves). Use concrete models to represent and name fractional parts of a set of objects (fourths and halves). Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red. Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is a fourth/half. Share-write what is a fourth or half. Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red. Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p><b>SNACK FRACTIONS Building Background</b> Teacher explains the activity – pretend they are sharing with three other friends. <b>Vocabulary</b> half, halves fourth, fourths fair shares equal pieces <b>Math</b> Students pretend share in fourths on the record sheet, then share the real snack with a friend. Compare halves and fourths.</p>	<p><b>SNACK FRACTIONS</b> <b>STUDENT ACTIVITY (per group of 4, per teacher):</b></p> <ul style="list-style-type: none"> <li>• Skewers (1 per student)</li> <li>• Food items in Ziploc bags: <ul style="list-style-type: none"> <li>○ 12 1" cubes of cooked meat or chicken</li> <li>○ 8 cubes of cheese</li> <li>○ 8 cubes pineapple</li> <li>○ 8 cherry tomatoes</li> </ul> </li> <li>• 16 bathroom type paper cups</li> <li>• 4 paper plates</li> <li>• 4 paper towels</li> <li>• 4 scissors</li> <li>• 4 glue sticks</li> <li>• Chart paper with question: <b>How do you know you have one-fourth of each food item?</b></li> </ul>	<p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Kabob Fractions</li> <li>• <b>BLM</b> Are these fourths? (<i>for the Share-Write at the end of the lesson.</i>)</li> </ul>	

Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<p><b>Daily Routine</b> Unit 3 Lesson 2 30 – 45 minutes</p>	<p><b>ESSENTIAL</b> Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p> <p><b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p>	<p><b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.</p> <p><b>OPTIONAL</b> Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Target Number</li> <li>CGI Problem</li> <li>What’s Missing</li> <li>Measurement</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Solve It!</li> <li>Calendar</li> <li>Straws</li> <li>Pennies</li> <li>Graphing (none today)</li> <li>Vocabulary building</li> </ul> <p><b>OPTIONAL Program</b> <b>Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>50 base ten units per student</li> <li>Unknown Quantity Cards</li> <li>Dark marker – 1 per student</li> <li>Large white or manila construction paper for footsteps – 1 per student</li> <li>Scissors – 1 pair per student</li> <li>2 sticky notes – per student</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>30 Straws and rubber bands for board and student kits</li> <li>Pennies, nickels, dimes, quarters for counting days in school</li> <li>Class graph</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>BLM CGI Problems Unit 3 – teacher only</li> <li>BLM CGI Problems Unit 4 – teacher only</li> <li>BLM Footsteps</li> <li>BLM Teacher Guide</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>BLM Solve It! 1 problems</li> <li>BLMs for Daily Routine Board</li> <li>BLM Ojibwa Art graph</li> </ul>
<p><b>Classroom</b> Unit 3, Lesson 2 1 to 1.5 hour</p>	<p>Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three terms in the equation. Compose 10 with two or more addends with and without concrete objects.</p>	<p><b>Reading Objectives</b> Find words in a shared reading text and read those words. Retell the key details of a story.</p> <p><b>Language Objectives</b> Use vocabulary words to talk about a legend.</p>	<p><b>Language</b> <i>The Legend of the Lady Slipper</i> by Lise Lunge-Larsen and Margi Preus</p> <p>Vocabulary Activity Shared Reading Legend Booklet</p> <p><b>Vocabulary:</b> folktales, legend, character, setting, village, journey, moccasins, messenger, medicine</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>Art supplies (crayons or colored pencils)</li> <li>Shared Reading text pre-written on chart paper</li> </ul>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>BLM Word Cards</li> <li>BLM Legend Booklet – The Legend of the Lady Slipper, one copy per student</li> </ul>
		<p><b>Math</b> Building Background</p>	<p><b>Math</b> base ten sets</p>	<p><b>Math</b> Cool Strategies -</p>	

		Define vocabulary words. Discuss the activity with peers.	Directed toward the assessment item which has students matching picture to number sentence.  <b>Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than	<ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units</li> </ul>	1 per student
<b>TV</b> <b>Unit 3, Lesson 2</b>  30 minutes	Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.	Use the math vocabulary during the activity. Discuss solution strategies. Explain how to regroup in addition and subtraction.	<b>Building Background</b>  <b>Vocabulary Building</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than  <b>Mathematics</b> Students choose their strategy, but Azulito explains all that we have practiced.	<ul style="list-style-type: none"> <li>● base ten sets – 1 set per student</li> <li>○ 15 longs</li> <li>○ 20 units (<i>or units they already have from measuring</i>)</li> </ul>	<ul style="list-style-type: none"> <li>● <b>BLM</b> – Ojibwa Art 1 per student</li> <li>● <b>BLM</b> Ojibwa Art, Azulito's Answer sheet – TV only</li> </ul>
<b>Follow-up and Snack Fraction</b> <b>Unit 3 Lesson 2</b>  .5 to 1 hour	Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.	Listen and speak with a partner during our math activity. Explain how the base ten models relate to the number representation. Use the math vocabulary during the activity. Share-write math journal response.	Continue solving problems in the same fashion as the TV Lesson.	<ul style="list-style-type: none"> <li>● base ten sets – 1 set per student</li> <li>○ 15 longs</li> <li>○ 20 units (<i>or units they already have from measuring</i>)</li> </ul>	<ul style="list-style-type: none"> <li>● Ojibwa Art from TV Lesson - 1 per student</li> </ul>
	<b>SNACK FRACTIONS</b> Separate a whole into four	<b>SNACK FRACTIONS</b> Explain why each portion	<b>SNACK FRACTIONS</b> <b>Building Background</b>	<b>SNACK FRACTIONS</b> <b>STUDENT ACTIVITY</b>	<b>SNACK FRACTIONS</b> ● <b>BLM</b> Snack Bag Fractions

	<p>equal parts and use appropriate language to describe the parts, such as one out of four equal parts. Partition objects into four equal parts and name the parts fourths. Write the fraction in numeric form.</p>	<p>is one-fourth. Share-write what is a fourth.</p>	<p>Explain the “pretend” fourths as in Lesson 1.</p> <p><b>Vocabulary</b> half fair share equal pieces more than fewer than</p> <p>Students compare number of snacks in their teams snack pack.</p>	<p><b>(per group of 3, per teacher):</b></p> <ul style="list-style-type: none"> <li>• 3 bags of 100 calorie snacks – select a snack that has many pieces rather than a stacked cookie package (1 bag per student)</li> <li>• 3 paper plates</li> <li>• 3 paper towels</li> <li>• scissors</li> <li>• glue stick</li> </ul>	<ul style="list-style-type: none"> <li>• Chart paper with question: <b>Did your snack bags divide your snack into fair shares? Why or why not?</b> Work as a class to decide if the snacks provided in each bag gave each partner fair shares of today’s snack, or thirds.</li> </ul>
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Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<p><b>Daily Routine</b>  <b>Unit 3 Lesson 3</b>            30 – 45 minutes</p>	<p><b>ESSENTIAL</b>            Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.  <b>OPTIONAL</b>            Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem. Estimate coins in a jar and count by tens and ones to verify estimate.</p>	<p><b>ESSENTIAL</b>            Listen, read and write to understand problems and explain solution strategies.  <b>OPTIONAL</b>            Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones. Graph data from classroom experiences and debrief the data.</p>	<p><b>ESSENTIAL</b>            • Target Number            • CGI Problem            • What’s Missing            • Measurement  <b>OPTIONAL</b>            • Solve It!            • Calendar            • Straws            • Pennies            • Graphing            • Vocabulary building  <b>OPTIONAL Program</b>  <b>Money Matters</b> found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b>            • 50 base ten units per student            • Unknown Quantity Cards            • 2 sticky notes – per student            • Large area to display measurement Sticky Notes and Footsteps  <b>OPTIONAL</b>            • Bar graph generic board            • Tag for titles            • Jar with 43 nickels            • 30 Straws and rubber bands for board and student kits            • Pennies, nickels, dimes, quarters for counting days in school</p>	<p><b>ESSENTIAL</b>            • BLM CGI Problems Unit 3 – teacher only            • BLM Teacher Guide to activity  <b>OPTIONAL</b>            • BLM Solve It! 1 problems            • BLMs for Daily Routine Board            • BLM Ojibwa Moccasin graph</p>
<p><b>Classroom</b>  <b>Unit 3, Lesson 3</b>            1 to 1.5 hour</p>	<p><b>Math Objectives</b>            Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem. Solve one-step word problems involving addition or subtraction within 100 using a variety of strategies based on place value, including</p>	<p><b>Reading Objectives</b>            Develop reading fluency through repeated reading of a text.  <b>Language Objectives</b>            Understand, use, and apply new vocabulary. Understand vocabulary words in a shared reading text. Sort words from the story by a given rule (ex. Number of Syllables).</p>	<p><b>Language</b>  <i>The Legend of the Lady Slipper</i> by Lise Lunge-Larsen and Margi Preus  <b>Shared Reading</b>            Word Sort  <b>Vocabulary:</b> folktale, legend, character, setting, village, journey, moccasins, messenger, medicine</p>	<p><b>Language</b>            • Syllable sorting chart prewritten on chart paper            • Shared Reading text used in lesson 2            • Word Sort Chart pre-written on chart paper</p>	<p><b>Language</b>            • BLM Word Cards            • BLM Word Sort Activity (class set)</p>

	algorithms.		<p><b>Math Language Objectives</b> Discuss patterns explored in base ten materials. Use unit vocabulary properly in discussions.</p>	<p><b>Math</b> <b>Building Background</b> Arithmetic practice on a color sheet. <b>Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p>	<p><b>Math</b> • base ten set – 1 per student ○ 15 tens ○ 20 units • crayons: light blue, dark blue, light green, dark green, yellow – 1 set per student</p>	<p><b>Math</b> • <b>BLM TM</b> Coloring Ojibwe Art - 1 per student (2 per student if you'd like them to have a second copy to color as they wish)</p>
<b>TV</b> <b>Unit 3, Lesson 3</b> 30 minutes	Solve one-step word problems involving addition or subtraction within 100 using a variety of strategies based on place value, including algorithms.	Use the math vocabulary during the activity. Discuss solution strategies. Explain how to create the fact family number sentences from three related numbers.	<p><b>Building Background</b> Azulito describes his exploration of the base ten materials. <b>Vocabulary Building</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than <b>Mathematics</b> Solve substantial word problems all with 2-digit numbers.</p>	<p><b>Math</b> • base ten sets – 1 set per student ○ 15 longs ○ 20 units</p>	<p>• <b>BLM</b>– Salmon Problems 1 per student • <b>BLM</b> Azulito's Salmon Problems – TV teacher only</p>	
<b>Follow-up and Snack Fraction</b> <b>Unit 3 Lesson 3</b> .5 to 1 hour	Practice previously learned skills. Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.	Listen and speak with a partner during our math activity. Play a review game with a small group. Use the math vocabulary during the activity. Share-write math journal response.	<p>Students discuss the TV problems. Students view the Family Fun Game cards to discuss possible solution strategies. Students complete the arithmetic lesson from TM.</p>	<p>• crayons (same as TM)- 1 set per students • base ten sets – 1 set per student ○ 15 longs ○ 20 units (or units they already have from measuring) • Salmon Problems from TV Lesson - 1 per student</p>	<p>• Family Fun Game Board • Family Fun Movement Cards • 20 counters • Games Markers • <b>BLM</b> Family Fun Problem Cards, Unit 2 • <b>BLM</b> Special Instructions • <b>BLM</b> All-School Answer Key</p>	

	<p><b>SNACK FRACTIONS</b> Use concrete models to represent and name fractional parts of a whole and parts of a set of objects (fourths and halves). Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red. Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part. Write fraction in numerical form.</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is a fourth/half. Share-write what is a fourth or half. Explain whether you would rather have a fourth or a half of your favorite snack and why.</p>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Teacher explanation of activity. <b>Vocabulary</b> fourth, fourths fair shares equal pieces</p>	<p>• Way to project game cards for the class to see and read • Color activity from TM – 1 per student</p> <p><b>STUDENT ACTIVITY (per group of 4):</b></p> <ul style="list-style-type: none"> <li>• 4 full graham cracker sheets</li> <li>• 2 T peanut butter</li> <li>• 4 plastic knives</li> <li>• 4 paper plates</li> <li>• 4 paper towels</li> <li>• 4 scissors</li> <li>• 4 glue sticks</li> </ul>	<p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Crackers and Peanut Butter Fractions</li> <li>• Chart paper with question: <b>How do you know you have one-fourth of each part of the snack?</b></li> </ul>
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<b>Unit 4</b>	<b>Lesson 1</b>			<b>Lesson 2</b>		<b>Lesson 3</b>
	<b>TV and Follow Up</b>	<b>Snack Fractions</b>	<b>TV and Follow Up</b>	<b>Snack Fractions</b>	<b>TV and Follow Up</b>	<b>Snack Fractions</b>
<b>1<sup>st</sup> Grade</b> <b>Assessment Items</b> <ul style="list-style-type: none"> <li>Lesson 1: 4, 8</li> <li>Lesson 2:</li> <li>Lesson 3:</li> </ul> <b>Daily Routines</b> <ul style="list-style-type: none"> <li>What's Missing (2)</li> <li>CGI (3, 5)</li> <li>Target Number</li> <li>Measurement (5)</li> </ul> <b>Snack Fractions (6, 8)</b>	<p>1.3B Use objects and pictorial models to solve word problems involving joining, separating sets within 20 and unknowns as any one of the terms in the problem</p> <p>1.3C compose 10 with two addends with and without concrete objects.</p> <p>1.3F Generate and solve problems situations when given a number sentence involving addition or subtraction of numbers within 20</p> <p>1.5D Represent word problems involving addition and subtraction of whole numbers up tot 200 using concrete and pictorial models and number sentences</p> <p>1.5F Determine the unknown whole number in an addition or subtraction equations when the</p>	<p>1.6G Partition two – dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p>1.6H Identify examples and non-examples of halves and fourths</p> <p>2.3A Partition objects into equal parts and name the parts, including halves, fourths, and eighths using words.</p> <p>2.3C Use concrete models to count fractions parts beyond one whole using words and recognize how many parts it takes to equal one whole</p> <p>2.3D Identify examples and non-examples of halves, fourths, and eighths.</p>	<p>1.3B Use objects and pictorial models to solve word problems involving joining, separating sets within 20 and unknowns as any one of the terms in the problem</p> <p>1.3C compose 10 with two addends with and without concrete objects.</p> <p>1.3F Generate and solve problems situations when given a number sentence involving addition or subtraction of numbers within 20</p> <p>1.5D Represent word problems involving addition and subtraction of whole numbers up tot 200 using concrete and pictorial models and number sentences</p> <p>1.5F Determine the unknown whole number in an addition or subtraction equations when the unknown may be any one of the three or four terms in the equation.</p> <p>2.4B Recall basic facts to add and subtract within 20 with automaticity.</p> <p>2.4C Solve one-step and</p>	<p>1.6G Partition two – dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p>1.6H Identify examples and non-examples of halves and fourths</p> <p>2.3A Partition objects into equal parts and name the parts, including halves, fourths, and eighths using words.</p> <p>2.3C Use concrete models to count fractions parts beyond one whole using words and recognize how many parts it takes to equal one whole</p> <p>2.3D Identify examples and non-examples of halves, fourths, and eighths.</p>	<p>1.3B Use objects and pictorial models to solve word problems involving joining, separating sets within 20 and unknowns as any one of the terms in the problem</p> <p>1.3C compose 10 with two addends with and without concrete objects.</p> <p>1.3F Generate and solve problems situations when given a number sentence involving addition or subtraction of numbers within 20</p> <p>1.5D Represent word problems involving addition and subtraction of whole numbers up tot 200 using concrete and pictorial models and number sentences</p> <p>1.5F Determine the unknown whole number in an addition or subtraction equations when the unknown may be any one of the three or four terms in the equation.</p> <p>2.4B Recall basic facts to add and subtract within 20 with automaticity.</p> <p>2.4C Solve one-step and</p>	<p><b>31.6G</b> Partition two – dimensional figures into two and four fair shares or equal parts and describe the parts using words.</p> <p>1.6H Identify examples and non-examples of halves and fourths</p> <p>2.3A Partition objects into equal parts and name the parts, including halves, fourths, and eighths using words.</p> <p>2.3C Use concrete models to count fractions parts beyond one whole using words and recognize how many parts it takes to equal one whole</p> <p>2.3D Identify examples and non-examples of halves, fourths, and eighths.</p>
<b>2<sup>nd</sup> Grade</b> <b>Assessment Items</b> <ul style="list-style-type: none"> <li>Lesson 1: review 2st grade objectives</li> <li>Lesson 2: 1, 2, 5, 6</li> <li>Lesson 3: 1, 2, 5, 6</li> </ul> <b>Daily Routines</b> <ul style="list-style-type: none"> <li>Measurement (6)</li> <li>CGI (5, 6)</li> </ul> <b>Snack Fractions (8)</b>						

# 1-2 Roadmap Unit 4 | 2014

	<p>unknown may be any one of the three or four terms in the equation.</p> <p>2.4B Recall basic facts to add and subtract within 20 with automaticity.</p> <p>2.4C Solve one-step and multi-step word problems involving addition and subtraction using a variety of strategies based on place value, including algorithms,</p> <p>2.7C Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.</p>		<p>2.4B Recall basic facts to add and subtract within 20 with automaticity.</p> <p>2.4C Solve one-step and multi-step word problems involving addition and subtraction using a variety of strategies based on place value, including algorithms,</p> <p>2.7C Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.</p>		<p>multi-step word problems involving addition and subtraction using a variety of strategies based on place value, including algorithms,</p> <p>2.7C Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.</p>	
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## Project SMART/Math MATTERS 2014

Grade Level: 1-2

Unit 4 / Lessons 1 – 2 - 3

### Daily Routine Math Objectives:

Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.

Model and solve oral word problems.

Model and solve 2-step word problems.

Represent numbers in a variety of representations including contextual references (i.e., 12 could be  $7 + 5$ , but could also be a dozen).

Read and use a calendar.

Count objects, group in ones and tens.

Compare item lengths using money as the unit of measure.

Estimate and measure linearly in units that approximate standard units.

Create graphs from everyday experiences.

### Daily Routine Language Objectives:

Reason, model and solve oral word problems.

Listen to, read and speak measurement vocabulary: length, estimate, width, longer, shorter.

Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.

Write graph titles and labels interactively.

### Unit Math Objectives (Integrated Lesson including snack fractions):

Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem.

Solve one-step and multi-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value including algorithms.

Partition two-dimensional figures into four fair shares or equal parts and describe the parts using words.

Identify examples and non-examples of fourths.

Partition objects into equal parts and name the parts including halves, fourths and eighths, using words.

### Unit Language Objectives:

Listen to, speak, read and write unit vocabulary in a variety of group and individual settings.

Share-write math sentences.

Describe why a snack is or is not half.

Understand new vocabulary words in a legend, and use them to fill in a Story Map.

Use vocabulary words to talk about a legend.

Understand, use, and apply new vocabulary.

Understand vocabulary words in a shared reading text.

Sort words from the story by a given rule (ex., Number of Syllables).

### Technology Objectives:

Use research skills and electronic communication, with appropriate supervision, to create new knowledge.

Technology suggested in this unit: iPad, SMART Board or other “smart” projection device, Internet

**Key Vocabulary, MATH: Repeated Vocabulary:** regrouping, exchanging, trading, comparing, more than, less than, fewer than

**Key Vocabulary, LANGUAGE:** folktale, legend, character, setting, village, journey, moccasins, messenger, medicine

### Resources/Literacy Links

*The Legend of the Lady Slipper* by Lise Lunge-Larsen and Margi Preus

Related links : <http://vimeo.com/32120573> storyteller telling the story

<http://www.mrsoshouse.com/ext/ladyslip.html> Interesting web scavenger hunt (social studies related)

### Lesson Sequence

- Daily Routine: 30 to 45 minutes
- Classroom Lesson: 1 to 1.5 hour
- TV Lesson: 30 minutes
- Classroom Follow-up including Snack Fractions: .5 to 1 hour

### MATH WALK

Wild Flower Walk

#### Technology Connections

- **Math Practice**

[http://www.coolmath-games.com/0-math-](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29)

[lines/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29)

Challenging game for making 10

<http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html>

Adding 2-digit numbers

- **Science Connection**

[http://www.fcps.edu/islandcreekes/ecology/pink\\_ladys\\_slipper.htm](http://www.fcps.edu/islandcreekes/ecology/pink_ladys_slipper.htm)

Facts about the flower, Lady's Slipper

<http://www.easyfunschool.com/article1293.html>

Interesting seed investigations

- **Social Studies Connection**

[http://www.bigorrin.org/chippewa\\_kids.htm](http://www.bigorrin.org/chippewa_kids.htm)

Ojibwe people information

<http://nmai.si.edu/environment/ojibwe/People.aspx>

Learn more about Ojibwe people

- **Health/Physical Ed Connection**

Wah-Oh-Nay, or Little Flower, Walk

<http://nativeamericans.mrdonn.org/games.html>

Games to play

- **Art Connection**

[http://www.ehow.com/info\\_7943694\\_ladys-slipper-crafts-kids.html](http://www.ehow.com/info_7943694_ladys-slipper-crafts-kids.html)

Several craft ideas centered around Lady's Slippers.



## Unit 4 OPTIONAL All-School Project

Because all grade bands will be reading, learning and researching within the same unit theme, we are offering OPTIONAL projects in which all ages can participate.

### Unit Theme: Folktales

### Unit 4: Folktale Presentations

#### Defined:

Students create scenery, props, costumes and script then perform their folktale to the rest of the school. The presentation might be a: live performance, choral reading, puppet show, shadow puppet show, PowerPoint presentation and live reading, radio broadcast, movie, or any other venue that you and your class decide upon. The presentation, however, should be part of a whole-school event during which each grade band presents the folktale read during this unit. 7-8 can participate by selecting one of the four books read thus far.

#### Materials:

- Materials are based on your chosen presentation venue.

#### Objectives: (add your own objectives to the project)

- Students understand the elements of a folktale.
- Students work cooperatively to produce a presentation of their folktale.
- Students write brief descriptions of the memorable images.

#### Procedures:

##### STAFF:

- Teaching staff should plan the all-school event ahead of time, selecting time, place, and name of all-school event such as Rooster Crow Productions or Sundown Theater, or Folktale Spin Productions, or whatever clever name you devise. Think about an MC for the event.
- It would be wise that the teachers select the presentation venue for the event based on the talents, resources and time each grade band teacher believes her/his class can contribute.
- You might be able to involve community leaders in helping students with costumes, props, script writing, etc., based on your production venue selections.

##### STUDENTS:

- Students work into cooperative groups that will create various parts of the presentation based on the venue: script, costumes, scenery, sound-effects, etc. NOTE: Kinder and 1-2 will need much more guidance than 3-4 and 5-6 in the planning process.
  1. Pull the components of the presentation together and practice.
  2. Present the venue to the larger group in the main event.

## Unit 4 OPTIONAL All-School Project

### Online Resources:

These videos are just examples of different types of visual presentations, not necessarily folktale presentations; but they can give you an idea of possible presentation venues.

- [http://www.youtube.com/watch?v=eQY3h3kKhY4&feature=youtube\\_gdata](http://www.youtube.com/watch?v=eQY3h3kKhY4&feature=youtube_gdata) – hard to hear, but show how simple the presentations can be
- [http://www.youtube.com/watch?v=-2aAPKx\\_4MQ&feature=youtube\\_gdata](http://www.youtube.com/watch?v=-2aAPKx_4MQ&feature=youtube_gdata) – silent movies theme.
- [http://www.youtube.com/watch?v=OxcY7bA2FPY&feature=youtube\\_gdata](http://www.youtube.com/watch?v=OxcY7bA2FPY&feature=youtube_gdata) – slide show to music
- [http://www.youtube.com/watch?v=T5QgL0jzFx8&feature=youtube\\_gdata](http://www.youtube.com/watch?v=T5QgL0jzFx8&feature=youtube_gdata) – cartoons, captions, and crooning – interesting combo
- [http://www.youtube.com/watch?v=U1n\\_pocRa1U&feature=youtube\\_gdata](http://www.youtube.com/watch?v=U1n_pocRa1U&feature=youtube_gdata) – movie of a fairy tale
- [http://www.youtube.com/watch?v=tlz-rUuSdEw&feature=youtube\\_gdata](http://www.youtube.com/watch?v=tlz-rUuSdEw&feature=youtube_gdata) – life-size diorama come to life
- [http://www.youtube.com/watch?v=91MkLF55By4&feature=youtube\\_gdata](http://www.youtube.com/watch?v=91MkLF55By4&feature=youtube_gdata) – very young to older children involved in creating puppet shows.
- [http://www.youtube.com/watch?v=M\\_uX5lhPb4I&feature=youtube\\_gdata](http://www.youtube.com/watch?v=M_uX5lhPb4I&feature=youtube_gdata) – video a mixture of puppets and real life backdrop
- [http://www.youtube.com/watch?v=nn646hwJwoU&feature=youtube\\_gdata](http://www.youtube.com/watch?v=nn646hwJwoU&feature=youtube_gdata) – first grade presentation – hard to hear, but simple presentation style
- [http://www.youtube.com/watch?v=sBlw6BRkCnM&feature=youtube\\_gdata](http://www.youtube.com/watch?v=sBlw6BRkCnM&feature=youtube_gdata) – animation ideas for older children
- [http://www.youtube.com/watch?v=l3NvkxNpjGg&feature=youtube\\_gdata](http://www.youtube.com/watch?v=l3NvkxNpjGg&feature=youtube_gdata) – shadow play and choral reading
- [http://www.youtube.com/watch?v=lhcu45ticaY&feature=youtube\\_gdata](http://www.youtube.com/watch?v=lhcu45ticaY&feature=youtube_gdata) – Using “Book Writer”
- [http://www.youtube.com/watch?v=d\\_F-4u0ygLc&feature=youtube\\_gdata](http://www.youtube.com/watch?v=d_F-4u0ygLc&feature=youtube_gdata) Hmong folktale presentation
- [http://www.youtube.com/watch?v=a8Nj3KDsA-U&feature=youtube\\_gdata](http://www.youtube.com/watch?v=a8Nj3KDsA-U&feature=youtube_gdata) – musical presentation by Kinders –
- [http://www.youtube.com/watch?v=Qs-zlzALYNU&feature=youtube\\_gdata](http://www.youtube.com/watch?v=Qs-zlzALYNU&feature=youtube_gdata) – OK, so this is like a Broadway musical, but, it’s cool
- [http://www.youtube.com/watch?v=c5RIZN9fxzg&feature=youtube\\_gdata](http://www.youtube.com/watch?v=c5RIZN9fxzg&feature=youtube_gdata)

**Materials**

- 50 base ten units per student
- Unknown Quantity Cards
- **BLM** CGI Problems Unit 4 – teacher only

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy****Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS**

Lessons 1, 2, 3

- 1<sup>st</sup> – 1.3BCF; 1.5DF. 1.6GH
- 2<sup>nd</sup> – 2.3A, 2.4BC; 2.7C

**ELPS (English Language Proficiency Standard)**

1E, 1G, 2E, 2G, 2H, 3A, 3B, 3C

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1., I.C.1., I.C.2., II.A.1., II.A.4  
 ELA II.A.2., II.A.3., II.B.1., III.B.2  
 MATH I.A.1., IV.A.1., V.A.1., IV.B.1., VI.C.2., VIII.A.4

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 6, 7, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 6, 7

**Unit 4, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Daily Routine**

**Mid-assessment – if you administer the Mid-assessment to 2<sup>nd</sup> graders, today is the day.**

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – none
  - Lesson 2 - 15
  - Lesson 3 – 45
- **CGI Problem\***
  - Lesson 1 – **Join, Change Unknown** (*2<sup>nd</sup> item 5*)
  - Lesson 2 – Compare, Difference Unknown (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
  - Lesson 3 – Part Whole. Whole Unknown (*1<sup>st</sup> item 3ab*)
- **What’s Missing** (*1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction*)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)\*\*
  - Lesson 1 – none
  - Lesson 2 – How long are your footsteps?
    - BLM Footsteps
    - BLM Teacher Guide
    - Base ten units – 50 per student
  - Lesson 3 – Comparing Footsteps
    - BLM Teacher Guide

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

#### Azulito's Corner Unit 4, Lesson 1 CGI

How did you solve the CGI problem today? Please explain your strategy to us. Let's see how many different strategies we see across the United States.

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems. Follow the guidelines in Solve It! Overview to facilitation Lessons 1, 2, and 3.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – none
  - Lesson 2 – Favorite Ojibwe Art
    - BLM Favorite Ojibwe Art
  - Lesson 3 – Favorite Moccasins
    - BLM Favorite Ojibwe Moccasins

#### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**Assessment Item 1<sup>st</sup> grade #8 and 2<sup>nd</sup> grade #7 will be reviewed daily in Snack Fractions.**

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

#### Vocabulary Building

Choose an activity listed in the Daily Routines section.

## Unit 4

CGI Problems for *The Legend of the Lady Slipper*

Join	<b>Result Unknown (JRU)</b> There were __ people in the lodge. __ more people entered. How many people are in the lodge now? 17, 10 13, 8 7, 15	<b>Change Unknown (JCU)</b> Little Flower traveled __ miles. How many more miles will she need to travel to complete the __ mile trip to get herbs? 8, 18 11, 20 3, 19	<b>Start Unknown (JSU)</b> Some of the people got sick. Then __ more people got sick. Now __ people are sick. How many people were sick to start? 10, 26 23, 32 18, 37
	<b>Result Unknown (SRU)</b> There were __ deer in the field. __ ran into the woods. How many deer are in the field now? 25, 15 37, 20 52, 18	<b>Change Unknown (SCU)</b> There were __ healthy people in the village. Some got sick and now there are __ healthy people. How many got sick? 36, 20 53, 21 41, 27	<b>Start Unknown (SSU)</b> There were some deer in the field. __ ran off and now there are __ deer in the field. How many deer were in the field to start? 12, 12 24, 30 35, 17
Part-Part-Whole	<b>Whole Unknown (PPW-WU)</b> There were __ healthy people and __ sick people in the village. How many people in all? 21, 23 41, 17 15, 39		<b>Part Unknown (PPW-PU)</b> There were __ people in Little Flower's village. __ were adults and the rest were children. How many were children? 35, 15 42, 21 50, 28
	<b>Difference Unknown (CDU)</b> There were __ pink lady slippers and __ red lady slippers. How many fewer pink than red? 14, 17 24, 35 55, 62	<b>Quantity Unknown (CQU)</b> There were __ red lady slippers growing in the grass. There were __ fewer pink than red. How many pink flowers were there? 17, 8 23, 13 64, 19	<b>Referent Unknown (CRU)</b> There were __ adults in the village. This was __ fewer than the number of children in the village. How many children in the village? 16, 8 47, 20 56, 38
Multiply and Divide	<b>Multiplication</b> There were __ wigwams in the far-away village. Each wigwam held __ people. How many people in all? 5, 10 7, 5 9, 8	<b>Measurement Division (MD)</b> There were __ people in the far-away village. __ lived in each wigwam. How many wigwams were there? 18, 6 27, 9 45, 5	<b>Partitive Division (PD)</b> There were __ people living in the far-away village. The same number of people lived in each of __ wigwams. How many people in each? 15, 3 33, 11 90, 15

Unit 4

CGI Problems for *The Legend of the Lady Slipper*



<p><b>Juntar</b></p>	<p><b>Resultado desconocido (JRU)</b> Había __ personas en la cabaña. __ más personas entraron. ¿Cuántas personas hay en la cabaña ahora? 17, 10 13, 8 7, 15</p>	<p><b>Cambio desconocido (JCU)</b> Pequeña Flor viajó __ millas. ¿Cuántas millas más necesita viajar para terminar el viaje de __ millas para las hierbas? 8, 18 11, 20 3, 19</p>	<p><b>Inicio desconocido (JSU)</b> Algunas personas se enfermaron. Entonces __ personas más se enfermaron. Ahora __ personas están enfermos. ¿Cuántas personas se enfermaron al principio? 10, 26 23, 32 18, 37</p>
<p><b>Separatar</b></p>	<p><b>Resultado desconocido (SRU)</b> Había __ venados en el campo. __ corrieron al bosque. ¿Cuántos venados hay en el campo ahora? 25, 15 37, 20 52, 18</p>	<p><b>Cambio desconocido (SCU)</b> Había __ personas sanas en el pueblo. Algunas se enfermaron y ahora hay __ personas sanas. ¿Cuántas se enfermaron? 36, 20 53, 21 41, 27</p>	<p><b>Inicio desconocido (SSU)</b> Había algunos venados en el campo. __ se fueron y ahora hay __ venados en el campo. ¿Cuántos venados había en el campo al empezar? 12, 12 24, 30 35, 17</p>
<p><b>Parte-parte-entero</b></p>	<p><b>Entero desconocido (PPW-WU)</b> Había __ personas sanas y __ personas enfermas en el pueblo. ¿Cuántas personas hay en total? 21, 23 41, 17 15, 39</p>		<p><b>Parte desconocido (PPW-PU)</b> Había __ personas en el pueblo de Pequeña Flor. __ eran adultos y lo demás niños. ¿Cuántos niños había? 35, 15 42, 21 50, 28</p>
<p><b>Comparar</b></p>	<p><b>Diferencia desconocida (CDU)</b> Había __ zapatitos de dama rosados y __ zapatitos de dama rojos. ¿Cuántos menos rosados había que rojos? 14, 17 24, 35 55, 62</p>	<p><b>Cantidad desconocida (CQU)</b> Había __ zapatitos de dama rojos creciendo en la hierba. Había __ menos rosados que rojos. ¿Cuántas flores rosadas había? 17, 8 23, 13 64, 19</p>	<p><b>Referente desconocido (CRU)</b> Había __ adultos en el pueblo. Esto fue __ menos que el número de niños en el pueblo. ¿Cuántos niños había en el pueblo? 16, 8 47, 20 56, 38</p>
<p><b>Multiplicar y dividir</b></p>	<p><b>Multiplicación</b> Había __ tiendas de indio el pueblo lejano. En cada tienda de indio cabía __ personas. ¿Cuántas personas hay en total? 5, 10 7, 5 9, 8</p>	<p><b>División de medición (MD)</b> Había __ personas en el pueblo lejano. __ vivían en cada tienda de indio. ¿Cuántas tiendas de indio había? 18, 6 27, 9 45, 5</p>	<p><b>División partitiva (PD)</b> Había __ personas en el pueblo lejano. El mismo número de personas vivían en cada __ de las tiendas de indio. ¿Cuántas personas cabía en cada tienda? 15, 3 33, 11 90, 15</p>

# Solve It! Unit 4, Lesson 1

Pairs



## First Problem

- There were 32 cats on the farm. 15 of the cats were brown. How many were not brown?
  - What is the answer to the question? Show your solution strategy.

<b>Problem Solution</b> (#1 Problem Solver) Name:	<b>Solution Verification</b> (#2 Problem Solver) Name:

## Second Problem

- Of the cats that were not brown, 5 were solid white and the rest were orange. How many were orange?
  - What do you need from problem 1 to solve the problem?
  - Be sure to verify the answer to problem 1 before solving this problem.
  - What is the answer to the question? Show your solution strategy.

<b>Problem Solution</b> (#2 Problem Solver) Name:	<b>Solution Verification</b> (#3 Problem Solver) Name:

## Solve It! Unit 4, Lesson 1

Pairs



### First Problem

- Había 32 gatos en la granja. 15 de los gatos eran marrones. ¿Cuántos no eran marrones?
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.

<b>Solución del problema (#1 Problem Solver)</b> Nombre:	<b>Verificación de la solución (#2 Problem Solver)</b> Nombre:

- De los gatos que no eran marrones, 5 eran todos blancos y el resto era anaranjados. ¿Cuántos eran anaranjados?
  - ¿Qué necesitas del problema 1 para resolver este problema?
  - Asegúrate de verificar la respuesta del problema 1 antes de resolver este problema.
  - ¿Cuál es la respuesta a la pregunta? Muestra tu estrategia de solución.

<b>Solución del problema (#2 Problem Solver)</b> Nombre:	<b>Verificación de la solución (#3 Problem Solver)</b> Nombre:



**Literature Selection**

*The Legend of the Lady Slipper*

by Lise Lunge-Larsen and Margi Preus

**Materials**

**Materials for Language Lesson**

- BLM Word Cards
- BLM Legend Chart
- BLM Folktale Chart
- BLM Story Map – enlarged, or recreated on chart paper

**Materials for TM Lesson**

- Base Ten Sets
  - o 15 longs
  - o 20 units
- BLM TM Trading Problems - 1 per student
- BLM TM Teacher’s Guide pages 1 and 2 – teacher only

**Literature Vocabulary**

folktale  
legend  
character  
setting  
village  
journey  
moccasins  
messenger  
medicine

**Math Vocabulary**

**Repeated Vocabulary**

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

**ELPS (English Language Proficiency Standard)**

2F, 3G, 3H, 4G, 4J, 4K

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.B.2., II.C.1., II.A.2., II.A.4.  
ELA II.A.1., II.A.6., II.A.7., II.A.11., II.C.2., III.A.1.

**Unit 4, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson**



Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.

**Math Objectives**

- Model 2-digit subtraction with base ten materials and connect the models to the algorithm.
- Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

**Reading Objectives**

- Retell the key details of a legend using a Story Map.
- Explain the lesson of the legend.

**Language Objectives**

- Understand new vocabulary words in a legend, and use them to fill in a Story Map.

**BEFORE READING**

**Building Background, Literature and Vocabulary**

Show students the cover of today’s story, *The Legend of the Lady Slipper*. Read the title to the students. Ask students, “What is a legend?”

Allow students to share what they may know about a legend.

Display the legend chart (*BLM Legend Chart*) and describe the characteristics to the students.

**A Legend**

- A story that was passed on from person-to-person
- Parts of the story may be true
- It has important meaning for the people in which the story began
- The story usually has a hero

Next, allow students to share what they might know about a folktale.

Display the folktale chart (*BLM Folktale Chart*) and describe the characteristics to the students.

### Guided Reading Groups:

If you conduct guided reading groups as part of your balanced literacy instruction, or provide time for students to read independently, you can reinforce these same reading strategies.

With emergent readers and beginning ELLs, you can have a guided reading group session be more like a shared reading where you preview the text, read it aloud to students the first time through, echo read the text for the second reading, and then possibly have students read it along with you for a third reading.

- **Story Map**

You can use a basic Story Map template to help students identify the key details in the text they're reading (characters, setting, problem, events, solution). Have students point to each section of the Story Map as they talk about it with you.

- **Retelling**

When you finish the guided reading, give students prompts to help them retell the key details of the story with you. Have students use the Story Map as a guide for what to include in the retelling.

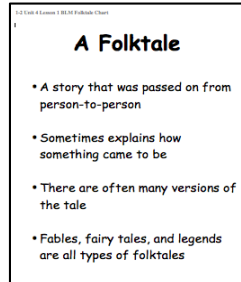
To provide support, you can begin each sentence for students, and then have them fill in the rest of the sentence. Or, you can ask specific questions to get students to recall a specific detail. For example:

- What characters did we meet at the beginning of the story?
- Where are the characters?
- What problem do the characters have?
- Then what happened to the characters?
- What happened at the end? What was the solution?

## Unit 4, Lesson 1

### Classroom Lesson - continued

1<sup>st</sup> – 2<sup>nd</sup>



Explain that the story the students are going to listen to today is a special kind of folktale, called a legend: *The Legend of the Lady Slipper*.

Show the students the picture card of the moccasin and the vocabulary word card. Explain that picture shows a special type of shoe called a moccasin. Say, “The story we are going to read today is about a group of people called the Ojibwe who lived in the northern woods of North America. Moccasins are a typical type of shoe worn by the Ojibwe people.”

Display the word card labeled “village.” The word village is used to describe a group of people living together in a small area. Read the word “village” slowly and with careful enunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “journey.” The word journey is used to describe traveling from one place to another. Read the word “journey” slowly and with careful enunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “messenger.” A messenger is a person who carries a message. Read the word “messenger” slowly and with careful enunciation. Instruct students to read it aloud with you several times as you point to the word.

Display the word card labeled “medicine.” Medicine is something that is used to make the sick feel well. Read the word “medicine” slowly and with careful enunciation. Instruct students to read it aloud with you several times as you point to the word.

Read the Foreword at the beginning of the book. Use the Foreword to set the scene for the story and build the students’ anticipation.

**Listening Center Connection:**

After the read aloud, have students listen to the recorded version of *The Legend of the Lady Slipper* in a Listening Center as part of their independent reading time.

Show students how to listen while following along in the book. Then show students how they can listen to the legend additional times, reading along softly with some of the words. This will help students connect oral language with written language, improving their word recognition, and ultimately their reading fluency.

**ELLs:** Using a listening center is particularly powerful for ELLs as a way to connect oral and written language, build vocabulary, build word recognition, and gain fluency in English.

**Unit 4, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>



**Classroom Lesson** - continued

**DURING READING**

**Comprehensible Input, Literature and Vocabulary**

**Read Aloud: *The Legend of the Lady Slipper***

The reading strategy students will work on this unit is **retelling** key details. This retelling work will take place *after* you read the legend.

To help students with retelling, you will show them how to fill in a **Story Map** with the key details from the legend. Students can then use this Story Map to structure their retelling. Following is an image of the blank Story Map (*BLM Story Map*). You will fill in the character and setting sections of the Story Map as you read, and the remaining sections after you finish the legend. When completed, your Story Map will look something like the second example.

Main Characters	
Setting	
What is the legend about?	
What was the lesson of the story?	
What does it tell us about the people who told the legend?	

Main Characters	Young girl The young girl's brother A woman from another village
Setting	Two Ojibwe villages
What is the legend about?	This legend tells the story of a young girl who journeys to another village in the winter to get medicine for her family and the others in her village who were sick.
What was the lesson of the story?	Helping others is important. Make sacrifices for those you love. Making sacrifices takes courage.
What does it tell us about the people who told the legend?	Courage was important to the people who told the legend. We can learn a lot from the world around us. It is important to show respect and care for your family and the others in your village.

**Pg. 2**

**Teacher Question:** Explain that the place where the characters are is called the “*setting*.” “How could we describe the setting of the story so far?” Be sure to point out the Ojibwe houses in the illustration.

**Pg. 4**

**Teacher Question:** Two of the main characters in this legend have already been introduced. Who do you think are two of the main characters? Point to the “*Main Characters*” section of the Story Map. Once students share, add the young girl and her brother to the character section of the *BLM Story Map*.

**Pg. 6**

**Teacher Question:** Why do you think her brother is going to this dangerous trip?

**Pg. 8**

**Teacher Question:** Wow, she must be very brave. It sounds like a dangerous journey. How do you think she is feeling?

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### Page 14

Stop here to add details to the Story Map (*characters and setting*).

#### Page 20

**Teacher Question:** Oh no, what do you think the young girl will do? What do you think is going to happen?

#### Page 27

Stop after reading the first paragraph.

**Teacher Question:** What do you think they found?

### AFTER READING

#### Practice and Application, Literature and Vocabulary

#### Story Map Discussion

Discuss the remaining sections of the Story Map and fill in.

- What was the legend about?
- What was the lesson of the story?
- What does the story tell us about the Ojibwe people?

Use the filled in Story Map to guide students to a deeper understanding of the story.

#### Oral Retelling

Help students orally retell this legend, using the details on the Story Map.

##### 1. Explain what it means to “retell”

Say, “Everyone in our school is reading folktales this week. Remember that a legend is a special kind of folktale. You are the only students in the school who have read the story “The Legend of the Lady Slipper.” If you want to tell another student what happens in this legend, then you need to **retell** the legend. That means you tell the person *just the important parts* – not every single little thing that happened!”

Say, “For example, when a new movie comes out, and you see a commercial about the movie, do they tell you every little thing that happens in the movie? No! They show you who the characters are, where they are, what the problem is, and maybe some of the big things that happen in the movie.”

##### 2. Model how to retell

Say, “We are going to do the same thing to retell what happens in this legend. We will use the details we put on our Story Map to help us.”

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



#### Model:

Let me show you what I mean. *Retell the legend using the information in the Story Map. Point to each section of the Story Map as you use those details in your retelling. Your retelling could be something like this:*

This is a story about a young girl. She lives in a small village with her family. The young girl was very fond of her older brother. He was smart and strong and fast and because of this he was the messenger for the village. The people of the village suddenly become sick, even the people in the young girl's family, including her brother. The young girl decides to make a dangerous journey to another village to get the medicine her family needs. The journey is long and hard and on the way back to her village she loses her moccasins in the snow. She must walk the rest of the way in her bare feet. She returns to her village and delivers the medicine her family needs. When the snow melts the young girl and her brother return to the forest to look for her lost moccasins, but instead they find beautiful flowers in the shape of little moccasins. The young girl was very courageous and she made sacrifices for the people she loved.

### 3. Help students retell

Tell students that now they're going to do the same retelling with your help. Point to each section of the Story Map in order, and for each one, give students a question to prompt them to retell. Help students answer in **complete sentences** so their responses form a retelling.

- Who are the characters in this story?
- Where does the young girl live?
- What problem do the people of the village have?
- What does the young girl do?
- What important discovery is made at the end of the story?
- What was the lesson of the story?

**DISCLAIMER: I have found 2 spellings of the people: Ojibwe and Ojibwa. My spell check prefers Ojibwa as noted in our literature book; however most of the sources I've found spell it Ojibwe. You will find it spelled both ways in this unit.**



folktale

legend

character

setting





(Create on cardstock – one set for the room, and one set for each student to take home at end of Lesson 1 for practice)

village

journey

moccasins

messenger



medicine

cuento folclórico

mocasín

leyenda



personaje

escenario

pueblo

viaje



mensejero

medicina







# A Folktale

- A story that was passed on from person-to-person
- Sometimes explains how something came to be
- There are often many versions of the tale
- Fables, fairy tales, and legends are all types of folktales





# A Legend

- A story that was passed on from person-to-person
- Parts of the story may be true
- It has important meaning for the people in which the story began
- The story usually has a hero





<b>Main Characters</b>	
<b>Setting</b>	
<b>What is the legend about?</b>	
<b>What was the lesson of the story?</b>	
<b>What does the story tell us about the people who told the legend?</b>	



<b>Personajes principales</b>	
<b>Escenario</b>	
<b>¿De qué se trata la leyenda?</b>	
<b>¿Cuál fue la lección del cuento?</b>	
<b>¿Qué nos dice el cuento acerca de la gente que contaban la leyenda?</b>	

**Math Objectives:**

- Model 2-digit subtraction with base ten materials and connect the models to the algorithm.
- Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

**Materials for TM Lesson**

- Base Ten Sets
  - 15 longs
  - 20 units
- **BLM TM** Teacher’s Guide pages 1 and 2 – teacher only

**Math Vocabulary****Repeated Vocabulary**

regrouping  
 exchanging  
 trading  
 comparing  
 more than  
 less than  
 fewer than

 **Technology:**

<http://www.ixl.com/math/grade-1/comparison-word-problems>

Free online game for comparison problems.

**ELPS (English Language Proficiency Standard)**

2C, 2G, 3A, 3D, 3F, 3I

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.B.1., I.B.2., I.C.1., I.C.2., I.D.1.  
 MATH I.A.1., I.B.1., I.C.1., II.A.1., V.A.1.IX.A.1., IX.A.2.

**Unit 4, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math****Building Background, Math**

Let’s read all of the words on our Math Word Wall today (*read each word, have students read each word and give an example of how the word would be used*).

Our words are very important to our being able to understand and talk about math. These three words are very important to this unit’s lessons:

- Regrouping
- Exchanging
- Trading

Let’s practice the process of regrouping, exchanging or trading with just one problem before our TV Lesson.

(Write on the board.) 24 – 19

(Follow the BLM Teacher’s Guide pages 1 & 2 for the direct teach. When you have finished the guided practice with your students, continue below.)

We have just practiced the skills that we will need for our TV Lesson. I think that our TV Teacher has some interesting story problems about Little Flower and the Lady’s Slipper. Let’s get ready for the TV Lesson, but first, what have we learned in this lesson?

**Objectives:** Read the math and language objectives and have students explain how they learned them.

**Distribute TV Lesson Materials****TV Materials**

*Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.*

- base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM**– Lady’s Slipper Base Ten Board - 1 per student
- **BLM**- Lady’s Slipper Problems 1 per student







Use this format for all of the base ten practice you do during this unit.

**Process to use in all TM this unit**

**Modeling with Base 10**

- Someone please read this number sentence. (*24 subtract 19*)
- What does that mean? (*We are going to subtract 19 from 24; 24 take away 19*)
- What are the fewest number of base ten blocks I can use to represent our first number? (*24 is 2 tens and 4 ones*)

Tens	Ones

- Represent 24 with your blocks.
- Look at your blocks. We need to subtract 19. Do you have enough ones to remove 9 of them? (no)

Tens	Ones

- What can you do? (*regroup, trade, exchange one of your tens for 10 ones*)
- Do so.
- Do you still have 24 represented (*yes – 1 ten and 14 ones; count them to verify they are 24*)

Tens	Ones

- Now can you physically remove 9 ones? (yes)
- Do so. And do you have enough tens to subtract 1 ten from it? (yes) Do so.
- What do you have left after you subtract 19 from 24? (5 ones)

**Recording on the BLM**

Tens	Ones

- Let’s record what we just did. We have several ways to record our model.
- First, let’s draw our model.
- How did we represent the 24 in the fewest blocks? (*2 tens which is 2 sticks in the tens column, and 4 ones, which are 4 dots in the ones column*) Do so.

Tens	Ones

- Our number sentence tells us to subtract. That means we have to remove some of our drawing. What do we do? (*volunteers to tell you what to do next, then explain as follows as you do the action*)
- We saw that we did not physically have enough ones to remove 9 of them. We must trade, regroup or exchange one of the ten sticks (*circle the stick and draw a curved line over to the ones*) for ten ones (*draw in 10 dots in the ones column*)



Tens	Ones

- Now what? (volunteers explanation) We now have more than enough ones to physically remove 9 ones, so let's do it by marking out 9 ones in the ones column (do so).
- We still need to remove the one ten, so mark out one ten in the tens column (do so)
- What is remaining? (5 ones)

**Number Representation**

Tens	Ones
2	4
-1	9

Tens	Ones
1	14
<del>2</del>	<del>4</del>
-1	9
<hr/>	
	5

- Now let's represent in numbers on our base ten board. Someone please explain what we do (*volunteer explains*)
- 24, that is 2 tens and 4 ones (*write on the tens and one column – 2 in the tens column and 4 in the ones column*)
- This time we have to represent the 19 because we are recording what we did in numbers. So – 19 (*again using place value to write the 1 ten and 9 ones.*)
- Someone explain what we do now. (*volunteer explains – allow others to clarify if necessary*)
- We have to do the same thing with our numbers that we modeled with our base ten blocks. Trade 1 ten for ten ones (*cross out 2, leaving 1 in the tens, then add the 10 ones to 4 which makes 14*)
- If we remember our basic facts 15 subtract 9 equals 5. 1 ten subtract 1 ten equals 0 tens.
- The number sentence simply wants you to rewrite the original sentence which is written across, or horizontally, to this format called vertical. So, just rewrite the number sentence in the same form that you wrote it on the number presentation board. Why does this make sense with this kind of subtraction? (*The tens and ones are lined up so you can make trades easily.*)

**Literature Vocabulary**

folktale  
 legend  
 character  
 setting  
 village  
 journey  
 moccasins  
 messenger  
 medicine

**Math Vocabulary****Repeated Vocabulary**

regrouping  
 exchanging  
 trading  
 comparing  
 more than  
 less than  
 fewer than

**TV Materials:**

*Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.*

- base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM**– Lady’s Slipper Base Ten Board - 1 per student
- **BLM** - Lady’s Slipper Problems 1 per student

**ELPS** (*English Language Proficiency Standard*)  
 2B, 2C, 3C, 3F, 3G

**CCRS** (*College and Career Readiness Standards*)  
 CROSS-CURRICULAR I.A.1.,  
 I.C.2, I.D.3, II.A.1., II.A.2,  
 ELA II.A.1., II.A.3., II.A.6.,  
 II.B.1., III.B.2.  
 MATH I.A.1., I.B.1., II.A.1.,  
 V.A.1., VIII.A.1., VIII.C.1

**Unit 4, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives**

- Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.

**Language Objectives**

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to regroup in addition and subtraction.

**Building Background, Math**

**TEACHER:** The girls and boys practiced regrouping, trading, exchanging today with a subtraction problem. We’re going to be using that concept today with some very special word problems.

**AZULITO:** And I’ll bet you are going to use Wah-Oh-Nay, or Little Flower in your problems, aren’t you?

**TEACHER:** Oh, yes, Azulito. She was a very brave and caring little girl. Without Little Flower, her village would have perished, or died.

**AZULITO:** Maybe that is why when you pick a Lady Slipper all of the flowers in that area will die. They all depend on one another to live.

**TEACHER:** That could be, Azulito. And we must depend on trading, regrouping, exchanging, and our knowledge of number sense to help us with subtraction and addition problems. Let’s try a few.

First, I have a new story board for you. I thought you might like to have one that shows the beautiful flower (*show the board*). This is a Lady’s Slipper. It’s a very unusual flower.

Now, let’s read our first problem. Remember to look for the math movie when I read it the first time!

**Comprehensible Input**

You have a copy of these problems, so let’s read them together. I will read through it the first time with you so you can see the Math Movie in your mind.

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**Little Flower and her brother tried to find her missing moccasins. Instead, they found beautiful flowers. There were 30 in all. Some were yellow. 12 were pink. How many flowers were yellow?**

What math movie did you see? Tell your Classroom Teacher (*pause*).

**AZULITO:** (*pause*) I see a field of flowers. Some are pink and some are yellow. I know there are a total of 30, and that 12 were pink. What I don't know is how many are yellow. This one is different from problems we have had.

**TEACHER:** Yes it is, Azulito. The students solved a similar problem for their CGI today.

Before we use our base ten blocks, let's write down what we know.

30 total flowers  
12 pink flowers  
? yellow flowers

What does this information tell us about the relationship of the numbers? Boy and girls, please talk about this in your class (*pause, with SMARTBoard as focus*).

**AZULITO:** (*pause*) Well, I know that 30 is the total, so that is our largest number. I also know that the other two numbers will add up to that 30.

**TEACHER:** Very good. So I could write  $30 = ?$  (*some number*) add 12, correct? Or  $30 = ? + 12$ .

**AZULITO:** (*pause*) Yes. The trick is finding that "some number." What do you think, boys and girls? How can we find the missing number? What would you do? Talk to your class. (*pause*)

(*pause*) This looks like some of the What's Missing type problems. And it also reminds me of fact families. I know that these three numbers are related. I can find two addition problems, and I can find two subtraction problems.

So I get it! If 12 add some number equals 30, I can also SUBTRACT to find the missing number.  $30$  subtract  $12 =$  that missing number!

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**TEACHER:** Excellent job, Azulito. Boys and girls, I could hear that many of you had that strategy, too. It isn't the only strategy, but it is one strategy to find the answer. Let's use our base ten blocks now to find that missing number.

*(Use the base ten block process you used in the last unit to solve the problem, talking through every step of the process as you model it on the SMARTBOARD. Remember to interchange the three words. All are mathematically accurate for the process you are doing – regrouping, exchanging, trading – and all of the words are used throughout the US to describe the action.)*

Alright, we have used our base tens to model  $30 - 12 = ?$  and found that the missing number is 8. Let's draw that model on our record sheet (*do so, again following the same process as you did throughout the last unit, talking through the steps and using the SMARTBOARD to demonstrate*).

Our number representation (*same model as last unit*).

And finally, our number sentence. Why do we write these number sentences in this vertical representation? (*pause*) Because we can see to line up our place values, our tens and ones, to make the exchanges, trades, and regroupings easier for us.

**AZULITO:** We used our math movie, and we used our knowledge of fact families to help us solve that problem. That was really cool!

**TEACHER:** Let's see what we have to use for this next problem. Remember to read along with me as I read it, looking for the math movie.

**Little Flower counted 32 Lady's Slippers. Her brother counted the same flowers, but only found 29 Lady's Slippers. How many more Lady's Slippers does he need to find to count?**

Think about the math movie you see here, boys and girls. Talk about it with your class. I will give you a little time. (*pause*)

**AZULITO:** (*pause*) I see Little Flower and her brother counting the same flowers. Little flower counted 32 Lady's Slippers, but her brother only found 29 to count. What we want to know is how many more flowers her brother has to find to count. This is a little different again.

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**TEACHER:** Yes it is, Azulito. But how is this problem like the other problem? (*pause*)

**AZULITO:** (*pause*) Well, I still know the total number of flowers – that’s the 32 that Little Flower counted. Let’s see, I know that her brother only found 29 of them to count.

Hey, I know. 29 flowers add something will give us the 32 flowers. I see it in my mind – all those flowers!

**TEACHER:** So, from what you said, I think I can write:

32 total flowers  
29 flowers counted  
? flower left to count

What number sentence can we write now, boys and girls, to help us solve this problem? Tell your Classroom Teacher what you would write. Classroom Teachers, please write them on the board. (*pause*)

**AZULITO:** (*pause*) Well, the boys and girls could solve it another way, but this is what I see in my math movie.

32 flowers = 29 flowers + ?

This one is really simple – I could just count on to get this one! See  $29 + 1 + 1 + 1 = 32$ . Her brother needed to find three more flowers to count!


**TEACHER:** Well done, Azulito! You used number sense! And I think I hear several of our boys and girls using number sense, too. That’s a very good strategy.

Let’s check it now with a strategy that I will bet most of us used. I used this other one, in fact.

I know that this addition problem also has related subtraction problems. I know that I can subtract to find the missing number.

$32 - 29 = ?$

Now, we can use our base ten blocks to solve that. (*Do so as you have the other problems – even though this is a comparison problem. Model on the SMARTBOARD.*)

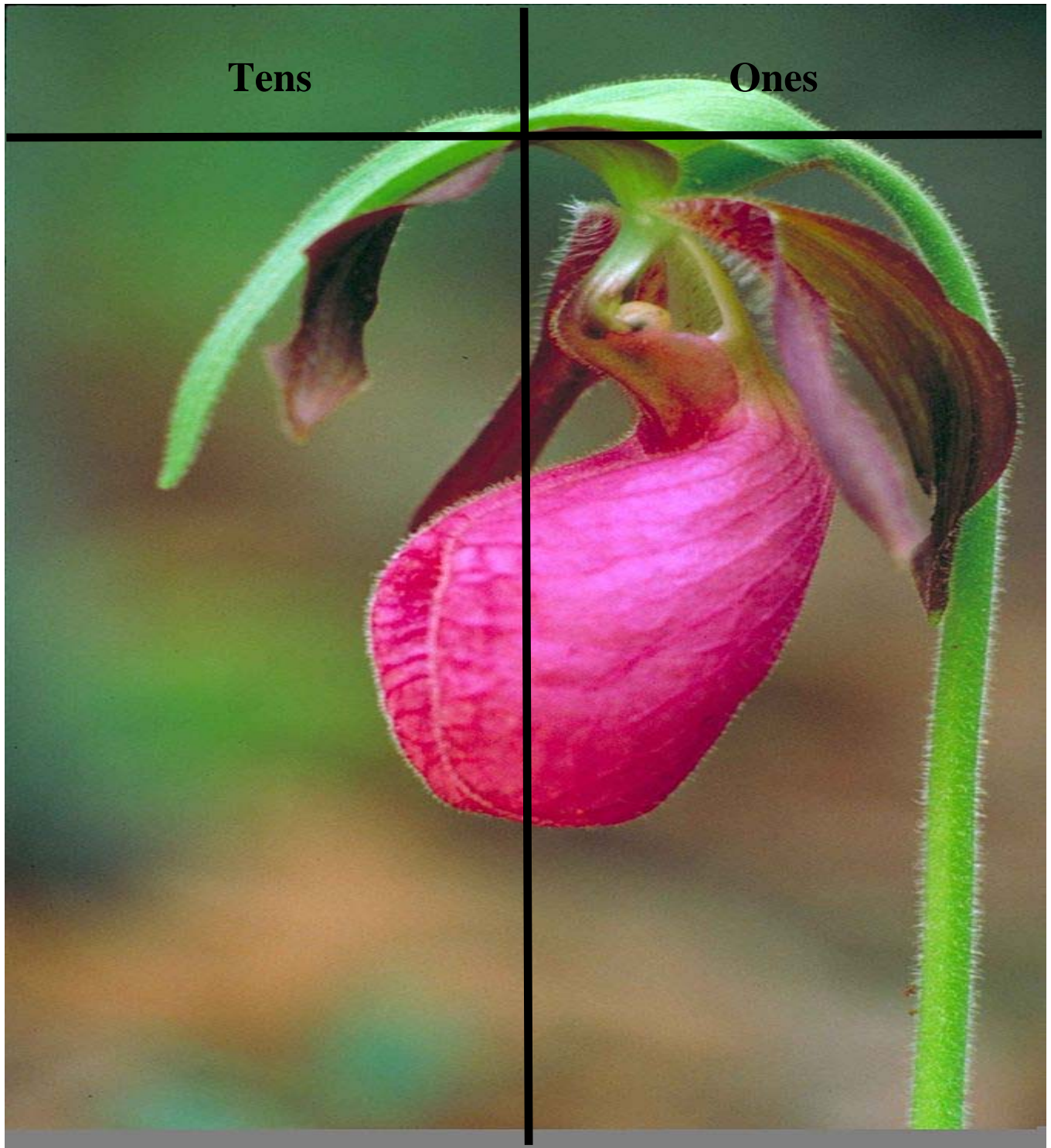
<p><b>Azulito's Corner</b>  <b>Unit 4, Lesson 1 CGI</b>  How did you solve the CGI problem today? Please explain your strategy to us. Let's see how many different strategies we see across the United States.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b>  </p> <p><b>Unit 4, Lesson 1</b>  <b>TV Lesson</b> - continued</p> <p><b>TEACHER:</b> Alright, we have used our base tens to model <math>32 - 29 = ?</math> and found that the missing number is three.</p> <p>Let's draw that model on our record sheet (<i>do so, again following the same process as you did throughout the last unit, talking through the steps and using the SMARTBOARD to demonstrate</i>).</p> <p>Our number representation (<i>same model as last unit</i>).</p> <p>And finally, our number sentence (<i>same model as before</i>).</p> <p>Great job girls and boys!</p> <p><b>AZULITO:</b> That was really cool! You know, we could hear that many of the boys and girls had different strategies for solving those problems. I was wondering how they solved the CGI problem during Daily Routines today. Please go on MAS Space and share some of your posters from your CGI today. We'd like to see your strategies!</p> <p><b>TEACHER:</b> Great task! It will be interesting to see all of the different strategies. And seeing their posters will be a lot of fun!</p> <p>And now, let's see what we accomplished today during our lesson.</p> <p><b>Objectives:</b> And now before we go, let's review what we have learned today! (<i>do so</i>)</p>
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BLM Unit 4, TV Lesson 1  
One sheet per student

Lady's Slipper Base Ten Board 





## BLM Unit 4, TV Lesson 1

One sheet per student

## Lady's Slipper Problems

### Materials:

- Base ten sets – 15 tens, 20 ones
- Lady's Slipper Base Ten Board
- Lady's Slipper Problem Sheet



1. Little Flower and her brother tried to find her missing moccasins. Instead, they found beautiful flowers. There were 30 in all. Some were yellow. 12 were pink. How many flowers were yellow?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

2. Little Flower counted 32 Lady's Slippers. Her brother counted the same flowers, but only found 29 Lady's Slippers. How many more Lady's Slippers does he need to find to count?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

**BLM Unidad 4, Lección TV 1**

**Problemas de la orquídea Zapatillas de dama**



Una hoja por estudiante

**Materiales:**

- Juegos de base diez - 15 decenas, 20 unidades
- Tablero base diez de Zapatillas de dama
- Hoja de problemas de Zapatillas de dama



1. Pequeña Flor y su hermano intentaban encontrar sus mocasines perdidos. En su lugar, encontraron flores hermosas. En total, había 30. Algunas eran amarillas. 12 eran rosas. ¿Cuántas flores eran amarillas?

Modelos base diez  
numéricas

Representación de números

Oraciones

Decenas	Unidades

2. Pequeña Flor contó 32 Zapatillas de dama. Su hermano contó las mismas flores, pero solo encontró 29 Zapatillas de dama. ¿Cuántas Zapatillas de dama más necesita encontrar él para contar?

## Literature Vocabulary

folktale  
legend  
character  
setting  
village  
journey  
moccasins  
messenger  
medicine

## Math Vocabulary

regrouping  
exchanging  
trading

## Repeated Vocabulary

comparing  
more than  
less than  
fewer than

## TV Materials:

- Lady's Slipper Base Ten Board – 1 per student from TV  
(*students do NOT have to use this if they do wish to*)
- base ten sets – 1 set per student
  - 15 longs
  - 20 units
- **BLM** Lady's Slipper #2 – 1 per student
- **BLM Teacher KEY**

## ELPS (English Language Proficiency Standard)

2F, 2G, 3D, 3E, 4A, 5A, 5B

## CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR I.B.2.,  
I.C.3., II.B.1., II.B.2.  
ELA I.A.1., I.A.2., II.A.1., II.A.3.,  
II.B.1., III.B.1., III.B.2  
MATH I.B.1., I.C.1., II.A.1.,  
V.A.1.



## Technology

<http://www.roomrecess.com/pages/BlockBuster.html> . Fast moving game to find fact families.

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

## Follow-up



### Math Objectives

- Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.

### Language Objectives

- Listen and speak with a partner during our math activity.
- Explain how the base ten models relate to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

### Practice and Application, Math

Now, let's solve two more problems. This time, you and your partner may work together to solve them. Remember that you really can solve them using any strategy you wish, but we need to see the strategy.

Also, notice that there is a large rectangle that asks you for the related family. Remember how the TV Teacher used the concept of fact families to help her solve the problems. Our problems have related number sentences. Please write all of them in this rectangle.

### Format:

- Read the first story for the Math Movie and have volunteers tell the class what they saw in their minds as you read the story.
- Ask students to establish what they know and what they do not know for this problem.
- Have student partners work together, but generate their own record sheets.
- Ask students to share their strategies.
- *Pay particular attention to how students solve the problem: base ten blocks; drawn models; number sentences. Your 1<sup>st</sup> grade students will not be assessed on double digit operations, so base ten blocks are expected. 2<sup>nd</sup> grade students will be expected to show a strategy on their assessment. The algorithm would be preferred; however, any written strategy is acceptable.*

**Repeat the process for the second problem.**

Either of the two suggested sites could be a self-checking center activity.

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Follow-up - continued

#### Math Journal Writing

*Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.*

 **Suppose a new student arrives who does not yet understand regrouping, trading, exchanging. How would you explain the process to him?**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

**BLM Unit 4, Follow-up Lesson 1**

One sheet per student

**Lady's Slippers Problems #2** 

Base Ten Board

**Materials:**

- Base ten sets – 15 tens, 20 ones
- Lady's Slipper Base Ten Board
- Lady's Slippers Problems #2 Sheet



3. Little Flower found 48 Lady's Slippers. She found 19 more flowers than her big brother found. How many Lady's Slippers did her brother find?

Related Family


4. Little Flower found 52 pink Lady's Slippers. That was 23 more than the yellow Lady's Slippers she found. How many yellow Lady's Slippers did Little Flower find?

Related Family






## BLM Unit 4, Follow-up Lesson 1

Una hoja por estudiante

## Lady's Slippers Problems #2

Tablero base diez

### Materiales:

- Juegos de base diez - 15 decenas, 20 unidades
- Tablero base diez de Zapatillas de dama
- Hoja de problemas de las Zapatillas de dama n.º 2



1. Pequeña Flor encontró 48 Zapatillas de dama. Encontró 19 flores más que su hermano mayor. ¿Cuántas Zapatillas de dama encontró su hermano?
  
2. Pequeña Flor encontró 52 Zapatillas de dama rosas. Eran 23 más que las Zapatillas de dama amarillas que ella encontró. ¿Cuántas Zapatillas de dama amarillas encontró Pequeña Flor?



## BLM Unit 4, Follow-up Lesson 1

Teacher only

## TEACHER KEY



Base Ten Board

### Materials:

- Base ten sets – 15 tens, 20 ones
- Lady's Slipper Base Ten Board
- Lady's Slippers Problems #2 Sheet



5. Little Flower found 48 Lady's Slippers. She found 19 more flowers than her big brother found. How many Lady's Slippers did her brother find?

**Students may use base ten blocks, but must also have a written model as well to show.**

**Students may use the drawn base ten, the number representation, or just the number sentence. The choice of strategies is up to them.**

**NOTE: Students were taught the addition sentences of Fact Families with the addends first, then the sum. These related families have been presented in reverse, the sum equaling the addends. You might need to explain; and you should accept either representation.**

Related Family

$$48 = 19 + ?$$

$$48 = ? + 19$$

$$48 - 19 = ?$$

$$48 - ? = 19$$

6. Little Flower found 52 pink Lady's Slippers. That was 23 more than the yellow Lady's Slippers she found. How many yellow Lady's Slippers did Little Flower find?

**Students may use base ten blocks, but must also have a written model as well to show.**

**Students may use the drawn base ten, the number representation, or just the number sentence. The choice of strategies is up to them.**

**NOTE: Students were taught the addition sentences of Fact Families with the addends first, then the sum. These related families have been presented in reverse, the sum equaling the addends. You might need to explain; and you should accept either representation.**

Related Family

$$52 = 23 + ?$$

$$52 = ? + 23$$

$$52 - 23 = ?$$

$$52 - ? = 23$$



## Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths and halves).
- Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Language Objectives

- Explain why each portion is a fourth/half.
- Share-write what is a fourth or half.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Vocabulary

half, halves  
fourth, fourths  
fair shares  
equal pieces

## STUDENT ACTIVITY ((per group of 4, per teacher):

- **BLM** Kabob Fractions
- **BLM** Are these fourths? (for the Share-Write at the end of the lesson.)
- Skewers (1 per student)
- **Food items in Ziploc bags:**
  - 12 1”cubes of cooked meat or chicken
  - 8 cubes of cheese
  - 8 cubes pineapple
  - 8 cherry tomatoes
- 16 bathroom type paper cups
- 4 paper plates
- 4 paper towels
- 4 scissors
- 4 glue sticks
- Chart paper with question:  
**How do you know you have one-fourth of each food item?**

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

#### Snack Fractions

*As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.*

**Objective:** We are going to share our snack a little differently today. First of all, you will be in groups of yourself and three other friends. Then we are going to assemble, or put together our snack. It’s called a Kabob and is made by taking different kinds of foods and spearing them on a little stick called a skewer. You put the foods on the skewer in a pattern so that the flavors blend, and because it looks very pretty.

You are going to share the actual food items with yourself and three friends. How many will be sharing the actual food items? (*four – myself add three friends*)

**Record Sheet:** Before really sharing the food items and making our kabobs, we’re going to work through the record sheet.

The first thing that I would like for you to do is to cut out all of the little food items on the page. Leave each one inside the dark bordered rectangle. You will each want to keep your cutouts to yourself. Do not share your cutouts. (*Give students time to cut, circulating the room asking questions.*)

#### QUESTIONS:

- You have more meat than any other food. Show me the picture that represents the meat.
- How many different foods do you have?
- The food items besides meat are cheese, pineapple and cherry tomatoes. What do you notice when you compare the cheese, pineapple and cherry tomatoes? (*same amounts of each*)

*Once the rectangles are all cut, make sure the students have their own sets and do not mix them.*

Distribute the little paper cups so that each of you has an equal share of the cups. You are going to talk about how to divide the paper food items, then each of you will divide your paper food items as if you were sharing them among yourself and three people. You should use the paper cups to put the shares into.

- What are some of your strategies for sharing the paper food items? (*Let all who have a strategy, share their strategy.*)
- What do we call one of those parts? (*one-fourth*)
- What does one-fourth mean? (*one out of four equal portions*)

## Unit 4, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



- Let's explore each of your small paper cups. How many of each food item is in each cup? (*three meat, two cheese, two pineapple, two tomatoes*)

Prove to me that if I have 12 pieces of meat and share it equally among four people, that one-fourth of the meat pieces is three pieces of meat. (*Let students share how they did it. Repeat the process for the other food items. Hopefully someone will see that once you have shared one of the other foods, since they all are eight pieces, they will all be shared the same.*)

Now, take one-fourth of the pictures you have cut out, arrange them in a pattern on the stick, or skewer picture on your page. When you are happy with your arrangement, glue your pictures in place. (*Circulate the room to make sure the students all have one-fourth of each food item.*)

**SNACK Eating:** Students are now given the real food, divide it into fourths in the same manner, assemble their own kabob, and enjoy.

#### **Snack Fraction Writing: BLM Kabob Fractions**

How do you know you have one-fourth of each food item?

**Objectives: Review what you learned and how you learned it.**

**BLM Unit 4, Snack Fractions Lesson 1**

**Kabob Fractions**



(One sheet per student)

My name is \_\_\_\_\_

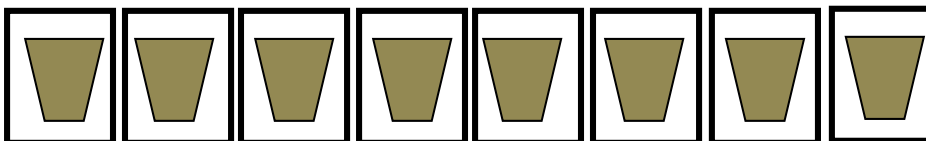
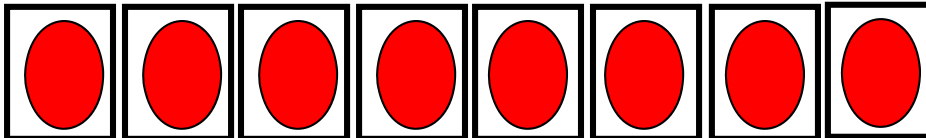
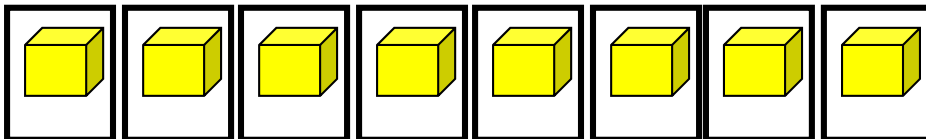
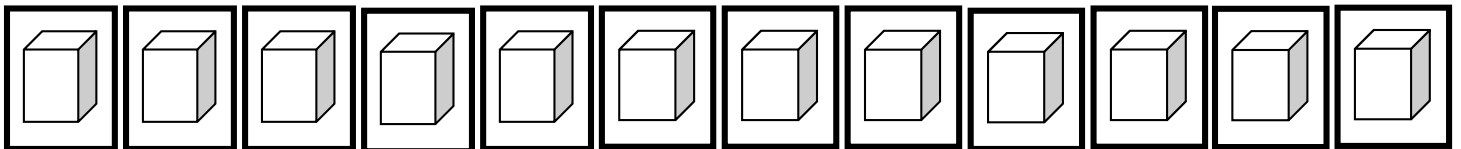
This is my skewer with my fair share when sharing the food with myself and 3 friends.



What fractional part of the food items will each of you receive? \_\_\_\_\_



Cut out the food items below. Divide the items so that you are sharing among yourself and 3 friends. Glue your fair share to the skewer above.



My name is \_\_\_\_\_

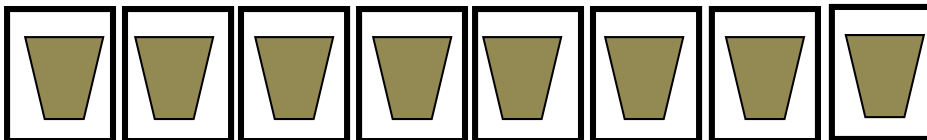
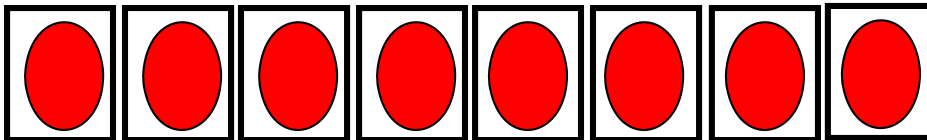
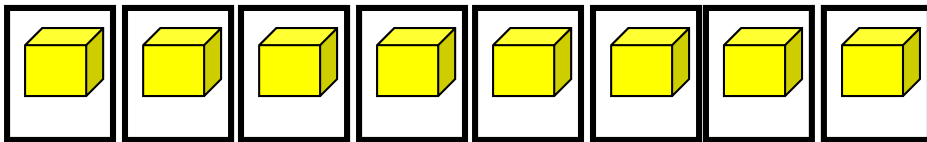
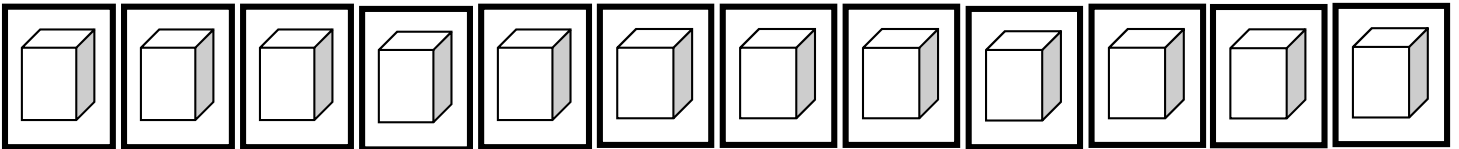
This is my kabob with my portion equal when I share the food with 3 friends.



¿Qué parte fraccionaria de la comida recibe cada uno de ustedes? \_\_\_\_\_



Corta las imágenes abajo. Divide las comidas para compartirlas entre tú y 3 amigos. Pega tu porción igual a la brocheta arriba.





**Family Fun, Unit 4 Lesson 1** 

Our book for this unit is *The Legend of the Lady Slipper*.

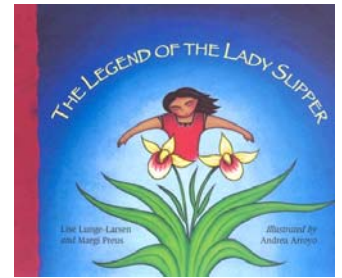
My favorite part is \_\_\_\_\_

\_\_\_\_\_.

In math we learned about comparing, and we learned about regrouping. I can show you how to subtract  $25 - 17$ .

Thank you for helping me learn math!

\_\_\_\_\_



**Family Fun, Unit 4 Lesson 1** 

El libro para esta unidad es *The Legend of the Lady Slipper*.

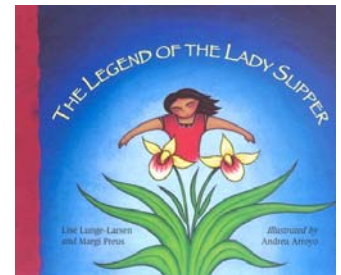
Mi parte favorita es \_\_\_\_\_

\_\_\_\_\_.

En la clase de matemáticas aprendimos como comparar y también aprendimos como reagrupar. Te puedo mostrar como restar  $25 - 17$ .

¡Gracias con ayudarme con las matemáticas!

\_\_\_\_\_





**Materials**

- 50 base ten units per student
- Unknown Quantity Cards
- Dark marker – 1 per student
- Large white or manila construction paper for footsteps – 1 per student
- Scissors – 1 pair per student
- 2 sticky notes – per student
- **BLM CGI Problems Unit 4** – teacher only
- **BLM Footsteps**
- **BLM Teacher Guide**

**OPTIONAL**

- BLM Ojibwa Art graph
- Class graph

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy****Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS**

Lessons 1, 2, 3

- 1<sup>st</sup> – 1.3BCF; 1.5DF. 1.6GH
- 2<sup>nd</sup> – 2.3A, 2.4BC; 2.7C

**ELPS (English Language Proficiency Standard)**

1E, 1G, 2E, 2G, 2H, 3A, 3B, 3C

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1.,  
I.C.1., I.C.2., II.A.1., II.A.4  
ELA II.A.2., II.A.3., II.B.1.,  
III.B.2  
MATH I.A.1., IV.A.1., V.A.1.,  
IV.B.1., VI.C.2., VIII.A.4

**Unit 4, Lesson 2****Daily Routine**1<sup>st</sup> – 2<sup>nd</sup>

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – none
  - **Lesson 2 - 15**
  - Lesson 3 – 45
- **CGI Problem\***
  - Lesson 1 – Join, Change Unknown (*2<sup>nd</sup> item 5*)
  - **Lesson 2 – Compare, Difference Unknown** (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
  - Lesson 3 – Part Whole, Whole Unknown (*1<sup>st</sup> item 3ab*)
- **What's Missing** (*1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction*)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)\*\*
  - Lesson 1 – none
  - **Lesson 2 – How long are your footsteps?**
    - **BLM Footsteps**
    - **BLM Teacher Guide**
    - **Base ten units – 50 per student**
  - Lesson 3 – Comparing Footsteps
    - **BLM Teacher Guide**

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

**1<sup>st</sup>** - 1, 2, 3,4, 5, 6, 7, 8

**2<sup>nd</sup>** - 1, 2, 3, 4, 5, 6, 7

**Azulito's Corner****Unit 4, Lesson 2****Writing Problems**

Write a class story problem for Little Flower. Be sure you can answer the problem, though.

**Unit 4, Lesson 2****1<sup>st</sup> – 2<sup>nd</sup>****Daily Routine** - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems. Follow the guidelines in Solve It! Overview to facilitation Lessons 1, 2, and 3.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – none
  - **Lesson 2 – Favorite Ojibwe Art**
    - **BLM Favorite Ojibwe Art**
  - Lesson 3 – Favorite Moccasins
    - **BLM Favorite Ojibwe Moccasins**

**Graph QUESTIONS**

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**Assessment Item 1<sup>st</sup> grade #8 and 2<sup>nd</sup> grade #7 will be reviewed daily in Snack Fractions.**

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

**Vocabulary Building**

Choose an activity listed in the Daily Routines section.

One sheet per student

**You will need:**

- 1 large piece of paper
- 1 sharp pencil or a crayon
- 1 pair of scissors
- 50 base ten cubes (the ones)
- 2 Sticky Notes



**Procedure**



- Trace your shoe sole on the paper using the pencil or crayon.
- Cut out the tracing.
- Use the base ten cubes to measure the length of the tracing of your shoe sole.
- Complete the sentences below.

**How long are your footsteps?**



**My footprint measures \_\_\_\_\_ base ten cubes long.**

**The distance of my journey is \_\_\_\_\_ of my footsteps.**

One sheet per student

**Necesitarás:**

- 1 pedazo grande de papel
- 1 lápiz afilado o un crayón
- 1 par de tijeras
- 50 cubos base diez (las unidades)
- 2 notas adhesivas



**Procedimiento**

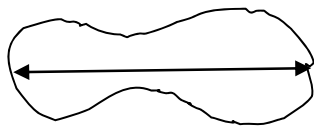
Marca la suela de tu zapato en el papel con el lápiz o el crayón.

Recorta el contorno.

Utiliza los cubos de base diez para medir la longitud del trazado de la suela de tu zapato.

Completa las siguientes oraciones.

**¿Cuánto miden tus pisadas?**



Mis pisadas miden \_\_\_\_\_ cubos base diez de largo.

La distancia de mi viaje es \_\_\_\_\_ de mis pisadas.



Little Flower walked a very long way, leaving footsteps in the snow to save her brother and her family and friends from the sickness. From the story, she was probably just about your age. I wonder how many footsteps she took to make that journey?

### Tracing Footsteps

- Read or help the students read through the BLM. You may guide them as they work to trace, cut and measure their shoe soles, or footsteps.
- Students should label the footstep with the number and unit. Ex: 27 footsteps
- Have students write the measurement (ex: 27 footsteps) on one of the Sticky Notes along with their names.

### Journey in your Footsteps to the Door

- Tell students that they are going to take a very short journey, a journey from their desks or workspace to the door of the class area. Ask the students to talk about how they will find the measurement – the distance in footsteps from their desk or workspace to the door. Let them discuss with a partner how to overcome the fact that each person can only use their own footsteps – one footstep tracing or their own steps – to measure the distance.
- Let the students explain how they would accomplish the task.
- Tell students to put their name on the unused Sticky Note and bring it with them when they come to the door.
- Have the students work with a partner to measure the distance. You be at the door to jot down the measure (to nearest footstep) when they each complete the task. Write in large print, dark marker.
- Make sure you keep an eye on the measuring, though, so that students understand they must measure heel to toe whether they are using their own two feet or the tracing.
- You will keep the journey measurements for Measurement Lab in Lesson 3.

### Closing

- Ask students to discuss the activity.
  - Do the students think that all of the measures are the same? Just let them discuss this – probably they will realize that first of all, most students had a different starting point since the distance was from their own desks to the door. Very astute students will realize that footstep sizes are different, so measures of the same distance would still be different.
  - Tell students that they will arrange footstep and distance measures in Lesson 3 from shortest to longest.
- Students stick their footstep length Sticky Note onto their footstep and give it to you for safe keeping until Lesson 3.





**BLM Unit 4, Daily Routine, Graphing Lesson 2**

**Favorite Ojibwa Art** 

Enough copies so that you have one for the picture graph, and one of each for each student to choose.





**Solve It! Unit 4, Lesson 2**      **Pairs**



- The 32 farm cats liked to sleep in the barn. 6 of the cats slept with the horses. 9 of the cats slept with the cows. The rest of the cats slept in the loft. How many cats slept in the loft?

Problem #1 – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

Problem #2 – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

Final Solution – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

You are free to take this apart any way you wish – on your own; together as a team; a mix of both. You are responsible, however, for your own paper having all problems identified and solved; verifying your Team member’s page. Be sure to write your final solution with a label in the box.

**Solve It! Unit 4, Lesson 2**      **Pairs**



Esos 32 gatos estaban muy ocupados en la granja. 7 de los gatos se aseguraban de que los cerditos bebés estuvieran seguros. Algunos de los gatos trabajaban mucho cuidando a los pollitos bebés. 8 de los gatos se aseguraban de que las cabras bebés comieran su avena. ¿Cuántos gatos cuidaban a los pollitos bebés?

Problema #1 – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Problema #2 – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Solución final – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Puedes resolver esto del modo que desees - por ti mismo; en equipo; una mezcla de ambos métodos. Sin embargo, tú eres responsable de que tu propio trabajo tenga todos los problemas identificados y resueltos; verificando la página del miembro de tu equipo. Asegúrate de escribir tu solución final con una etiqueta en la caja.

**Literature Selection**

*The Legend of the Lady Slipper*  
by Lise Lunge-Larsen and Margi Preus

**Materials for Language Lesson**

- **BLM** Word Cards
- **BLM** Legend Booklet – The Legend of the Lady Slipper, one copy per student
- Art supplies (crayons or colored pencils)
- Shared Reading text pre-written on chart paper

**Materials for TM Lesson**

- Base Ten Sets
  - 15 longs
  - 20 units
- **BLM TM** Cool Strategies - 1 per student

**Literature Vocabulary**

folktale  
legend  
character  
setting  
village  
journey  
moccasins  
messenger  
medicine

**Math Vocabulary****Repeated Vocabulary**

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

**ELPS** (*English Language Proficiency Standard*)  
2F, 3G, 3H, 4G, 4J, 4K

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.2.,  
II.C.1., II.A.2., II.A.4.  
ELA II.A.1., II.A.6., II.A.7., II.A.11.,  
II.C.2., III.A.1.

**Unit 4, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson**

*Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.*

**Math Objectives**

- Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three terms in the equation.
- Compose 10 with two or more addends with and without concrete objects.

**Reading Objectives**

- Find words in a shared reading text and read those words.
- Retell the key details of a story.

**Language Objectives**

- Use vocabulary words to talk about a legend.

**BEFORE READING****Practice and Application, Vocabulary**

Review vocabulary words on word wall.

**Play Mystery Word Game**

1. Display and read a vocabulary word from the word wall. Have students repeat the word aloud. Repeat for each word.
2. Gather the words cards. Place them face down so no one can see them.
3. Choose one word at random and make a big show of sneaking a look at the word without letting students see it.
4. Give students clues to help them guess the mystery word. Clues can emphasize meaning and/or spelling.
5. Students can write down their guess or give it orally. If responding orally, students should be given time to think and instructed not to respond until signaled to do so.
6. Teacher can give multiple clues before revealing the mystery word.

Show students the cover of the book. Ask, “What is the title of the book we have been reading?” Review vocabulary words on the word wall. Ask students to use a vocabulary word to describe a character or an event from the story. Use the Rug Partner Routine.

**Listening Center Connection**

Record the Shared Reading text, and have students listen to it repeatedly while reading along as much as they can. Afterwards, you can ask students to read some of the words. Do this based on what you know about each student's reading ability; ask them to read words that you feel they will be successful with. This is a way to bridge students to independent reading.

**Language Center Connection**

Put extra copies of the Shared Reading text in a language center, and give students different challenges, depending on their age/reading level. For example:

- Circle the periods and commas.
  
- Circle all of the capital letters.
  
- Color/highlight or underline certain key words.
  - village
  - messenger
  - journey
  - medicine
  - moccasins
  
- Color/highlight or underline certain high frequency words.
  - the
  - a
  - she
  - and
  - to
  - in
  - for
  - is

**Unit 4, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued

Be sure to circulate while students are talking to assess whether or not they are using the vocabulary words correctly. Encourage to students to use the text if they need help using the word in a sentence.

Regroup the class and have several students share. Rephrase what students say, as needed. Emphasize the vocabulary words as you speak in a natural way. Point to the words on the interactive word wall. As students share, you can also point to those parts in the book so they connect the oral language with the illustrations.

**Building Background, Literature**

Read page 1 aloud to the students two times. The first time you read it, do so very slowly and without expression, Use poor phrasing and misread a word or two. Read the passage again. This time read it accurately, smoothly, and with expression. Have students compare the two readings. Ask questions like: How were they different? Which sounded like a good reader? Which one was easier to understand? Which was more enjoyable to listen to? Explain to students that good readers are fluent, accurate, and they read with expression.

**DURING READING****Comprehensible Input, Literature**

Tell students that you are not going to stop to ask questions or think aloud during the reading. Instead you are going to concentrate on reading fluently. Ask students to note accuracy, expression, and phrasing.

**Practice and Application, Literature****Shared Reading**

The following Shared Reading text is a simple retelling of *The Legend of the Lady Slipper*. It will help students understand that a retelling doesn't say everything that happened in the story, but just the important parts. It will also help students identify key vocabulary words and read those words, with your support.

1. Show students the following Shared Reading text, written ahead of time on chart paper.

## Unit 4, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



#### The Legend of the Lady Slipper

A young girl lives with her family in a village.

Her brother is the messenger because he is smart, strong, and fast.

The people in the village get very sick.

The young girl makes a journey to another village to get medicine for her people.

On the journey, she loses her moccasins in the snow.

After the snow melts, the young girl and her brother return to look for her moccasins.

They find beautiful flowers shaped like little moccasins.

2. Read aloud, tracking the text with a pointer. Read the text fluently, but slightly slower than your normal reading pace so students can follow along with their eyes.
3. Tell students: This is a retelling of what happened in the legend – it tells us the most important things that happened. When we retell a story, we don't need to say every little thing that happened. We can just say the important parts.
4. Say, "Let's find some of our vocabulary words in this text."

For each of the five vocabulary words (**village, messenger, journey, medicine, moccasins**) do the following steps:

- Say, "OK, let's find the word \_\_\_\_ in this text."
- Show students the word card, and point out the beginning letter. Ask students what letter it is.
- Count the number of letters in the word.
- Say, "Look for the word \_\_\_\_ in our text. Remember, it starts with the letter \_\_\_\_ and it has \_\_\_\_ letters in the word."
- Have student volunteers come up to the chart and point out where the word is (*it may be repeated multiple times*). Show students the beginning letter, and count the number of letters in the word.
- Have student volunteers help you highlight the word.
- Use a different color for each of the vocabulary words to distinguish them.
- Repeat this for each word.

## Unit 4, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



Tell students they are now going to learn to read this piece of text fluently by reading it multiple times. Tell them you will point to each word as it is said. Emphasize to students the importance of tracking each word with their eyes as you do with the pointer.

Pause when you get to the vocabulary words to give students a chance to chime in with you.

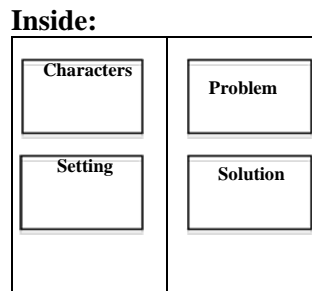
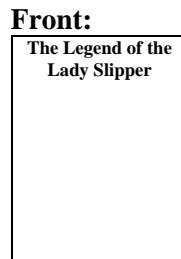
Repeat the shared reading several times, so students have more opportunities to become familiar with the sentences and the vocabulary words. Each time, you should find that students are better able to read along key words with you, and even phrases.

If time allows, students can practice reading the text fluently independently or with a partner.

### AFTER READING

#### Illustrating a Legend Booklet

1. Give each student a copy of the **BLM Legend Booklet – The Legend of the Lady Slipper**. To create the booklet, simply **photocopy Pages 1 and 2 of the BLM back to back** (so that it is one page, 2-sided), and fold the paper on the dotted line.
2. The booklet will now look like this:





## Unit 4, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



#### Back: (blank)



3. Help students read the vocabulary words in each of the four sections. Review with students what they should include in each box.
4. Have students illustrate each section of the Story Map to show their understanding of the legend and the vocabulary words. Students can use crayons or colored pencils.

#### Differentiation:

- For students with stronger writing abilities, particularly your second graders, encourage them to write a sentence for each section of the booklet to accompany their illustrations. They can use the class Story Map to help them with this writing.
  - For students with beginning writing abilities, you can help them label certain parts of their illustration. Encourage students to look at the class Story Map and the vocabulary word wall to see how to spell certain words.
5. This legend booklet is for students to keep. Since this is the only grade band reading *The Legend of the Lady Slipper*, encourage students to share their legend booklet with siblings/friends in other classes to explain what happens in this story.



## The Legend of the Lady Slipper

A young girl lives with her family in a village.

Her brother is the messenger because he is smart, strong, and fast.

The people in the village get very sick.

The young girl makes a journey to another village to get medicine for her people.

On the journey, she loses her moccasins in the snow.

After the snow melts, the young girl and her brother return to look for her moccasins.

They find beautiful flowers shaped like little moccasins.





# The Legend of the Lady Slipper

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Characters

Setting



Problem

Solution







<p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three terms in the equation.</li> <li>• Compose 10 with two or more addends with and without concrete objects.</li> </ul> <p><b>Materials for TM Lesson</b></p> <ul style="list-style-type: none"> <li>• Base Ten Sets <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units</li> </ul> </li> <li>• <b>BLM TM</b> Cool Strategies - 1 per student</li> </ul> <p><b>Math Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p> <p> <b>Technology:</b> <a href="http://www.ixl.com/math/grade-1/comparison-word-problems">http://www.ixl.com/math/grade-1/comparison-word-problems</a> Free online game for comparison problems.</p> <p><b>ELPS</b> (<i>English Language Proficiency Standard</i>) 2C, 2G, 3A, 3D, 3F, 3I</p> <p><b>CCRS</b> (<i>College and Career Readiness Standards</i>) CROSS-CURRICULAR I.B.1., I.B.2., I.C.1., I.C.2., I.D.1. MATH I.A.1., I.B.1., I.C.1., II.A.1., V.A.1.IX.A.1., IX.A.2.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b> </p> <p><b>Unit 4, Lesson 2</b></p> <p><b>Classroom Lesson</b> - continued</p> <p><b>TRANSITION to Math</b></p> <p><b>Building Background, Math</b> There are two strategies that will help you be a more efficient problem solver. You used one of them in the TV Lesson yesterday – related facts, like Fact Families.</p> <p>Another is finding 10s, or using compatible numbers.</p> <p>We are going to practice these strategies today. We are going to work SET 1 right now, then finish sets 2 and 3 for part of our Follow-up activity.</p> <p>Let’s look at the first set of problems today. There is a number missing in each number sentence. What do you suppose that number will be in each sentence? Talk to your partner and see if you can figure out what you need to find. (<i>pause</i>)</p> <p><i>(Volunteers talk about what they think they should find. Hopefully someone will see that two of the numbers must add to ten. Sometimes you are given that number. Sometimes you have to find one of the addends to make a sum of ten.</i></p> <p><i>Students work with a partner to compete set 1.)</i></p> <p>Now, let’s get ready for our TV Lesson.</p> <p><b>Objectives:</b> Read the math and language objectives and have students explain how they learned them.</p> <p><b>Distribute TV Lesson Materials</b> <b>TV Materials</b> <i>Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.</i></p> <ul style="list-style-type: none"> <li>• base ten sets – 1 set per student <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> <li>• <b>BLM</b>– Ojibwa Art - 1 per student</li> <li>• <b>BLM</b> Ojibwa Art - Azulito’s</li> </ul>
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**BLM TM Unit 4, Lesson 2**

One per student

Use what you know about compatible numbers to solve these problems.

**Cool Strategies!** 



**Set 1**  
**Making 10**

$3 + \underline{\quad} + 9 = 19$

$6 + \underline{\quad} + 4 = 17$

$\underline{\quad} + 1 + 9 = 12$

$\underline{\quad} + 8 + 2 = 15$

$3 + 8 + \underline{\quad} = 18$

$6 + 5 + \underline{\quad} = 16$

**Set 2 - Fact Families for 10**

**0,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**1,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Set 3**  
**Make your own problem.**  
**Use compatible numbers.**

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

**4,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**5,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**BLM TM Unit 4, Lesson 2**

One per student

**Cool Strategies!** 

Utiliza lo que sabes de los números compatibles para resolver estos problemas.



**Conjunto 1  
Haciendo 10**

$3 + \underline{\quad} + 9 = 19$

$6 + \underline{\quad} + 4 = 17$

$\underline{\quad} + 1 + 9 = 12$

$\underline{\quad} + 8 + 2 = 15$

$3 + 8 + \underline{\quad} = 18$

$6 + 5 + \underline{\quad} = 16$

**Conjunto 2 – Familia de hechos para 10**

**0,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**1,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**4,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**5,     , 10**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Conjunto 3**  
**Haz tus propios problemas.**  
**Usa números compatibles.**

\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

**Literature Vocabulary**

folktale  
 legend  
 character  
 setting  
 village  
 journey  
 moccasins  
 messenger  
 medicine

**Math Vocabulary****Repeated Vocabulary**

regrouping  
 exchanging  
 trading  
 comparing  
 more than  
 less than  
 fewer than

**TV Materials:**

*Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.*

- base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM**– Ojibwa Art 1 per student
- **BLM** Ojibwa Art, Azulito’s Answer sheet – TV only

**ELPS** (*English Language Proficiency Standard*)  
 2B, 2C, 3C, 3F, 3G, 4F

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.A.1.,  
 I.C.2, I.D.3, II.A.1., II.A.2.  
 ELA II.A.1., II.A.3., II.A.6.,  
 II.B.1., III.B.2.  
 MATH I.A.1., I.B.1., II.A.1.,  
 V.A.1., VIII.A.1., VIII.C.1

**Unit 4, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives**

- Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.

**Language Objectives**

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to regroup in addition and subtraction.

**Building Background, Math**

**TEACHER:** The boys and girls have been practicing regrouping, trading, exchanging. Today, they also practiced number sense in making tens and fact families. We’re going to put that all together today in our solving word problems!

**AZULITO:** That’s a good idea. I love to know how what I am learning will help me solve word problems!

**TEACHER:** Then, let’s begin! First, look at your record sheet. You may solve your problem anyway you wish; but you have to have a strategy for your class to see and for you to explain. Azulito will explain all the ways we have used. You can see which one you used. Or maybe you used a different strategy. If so, go on to MAS Space and let us know!

**Comprehensible Input**

Let’s read the problem together so you can see the Math Movie in your mind. First, look at the picture. (*place picture on the SMARTBOARD*) What a beautiful painting. Look at the fish. Do you see how they seem to be swimming into the picture from this small yellow window, then swimming to the end of the painting and out of this other yellow window? What if there are fish behind the scene? Let’s look at our story.

***This is a picture of a piece of Ojibwa art. There are 17 fish showing in the painting. The artist might have painted 50 fish. How many more fish would the artist have had to have painted to show 50 fish?***

What math movie did you see? Tell your Classroom Teacher (*pause*).

 SMARTBOARD

Model problem  
Base ten blocks  
Base ten drawing  
Number on base ten  
Number sentence

**AZULITO:** *(pause)* I see the fish and I know that there are 17 in the picture. But the artist might have painted a total of 50. Maybe the rest could be behind the picture? I need to know how many fish might be behind the picture. This is a little like the problems we solved in Lesson 1.

**TEACHER:** Yes it is, Azulito. Before you explain how you could solve it, I would like for the students to solve the problem.  
*(generous pause)*

**AZULITO:** *(pause)* I wanted to know the information the story gave me, so I wrote it down.

17 fish are showing  
50 fish might be there  
? fish could behind the scenes?

Then I used what I know about related facts to find my number sentence.

I know that 50 equals 17 add some number  
 $50 = 17 + ?$

But that isn't much help to me right now. Let me use a related subtraction number sentence.

$50 - 17 = ?$  (write it vertically)

I can model that with base ten blocks. How may of you modeled with base 10 blocks, boys and girls? *(Model and talk through the model as in the past.)*


**TEACHER:** So far so good, Azulito! You are on a roll!

**AZULITO:** Thank you! Now I can draw the base ten *(Model and talk through the model as in the past.)*

I can use numbers in my base ten board *(Model and talk through the model as in the past.)* Hmm, I think I see a Make Ten here!

Finally, I can solve using a number sentence *(do so, and talk about 10 subtract 7. If you know your basic facts, especially your "make ten" facts, you can quickly solve this problem).*

**TEACHER:** Well done! Well boys and girls, did Azulito demonstrate your strategy with those he used? If not, please send us your strategy on MAS Space so we can share it!

<p><b>Azulito's Corner</b>  <b>Unit 4, Lesson 2</b>  <b>Writing Problems</b>  Write a class story problem for Little Flower. Be sure you can answer the problem, though.</p>	<p><b>Unit 4, Lesson 2</b> <span style="float: right;">1<sup>st</sup> – 2<sup>nd</sup></span>  <b>TV Lesson</b> - continued <span style="float: right;"></span></p>
	<p><b>TEACHER:</b> Let's solve the second problem.</p> <p><b>While viewing the picture, Monty counted 40 red berries on stems. His friend Lisa counted 17 fewer than Monty counted. How many red berries did Lisa count?</b></p> <p><i>(Same process as problem #1 –after you've read the problem, give students a generous time to solve, then have Azulito solve with</i></p> <ul style="list-style-type: none"> <li>• <i>First explain the math movie</i></li> <li>• <i>Base ten blocks</i></li> <li>• <i>Base ten pictures</i></li> <li>• <i>Place value number</i></li> <li>• <i>Number sentence with regrouping and knowing Make 10.</i></li> </ul> <p><b>AZULITO:</b> We used our math movie, and we used our knowledge of fact families to help us solve that problem. That was really cool!</p> <p><b>TEACHER:</b> Well done boys and girls, Azulito!  You are all such good problem solvers! I would like for you to talk more about the problems after we say good-bye today!</p> <p><b>AZULITO:</b> I would love to hear their discussions. That would be cool! And something else that is cool – I would like for you and your class to write a story problem today using Little Flower as your topic. Be sure that you can answer the question, but make it hard for me. I will go on and answer the problems! And hopefully other classes will, too!</p> <p><b>TEACHER:</b> Great task! It will be interesting to see all of the different story problems. I know you will be up to answering them, Azulito!</p> <p>And now, let's see what we accomplished today during our lesson.</p> <p><b>Objectives:</b> And now before we go, let's review what we have learned today! (<i>do so</i>)</p>







One sheet per student



**Materiales:**

- Juegos de base diez - 15 decenas, 20 unidades
- Hoja de problema de Arte ojibwa **BLM**

1. Esta es una imagen de una pieza de arte ojibwa. Se muestran 17 peces en la pintura. El artista tendría que haber pintado 50 peces. ¿Cuántos peces más tendría que haber pintado el artista para mostrar 50 peces?

2. Mientras miraba la imagen, Monty contó 40 bayas rojas en los tallos. Su amiga Lisa contó 17 menos que las que contó Monty. ¿Cuántas bayas rojas contó Lisa?



**Materials:**

- Base ten sets – 15 tens, 20 ones
- Ojibwa Art Problem Sheet

1. This is a picture of a piece of Ojibwa art. There are 17 fish showing in the painting. The artist might have painted 50 fish. How many more fish would the artist have had to have painted to show 50 fish?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

2. While viewing the picture, Monty counted 40 red berries on stems. His friend Lisa counted 17 fewer than Monty counted. How many red berries did Lisa count?

Base Ten Models



Tens	Ones

Number Representation

Tens	Ones

Number Sentence



<p><b>Literature Vocabulary</b>  folktale  legend  character  setting  village  journey  moccasins  messenger  medicine</p> <p><b>Math Vocabulary</b>  <b>Repeated Vocabulary</b>  regrouping  exchanging  trading  comparing  more than  less than  fewer than</p> <p><b>TV Materials:</b></p> <ul style="list-style-type: none"> <li>base ten sets – 1 set per student <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units (or units they already have from measuring)</li> </ul> </li> <li>Ojibwa Art from TV Lesson - 1 per student</li> </ul> <p><b>ELPS (English Language Proficiency Standard)</b>  2F, 2G, 3D, 3E, 4A, 5A, 5B</p> <p><b>CCRS (College and Career Readiness Standards)</b>  CROSS-CURRICULAR I.B.2., I.C.3., II.B.1., II.B.2.  ELA I.A.1., I.A.2., II.A.1., II.A.3., II.B.1., III.B.1., III.B.2  MATH I.B.1., I.C.1., II.A.1., V.A.1</p> <p> <b>Technology</b>  <a href="http://www.roomrecess.com/page/s/BlockBuster.html">http://www.roomrecess.com/page/s/BlockBuster.html</a>  Fast moving game to find fact families.</p> <p>Either of the two suggested sites could be a self-checking center</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b>  </p> <p><b>Unit 4, Lesson 2</b>  <b>Follow-up</b></p> <p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>Listen and speak with a partner during our math activity.</li> <li>Explain how the base ten models relate to the number representation.</li> <li>Use the math vocabulary during the activity.</li> <li>Share-write math journal response.</li> </ul> <p><b>Practice and Application, Math</b>  First, we didn't have time during the TV Lesson for you to talk about your strategies. Let's talk about them now.</p> <p><i>(Ask one volunteer to discuss his/her strategy. Then ask if someone used a different strategy to solve number 1. Continue until all strategies have been explained. Be sure that you are asking students who are not very verbal to verbalize – they won't get better at talking math unless you help them orally communicate.</i></p> <p><i>Repeat the process for the second problem.)</i></p> <p>Now, let's finish the page that we started in the Transition to Math lesson before the TV lesson.</p> <p>We finished Set 1. Now look at Set 2. What do you think is needed here? Take time to look, then we will talk about it. <i>(Pause, then have volunteers explain. Hopefully someone will see that you have to find the other addend that makes 10 in the fact family, then use the three related numbers to write the four number sentences. We have not dealt with doubles before. Wait until everyone has finished, then have students study and discuss 5, 5, 10. Why are there only two lines for 5, 5, 10? Student work by themselves to complete this part.)</i></p> <p>Our last set in an interesting set because you get to make up your own 3-addend problem. But be careful, two of those numbers have to “make ten.” <i>(Students work alone to complete this set. When everyone is done, have the students share their problems one at a time, and the class solving it. Again, talk about the strategies used to solve the problem.)</i></p>
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activity.

## Unit 4, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up - continued



#### Math Journal Writing

*Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a large chart and marking pen with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.*

 **Let's write a class story problem today for Azulito!**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.



## Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths and halves).
- Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Language Objectives

- Explain why each portion is a fourth/half.
- Share-write what is a fourth or half.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Vocabulary

fair shares  
equal pieces  
more than  
fewer than  
equal to

## STUDENT ACTIVITY (per group of 3, per teacher):

- **BLM** Snack Bag Fractions
- 3 bags of 100 calorie snacks – select a snack that has many pieces rather than a stacked cookie package (1 bag per student)
- 3 paper plates
- 3 paper towels
- scissors
- glue stick
- Chart paper with question: **Did your snack bags divide your snack into fair shares? Why or why not?** Work as a class to decide if the snacks provided in each bag gave each partner fair shares of today’s snack, or thirds.

## Unit 4, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

### Snack Fractions

*As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.*

**Objective:** Once again our snack fraction is a little different today. Today you will begin with the actual food. But before you can eat your snack, you must compare.

*(Divide students into groups of three. If you have a pair, they must use you as a third in their group.)*

Each of these snack bags has the same weight of snack inside. The bag does say that if you eat the entire bag, you will have eaten a 100 calorie snack. But does that mean that the same number of snacks are in each bag? If each of you has a snack bag, do you think that you will have fair shares, the same NUMBER of each snack inside? *(discussion)*

We are going to find out. Let’s look at our Record sheet to see what is expected of us.

Looking at the sheet, what do you think you each must do first? *(Count the snacks in your own bag.)*

Then, what do you think you must do? *(Share the count with the others on your team. Fill in your own record sheet with the counts.)*

What do you think you will do with the sentence stems? *(Cut out the comparison words at the bottom of the page, then use the counts from the bags and the comparison words to compare the amounts in each bag. Glue the words into place.)*

Finally, you need to make a decision about whether you had fair shares based on the number of snacks in each of your bags. Circle “did” or “did not” to complete the sentence at the bottom of your record sheet.

I should hear a lot of discussion in your groups about comparing, more than, fewer than, and equal to. When will you use the phrase “equal to?” *(when the two bags have the same number of snack items in them)*

When will you use the phrase “more than?” *(when the person filling in the chart has more pieces than the other person)*

When will you use the phrase “fewer than?” *(when the person filling in the chart has fewer pieces than the other person)*

## Unit 4, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Snack Fractions

OK, each of you should count the snacks in your bag by yourself and record your number. Then compare your number with the others in your group. Complete your record sheet. Then we will compare notes before you enjoy your snack.

#### QUESTIONS:

- How many snacks do each of you have in your bags?
- How will you use that information to compare the three bags of snacks?
- Explain to me how you know that you have compared all three snacks using the sentence stems.

Discuss all of their findings, then complete the Snack Fraction Writing assignment before they enjoy their snacks.

#### Snack Fraction Writing: Chart

**Did you snack bags divide your snack into fair shares? Why or why not?**

**Objectives: Review what you learned and how you learned it.**



My name is \_\_\_\_\_

My bag had \_\_\_\_\_ pieces in it.



The bag \_\_\_\_\_ had \_\_\_\_\_ pieces in it.  
(Other Team Member Name)



The bag \_\_\_\_\_ had \_\_\_\_\_ pieces in it.  
(Other Team Member Name)



_____ pieces are	<input type="text"/>	_____ pieces.
_____ pieces are	<input type="text"/>	_____ pieces.
_____ pieces are	<input type="text"/>	_____ pieces.

Our snack bags ( did did not ) divide our snack into fair share, thirds.



Cut out the comparison word cards below.  
Decide which comparison word matches your snack.  
Glue the comparison word card to the comparison statement.

<b>more than</b>	<b>more than</b>	<b>more than</b>
<b>fewer than</b>	<b>fewer than</b>	<b>fewer than</b>
<b>equal to</b>	<b>equal to</b>	<b>equal to</b>

Mi nombre es \_\_\_\_\_

Mi bolso tenía \_\_\_\_\_ pedacitos.



El bolso de \_\_\_\_\_ tenía \_\_\_\_\_ pedacitos.  
(Otro compañero)



El bolso de \_\_\_\_\_ tenía \_\_\_\_\_ pedacitos.  
(Otro compañero)



_____ pedacitos	<input type="text"/>	_____ pedacitos.
_____ pedacitos	<input type="text"/>	_____ pedacitos.
_____ pedacitos	<input type="text"/>	_____ pedacitos.

Nuestros bolsos ( sí no ) dividió nuestro refrigerio en porciones iguales (tercios).



Cut out the comparison word cards below.  
Decide which comparison word matches your snack.  
Glue the comparison word card to the comparison statement.

<b>más que</b>	<b>más que</b>	<b>más que</b>
<b>menos que</b>	<b>menos que</b>	<b>menos que</b>
<b>igual a</b>	<b>igual a</b>	<b>igual a</b>

**Family Fun, Unit 4 Lesson 2** 

Our book for this unit is *The Legend of the Lady Slipper*.

The math strategy we used today was \_\_\_\_\_

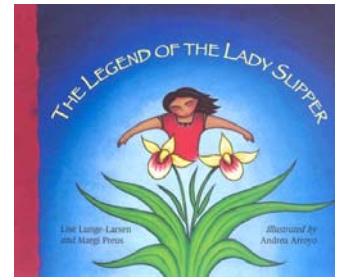
\_\_\_\_\_

I think this will be helpful because \_\_\_\_\_

\_\_\_\_\_

Thank you for helping me learn math!

\_\_\_\_\_



**Family Fun, Unit 4 Lesson 2** 

El libro para esta unidad es *The Legend of the Lady Slipper*.

La estrategia que utilizamos en la clase de matemáticas hoy fue

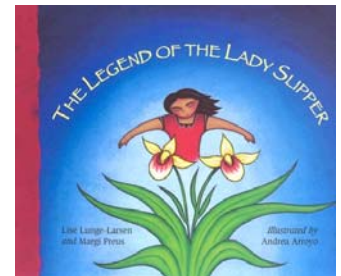
\_\_\_\_\_

Creo que será útil porque \_\_\_\_\_

\_\_\_\_\_

¡Gracias por ayudarme a aprender matemáticas!

\_\_\_\_\_





**Materials**

- 50 base ten units per student
- Unknown Quantity Cards
- 2 sticky notes – per student
- Large area to display measurement Sticky Notes and Footsteps
- **BLM CGI Problems Unit 4** – teacher only
- **BLM Teacher Guide**

**OPTIONAL**

- **BLM Ojibwa Moccasin graph**
- Class graph

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

 **Balanced Literacy Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS**

Lessons 1, 2, 3

- 1<sup>st</sup> – 1.3BCF; 1.5DF. 1.6GH
- 2<sup>nd</sup> – 2.3A, 2.4BC; 2.7C

**ELPS (English Language Proficiency Standard)**

1E, 1G, 2E, 2G, 2H, 3A, 3B, 3C

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1., I.C.1., I.C.2., II.A.1., II.A.4  
 ELA II.A.2., II.A.3., II.B.1., III.B.2  
 MATH I.A.1., IV.A.1., V.A.1., IV.B.1., VI.C.2., VIII.A.4

**Unit 4, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**Daily Routine**

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – none
  - Lesson 2 – 15
  - **Lesson 3 – 45**
- **CGI Problem\***
  - Lesson 1 – Join, Change Unknown (*2<sup>nd</sup> item 5*)
  - Lesson 2 – Compare, Difference Unknown (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
  - **Lesson 3 – Part Whole. Whole Unknown** (*1<sup>st</sup> item 3ab*)
- **What’s Missing** (*1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction*)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)\*\*
  - Lesson 1 – none
  - Lesson 2 – How long are your footsteps?
    - BLM Footsteps
    - BLM Teacher Guide
    - Base ten units – 50 per student
  - **Lesson 3 – Comparing Footsteps**
    - **BLM Teacher Guide**

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following Assessment items.)

**1<sup>st</sup>** - 1, 2, 3, 4, 5, 6, 7, 8

**2<sup>nd</sup>** - 1, 2, 3, 4, 5, 6, 7

**Azulito's Corner****Unit 4, Lesson 3****Measurement Lab**

Share your thoughts about the measurement lab this unit. What will you ponder?

**Unit 4, Lesson 3****1<sup>st</sup> – 2<sup>nd</sup>****Daily Routine** - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems. Follow the guidelines in Solve It! Overview to facilitation Lessons 1, 2, and 3.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing**
  - Lesson 1 – none
  - Lesson 2 – Favorite Ojibwe Art
    - BLM Favorite Ojibwe Art
  - **Lesson 3 – Favorite Moccasins**
    - **BLM Favorite Ojibwa Moccasins**

**Graph QUESTIONS**

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?
- Explain how you estimated the number of pennies in the jar.

**(Assessment Item 1<sup>st</sup> grade #8 and 2<sup>nd</sup> grade #7 will be reviewed daily in Snack Fractions.)**

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

**Vocabulary Building**

Choose an activity listed in the Daily Routines section.

**Solve It! Unit 4, Lesson 3 Pairs**

Solve your own problem today, showing your work. Verify your partner's problem solution when you both finish your own. Discuss your work.

**Partner 1 Problem**      **Name** \_\_\_\_\_ **Date** \_\_\_\_\_

- Those 32 cats were really busy on the farm. 7 of the cats made sure that the baby piggies were safe. Some of the cats worked hard guarding the baby chicks. 8 of the cats watched to make sure the baby goats ate their oats. How many cats guarded the baby chicks?

<b>Problem Solution</b>	<b>Problem Verification</b>
Name:	Name:

**Solve It! Unit 4, Lesson 3 Pairs**

Hoy, resuelve tu propio problema, mostrando el procedimiento. Verifica la solución de tu compañero cuando ambos terminen de hacerlo por sí mismos. Hablen sobre su trabajo.

**Partner 1 Problem**      **Name** \_\_\_\_\_ **Date** \_\_\_\_\_

Esos 32 gatos estaban muy ocupados en la granja. 7 de los gatos se aseguraban de que los cerditos bebés estuvieran seguros. Algunos de los gatos trabajaban mucho cuidando a los pollitos bebés. 8 de los gatos se aseguraban de que las cabras bebés comieran su avena. ¿Cuántos gatos cuidaban a los pollitos bebés?

<b>Solución del problema</b> Nombre:	<b>Verificación de la solución</b> Nombre:



**Partner 2 Problem**

**Name** \_\_\_\_\_ **Date** \_\_\_\_\_

- There were 56 mice on the farm. Nine of them lived near the piggies in the barn. Twelve of them lived with the horses in the barn. The rest of them lived in the barn loft. How many mice lived in the barn loft?

<b>Problem Solution</b> Name:	<b>Problem Verification</b> Name:

**Partner 2 Problem**

Name \_\_\_\_\_ Date \_\_\_\_\_

- Había 56 ratones en la granja. Nueve de ellos vivían cerca de los cerditos en el granero. Doce de ellos vivían con los caballos en el granero. El resto de ellos vivía en el altillo del granero. ¿Cuántos ratones vivían en el altillo del granero?

<b>Solución del problema</b> Nombre:	<b>Verificación de la solución</b> Nombre:

**Materials:**

- Journey Sticky Notes generated in Lesson 2
- Footstep measurement Sticky Note generated in Lesson 2.
- Footstep tracing generated in lesson 2
- Scotch tape (teacher only)

**Pre-Class**

- Before the students arrive, arrange the Journey Footsteps distances Sticky Notes in ascending order (number line style) on a wall or board where students can gather around for the activity.

**Activity**

- When the students arrive, and after you've assembled them by the Journey Footsteps, ask the students to tell you how you have arranged the Sticky Notes on the wall (board). Let the students discover the arrangement.
- Ask the students how they think the measure of their individual Footsteps would compare to the Journey measurements (*do not coax – they can discover later if they don't see it, which they probably won't*).
- Redistribute the Footsteps with the Sticky Note attached.
- Ask each student one at a time to come up and find their name and put their Sticky Note beneath their Journey measurement.
- Once all of the measurement Sticky Notes have been placed on the board, walk to each one with your dark marker. Read the measurement, and write it larger and in the dark marker.
- Ask students to look just at the footstep measurements. Is there a pattern? (*If measurements were fairly accurate, the footsteps measurements will be in DESCENDING order – the longest measure first, the shortest measure last.*)
- Ask students to talk about why they think that would be so. Let the students discuss it without your coaxing. There will be other activities before the end of the summer session to help cement the understanding that the longer the unit, the fewer it takes to measure the distance.

**Footsteps**

- Have the students tape their footsteps beneath their measures on the wall. Leave this display for the rest of the summer session.

**Closing**

- Tell students that you'd like for this to be a pondering activity – that is, you'd like for them to think about it, discuss it with other children, discuss it at home for a bit. Why are the measures in reverse order? Place the large “Ponder This!” question mark on the wall with the arranged activity pieces.





# Ponder This!





**BLM Unit 4, Daily Routine, Graphing Lesson 3**

**Favorite Moccasins** 

Enough copies so that you have one for the picture graph, and one of each for each student to choose.







**Literature Selection*****The Legend of the Lady Slipper***

by Lise Lunge-Larsen and Margi Preus

**Materials****Materials for Language Lesson**

- BLM Word Cards
- Shared Reading text used in lesson 2
- Word Sort Chart pre-written on chart paper
- BLM word sort activity (class set)
- Syllable sorting chart prewritten on chart paper

**Materials for TM Lesson**

- Base ten set – 1 per student
- **15 tens**
- **20 units**
- Crayons: light blue, dark blue, light green, dark green, yellow – 1 set per student
- BLM TM Coloring Ojibwe Art - 1 per student (2 per student if you'd like them to have a second copy to color as they wish)

**Literature Vocabulary**

folktale  
legend  
character  
setting  
village  
journey  
moccasins  
messenger  
medicine

**Math Vocabulary****Repeated Vocabulary**

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

**Unit 4, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson**

*Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.*

**Math Objectives:**

- Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.
- Solve one-step word problems involving addition or subtraction within 100 using a variety of strategies based on place value, including algorithms

**Reading Objectives:**

- Develop reading fluency through repeated reading of a text.

**Language Objectives:**

- Understand, use, and apply new vocabulary
- Understand vocabulary words in a shared reading text.
- Sort words from the story by a given rule (*ex. Number of Syllables*).

**BEFORE READING****Practice and Application, Literature and Vocabulary Shared Reading**

For today's shared reading, the goal is for students to have additional practice identifying words and reading them. Based on what you know about your students, choose one of the following two options to focus on.

Option 1: Continue reinforcing the beginning letters and sounds you worked on in Lesson 2.

- Show students a word card. Ask, "What letter does this word start with? What is the word?"
- Say, "Find the word in our text."
- Once the word is located, have students read the word with you.

**ELPS** (*English Language Proficiency Standard*)  
2F, 3G, 3H, 4G, 4J, 4K, 5A

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.B.2.,  
II.C.1., II.A.2., II.A.4.  
ELA I.A.2., II.A.1., II.A.6.,  
II.A.7., II.A.11., II.C.2., III.A.1.

**Language Center Connection**  
Students can play Mystery Word Game with a partner.

**Independent Reading Connection**

For students to improve as readers, they have to actually read a text themselves. It seems obvious, but often we emphasize reading aloud a text and never release the responsibility of reading to the students. In this unit, your students have had multiple opportunities to read the Shared Reading text in Lessons 2 and 3. If you set up a Listening Center, then they have also been able to read along with the recorded text of *The Legend of the Lady Slipper*. For the final lesson, consider creating heterogeneous **reading partners** based on reading ability (a stronger reader with a weaker reader). Give the partnership a copy of the shared reading text, and have them read it together as partners. The stronger reader will be the one carrying the reading, with the other student listening and joining in when possible.

**Unit 4, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>



**Classroom Lesson - continued**

- Finally, read aloud the sentence the word is in, having students chime in with any words they can.
- Repeat with each of the vocabulary words found in the text.

Option 2: Extend the work you did with students in Lesson 2.

- Help them count the number of words in the first sentence (*draw their attention to the space between each word*).
- Help students see how many words in a sentence they already know how to read (*Ex: vocabulary and high frequency words*).
- For unfamiliar words in the sentence, sound out the beginning letter with students, and help them read aloud the word.
- Then, read the entire sentence slowly with students, pointing to each word.
- Read it again at a slightly more fluent pace, again pointing to each word.
- Repeat with each remaining sentence.

**DURING READING**

**Comprehensible Input, Literature and Vocabulary**

“Today we are going to be taking a closer look at some of the words in the story, *The Legend of the Lady Slipper*. Words are made up of parts called syllables. Some words have only one syllable, while other words can have two, three, four, or even more syllables. We are going to look at words from the story that two or three syllables.”

Create a chart, similar to the one below, on chart paper.

2 Syllable Words	3 Syllable Words

**Language Center Connection**

Have students repeat the sorting activity from Lesson 3, this time with the new words from *The Legend of the Lady Slipper*.

**Independent Reading Connection**

*The Legend of the Lady Slipper* is not at an independent reading level for most early readers, which is why it's a perfect read aloud, and a perfect text for them to listen to in a Listening Center. However, another option is for you to provide students with the opportunity to "read" the story with a partner during independent reading time. What will this "reading" look like? Have students sit shoulder – to – shoulder as they do when they're next to each other on the rug. They can share the copy of the book. Then, have students orally tell what is happening on each page. This form of reading is a very important step towards conventional reading for students.

The more students do this, the more opportunities they have to develop oral language and use new vocabulary. It also solidifies their understanding of story sequence and their comprehension of the text.

**Unit 4, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson - continued**

Direct the students' attention to the chart and explain that you are going to use this to sort words from the story into the appropriate groups.

"Before we start adding words from the story to our chart, let's practice one together. We discussed the word setting when we worked on our story map." Show students the word card, setting. "Sometimes it is helpful to clap the word parts while you say the word aloud." Model this for the students. "Now let's do it together, set-ting. How many times did we clap? How many word parts does the word setting have? How many syllables does the word setting have?" Repeat this for the word characters.

"Great job, helping me fill in the chart with words, but we are not done. We are going to add words when we reread the story today."

Reread the story, *Legend of the Lady Slipper* to the class. Pause on the pages listed below and allow the students to determine where the chosen words should be added on the syllable chart.

Pg. 3 tomorrow

Pg. 7 brother

Pg. 12 frozen

Pg. 15 people

Pg. 19 suddenly

Pg. 24 footprint

Pg. 27 beautiful

**AFTER READING****Practice and Application, Vocabulary**

We just completed a word sort activity. You were able to sort the vocabulary words from the story into two groups: words with two syllables and words with three syllables. Now you are going to sort this week's vocabulary words in the same way.

**Unit 4, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson - continued**



The students will be completing a word sort activity using the BLM Word Sort.

Model for the children how to cut the words at the bottom of the page into individual strips and sort them into groups according to the number of syllables. Allow students to work with a partner or in a small group. Please note that the children can simply sort the words into groups and you can reassemble the students at the end of the activity to complete a whole class sort. Alternatively, they can use the sorting template so they can glue the sorted words into the appropriate columns.

2 syllables	3 syllables
legend	messenger
folktale	medicine
	moccasin
	village
	journey

2 sílabas	3 sílabas
leyenda	mensejero
Cuento folclórico	medicina
	mocasín
	pueblo
	viaje

### Math Objectives:

- Use objects and pictorial models to solve word problems involving comparing sets within 20 and unknowns as any one of the terms in the problem.
- Solve one-step word problems involving addition or subtraction within 100 using a variety of strategies based on place value, including algorithms.

### Materials for TM Lesson

- Base Ten Sets
  - 15 longs
  - 20 units
- Crayons: light blue, dark blue, light green, dark green, yellow – 1 set per student
- **BLM TM** Coloring Ojibwe Art - 1 per student (*2 per student if you'd like them to have a second copy to color as they wish*)

### Math Vocabulary

#### Repeated Vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than



#### Technology:

<http://www.ixl.com/math/grade-1/comparison-word-problems>

Free online game for comparison problems.

**ELPS** (*English Language Proficiency Standard*)

2C, 2G, 3A, 3D, 3F, 3I

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.1., I.B.2., I.C.1., I.C.2., I.D.1.

MATH I.A.1., I.B.1., I.C.1., II.A.1., V.A.1.IX.A.1., IX.A.2.

## Unit 4, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued

#### TRANSITION to Math



### Building Background, Math

Today you are going to color an Ojibwa Art page (*show the BLM*). What do you notice about the page?

(*Among other things, you want them to notice that*

- *There is a line drawing fish, and there is a colored fish in the corner.*
- *There are math problems to solve and there is a box in the lower left that is labeled, Answer Color KEY.)*

An Ojibwa artist, Norval Morrisseau, created a coloring book so that children would see the richness of Ojibwa art. The colored picture that you see is his view of a salmon fish.

You will not have as many colors on your fish because you are going to color guided by your answers to the math problems.

Find the math problem 20 – 10. What do you see pointing from the bottom of that math problem box? (*an arrow that goes into the coloring page*)

- Your answer to this math problem will tell you what color to use for this white area.
- What is 20 subtract 10? (*Pause and wait for the correct answer.*)
- What strategy did you use to find that answer? (*Accept all reasonable answers including counters, base ten model, drawn model, base ten numbers and number sentence.*)
- The answer is 10. Please write your answer in the math problem box.

Now, go down to the bottom of the page on the left to find the Answer Color KEY.

- Find the number 10.
- What color does the number 10 represent? (*dark blue*)
- Take your dark blue crayon and first, color in your math number box that we just solved – please color lightly so you can still see the problem.
- Now you may color the large white portion of the salmon fish that the arrow has landed in. You may color inside the fish as light or dark as you wish.

Continue solving problems and coloring the fish. If you have answered all of your problems correctly, we will all have the same salmon fish when you are finished.

## Unit 4, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson** - continued



### TRANSITION to Math

*(Students can finish the arithmetic practice coloring page during the Follow-up Lesson if you wish.)*

**Objectives:** Read the math and language objectives and have students explain how they learned them.

### Distribute TV Lesson Materials

#### TV Materials

*Put the base ten materials in a Ziploc for each student for easy distribution throughout the rest of the summer.*

- base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM**– Salmon Problems - 1 per student
- **BLM** Azulito’s Salmon Problems – TV teacher only



BLM TM Unit 4, Lesson 3

One per student

Coloring Ojibwa Art 

**Math Problems:**

- 45 - 30
- 41 - 19
- 36 - 18
- 20 - 10
- 41 - 20
- 9 + 9
- 8 + 2
- 6 + 4
- 3 + 7
- 15 - 5
- 57 - 35
- 75 - 60
- 37 - 22
- 50 - 40
- 40 - 30
- 5 - 5
- 1 - 9
- 10 - 0
- 34 - 19

**Answer Color KEY:**

- 15 = light blue
- 18 = light green
- 21 = yellow
- 10 = dark blue
- 22 = dark green



### Literature Vocabulary

folktale  
legend  
character  
setting  
village  
journey  
moccasins  
messenger  
medicine

### Math Vocabulary

#### Repeated Vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

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  - 15 longs
  - 20 units (*or units they already have from measuring*)
- **BLM**– Salmon Problems - 1 per student
- **BLM** Azulito’s Salmon Problems – TV teacher only

<http://search.aol.com/aol/image?q=pics+salmon+running&v t=aolrt-ff> Cool pics of salmon running, if you want to use them to show the students what “running” means.

<http://www.odditycentral.com/pics/worlds-biggest-salmon.html>  
Largest salmon ever found – another resource used for the length, but these are pretty good pics is you want to use them for the problem.

### Time Clue

**BB** = Building Background  
**CI** = Comprehensible Input  
**AC** = Azulito’s Corner  
**BB** = 1.5 minute  
**CI** = 26 minutes  
**AC** = 0.5 minute

## Unit 4, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson



*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

### Math Objectives:

- Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.

### Language Objectives:

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to regroup in addition and subtraction.

### Building Background, Math

**TEACHER:** The boys and girls are working on a salmon coloring page today. You know, Azulito, salmon is a very important food source in the Northwest and the Northeast

**AZULITO:** Oh yes, I know! The fish swim from the ocean up a fresh water river to lay their eggs. It is something to see all those fish swimming upstream!

**TEACHER:** Sometimes the fish swim in small groups of one, two, or five. Sometimes in larger groups into the hundreds, But many times they are in huge groups of thousands! Our problems today are about salmon, and a fishing contest that two brothers, Henry and Amos, were in. Let’s find out about the salmon and the contest.

### Comprehensible Input

Henry and his brother Amos were on different teams fishing for salmon. Henry’s team caught 47 in one day. That was 29 more salmon than his brother’s team caught that day. How many salmon did his brother’s team catch?

What math movie did you see? Tell your Classroom Teacher (*pause*).

**AZULITO:** (*pause*) I see two teams of fishermen. Henry’s team has 47 fish. Amos’ team has a number that is 29 fewer than Henry’s team.

**TEACHER:** That’s a pretty good math movie. Before you explain how you could solve it, I would like for the students to solve the problem. (*generous pause*)

**ELPS** (*English Language Proficiency Standard*)

2B, 2C, 3C, 3F, 3G, 4F

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.A.1.,

I.C.2, I.D.3, II.A.1., II.A.2.

ELA II.A.1., II.A.3., II.A.6.,

II.B.1., III.B.2.

MATH I.A.1., I.B.1., II.A.1.,

V.A.1., VIII.A.1., VIII.C.1



**SMARTBOARD**

Model problem

Base ten blocks

Base ten drawing

Number on base ten

Number sentence

## Unit 4, Lesson 3

### TV Lesson - continued

1<sup>st</sup> – 2<sup>nd</sup>



**TEACHER:** Alright, Azulito, tell us the information the story gave you.

**AZULITO:** I know that.

Henry's team caught 47 fish.

Amos' team caught 29 fewer – see, if Henry caught 29 MORE, then Amos' team must have caught 29 FEWER.

So, I need to find out how many fish Amos' team caught.

This was pretty simple. 47 fish subtract 29 fish or  $47 - 29$ .

I can model that with base ten blocks. How many of you modeled with base ten blocks, boys and girls? (*Model and talk through the model as in the past.*)

**TEACHER:** So far so good, Azulito! You are on a roll!

**AZULITO:** Thank you! Now I can draw the base ten. (*Model and talk through the model as in the past.*)

I can use numbers in my base ten board. (*Model and talk through the model as in the past.*)

Finally, I can solve using a number sentence. (*Do so, talking through your problem strategy.*)

**TEACHER:** Well done! Well boys and girls, did Azulito demonstrate your strategy with those he used? If not, please send us your strategy on MAS Space so we can share it!

**TEACHER:** Let's solve the second problem.

The longest salmon ever found was 51 inches long. Henry's longest fish was 32 inches long. How much shorter was Henry's fish than the record salmon?


(*Same process as problem #1 –after you've read the problem, give students a generous time to solve, then have Azulito solve with*

- *First explain the math movie*
- *Base ten blocks*
- *Base ten pictures*
- *Place value number*
- *Number sentence with regrouping and knowing Make 10.*

**SMARTBOARD**  
Demo on board.

**Azulito's Corner**  
**Unit 4, Lesson 3**  
**Measurement Lab**  
Share your thoughts about the measurement lab this unit. What will you ponder?

**Unit 4, Lesson 3**  
**TV Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>  


**AZULITO:** I learned something about salmon in our problems today. I think I would like to research and learn more. And, I'd like to eat some, too!

**TEACHER:** Well, story problems are a great way for us to learn about the world around us, Azulito! Thank you for seeing that! And speaking of learning, what is your MAS Space Corner about this time?

**AZULITO:** Well, I was watching some of the classes when they worked on their Measurement Lab. I learned something about measurement, but I still have some things I'm thinking about – I'm still "pondering" a few things. What are your thoughts on the lab, and what are you still thinking about, or "pondering?"

**TEACHER:** Great task, Azulito. You and I will probably learn something from the boys' and girls' observations, too!

And now, let's see what we accomplished today during our lesson.

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)



## BLM Unit 4, TV Lesson 3

One sheet per student

## Salmon Problems



Salmon are an important food source for many people who live in the Northwest on the Pacific Ocean and the Northeast on the Atlantic Ocean.

Once a year the fish swim from the ocean up fresh water rivers to lay their eggs.

This is called “running,” Salmon travel singly or in huge groups in the thousands of fish. Fishermen come from everywhere to catch the wild fish during this once-a-year event.

### Materials:

- Base ten sets – 15 tens, 20 ones
- **BLM** Salmon Problem Sheet

1. Henry and his brother Amos were on different teams fishing for salmon. Henry’s team caught 47 in one day. That was 29 more salmon than his brother’s team caught that day. How many salmon did his brother’s team catch?
  
  
  
  
  
  
  
  
  
  
2. The longest salmon ever found was 51 inches long. Henry’s longest fish was 32 inches long. How much shorter was Henry’s fish than the record salmon?

## BLM Unit 4, TV Lesson 3

One sheet per student

## Salmon Problems



El salmón es una fuente de alimentos importante para muchas personas que viven en el noroeste del Océano Pacífico y en el noreste del Océano Atlántico.

Una vez al año, el pez nada desde el océano hasta ríos de aguas frescas para poner huevos.

Esto se denomina “remontar”, el Salmón viaja solo o en grandes grupos de miles de peces. Los pescadores van de todos lados para atrapar al pez salvaje durante este evento que ocurre una vez al año.

### Materiales:

- Juegos de base diez - 15 decenas, 20 unidades
- Hoja de problemas del Salmón **BLM**

1. Henry y su hermano Amos estaban en equipos diferentes pescando salmones. El equipo de Henry atrapó 47 en un día. Fueron 29 salmones más de lo que el equipo de su hermano atrapó ese día. ¿Cuántos salmones atrapó el equipo de su hermano?
  
2. El salmón más largo jamás encontrado era de 51 pulgadas de largo. El pez más largo de Henry era de 32 pulgadas de largo. ¿Cuánto más corto era el pez de Henry que el salmón récord?



### BLM Unit 4, TV Lesson 3

### Azulito's Salmon Problems

One sheet per student



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Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

2. The longest salmon ever found was 51 inches long. Henry's longest fish was 32 inches long. How much shorter was Henry's fish than the record salmon?

Base Ten Models

Tens	Ones

Number Representation

Tens	Ones

Number Sentence

### BLM Unit 4, TV Lesson 3

### Azulito's Salmon Problems

One sheet per student



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#### Materials:

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- **BLM** Salmon Problem Sheet

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Modelos de base diez

Tens	Ones

Representación numérica

Tens	Ones

Oración numérica

2. El salmón más largo jamás encontrado era de 51 pulgadas de largo. El pez más largo de Henry era de 32 pulgadas de largo. ¿Cuánto más corto era el pez de Henry que el salmón récord?

Modelos de base diez

Tens	Ones

Representación numérica

Tens	Ones

Oración numérica

## Literature Vocabulary

folktale  
legend  
character  
setting  
village  
journey  
moccasins  
messenger  
medicine

## Math Vocabulary

### Repeated Vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

### TV Materials:

- crayons (same as TM)- 1 set per student
- base ten sets – 1 set per student
  - 15 longs
  - 20 units (*or units they already have from measuring*)
- Salmon Problems from TV Lesson - 1 per student
- Way to project game cards for the class to see and read
- Color activity from TM – 1 per student
- **BLM** Family Fun Game cards – 1 set for teacher
- Family Fun Game to take home – 1 full set per student

### ELPS (*English Language Proficiency Standard*)

2F, 2G, 3D, 3E, 4A, 5A, 5B

### CCRS (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.B.2.,  
I.C.3., II.B.1., II.B.2.  
ELA I.A.1., I.A.2., II.A.1., II.A.3.,  
II.B.1., III.B.1., III.B.2  
MATH I.B.1., I.C.1., II.A.1.,  
V.A.1.

## Unit 4, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up



### Math Objectives:

- Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.

### Language Objectives:

- Listen and speak with a partner during our math activity.
- Explain how the base ten models relate to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

### Practice and Application, Math

First, we didn't have time during the TV Lesson for you to talk about your strategies. Let's talk about them now.

*(Ask one volunteer to discuss his/her strategy. Then ask if someone used a different strategy to solve number one. Continue until all strategies have been explained. Be sure that you are asking students who are not very verbal to verbalize – they won't get better at talking math unless you help them orally communicate.*

*Repeat the process for the second problem.)*

Before we finish our coloring page from the Transition to Math lesson, I'd like to read through our Family Fun Game cards and ask you to tell me your thinking about how you would solve the problems.

We won't play the game today. We'll just talk about how we will solve the problems when we do play the game.

*(Show the cards one at a time and ask students to work with a partner to devise a strategy for solving. Ask for volunteers to explain the strategies. Be sure you hear from everyone in the room before you end this activity.)*

Now, let's finish the page that we started in the Transition to Math lesson before the TV lesson.

*(Just let the students solve the arithmetic problems and color the fish. Display the finished products – perhaps put them on the display wall after all of the students leave.)*



### Technology

<http://www.roomrecess.com/pages/BlockBuster.html>

Fast moving game to find fact families.

Either of the two suggested sites could be a self-checking center activity.

## Unit 4, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Follow-up - continued

#### Math Journal Writing

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



**Let's write a class story problem today for Azulito!**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

## Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths and halves).
- Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Language Objectives

- Explain why each portion is a fourth/ half.
- Share-write what is a fourth or half.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Vocabulary

fair shares  
equal pieces  
fourths

**STUDENT ACTIVITY** (per group of 4, per teacher):

- **BLM** Crackers and Peanut Butter Fractions
- 4 full graham cracker sheets
- 2 T peanut butter
- 4 plastic knives
- 4 paper plates
- 4 paper towels
- 4 scissors
- 4 glue sticks
- Chart paper with question: **How do you know you have one-fourth of each part of the snack?**

## Unit 4, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

#### Snack Fractions

**As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.**

**Objective:** Today’s snack fraction is pretty simple. All you need to do is to share the graham crackers and the peanut butter fairly among yourself and three friends.

What fractional part of the snack will you each receive if you share fairly? (*fourths*) How do you know it will be fourths? (*There are “myself” and my three friends – that is four people to share.*)

Before you actually share the food, cut out the pictures on the BLM. Each of you divide your pictures into four fair shares, or fourths. Glue what you would expect to receive on the BLM in the space provided.

(*Circulate the room to make sure students are talking “fractionese” to one another. Ask questions to probe for understanding and engage discussion.*)

#### QUESTIONS:

- Which is the easier part of the snack to share? (*crackers*)
- Why? (*There are four of them – we each get a whole one.*)
- Explain how you are thinking about sharing the peanut butter. What portion of each tablespoon will each of you receive?
- How can you be sure that you have equal portions of the peanut butter?

Discuss all of their findings, paying particular attention to the peanut butter. Show all solutions. Complete the Snack Fraction Writing assignment before they enjoy their snacks.

#### Snack Fraction Writing: Chart

- **How do you know you have one-fourth of each part of the snack?**

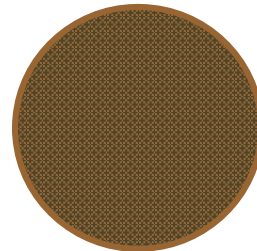
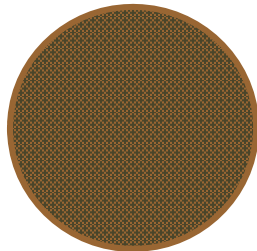
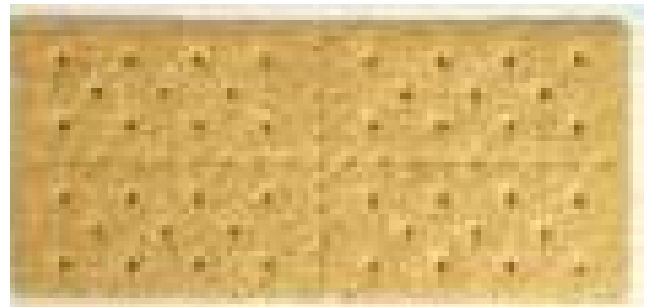
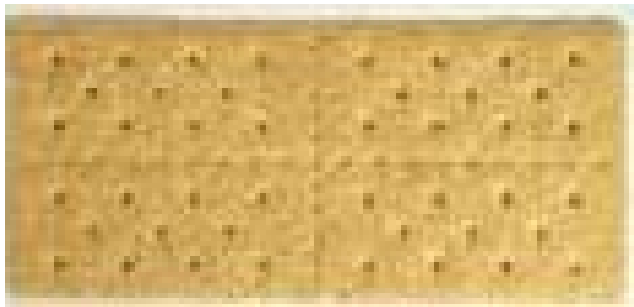
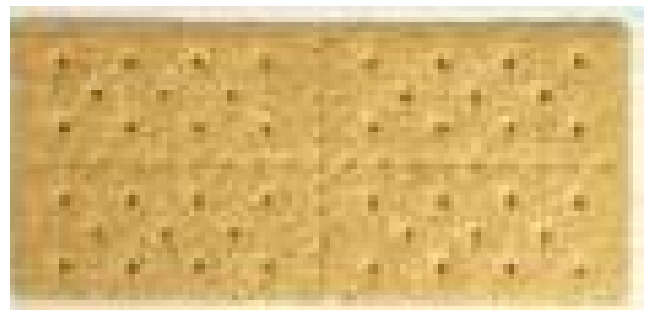
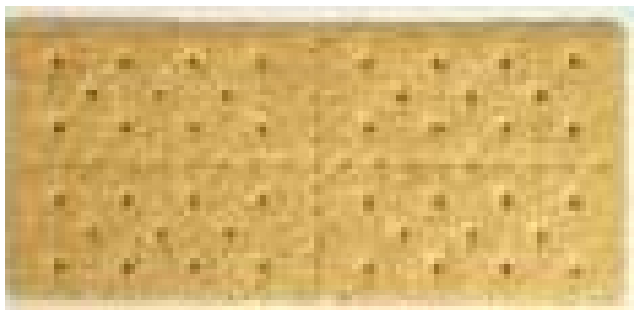
**Objectives:** Review what you learned and how you learned it.



My name is \_\_\_\_\_

Here is my fair share of the snack.

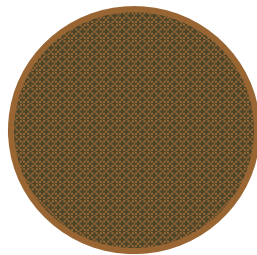
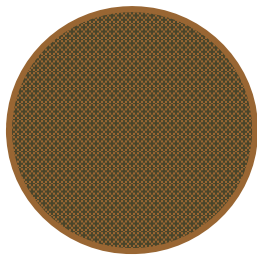
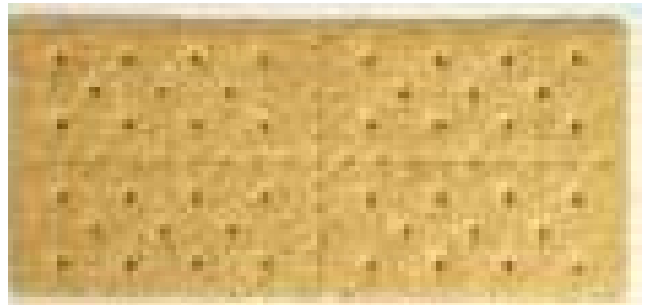
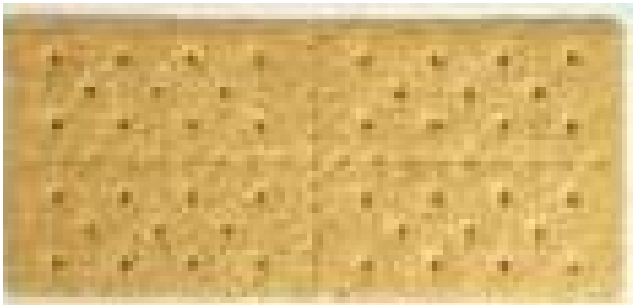
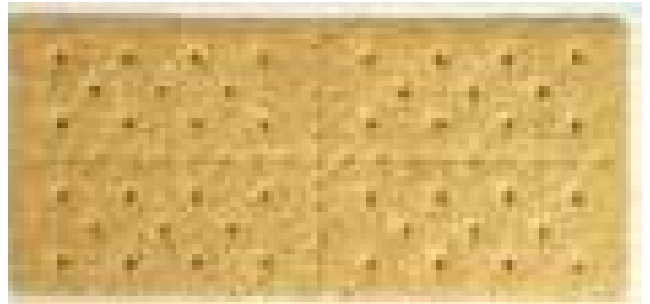
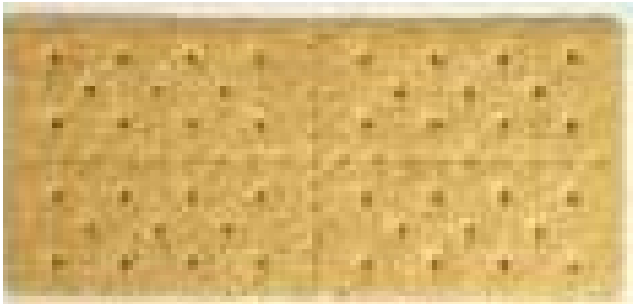
My fractional part of the snack is \_\_\_\_\_.



Mi nombre es \_\_\_\_\_

**Esta es mi porción igual del refrigerio.**

Mi parte fraccionaria del refrigerio es \_\_\_\_\_.





## Family Fun – 1<sup>st</sup> – 2<sup>nd</sup>, Unit 4 Lesson 3

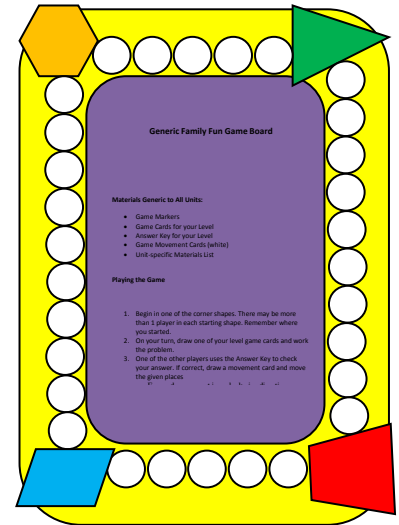
### Family Fun Game day again! Your supplies include:

- Blue Family Fun Problem Cards (for 1<sup>st</sup> – 2<sup>nd</sup> graders)
- Special Instructions (1<sup>st</sup> – 2<sup>nd</sup> graders)
- All-level Answer Key for Unit 2
- Family Fun Game Board – at home already
- Family Fun Game Movement Cards – at home already

Please gather 20 counters which could be pebbles, paper clips, beans or anything else small that children can use to model problems.

Thank you for taking the time to enjoy math as a family this summer!

Your Child's Teacher



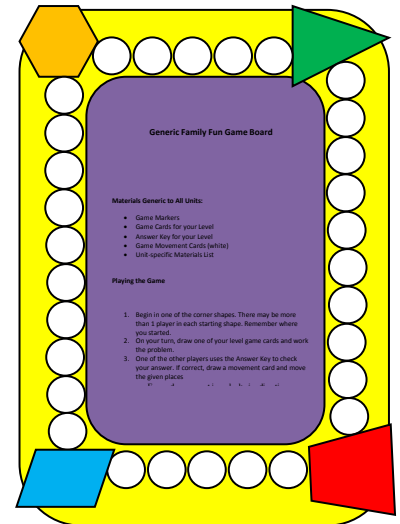
## Family Fun – 1<sup>st</sup> – 2<sup>nd</sup>, Unit 4 Lesson 3

### Hoy traje otro juego de diversion familiar a casa. Los materiales con:

- Tarjetas azules con problemas (para alumnos del 1 y 2 grados)
- Instrucciones especiales (para alumnos del 1 y 2 grados)
- Clave para todos los niveles para la unidad 4
- Tablero de juego – en casa
- Tarjetas de movimiento – en casa

Favor de juntar 20 contadores como piedras, clips, frijoles o cualquier cosa pequeña que se puede usar para modelar los problemas.

Gracias por ayudarme con las matemáticas.





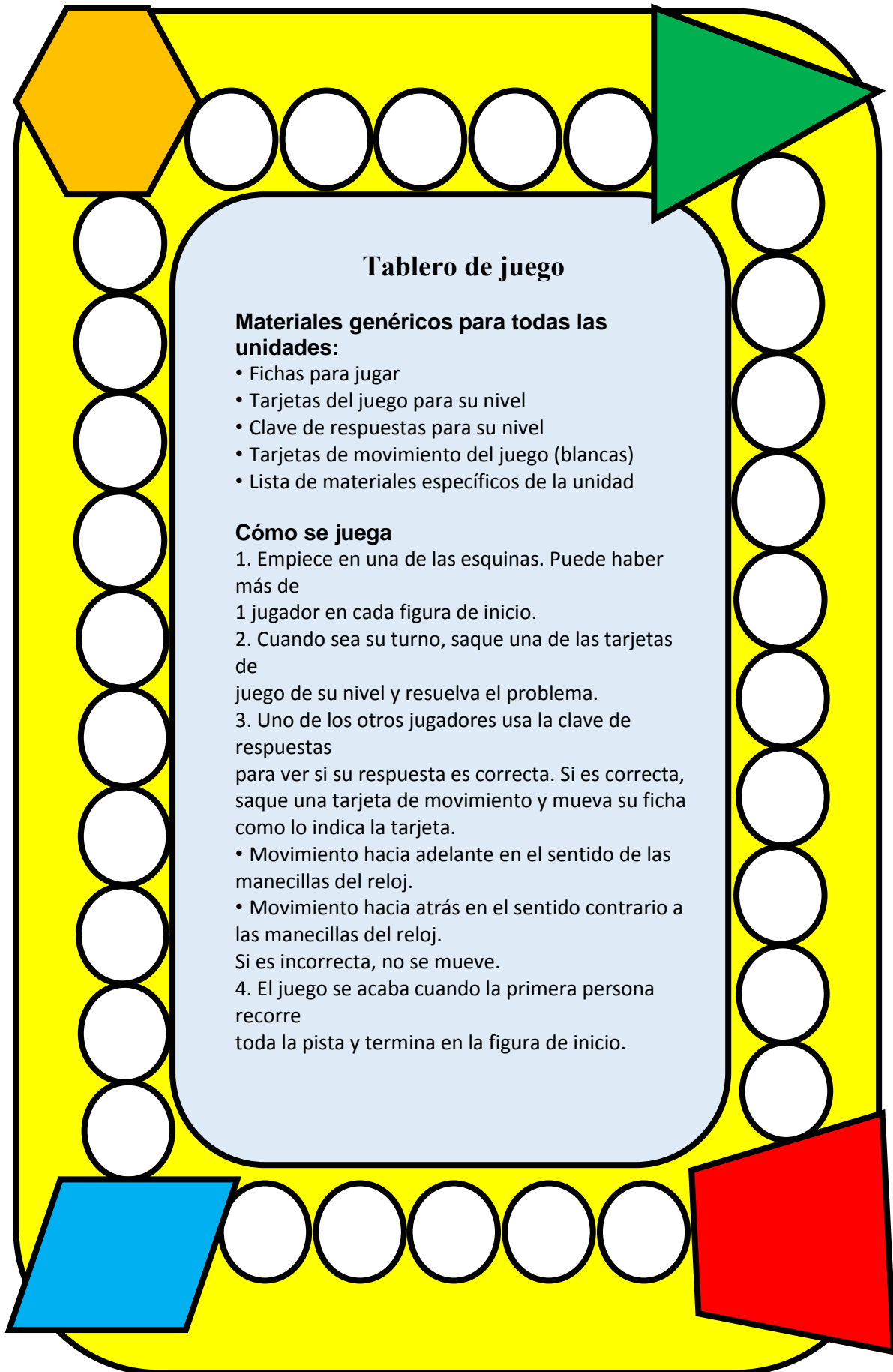
## Generic Family Fun Game Board

### Materials Generic to All Units:

- Game Markers
- Game Cards for your Level
- Answer Key for your Level
- Game Movement Cards (white)
- Unit-specific Materials List

### Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, draw a movement card and move the given places
  - Forward movement in a clockwise direction.
  - Backward movement in a counter clockwise direction.If incorrect, do not move.
4. Game is over when the first person runs the entire track, ending back on the starting shape.



<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>
<b>Move back 1 space</b>	<b>Move back 1 space</b>	<b>Move back 1 space</b>
<b>Move forward 3 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 3 spaces</b>

Units 1 – 2 – 3 -- FAMILY FUN

One per student for home

One per partner pair in class



Print on white paper.

Family Fun – Movement Cards

<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>
<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>
<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>

**BLM Unit 4, Follow-up Lesson 3**

**Family Fun Game Cards** 

Printed on *Blue* –one set per partners for class; one set per student for home. (There are two pages of cards.)

**Cards A – I are Unit 4 skills as assessed. Cards J – R review skills from previous units.**

**D.** Solve using any strategy.

$$\begin{array}{r} 52 \\ -29 \\ \hline \end{array}$$

**E.** Solve using any strategy.

$$\begin{array}{r} 40 \\ -17 \\ \hline \end{array}$$

**F.** Solve using any strategy.

$$\begin{array}{r} 51 \\ -12 \\ \hline \end{array}$$

**A.** Little Flower counted 23 Lady Slippers. Her brother counted 19 fewer than she did. How many Lady Slippers did her brother count?

**B.** Little Flower found 18 flowers. She hoped to find 35 flowers. How many more flowers did she need to find?

**C.** Little Flower needed mash-ki-ki for 50 people. She had enough for 37 people. How much more mash-ki-ki did she need?

**G.** Little Flower took 43 steps. Her brother took 29 steps fewer than she took. How many steps did her brother take?

**H.** Little Flower counted 47 flowers. Her brother counted 21 flowers. How many flowers did they count together?

**I.** Little Flower took 29 fewer steps than her brother. Her brother took 52 steps. How many steps did Little Flower take?

**BLM Unit 4, Follow-up Lesson 3**

**Family Fun Game Cards** 

Printed on **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**Cards A – I are Unit 4 skills as assessed. Cards J – R review skills from previous units.**

<p><b>D.</b> Resuelve usando cualquier estrategia.</p> $\begin{array}{r} 52 \\ -29 \\ \hline \end{array}$	<p><b>E.</b> Resuelve usando cualquier estrategia.</p> $\begin{array}{r} 40 \\ -17 \\ \hline \end{array}$	<p><b>F.</b> Resuelve usando cualquier estrategia.</p> $\begin{array}{r} 51 \\ -12 \\ \hline \end{array}$
<p><b>A.</b> Pequeña Flor contó 23 Zapatillas de dama. Su hermano contó 19 menos que ella. ¿Cuántas Zapatillas de dama contó su hermano?</p>	<p><b>B.</b> Pequeña Flor encontró 18 flores. Esperaba encontrar 35 flores. ¿Cuántas flores más necesitaba encontrar?</p>	<p><b>C.</b> Pequeña Flor necesitaba mash-ki-ki para 50 personas. Tenía suficiente para 37 personas. ¿Cuánto mash-ki-ki más necesitaba?</p>
<p><b>G.</b> Pequeña Flor dio 43 pasos. Su hermano dio 29 pasos menos que ella. ¿Cuántos pasos dio su hermano?</p>	<p><b>H.</b> Pequeña Flor contó 47 flores. Su hermano contó 21 flores. ¿Cuántas flores contaron los dos juntos?</p>	<p><b>I.</b> Pequeña Flor dio 29 pasos menos que su hermano. Su hermano dio 52 pasos. ¿Cuántos pasos dio Pequeña Flor?</p>



**BLM Unit 4, Follow-up Lesson 3****Family Fun Game Cards** 

Printed on **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.** You are fair sharing this cake with yourself and 3 friends. Draw how you would share.



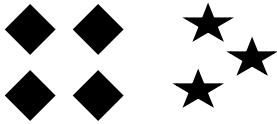
**K.** This rectangle is cut into halves. How do you know they are fair shares?



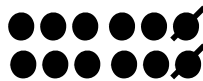
**L**

$$12 - \square = 7$$

**M.**  
Write a number sentence that matches this picture.



**N.**  
Write a number sentence that matches this picture.



**O.**

There were 12 wild things in the trees. 7 were swinging. The rest were climbing. How many were climbing?

**P.**  
8 wild things danced. 12 wild things swung from the trees. How many fewer wild things danced?

**Q.** Look at this number sentence.

$$4 + 8 + 6 = 18$$

Which numbers are compatible, or make ten?

**R.**

Use the following numbers to make a fact family.

8, 5, 13

**BLM Unit 4, Follow-up Lesson 3**

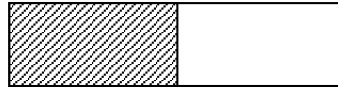
**Family Fun Game Cards** 

Printed on **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.** Estás compartiendo este pastel de manera justa para ti y 3 amigos. Dibuja cómo lo compartirías.



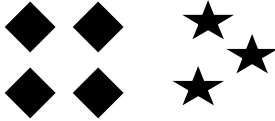
**K.** Este rectángulo está dividido en mitades. ¿Cómo sabes que son partes justas?



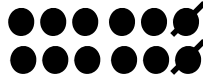
**L**

$$12 - \square = 7$$

**M.**  
Escribe una oración numérica que coincida con este dibujo.



**N.**  
Escribe una oración numérica que coincida con este dibujo.



**O.**  
Había 12 cosas salvajes en los árboles. 7 se estaban columpiando. El resto estaba trepando. ¿Cuántas estaban trepando?

**P.**  
8 cosas salvajes bailaron. 12 cosas salvajes se columpiaron de los árboles. ¿Cuántas cosas salvajes menos bailaron?

**Q.** Mira esta oración numérica.  
 $4 + 8 + 6 = 18$   
¿Cuáles números son compatibles, o suman diez?

**R.**  
Usa los números siguientes para formar una familia de hecho.  
8, 5, 13

**Materials:**

- Blue Family Fun Problem Cards (for 1<sup>st</sup> – 2<sup>nd</sup> graders)
- Special Instructions (1<sup>st</sup> – 2<sup>nd</sup> graders)
- All-level Answer Key for Unit 4
- Counters from home – pebbles, beans, paper clips, or any other small object that can be counted (for some review problems)
- Base ten blocks – 10 tens, 20 ones

**Solution Expectations****Problems A – C (unit 4 skills)**

- Students are expected to solve the problem using any strategy (base ten models, base ten drawing, number in place value, the traditional algorithm, or any other strategy that works).

**Problems D - I (unit 4 skills)**

- Students are expected to use any strategy (base ten models, drawings, algorithm) to solve the 2-digit addition or subtraction problems.

**Problems J – K (previous units)**

- Fraction problems
  - J – Students need to catch the “yourself and three more” which makes fourths, and divide a paper rectangle into four equal parts – any fourths is acceptable.
  - K – Students are expected to understand that fair shares means equal pieces.

**Problems L (previous units)**

- Students are expected to find the missing number.

**Problem M – M (previous units)**

- M - Students are expected to translate the addition picture to numbers.
- N – Students are expected to translate the subtraction picture to numbers.

**Problem O – P (previous units)**

- Students are expected to solve the word problems using any strategy they can (counters, number facts, algorithm). P uses the term “fewer” which might be a stumbling block for some students.

**Problem Q (previous units)**

- Students are expected to recognize the compatible numbers, or numbers that make 10.

**Problem R (previous units)**

- Students are expected to make the fact family four number sentences.

## BLM Unidad 4, Lección de seguimiento 3 Instrucciones especiales para 1.º-2.º

### **Materiales:**

- Cartas de problemas de Diversión Familiar azules (para estudiantes de 1.º – 2.º grado)
- Instrucciones especiales (estudiantes de 1.º – 2.º grado).
- Guía de respuestas para todos los niveles para la Unidad 4
- Contadores de casa - piedritas, frijoles, clips o cualquier otro objeto pequeño que pueda ser contado (para algunos problemas de revisión)
- Bloques base diez - 10 decenas, 20 unidades

### **Expectativas de solución**

#### **Problemas A – C (habilidades de la unidad 4)**

- Se espera que los estudiantes resuelvan los problemas usando cualquier estrategia (modelos base diez, dibujos base diez, número en espacios de magnitud, el algoritmo tradicional o cualquier otra estrategia que funcione).

#### **Problemas D – I (habilidades de la unidad 4)**

- Se espera que los estudiantes usen cualquier estrategia (modelos base diez, dibujos, algoritmos) para resolver los problemas de suma o resta de 2 dígitos.

#### **Problemas J – K (unidades anteriores)**

- Problemas de fracciones
  - J - Los estudiantes necesitan comprender el concepto de “tú y tres más” que hace cuartos, y dividir un rectángulo de papel en cuatro partes iguales - cualquier distribución de cuartos es aceptable.
  - K - Se espera que los estudiantes entiendan que partes justas significa trozos iguales.

#### **Problema L (unidades anteriores)**

- Se espera que los estudiantes encuentren el número faltante.

#### **Problemas M – N (unidades anteriores)**

- M - Se espera que los estudiantes traduzcan la imagen de suma a números.
- N – Se espera que los estudiantes traduzcan la imagen de resta a números.

#### **Problemas O – P (unidades anteriores)**

- Se espera que los estudiantes resuelvan los problemas razonados usando cualquier estrategia que puedan (contadores, hechos numéricos, algoritmos). En P se utiliza el término “menos”, lo que puede ser un obstáculo para algunos estudiantes.

#### **Problema Q (unidades anteriores)**

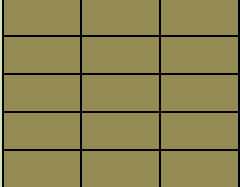
- Se espera que los estudiantes reconozcan los números compatibles, o los números que suman 10.

#### **Problema R (unidades anteriores)**

- Se espera que los estudiantes hagan las cuatro oraciones numéricas de familias de hecho.


BLM All-School Unit 4, Lesson 3

Family Fun Game Answer Key

Problem Letter	Kinder	1-2	3-4	5-6	7-8
A	11 seeds	23	3	$6\frac{1}{4}$ or 6.25	short = 6 long = 8
B	4 seeds	23	9	$\frac{5}{8}$ or 0.625 cups	6
C	4 seeds	39	42	\$423,294,920.10	1
D	5 seeds	4	6 seedlings	2134.448	3
E	10 seeds	17	8 bundles	\$7400 down	(x3)
F	3 seeds	13	50 bundles	10% water	$(\times \frac{1}{3})$
G	(see special instructions)	14		\$48.50 tax	$(\times \frac{1}{2})$
H	(see special instructions)	68		\$33 late fee	(x3)
I	2 equal parts	23		\$375 earned	(x5)
J	Nickel	Divided into four equal parts	3.21	\$39.64	(x3)
K	Dime	Parts are equal	$6 \times 7 = 42$ $7 \times 6 = 42$ $42 \div 7 = 6$ $42 \div 6 = 7$	\$12.20 tip	(x5)
L	Quarter	5	xx xx xx xx xx xx xx xx xx	25% tip	(x5)
M	Penny	$4 + 3 = 7$	Eleven and seven tenths	no. labels flipped	15
N	Bottom line	$12 - 2 = 10$	 $\frac{2}{4}$  $\frac{4}{8}$	yes. scale factor of (x6)	no – # of shirts varies from each closet
O	Top line	5 wild things	0.7	60 students: 1 bus	yes – 2 wheels on each bicycle
P	11	4	Between 0.25 and 0.5	30 notes hit	no – no scale factor

<b>Q</b>	8	4 and 6 are compatible	Line closest to 1	$\frac{17}{12}$ or $1\frac{5}{12}$	yes – scale factor (x20)
<b>R</b>	13 beans 13	$8 + 5 = 13$ $5 + 8 = 13$ $13 - 8 = 5$ $13 - 5 = 8$	Line in the middle	$4\frac{1}{8}$	yes – scale factor (x10)

## **FAMILY FUN Involvement**

1<sup>st</sup> – 2<sup>nd</sup> 

Overview for Unit 4, *The Legend of the Lady Slippers*

This overview will provide a one-page view of the suggested Family Fun Activities for this unit, as well as other opportunities provided for Family Involvement.

### **Lesson 1**

- Vocabulary Cards so students can practice language and math vocabulary at home
- Family Fun Unit 4 Lesson 1 Letter with many ideas for involving the family.

### **Lesson 2**

- You could send home a tape of a reading of the story, or if Internet is available at home. Include a link to the Related Links to hear it read online.
- Family Fun Unit 4 Lesson 2 Letter

### **Lesson 3**

- Family Fun Unit 4, Lesson 3 attached to the Family Fun Game supplies
- Family Enjoyment of Unit Project

### **Enrichment Suggestions**

- Families could investigate the wildflowers around their homes.
- Send home pictures of Ojibwa moccasins. Families could send back their own original design.

<p><b>This portion of the curriculum, although NOT required, should be used as needed to supplement and enrich the Unit’s activities.</b></p> <p><b>Family Fun Suggestions:</b></p> <ul style="list-style-type: none"> <li>• Families could investigate the wildflowers around their homes.</li> <li>• Send home pictures of Ojibwa moccasins. Families could send back their own original design.</li> </ul> <p><b>Possible Center Suggestions:</b></p> <ul style="list-style-type: none"> <li>• Online Math Games</li> <li>• Art Project selected from the website</li> </ul>	<p><b>MATH WALK</b></p> <p><b>Wild Flower Walk</b> – There are many beautiful wildflowers in our land. Walk your campus to see how many different varieties you can find. You might consider taking a photo-taking device then creating a video, still picture, or PowerPoint presentation for a parent night. Students could research to identify the flowers.</p> <p><b>Technology Connections</b></p> <ul style="list-style-type: none"> <li>• <b>Math Practice</b>  <a href="http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&amp;utm_medium=feed&amp;utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29">http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&amp;utm_medium=feed&amp;utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29</a>            Challenging game for making 10  <a href="http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html">http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html</a>            Adding 2-digit numbers</li> <li>• <b>Science Connection</b>  <a href="http://www.fcps.edu/islandcreekes/ecology/pink_ladys_slipper.htm">http://www.fcps.edu/islandcreekes/ecology/pink_ladys_slipper.htm</a>            Facts about the flower, Lady’s Slipper  <a href="http://www.easyfunschool.com/article1293.html">http://www.easyfunschool.com/article1293.html</a>            Interesting seed investigations</li> <li>• <b>Social Studies Connection</b>  <a href="http://www.bigorin.org/chippewa_kids.htm">http://www.bigorin.org/chippewa_kids.htm</a>            Ojibwe people information  <a href="http://nmai.si.edu/environment/ojibwe/People.aspx">http://nmai.si.edu/environment/ojibwe/People.aspx</a>            Learn more about Ojibwe people</li> <li>• <b>Health/Physical Ed Connection</b>            Wah-Oh-Nay, or Little Flower, Walk  <a href="http://nativeamericans.mrdonn.org/games.html">http://nativeamericans.mrdonn.org/games.html</a>            Games to play</li> <li>• <b>Art Connection</b>  <a href="http://www.ehow.com/info_7943694_ladys-slipper-crafts-kids.html">http://www.ehow.com/info_7943694_ladys-slipper-crafts-kids.html</a>            Several craft ideas centered around Lady’s Slippers.</li> </ul>
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<p><b>Math Objectives</b> (TV1) (problems similar to 2<sup>nd</sup> grade Assessment 5 &amp; 6 – students model and solve in multiple ways)</p> <ul style="list-style-type: none"> <li>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</li> </ul> <p>(TV2) (problems similar to 2<sup>nd</sup> grade Assessment 5 &amp; 6 – students select their own strategies)</p> <ul style="list-style-type: none"> <li>Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</li> </ul>	<p><b>Materials</b> (TV1)</p> <ul style="list-style-type: none"> <li>base ten sets – 1 set per student             <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> <li><b>BLM</b>– Lady’s Slipper Base Ten Board - 1 per student</li> <li><b>BLM</b> - Lady’s Slipper Problems - 1 per student</li> </ul> <p>(TV2)</p> <ul style="list-style-type: none"> <li>base ten sets – 1 set per student             <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> <li><b>BLM</b>– Ojibwa Art - 1 per student</li> <li><b>BLM</b> Ojibwa Art, Azulito’s Answer sheet – TV only</li> </ul> <p><b>Family Fun</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Family Fun Game board (<i>already home</i>)</li> <li><b>BLM</b> Family Fun Movement Cards (<i>already home</i>)</li> <li><b>BLM</b> 1<sup>st</sup> – 2<sup>nd</sup> Special Instructions</li> <li><b>BLM</b> Family Fun Problem Cards (<i>blue</i>)</li> <li><b>BLM</b> Family Fun Answer Key – all levels</li> <li>Base ten blocks – 10 tens, 20 units</li> <li>Counters (<i>20 – could be pebbles, beans from home</i>)</li> <li>Game markers</li> </ul> <p><b>Snack Fractions – lesson 2</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Snack Bag Fractions</li> <li>3 bags of 100 calorie snacks – select a snack that has many pieces rather than a stacked cookie package (1 bag per student)</li> <li>3 paper plates</li> <li>3 paper towels</li> <li>Scissors</li> <li>Glue stick</li> </ul> <p>Chart paper with question: <b>Did your snack bags divide your snack into fair shares? Why or why not?</b> Work as a class to decide if the snacks provided in each bag gave each partner fair shares of today’s snack, or thirds.</p>
<p><b>Differentiate</b></p> <p>Differentiating comes in your choice of which lesson to teach. You will also want to choose activities in the Daily Routines that teach/review the skills you need for your students to learn/review. Measurement is particularly important to the assessment.</p>	
<p><b>Snack Fraction Notice</b></p> <p>All snack fractions are common throughout the grade bands. All grade bands have daily snack fraction activities provided. All snack fractions for a unit in a specific grade band will practice the same set of skills. Therefore, you may choose from any of the 3 activities. Lesson 2 has been suggested for its ease of delivery.</p>	

## QUESTIONING

As a result of this lesson, your students should be able to respond to the following:

- What does it mean to trade, exchange, or regroup?
- Explain the process of trading, exchanging or regrouping when you add / subtract.



### Math Vocabulary

All Review Words: regrouping, trading, exchanging, comparing, more than, less than, fewer than, equal to

### CGI Problem (select one)

- Join, Change Unknown (*2<sup>nd</sup> item 5*)
- Compare, Difference Unknown (*1<sup>st</sup> item 5, 2<sup>nd</sup> item 6*)
- Part Whole. Whole Unknown (*1<sup>st</sup> item 3ab*)

### Journal Writing

Explain how to regroup, trade, exchange.

**Family Fun** (A generic game board is being used in all grade levels, differentiated by game cards specific to the grade level.) There is only one type of game this year. All games will have problem cards and an answer key at all levels. Please be sure the 1<sup>st</sup> – 2<sup>nd</sup> grade cards are printed on blue cardstock. The first nine cards are current unit skills. The next nine cards practice previous unit skills.

**Snack Fractions** - TV lesson 2, 100 Calorie Snacks. You can select any of the three snacks that are appropriate for your homes – all three snacks in 1<sup>st</sup> – 2<sup>nd</sup> grade level will practice the same skills. Although the fraction activities in this unit do not simulate the fraction assessment, they do practice important vocabulary such as “fewer than,” and of course the idea of fair shares. Please teach the lesson as written.

**Assessment** – Students will be introduced to and practice skills for items:

**1<sup>st</sup>** - 1, 2, 3, 4, 5, 6, 7, 8

**2<sup>nd</sup>** - 1, 2, 3, 4, 5, 6, 7

# 1<sup>st</sup>-2<sup>nd</sup>

# Overview

## Unit 5

## My Mexico, Mexico *mío*

This is a quick snapshot of the three math lessons for this unit. For detailed instructions, balance literacy objectives/extended activities, enrichment ideas refer to the complete lesson plans for each lesson. Notice that the Classroom Lesson has been divided into the Language portion and the Transition to Math portion.

Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<b>Daily Routine</b> Unit 5 Lesson 1 30 – 45 minutes	<b>ESSENTIAL</b> Solve math word problems. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.  <b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.	<b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.  <b>OPTIONAL</b> Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones. Graph data from classroom experiences and debrief the data.	<b>ESSENTIAL</b> • Target Number • CGI Problem • What’s Missing • Measurement  <b>OPTIONAL</b> • Solve It! • Calendar • Straws • Pennies • Graphing  <b>OPTIONAL Program</b> <b>Money Matters</b> is found in its own section on MAS Space.	<b>ESSENTIAL</b> • 50 base ten units per student • Unknown Quantity Cards  <b>OPTIONAL</b> • 30 Straws and rubber bands for board and student kits • Pennies, nickels, dimes, quarters for counting days in school	<b>ESSENTIAL</b> • BLM CGI Problems Unit 5 – teacher only • BLM How far did he travel?  <b>OPTIONAL</b> • BLM Solve It! 1 problems • BLMs for Daily Routine Board • <b>OPTIONAL BLM</b> Popsicle Flavors (and crayons to match the colors)
<b>Classroom</b> (Language and Transition to Math Lessons) <b>Lesson 1</b> .5 to 1 hour	<b>Math Objectives</b> Model 2-digit subtraction with base ten materials and connect the models to the algorithm. Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.	<b>Reading Objectives:</b> Identify the pattern in a poem. Describe how a pattern in poetry gives meaning.  <b>Language Objectives:</b> Use vocabulary to talk about poems.	<b>Language</b> <i>My Mexico, Mexico</i> <i>mío</i> by Tony Johnston  Class discussion Read Aloud Shared Writing  <b>Vocabulary</b> poem, poetry, line, bouquet, phrase, senses, simile	<b>Language</b> • Projected image of poem <i>Houses</i> , or written on chart paper • Place to write class poem (board, chart paper) • Paper and art supplies for illustrations • bouquet of flowers (real or artificial)	<b>Language</b> • BLM Word Cards
	<b>Math Language Objectives</b> Define vocabulary words. Discuss the activity with	<b>Math Building Background</b> Review regrouping,	<b>Math</b> • Dice – 2 per student	<b>Math</b> • BLM TM Who had More? - 1 per student	

		peers.	trading, exchanging <b>Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than	<ul style="list-style-type: none"> <li>Base Ten Sets <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units</li> </ul> </li> <li>Magnetic base ten blocks</li> <li>Crayons: green, yellow, orange, blue, pink – 1 set per student</li> </ul>	<ul style="list-style-type: none"> <li><b>BLM TM</b> Mexican Casa – 1 per student</li> </ul>
<b>TV Lesson 1</b> 30 minutes	Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.	Use the math vocabulary during the activity. Discuss solution strategies. Explain how to regroup in addition and subtraction.	<b>Building Background</b> Add base ten columns to story board  <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than  <b>Mathematics</b> Solve more difficult word problems that include regrouping.	<ul style="list-style-type: none"> <li>Copy of the My Mexico, turned to pages 4-5</li> <li>base ten sets – 1 set per student (students may use if they wish) <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>BLM</b> – Color Houses Stories – 1 per student</li> <li><b>BLM</b> - Colorful Houses Stories KEY – teacher only</li> </ul>
<b>Follow-up and Snack Fraction Lesson 1</b> .5 to 1 hour	Solve one-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.	Listen and speak with a partner during our math activity. Explain how the base ten model relates to the number representation. Use the math vocabulary during the activity. Share-write math journal response.	Discuss strategies from TV problems, then finish the coloring from TM lesson.	<ul style="list-style-type: none"> <li>base ten sets – 1 set per student <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units</li> </ul> </li> </ul>	
	<b>SNACK FRACTIONS</b> Use concrete models to	<b>SNACK FRACTIONS</b> Explain why each portion is	<b>SNACK FRACTIONS Building Background</b>	<b>SNACK FRACTIONS Per partners</b>	<b>SNACK FRACTIONS</b>

<p>represent and name fractional parts of a whole (fourths and halves).</p> <p>Use concrete models to represent and name fractional parts of a set of objects (fourths and halves).</p> <p>Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.</p> <p>Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p>a fourth/half.</p> <p>Share-write what is a fourth or half.</p> <p>Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.</p> <p>Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part.</p>	<p>Students share snacks with partners and discuss how they did that.</p> <p><b>Vocabulary</b> half, halves fourth, fourths eighths fair shares equal pieces</p> <p><b>Math</b> Students solve word problems to share in fourths and eighths.</p>	<ul style="list-style-type: none"> <li>• 3 Laughing Cow cheese wedges</li> <li>• 2 paper plates</li> <li>• 2 paper towels</li> <li>• Chart paper with question: <b>How do you know each person would have (one-fourth or one-eighth) of the cheese?</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> Laughing Cow Cheese Fractions – 1 per student</li> </ul>
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Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<i>Daily Routine</i> Unit 5 Lesson 2 30 – 45 minutes	<b>ESSENTIAL</b> Solve math word problems. Measure to compare. Represent whole numbers in a variety of ways. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.  <b>OPTIONAL</b> Solve multi-step word problems. Read and understand the calendar. Use coins to track the number of days of school. Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.	<b>ESSENTIAL</b> Listen, read and write to understand problems and explain solution strategies.  <b>OPTIONAL</b> Listen, read and write to understand problems and explain solution strategies. Read a calendar and explain patterns. Explain coin exchanges and grouping by tens and ones.	<b>ESSENTIAL</b> • Target Number • CGI Problem • What’s Missing • Measurement  <b>OPTIONAL</b> • Solve It! • Calendar • Straws • Pennies • Graphing  <b>OPTIONAL Program</b> <b>Money Matters</b> is found in its own section on MAS Space.	<b>ESSENTIAL</b> • 50 base ten units per student • Unknown Quantity Cards  <b>OPTIONAL</b> • 30 Straws and rubber bands for board and student kits • Pennies, nickels, dimes, quarters for counting days in school • Class graph	<b>ESSENTIAL</b> • <b>BLM</b> CGI Problems Unit 3 – teacher only • <b>BLM</b> CGI Problems Unit 4 – teacher only • <b>BLM</b> How long? How many fewer? • <b>BLM</b> KEY  <b>OPTIONAL</b> • <b>BLM</b> Solve It! 1 problems • <b>BLMs</b> for Daily Routine Board • <b>BLM</b> How do you like your corn?
<i>Classroom Lesson 2</i> 1 to 1.5 hour	<b>Math Objectives</b> Model 2-digit subtraction with base ten materials and connect the models to the algorithm. Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.	<b>Reading Objectives:</b> Find words in a poem that show what you can hear and see.  <b>Language Objectives:</b> Use vocabulary to talk about poems.	<b>Language</b> <i>My Mexico, Mexico mio</i> by Tony Johnston  Class discussion Read Aloud Shared Writing  <b>Vocabulary</b> poem, poetry, line, bouquet, phrase, senses, simile	<b>Language</b> • Bouquet of flowers used in lesson 1 • Projected image of poem <i>Corn</i> , or written on chart paper • Place to create T-Chart (board, chart paper) • Place to write class poem (board, chart paper) • Paper and art supplies for illustrations	<b>Language</b> • <b>BLM</b> Word Cards
	<b>Math Language Objectives</b> Define vocabulary words.	<b>Math</b> <b>Building Background</b> Review regrouping, trading,	<b>Math</b> • Several ears of Indian corn, if possible	<b>Math</b> • <b>BLM</b> TM Who had more? - 1 per student	

		Discuss the activity with peers.	<p>exchanging</p> <p><b>Vocabulary</b>  <b>Repeated Vocabulary</b>  regrouping  exchanging  trading  comparing  more than  less than  fewer than</p>	<p>OPTIONAL: blue corn chips – these are made from blue Indian corn – serving of 12 chips in a bowl per student</p> <ul style="list-style-type: none"> <li>• Dice – 2 per student</li> <li>• Base Ten Sets <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units</li> </ul> </li> <li>• Magnetic base ten blocks</li> <li>• Crayons: yellow, orange, blue, purple, red – 1 set per student</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM TM</b> Indian Corn – 1 per student</li> </ul>
<p><b>TV</b>  <b>Lesson 2</b>  30 minutes</p>	<p>Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.</p>	<p>Use the math vocabulary during the activity.  Discuss solution strategies.  Explain how to regroup in addition and subtraction.</p>	<p><b>Building Background</b></p> <p><b>Vocabulary Building</b>  <b>Repeated Vocabulary</b>  regrouping  exchanging  trading  comparing  more than  less than  fewer than</p> <p><b>Mathematics</b>  Students choose their strategy, but Azulito explains all that we've practiced.</p>	<ul style="list-style-type: none"> <li>• base ten sets – 1 set per student <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> – Corn problems – 1 per student</li> <li>• <b>BLM</b> – Corn Problems <b>KEY</b> – teacher only</li> </ul>
<p><b>Follow-up and Snack Fraction</b>  <b>Lesson 2</b>  .5 to 1 hour</p>	<p>Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place</p>	<p>Listen and speak with a partner during our math activity.  Explain how the base ten models relate to the number representation.</p>	<p>Explain their strategies from the TV problems solutions.</p>	<ul style="list-style-type: none"> <li>• base ten sets – 1 set per student <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units (<i>or units they already have from measuring</i>)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> – Corn problems – 1 per student (TV Lesson)</li> <li>• <b>BLM</b> – Corn Problems <b>KEY</b> – teachers only (TV Lesson)</li> </ul>

<p>value, including algorithms.</p>	<p>Use the math vocabulary during the activity. Share-write math journal response.</p>			
<p><b>SNACK FRACTIONS</b> Separate a whole into four equal parts and use appropriate language to describe the parts such as one out of four equal parts. Partition objects into four equal parts and name the parts fourths. Write the fraction in numeric form.</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is one-fourth Share-write what is a fourth.</p>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Students share snacks with partners and discuss how they did that.</p> <p><b>Vocabulary</b> half, halves fourth, fourths eighths fair shares equal pieces</p> <p><b>Math</b> Students solve word problems to share in fourths and eighths.</p>	<p><b>SNACK FRACTIONS</b> <b>(Per partners)</b></p> <ul style="list-style-type: none"> <li>• 4 whole graham cracker sheets</li> <li>• 2 T Nutella</li> <li>• 2 paper plates</li> <li>• 2 paper towels</li> <li>• 2 plastic knives</li> <li>• Chart paper with question:</li> </ul> <p><b>How do you know each person would have (one-fourth or one-eighth) of the snack?</b></p>	<p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Crackers and Nutella</li> </ul> <p>Fractions – 1 per student</p>



Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<p><b>Daily Routine</b>  <b>Unit 5 Lesson 3</b>            30 – 45 minutes</p>	<p><b>ESSENTIAL</b>            Solve math word problems.            Measure to compare.            Represent whole numbers in a variety of ways.            Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.</p> <p><b>OPTIONAL</b>            Solve multi-step word problems.            Read and understand the calendar.            Use coins to track the number of days of school.            Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.            Estimate coins in a jar and count by tens and ones to verify estimate.</p>	<p><b>ESSENTIAL</b>            Listen, read and write to understand problems and explain solution strategies.</p> <p><b>OPTIONAL</b>            Listen, read and write to understand problems and explain solution strategies.            Read a calendar and explain patterns.            Explain coin exchanges and grouping by tens and ones.            Graph data from classroom experiences and debrief the data.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• Target Number</li> <li>• CGI Problem</li> <li>• What’s Missing</li> <li>• Measurement</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Solve It!</li> <li>• Calendar</li> <li>• Straws</li> <li>• Pennies</li> <li>• Graphing</li> </ul> <p><b>OPTIONAL Program</b>  <b>Money Matters</b> is found in its own section on MAS Space.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• 50 base ten units per student</li> <li>• Unknown Quantity Cards</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• Bar graph generic board</li> <li>• Tag for titles</li> <li>• 30 Straws and rubber bands for board and student kits</li> <li>• Pennies, nickels, dimes, quarters for counting days in school</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> CGI Problems Unit 5 – teacher only</li> <li>• <b>BLM</b> How long? How many fewer?</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Solve It! 1 problems</li> <li>• <b>BLMs</b> for Daily Routine Board</li> <li>• <b>BLM</b> weaving Samples (graph)</li> </ul>
<p><b>Classroom</b>  <b>Lesson 3</b>            1 to 1.5 hour</p>	<p><b>Math Objectives</b>            Model 2-digit subtraction with base ten materials and connect the models to the algorithm.            Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and</p>	<p><b>Reading Objectives:</b>            Identify key details in a poem.            Identify similes in a poem.</p> <p><b>Language Objectives:</b>            Use vocabulary to talk about poems.            Use similes to add description to a class poem.</p>	<p><b>Language</b>  <i>My Mexico, Mexico mio</i> by Tony Johnston</p> <p>Class discussion            Read Aloud            Shared Writing</p> <p><b>Vocabulary</b>            poem, poetry, line, bouquet, phrase, senses, simile</p>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>• Projected image of poem / <i>Saw a Woman Weaving</i>, or written on chart paper</li> <li>• Place to create T-Chart (board, chart paper)</li> <li>• Place to write class poem (board, chart paper)</li> <li>• Paper and art supplies for illustrations</li> </ul>	<p><b>Language</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Word Cards</li> </ul>

	properties of operations.	<p><b>Math Language Objectives</b> Define vocabulary words. Discuss the activity with peers.</p>	<p><b>Math Building Background</b> Review regrouping, trading, exchanging</p> <p><b>Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p>	<p><b>Math</b></p> <ul style="list-style-type: none"> <li>• <a href="http://www.dickblick.com/lessonplans/paperweaving/">http://www.dickblick.com/lessonplans/paperweaving/</a> - Directions for weaving project</li> <li>• Teacher-made sample of the project</li> <li>• 9 x 12 sheets construction paper – 2 sheets, different colors per student*</li> <li>• *TEACHERS will probably want to pre-cut the materials as per the web directions to save time and materials.</li> <li>• Base ten units – 50 per student</li> <li>• Glue – 1 per student</li> <li>• <b>Ruler – not needed if teacher precuts</b></li> <li>• <b>Scissors – not needed if teacher precuts supplies</b></li> </ul>	
<p><b>TV Lesson 3</b> 30 minutes</p>	Solve one-step word problems involving addition or subtraction within 100 using a variety of strategies based on place value, including algorithms.	Use the math vocabulary during the activity. Discuss solution strategies. Explain how to create the fact family number sentences from three related numbers.	<p><b>Building Background</b> Students solve the problems. After each solution pause, Azulito describes Math movie and possible strategies.</p> <p><b>Vocabulary Building</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p> <p><b>Mathematics</b> Solve substantial word problems all with 2-digit numbers.</p>	<ul style="list-style-type: none"> <li>• sample of a paper weaving that Azulito can display (see <i>TM lesson for directional link</i>) – TV Teacher only <a href="https://www.google.com/search?q=ahuehuete+trees&amp;client=firefox-a&amp;hs=zUK&amp;rls=org.mozilla:en-US:official&amp;channel=sb&amp;tbm=isch&amp;tbo=u&amp;source=univ&amp;sa=X&amp;ej=kpYGU5bjG4ex2AXbqoCoBw&amp;ved=0CEAQsAQ&amp;biw=967&amp;bih=425">https://www.google.com/search?q=ahuehuete+trees&amp;client=firefox-a&amp;hs=zUK&amp;rls=org.mozilla:en-US:official&amp;channel=sb&amp;tbm=isch&amp;tbo=u&amp;source=univ&amp;sa=X&amp;ej=kpYGU5bjG4ex2AXbqoCoBw&amp;ved=0CEAQsAQ&amp;biw=967&amp;bih=425</a></li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> – Weaving – 1 per student</li> <li>• <b>BLM</b> - Weaving <b>KEY</b> – teacher only</li> </ul>

<p><b>Follow-up and Snack Fraction Lesson 3</b></p> <p>.5 to 1 hour</p>	<p>Practice previously learned skills. Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.</p>	<p>Listen and speak with a partner during our math activity. Play a review game with a small group. Use the math vocabulary during the activity. Share-write math journal response.</p>	<p>Students discuss the TV problems. Students view the Family Fun Game cards to discuss possible solution strategies. Students complete the arithmetic lesson from TM.</p>	<ul style="list-style-type: none"> <li>Family Fun Game Board</li> <li>Family Fun Movement Cards</li> <li>20 counters</li> <li>Games Markers</li> </ul>	<ul style="list-style-type: none"> <li><b>BLM</b> Family Fun Problem Cards, Unit 2</li> <li><b>BLM</b> Special Instructions</li> <li><b>BLM</b> All-School Answer Key</li> </ul>
<p><b>SNACK FRACTIONS</b> Use concrete models to represent and name fractional parts of a whole and parts of a set of objects (fourths and halves). Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red. Explain that the more fractional parts used to make a whole, the smaller the part and the fewer the fractional parts, the larger the part. Write fraction in numerical form.</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is a fourth/half. Share-write what is a fourth or half. Explain whether you would rather have a fourth or a half of your favorite snack and why.</p>	<p><b>SNACK FRACTIONS Building Background</b> Students share snacks with partners and discuss how they did that. <b>Vocabulary</b> half, halves fourth, fourths eighths fair shares equal pieces <b>Math</b> Students solve word problems to share in fourths and eighths</p>	<p><b>STUDENT ACTIVITY</b> <b>Per partners</b></p> <ul style="list-style-type: none"> <li>1 large bagel</li> <li>4 T cream cheese</li> <li>2 paper plates</li> <li>2 paper towels</li> <li>2 plastic knives</li> <li>Chart paper with question: <b>How do you know each person would have (one-fourth or one-eighth) of the snack?</b></li> </ul>	<p><b>SNACK FRACTIONS</b></p> <ul style="list-style-type: none"> <li><b>BLM</b> Bagel and Cream Cheese Fractions – 1 per student</li> </ul>	



## Project SMART/Math MATTERS 2014

**Grade Level: 1-2**

**Unit 5 / Lessons 1 – 2 - 3**

### **Daily Routine Math Objectives:**

Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.

Model and solve oral word problems.

Model and solve 2-step word problems.

Represent numbers in a variety of representations including contextual references (i.e., 12 could be  $7 + 5$ , but could also be a dozen).

Read and use a calendar.

Count objects, group in ones and tens.

Compare item lengths using money as the unit of measure.

Estimate and measure linearly in units that approximate standard units.

Create graphs from everyday experiences.

### **Daily Routine Language Objectives:**

Reason, model and solve oral word problems.

Listen to, read and speak measurement vocabulary: length, estimate, width, longer, shorter.

Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.

Write graph titles and labels interactively.

### **Unit Math Objectives (Integrated Lesson including snack fractions):**

Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem.

Solve one-step and multi-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value including algorithms.

Partition two-dimensional figures into eight fair shares or equal parts and describe the parts using words.

Identify examples and non-examples of eighths.

### **Unit Language Objectives:**

Listen to, speak, read and write unit vocabulary in a variety of group and individual settings.

Share-write math sentences.

Describe why a snack is or is not half.

Use vocabulary to talk about poems.

Use similes to add description to a class poem.

### **Technology Objectives:**

Use research skills and electronic communication, with appropriate supervision, to create new knowledge.

Technology suggested in this unit: iPad, SMART Board or other “smart” projection device, Internet

**Key Vocabulary, MATH: Repeated Vocabulary:** regrouping, exchanging, trading, comparing, more than, less than, fewer than

**Key Vocabulary, LANGUAGE:** poem, poetry, line, bouquet, phrase, senses, simile

**Resources/Literacy Links**

*My Mexico – Mexico mio* by Tony Johnston

Related links:

**Lesson Sequence**

- Daily Routine: 30 to 45 minutes
- Classroom Lesson: 1 to 1.5 hour
- TV Lesson: 30 minutes
- Classroom Follow-Up including Snack Fractions: .5 to 1 hour

**MATH WALK**

Take a poetry walk around your campus to observe and record sensory images – the sights, sounds, smells, textures of nature. Students could be given a special bound book in which to start their journal of observations. For more information, see <http://www.readingrockets.org/article/48491/>

**Technology Connections**

- **Math Practice**  
[http://www.coolmath-games.com/0-math-lines/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29)  
Challenging game for making 10  
<http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html>  
Adding 2-digit numbers
- **Science Connection**  
<http://www.examiner.com/article/indian-corn-corn-of-a-different-color>  
Facts about Indian corn
- **Social Studies Connection**  
<http://www.heritage-history.com/?c=read&author=eggleston&book=adventure&story=corn>  
History of Indian corn
- **Health/Physical Ed Connection**  
<http://peplus.wordpress.com/category/relay-games/>  
Relay games to play, some that require weaving.
- **Art Connection**  
Create a mural of colorful painted houses – use the picture, Lesson 1 TV, for model  
<http://www.123child.com/lessonplans/seasonal/fall/thanksgivingcorn.php>  
Activities with corn - these are very simple for pre-schoolers, but you can certainly adapt to older children.  
<http://www.pinterest.com/lainevan/elementary-art-collage-and-paper-weaving/>  
Interesting weaving projects.

## Unit 5 OPTIONAL All-School Project

Because all grade bands will be reading, learning and researching within the same unit theme, we are offering OPTIONAL projects in which all ages can participate.

### Unit Theme: Poetry

### Unit 5: Coffeehouse-style Poetry Reading

#### Defined:

Students write their own poems and perform them in a "coffee house" venue.

#### Materials

Tables and chairs  
Hot chocolate and pound cake  
Decorative mugs and paper plates, napkins  
Beret for reading poet  
Interlude guitar music

#### Objectives

- Write poems.
- Each student selects one of their original poems to present.
- Present the reading of the poem to the large group.

#### Procedures:

Prior to Poetry Reading event, students should write their own poems, either individually or as a class. The poems should be read in class to the class as practice. Class poems should be read chorally so that all of the class members take part in the presentation.

Set up the event area as a coffee house or cafe, a raised stage area up front if possible. Serve hot chocolate or other drink in cups or mugs.

Assign an MC to introduce the poets and a sound person to play appropriate guitar music CD between performances.

Poets come up to the stage one at a time from the audience when introduced to read their original work. The beret is an interesting touch which takes the individual out of the reading almost as a mask would do. If the poem is a class poem, students should read responsively or as choral reading.

You might want to serve small sandwiches or pound cake with fruit after the reading. What a super parent event this would be!

**Online resources:**

- <http://www.alexslimonade.org/files/down/coffee.pdf>  
This might be a possible fund raiser for your students' giving in financial responsibility, making the event a poetry reading instead of a talent show or lemonade stand.
- <http://www.ilovelibraries.org/articles/featuredstories/poeminyourpocket>  
Coffeehouse-style reading format
- <http://www.scholastic.com/teachers/top-teaching/2010/05/poetry-cafe> another  
Coffeehouse-style reading format



**Materials**

- Unknown Quantity Cards
- 50 base ten units
- **BLM** CGI Problems Unit 5 – teacher only
- **BLM** How Far Did He Travel? – 1 per student
- **OPTIONAL BLM** Popsicle Flavors (and crayons to match the colors)

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy****Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS**

Lessons 1, 2, 3

- 1<sup>st</sup> – 1.3BCF; 1.5DF. 1.6GH
- 2<sup>nd</sup> – 2.3A, 2.4BC; 2.7C

**ELPS (English Language Proficiency Standard)**

1A, 1F, 2B, 2E, 3A, 3B, 3C, 4C

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1., I.C.1., I.C.2., II.A.2., II.C.1.  
 ELA II.A.2., II.A.3., II.B.1., III.A.2  
 MATH I.A.1., I.B.1., IV.A.1., V.A.1., VI.C.2., VIII.A.2.

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 6, 7, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 6, 7

**Unit 5, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Daily Routine**

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – 10
  - Lesson 2 - 30
  - Lesson 3 – 60
- **CGI Problem\***
  - Lesson 1 – **Compare, Difference Unknown** (1<sup>st</sup> item 5, 2<sup>nd</sup> item 6)
  - Lesson 2 - Join, Change Unknown (2<sup>nd</sup> item 5)
  - Lesson 3 – Part Whole. Whole Unknown (1<sup>st</sup> item 3ab)
- **What’s Missing** (1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (1<sup>st</sup> item 5, 2<sup>nd</sup> item 6)\*\*
  - Lesson 1 – **How far did he travel?**
    - **BLM – How far did he travel?**
  - Lesson 2 – How long? How many fewer?
    - **BLM – How long? How many fewer?**
  - Lesson 3 – How long? How many fewer?
    - **BLM – How long? How many fewer?**

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems. Follow the guidelines in Solve It! Overview to facilitation Lessons 1, 2, and 3.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing** – there is a BLM with pictures for each graph
  - **Lesson 1 – What flavor Popsicle would you like to eat?** (Select four flavors that are popular with your students. Color four of the Popsicle graph pictures. Students then color their graph pictures to match their choices. If possible, have flavors available to eat later in the day. However, this is NOT snack fraction.)
  - Lesson 2 – How do you like your corn? (*on the cob, in a tortilla, in soup*)
  - Lesson 3 – Which weaving would you choose?

### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?

**(Assessment Item 1<sup>st</sup> grade, item # 8 and 2<sup>nd</sup> grade, item #7 will be reviewed daily in Snack Fractions.)**

**Money Matters** (*If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Spacae.*)

**Vocabulary Building** – Choose an activity listed in the Daily Routine section.

### Azulito's Corner Unit 5, Lesson 1 CGI

How did you solve the CGI problem today? Please explain your strategy to us.

# Unit 5

# CGI Problems for *My Mexico~Mexico mio*



<b>Join</b>	(Result Unknown) There were __ spotted pigs on the truck. The farmer loaded __ more pigs on the truck. How many pigs are on the truck now? 10, 4    6, 7    8, 9	(Change Unknown) The children made __ adobe bricks. How many adobe bricks do they need to make in order to have __ bricks, enough for a flower box planter? 10, 18    7, 15    9, 20	(Start Unknown) The farmer loaded some pigs on his truck. His farm hand loaded __ more pigs on the truck. Now there are __ pigs on the truck. How many pigs were on the truck to start? 4, 11    5, 8    6, 9
	(Result Unknown) There were __ little gourds drying on the vine. __ gourds were too dry and fell off. How many gourds are on the vine now? 10, 6    13, 6    17, 8	(Change Unknown) There were __ pigs on the truck. The farmer unloaded some and now there are __ pigs on the truck. How many pigs did the farmer unload? 20, 10    18, 8    16, 7	(Start Unknown) There were some little gourds drying on the vine. Maria picked __ to make into bird houses. Now there are __ gourds on the vine. How many gourds were on the vine to start? 6, 6    7, 7    9, 9
<b>Separate</b>	(Whole Unknown) There were __ crates of oranges and __ crates of coffee on the cargo truck. How many crates in all? 15, 10    13, 12    8, 6		(Part Unknown) There were __ crates of cargo on the truck. __ crates were oranges and the rest were coffee beans. How many crates were coffee beans? 15, 5    14, 8    17, 9
	(Difference Unknown) There were __ crates of oranges and __ crates of vanilla on the truck. How many more crates of oranges than vanilla? 15, 13    17, 7    21, 18	(Quantity Unknown) There were __ crates of vanilla on the truck. There were __ more crates of oranges than vanilla. How many crates of oranges were there? 10, 4    6, 7    4, 9	(Referent Unknown) In the cargo truck there were __ crates of coffee. That's __ more crates of coffee than vanilla. How many crates of vanilla are there? 12, 4    14, 6    21, 12
<b>Part-Part-Whole</b>	<b>Multiplication</b>		<b>Measurement Division</b>
	<b>Measurement Division</b>		<b>Partitive Division</b>
<b>Compare</b>	<b>Multiplication</b>		<b>Measurement Division</b>
	<b>Measurement Division</b>		<b>Partitive Division</b>
<b>Grouping and Partitioning</b>	(Difference Unknown) There are __ corn stalks in a row of corn. There are __ ears of corn on one stalk. How many ears of corn in all? 15, 2    20, 3    25, 4		(Quantity Unknown) A truck carrying oranges from Veracruz hauls __ bags of oranges. If there are __ bags of oranges in each crate, how many crates are there? 100, 10    100, 5    45, 3
	(Quantity Unknown) A truck carrying oranges from Veracruz hauls __ bags of oranges. If there are __ bags of oranges in each crate, how many crates are there? 100, 10    100, 5    45, 3		(Referent Unknown) The children made __ adobe bricks. If they stack them in __ piles, how many bricks will be in each pile? 25, 5    30, 5    55, 5

**Unit 5 CGI Problems Grades 1-2**

Unir	(Resultado desconocido) Había __ cerdos con manchas en el camión. El granjero cargó __ cerdos más en el camión. ¿Cuántos cerdos hay ahora en el camión? 10, 4    6, 7    8, 9	(Cambio desconocido) Los niños hicieron __ ladrillos de adobe. ¿Cuántos ladrillos de adobe tienen que hacer para tener __ ladrillos, suficientes para una jardinera para plantar flores? 10, 18    7, 15    9, 20	(Inicio desconocido) El granjero cargó algunos cerdos en su camión. Su bracero cargó __ cerdos más en el camión. Ahora hay __ cerdos en el camión. ¿Cuántos cerdos había en el camión al principio? 4, 11    5, 8    6, 9
	(Resultado desconocido) Había __ pequeñas calabazas secándose en la mata. __ calabazas estaban demasiado secas y se cayeron. ¿Ahora cuántas calabazas hay en la mata? 10, 6    13, 6    17, 8	(Cambio desconocido) Había __ cerdos en el camión. El granjero descargó algunos y ahora hay __ cerdos en el camión. ¿Cuántos cerdos descargó el granjero? 20, 10    18, 8    16, 7	(Inicio desconocido) Había unas pequeñas calabazas secándose en la mata. María recogió __ para fabricar pajarreras. Ahora hay __ calabazas en la mata. ¿Cuántas calabazas había en la mata al principio? 6, 6    7, 7    9, 9
Separar	(Entero desconocido) Había __ cajones de naranjas y __ cajones de café en el camión de carga. ¿Cuántos cajones serían en total? 15, 10    13, 12    8, 6		(Parte desconocido) Había __ cajones de carga en el camión. __ cajones contenían naranjas y el resto contenía granos de café. ¿Cuántos contenían granos de café? 15, 5    14, 8    17, 9
	(Diferencia desconocido) Había __ cajones de naranjas y __ cajones de vainilla en el camión de carga. ¿Cuántos cajones de naranjas más había comparado con las de vainilla? 15, 13    17, 7    21, 18	(Cantidad Desconocida) Había __ cajones de vainilla en el camión. Había __ cajones más de naranja que de vainilla. ¿Cuántos cajones de naranjas había? 10, 4    6, 7    4, 9	(Referente Desconocido) En el camión de carga había __ cajones de café. Eso es __ cajones más de café que de vainilla. ¿Cuántos cajones de vainilla hay? 12, 4    14, 6    21, 12
Parte-Parte-Entero	<b>Multiplicación</b>		<b>División de medidas</b>
Comparar	<b>División partitiva</b>		
	Formación de grupos y Partición Hay __ plantas de maíz en una hilera de maíz. Hay __ mazorcas en una planta. ¿Cuántas son las mazorcas en total? 15, 2    20, 3    25, 4		Un camión que transporta naranjas desde Veracruz transporta __ bolsas de naranjas. Si hay __ bolsas de naranja en cada cajón, ¿cuántos cajones hay? 100, 10    100, 5    45, 3

## Solve It! Problems Unit 5, Lesson 1

Pairs



- Mrs. Gomez baked pies to sell. She baked 25 blueberry pies, 12 apple pies and some cherry pies. If she baked a total of 50 pies, how many cherry pies did she bake?

Problem #1 – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

Problem #2 – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

Final Solution – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

You are free to take this apart any way you wish – on your own; together as a team; a mix of both. You are responsible, however, for your own paper having all problems identified and solved; verifying your Team member's page. Be sure to write your final solution with a label in the box.

## Solve It! Problems Unit 5, Lesson 1

Pairs



La Sra. Gómez horneó tartas para vender. Horneó 25 tartas de arándanos, 12 tartas de manzana y algunas tartas de cereza. Si horneó un total de 50 tartas, ¿cuántas tartas de cereza horneó?

Problema #1 – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Problema #1 – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Solución final – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Puedes resolver esto del modo que desees - por tí mismo; en equipo; una mezcla de ambos métodos. Sin embargo, tú eres responsable de que tu propio trabajo tenga todos los problemas identificados y resueltos; verificando la página del miembro de tu equipo. Asegúrate de escribir tu solución final con una etiqueta en la caja.

**BLM Daily Routines, MEASUREMENT Unit 5, Lesson 1**

One per student

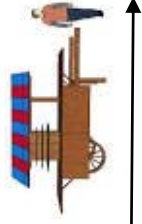


**How Far Did He Travel?**

The line below marks how far the street vendor traveled last week.

Pretend that each base ten cube is worth 1 mile. How many miles did the street vendor travel?

The street vendor traveled \_\_\_\_\_ miles.



This distance was 8 miles more than he traveled this week. How many miles did the street vendor travel this week?  
Show your work.

The street vendor traveled \_\_\_\_\_ miles this week.

**BLM Daily Routines, MEASUREMENT Unit 5, Lesson 1**



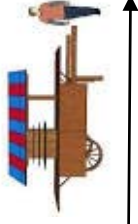
**How Far Did He Travel?**

One per student

La línea siguiente marca qué tan lejos viajó el vendedor ambulante la semana pasada.

Haz de cuenta que cada cubo base diez vale 1 milla. ¿Cuántas millas viajó el vendedor ambulante?

El vendedor ambulante viajó \_\_\_\_\_ millas.



La distancia era 8 millas más de lo que viajó esta semana. ¿Cuántas millas viajó el vendedor ambulante esta semana? Muestra tu procedimiento.

La distancia era 8 millas más de lo que viajó esta semana. ¿Cuántas millas viajó el vendedor ambulante esta semana? Muestra tu procedimiento.

El vendedor ambulante viajó \_\_\_\_\_ millas esta semana.





One per student

The line below marks how far the street vendor traveled last week. Pretend that each base ten cube is worth 1 mile. How many miles did the street vendor travel?

The street vendor traveled 22 miles. *(Please remember that duplicating can change the picture. Use whatever your measure it, but to the nearest WHOLE base ten cube.)*



This distance was 8 miles more than he traveled this week. How many miles did the street vendor travel this week? Show your work. *Circulate the room as students solve this problem. If students are having difficulty, ask them to describe the math movie they see when they read this problem. Students may solve any way they wish (base ten cubes, drawings, algorithm).*

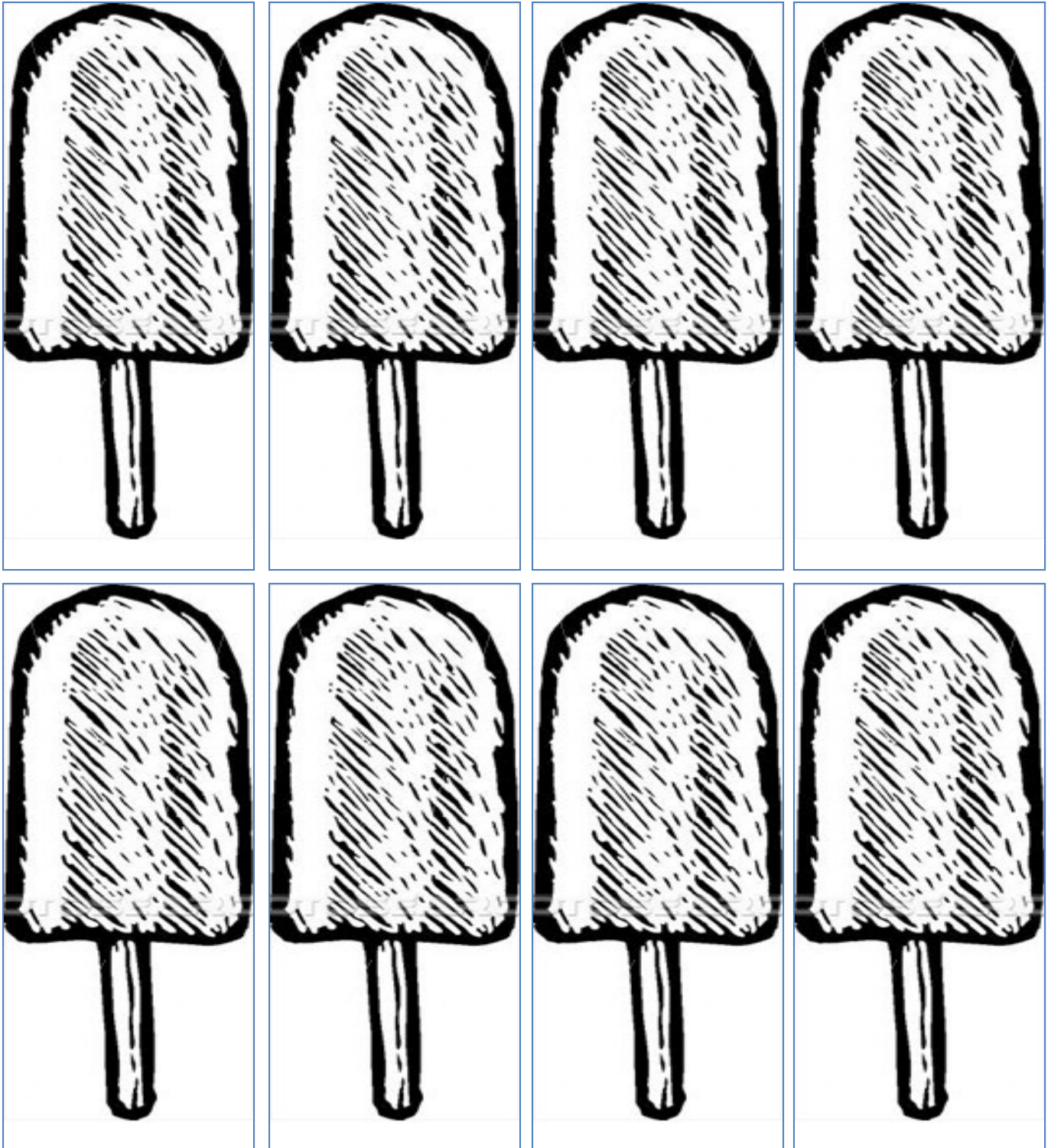
The street vendor traveled 14 miles this week.



**BLM Daily Routings, GRAPH Unit 5, Lesson 1**

**Favorite Popsicles** 

One per graph flavor (which you've colored to match the flavor; one per student plus crayons to match the flavor color)





## Literature Selection

*My Mexico – Mexico mio*  
By Tony Johnston  
“Houses”

### Materials

#### Language Materials

- BLM Word Cards
- Projected image of poem *Houses*, or written on chart paper
- Place to write class poem (board, chart paper)
- Paper and art supplies for illustrations
- bouquet of flowers (real or artificial)

#### Materials for TM Lesson

- Dice – 2 per student
- Base Ten Sets
  - 15 longs
  - 20 units
- Magnetic base ten blocks
- Crayons: green, yellow, orange, blue, pink – 1 set per student
- BLM TM Who had More? - 1 per student

### Literature Vocabulary

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

### Math Vocabulary

#### Repeated Vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

**ELPS** (*English Language Proficiency Standard*)  
1C, 2E, 2F, 3F, 3I, 4C, 4J

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson



*Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.*

#### Math Objectives:

- Model 2-digit subtraction with base ten materials and connect the models to the algorithm.
- Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

#### Reading Objectives:

- Identify the pattern in a poem.
- Describe how a pattern in poetry gives meaning.

#### Language Objectives:

- Use vocabulary to talk about poems.

### BEFORE READING

#### Building Background, Literature and Vocabulary

1. Ask, “Who in our class is from Mexico (or, has lived in Mexico/been to Mexico)?” Find Mexico on a map, and compare the location to where students are currently living.
2. Show students the book *My Mexico – México Mío*. Say, this is a book all about Mexico. The author loves Mexico, and she wanted to write about her memories of living in Mexico.
3. Explain: Each page has a **poem** about something in Mexico. *Open the book and show students the poem on each page. Show students the word card for **poem**, and have them read aloud the word several times with you.* Explain: A poem tells a story, but it is short. Sometimes it rhymes, like a song.
4. Flip through the pages of the book, pointing out the **poem** on each page, and asking students, “What do you think this poem is about? Does this picture remind you of anything? Have you ever seen/done something like this?” *Have students discuss what they see, and share any **personal connections** they have about their experiences in Mexico (or other places). You don’t need to look at every page; just enough to give students a taste of what is in this poetry book.*
5. Explain: When you put lots of p. *Show students the word card for **poetry**, and have them read aloud the word several times with you.* Ask, “Have you ever read a book of **poetry** before?”

CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR

I.A.1., II.A.7., II.A.8

ELA II.A.1., II.A.3., II.A.6.,

II.A.7., II.C.2., II.D.1.

### Guided Reading Groups:

If you conduct guided reading groups as part of your balanced literacy instruction, or provide time for students to read independently, you can reinforce this same reading strategy.

With emergent readers and beginning ELLs, you can have a guided reading group session be more like a shared reading where you preview the text, read it aloud to students the first time through, echo read the text for the second reading, and then possibly have students read it along with you for a third reading.

- **Author's Craft:**  
Have students describe how words or phrases give meaning to a poem or story. For example:
  - If there are words or phrases that repeat, what meaning does this give the poem or story?
  - If there are words or phrases that use alliteration, what meaning does this give the poem or story?
  - If the author uses alliteration, how does this affect the poem or story?

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

6. Say, “With **poetry**, you don’t need to read every single **poem**. You can choose the **poems** you are most interested in. When I first saw this book, one **poem** I really wanted to read was this one about houses, on page 4. *Open to the poem “Houses.”* Today I’ll share this poem with you.”
7. Show students the **bouquet** of flowers. Ask them to name what you are holding. If students are unable to produce the word **bouquet** on their own, explain to them that a bunch of flowers is called a **bouquet**. Say, “In the poem I am going to read to you today, the author compares what he sees in his neighborhood to a bouquet of flowers.”
8. Say, “Look at the picture. What do you think this poem will be about?”

### DURING READING

#### Comprehensible Input, Literature and Vocabulary

##### Read Aloud: *Houses*

The reading strategy you will focus on today is **Author’s Craft**. You will help students **describe how a pattern gives meaning to the poem**. Why did the author decide to create a pattern within the poem?

Note: If your students are Spanish-speaking, you may want to read the poem first in Spanish before reading it in English. If you don’t speak Spanish, you can play the recorded version of the Spanish poem for students to listen to. This will build their understanding of the poem, and improve their comprehension of the English version.

##### Read aloud the poem.

- **Teacher Question:** What is this poem about? *Discuss as a class.*
- Identify and discuss the pattern in the poem.

##### Read aloud the poem again.

This time, have the poem somewhere students can all *see* (projected on a screen, or written on chart paper).

- As you read aloud the poem, track the text using a pointer. Read at a natural pace that allows students to follow along with their eyes as you read.

**Listening Center Connection:**

After the read aloud, have students listen to the recorded version of *Houses* in a Listening Center as part of their independent reading time.

If you have any Spanish-speaking students, they can also listen to the Spanish version of the poem: *Casitas*.

Show students how to listen while following along in the book. Then show students how they can listen to the poem additional times, reading along softly with some of the words. This will help students connect oral language with written language, improving their word recognition, and ultimately their reading fluency.

**ELLs:** Using a listening center is particularly powerful for ELLs as a way to connect oral and written language, build vocabulary, build word recognition, and gain fluency in English.

**Launch Writing Workshop for Unit 5**

Students write their own poems, following similar structures of the poems they read as a class and wrote as a class.

See Writing Workshop section in *Balanced Literacy* Extensions for a possible sequence of mini-lessons, and how to differentiate this writing workshop for students with varying writing abilities.

**Unit 5, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>



**Classroom Lesson** - continued

**AFTER READING**

**Practice and Application, Literature and Vocabulary**

**Shared Writing – Class Poem**

Over the three Classroom Lessons this week, you will help students write three different poems about the community they all *currently* live in. Students will illustrate these poems. Together, the three poems will become a book of poetry about the area you all live in right now. Instead of calling the book of poetry “My Mexico,” it can be the name of your town/city: “My \_\_\_\_\_.”

Today, you will create a class poem following a similar structure as *Houses*:

<p><b>Title (topic of the poem)</b></p> <p><b>Just look _____ (location/item being described)!</b></p> <p><b>A(n) _____ (color word) _____,</b></p> <p><b>a(n) _____ (color word) _____,</b></p> <p><b>a(n) _____ (color word) _____,</b></p> <p><b>a(n) _____ (color word) _____,</b></p> <p><b>Like a bouquet of flowers.</b></p> <hr style="border: 0.5px solid black;"/>
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1. Have students think about what they typically see in your area. What comes in a variety of colors?
2. Decide on one of these topics for your class poem. Examples: cars, shoes, buildings, etc.

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



3. Following the poem structure, have students help you write each line of the poem using the chosen topic.
  - a. For each line, students brainstorm what to write. You may need to prompt students to support them with this thinking.
  - b. Combine students' ideas for each line, and write it down.
  - c. Note: This is Shared Writing – students help come up with the content of what to write, but the teacher is the one physically writing it down.
4. Once the poem is complete, give students a small piece of paper/cardstock where they can create an illustration for the poem.
5. Later, you will affix all of their illustrations on a separate page (*or on several pages, depending on the size of the illustrations and how many students you have*). Type the poem so it looks “professional.” You now have the first “published” class poem, with accompanying illustrations for your class book of poetry.



poem

poetry

line

bouquet



poema

poesía

línea

ramo



phrase

senses

simile





frase

sentidos

símil





<p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Model 2-digit subtraction with base ten materials and connect the models to the algorithm.</li> <li>• Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.</li> </ul> <p><b>Materials for Transition to Math Lesson</b></p> <ul style="list-style-type: none"> <li>• Dice – 2 per student</li> <li>• Base Ten Sets <ul style="list-style-type: none"> <li>○ 15 longs</li> <li>○ 20 units</li> </ul> </li> <li>• Magnetic base ten blocks</li> <li>• Crayons: green, yellow, orange, blue, pink – 1 set per student</li> <li>• <b>BLM TM</b> Who had More? -1 per student</li> <li>• <b>BLM TM</b> Mexican Casa – 1 per student</li> </ul> <p><b>Literature Vocabulary</b> poem poetry line bouquet phrase senses simile</p> <p><b>Math Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p> <p> <b>Technology:</b> <a href="http://www.ixl.com/math/grade-1/comparison-word-problems">http://www.ixl.com/math/grade-1/comparison-word-problems</a> Free online game for comparison problems.</p> <p><b>ELPS</b> (<i>English Language Proficiency</i>)</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b> </p> <p><b>Unit 5, Lesson 1</b></p> <p><b>Classroom Lesson</b> - continued <b>TRANSITION to Math</b></p> <p><b>Building Background, Math</b></p> <p>Let’s read all of the words on our Math Word Wall today (<i>read each word, have students read each word and give an example of how the word would be used</i>).</p> <p>Our words are very important to our being able to understand and talk about math. These words are very important to this unit’s lessons:</p> <ul style="list-style-type: none"> <li>• Regrouping</li> <li>• Exchanging</li> <li>• Trading</li> <li>• Comparing, more than, less than, fewer than</li> </ul> <p>We are going to play a game today that practices problems with regrouping and problems without regrouping.</p> <p>You and your partner each have a pair of dice. Each of you will roll your pair of dice (<i>have students do so</i>).</p> <p>Now look at your two dice. Arrange them to make a 2-digit number. (<i>Have students do so, and you roll your dice and make a 2-digit number, also.</i>)</p> <p>Use your base ten blocks to make that number (<i>do so and have students do so</i>).</p> <p>Now, I need a volunteer (<i>select someone</i>).</p> <p>Please bring your two dice and your base ten blocks up here so we can play the game together. (<i>Wait for volunteer.</i>) You and I will play one round together. We are going to use this record sheet. The class does NOT need to record at this time – you and I will use my sheet and the second sheet I have up here for you.</p> <p>This is my number (<i>write your number on the board, and write on the record sheet – the volunteer writes your number under the partner’s column</i>).</p> <p>What is your (<i>volunteer’s</i>) number? (<i>Write on the board. Volunteer records under the “I am” column, and you record under “My partner is” column.</i>)</p> <p>Can anyone tell us which of these two numbers is more? (<i>response</i>)</p>
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*Standard)*  
2C, 2G, 3A, 3D, 3F, 3I

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.A.1., I.C.2., II.A.2., II.A.4.  
MATH I.B.1., II.A.1., IV.A.1., VIII.A.4.

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### TRANSITION to Math

How do you know that one is more? (*Students might have checked with their base ten blocks, or they might know place value, or they may have looked at your 120 board in the room to make that decision – any strategy works.*)

Did anyone make that decision another way? (*Look for the above strategies, but accept all reasonable answers, such as counting.*)

In our game, we not only need to know which is more, but we also need to know how MUCH more the larger is. How can we find that? (*Most will say subtraction using blocks or number sentences, some might say add on if your numbers are closer together. Accept all reasonable answers.*)

On your record sheet, there are five boxes at the bottom of the page. We are going to use each of those boxes to write our number sentence and subtract. You may use whatever tools you wish to subtract, but you will record your subtraction problem in the box.

(*Ask your volunteer if s/he can demonstrate the subtraction problem. Accept whatever strategy s/he uses.*)

*Ask if someone can solve it another way. If it has not already been demonstrated, ask if someone can show the number sentence in the box – that is what we are all going to record in the box when we play the game. Be sure the volunteer explains the process as s/he subtracts using the traditional algorithm.*)

Now that we have the answer, what does this answer tell us? (*It tells us how much more the larger number is than the smaller number.*)

This answer is what we write in our last column on our record sheet. (*Write the difference in your column to demonstrate.*)

When you finish all five rounds of your game, I will give you this Mexican Casa sheet to color. We will talk more about that later. You will start the game now, but we will finish during our Follow-up Lesson.

(*Pair up the students and have them begin the game. Circulate the room to make sure that students understand what is expected. If you feel more explanation is necessary, have the students play a round or two as a class, half the class using one roll, and half the class using another roll of the dice.*)

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

**Classroom Lesson** - continued



### TRANSITION to Math

Play until time for the TV Lesson then review the objectives and distribute the math materials.

**Objectives:** Read the math and language objectives and have students explain how they learned them.

### Distribute TV Lesson Materials

#### TV Materials:

- Copy of the *My Mexico*, turned to pages 4-5
- Base ten sets – 1 set per student (students may use if they wish)
  - 15 longs
  - 20 units
- **BLM** – Colorful Houses Stories – 1 per student
- **BLM** - Colorful Houses Stories KEY – teacher only



**BLM TM Unit 5, Lesson 1**

One sheet per student

**Who had More?** 

I am _____	My partner is _____	Who has more?	How much more?
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	

**BLM TM Unit 5, Lesson 1**

One sheet per student

**Who had More?** 

Soy _____	Mi compañero es _____	¿Quién tiene más?	¿Cuántos más?
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	

## BLM TM Unit 5, Lesson 1

One sheet per student

## Mexican Casa

You will also need crayons – green, yellow, orange, blue, pink



Now that you have finished your game, go back and circle the number sentences where you had to regroup, exchange, or trade to find the answer.

You may use that many different colors to paint your Mexican Casa. If you regrouped, 3 times, you may use 3 colors; 5 times, 5 colors. If you never had to regroup, or regrouped only once, you may choose 2 colors to paint your house, if you wish.





**Literature Vocabulary**

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

**Math Vocabulary****Repeated Vocabulary**

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

**TV Materials:**

- Copy of the *My Mexico*, turned to pages 4-5
- Base ten sets – 1 set per student (students may use if they wish)
  - 15 longs
  - 20 units
- **BLM** – Color Houses Stories – 1 per student
- **BLM** - Colorful Houses Stories KEY – teacher only

**ELPS (English Language Proficiency Standard)**

2B, 2C, 2E, 3C, 4F

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1., I.C.2, I.D.3, II.A.1., II.A.2.  
ELA II.A.1., II.A.3., II.A.6., II.B.1., III.B.2., III.B.3.  
MATH I.A.1., I.B.1., II.A.1., V.A.1., VIII.A.1., VIII.C.1

**Unit 5, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives:**

- Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.

**Language Objectives:**

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to regroup in addition and subtraction.

**Building Background, Math**

**TEACHER:** We are going to solve two very interesting problems today. I was thinking about the poem, *Houses*, and how very colorful they are.

**AZULITO:** Oh yes, I like color! My favorite color is BLUE!

**TEACHER:** And I can see why, Azulito! Before we begin the story problems, I would like for the boys and girls to look at the picture on pages 4-5 of your books. There is a man who is pushing a cart. He is a street vendor – that means he is selling something. What does it say on the cart he is pushing?

**AZULITO:** Paletas. Ah, he is selling popsicles! I'll bet that cart has ice in it to keep the popsicles from melting!

**TEACHER:** I'm sure you are right, Azulito. He is selling popsicles. And do you see how the little boy is running toward him? What do you think he has in his hand?

**AZULITO:** The little boy must have some money to buy a popsicle! That would taste very good on a hot summer day!


**TEACHER:** Yes it would. Our first story problem is about the vendor.

**Comprehensible Input**

You have a copy of these problems, so let's read them together. I'll read through it the first time with you so you can see the Math Movie in your mind.

**The paletas vendor sold 47 popsicles to the children. He started with 80 popsicles to sell before the end of the day. How many more popsicles does he need to sell to reach his goal?**

**Unit 5, Lesson 1**  
**TV Lesson** - continued

1<sup>st</sup> – 2<sup>nd</sup>  


 **SMARTBOARD**

Write the problem before teacher reads.

As Azulito describes his math movie, show pictures of the 80 popsicles.

Then show the 47 leaving the group.

After the solution pause,

- solve using number sentence
- model with base ten
- model with numbers on the ten chart.

**CLASSROOM TEACHERS**

Please be sure that students are solving the problems. You will want to circulate the room to see how many still need help with this type of problem before the post assessment next unit.

What math movie did you see, boys and girls? Tell your Classroom Teacher (*pause*).

**AZULITO:** (*pause*) I see 80 popsicles in the vendor’s cart. 47 of the popsicles are gone because children bought them. I really want to know how many the vendor has to sell until 80 are sold.

**TEACHER:** Very good, Azulito. Let’s let the girls and boys solve this problem, then I will let you show us how you solved the problem. Boys and girls, you may use any strategy you wish to solve the problem. (*generous pause*)

**AZULITO:** (*pause*) I used a number sentence to solve the problem. (*Demonstrate and explain the steps to subtract with regrouping, trading, exchanging.*)

**TEACHER:** Well done, Azulito! Girls and boys, how many of you used the number sentence to solve this problem? I see that many of you raised your hands. Well done!

There are several other strategies, too. Raise your hands if you solve the problem another way. (*slight pause*)

**AZULITO:** (*pause*) I know another way! I could have used my base ten blocks! (*Model and explain as you model using the base ten blocks.*)

**TEACHER:** You explained that very well, Azulito! Boys and girls, how many of you solved using the base ten blocks? And you could have drawn the blocks instead of using the real blocks (*Demonstrate and explain while you are demonstrating.*)

But no matter which of the strategies you used, you should have found that the paletas vendor still needed to sell 33 popsicles to meet his goal of 80 for the day.

Alright, let’s look at our second problem. (*Work as far as you can in the time allowed, still leaving time for a quick glance at Azulito’s corner.*)

Look at the picture for this problem. Do you see all of the colorful buildings? This is a picture from Guanajuato, Mexico. It takes a long time to keep all of those houses painted so they look like jewels on the hillside. Let’s read the problem. Please read with me.

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**TEACHER:** There were 56 houses painted last month. That is 29 more than the houses painted this month. How many houses were painted this month?

What math movie do you see when you read this. Please tell the class your math movie (*pause*).

**AZULITO:** I see houses. 56 of them were painted last month. But the problem tells us that 56 houses are MORE than were painted this month, 29 houses more. So this month the number of houses is 29 less than 56.

**TEACHER:** Alright, Azulito. Is that what you saw, boys and girls? Think about how you are going to solve this problem. I'll give you time to think and time to solve the problem. (*generous pause*)

**AZULITO:** I drew base ten blocks to make sure I could really see the movie. First, I drew 56 base ten blocks – that five tens and six ones (*do so*).

Now, I know that this month there were fewer houses painted, so that tells me my number will be less – 29 less in fact. I'll subtract 29 from these 56 houses (*do so, explaining the exchanging, regrouping, trading process*). So, this month they only painted 27 houses.

**TEACHER:** Well done, Azulito! And we can solve that with a number sentence (*demonstrate the vertical algorithm, explaining how each step relates to Azulito's model*). Perhaps there are other strategies used in your classroom. Be sure to share those strategies with one another during your Follow-up Lesson.

**AZULITO:** That was really cool! You know, we could hear that many of the boys and girls had different strategies for solving those problems. I was wondering how they solved the CGI problem during Daily Routines today. Please go on MAS Space and share some of your posters from your CGI today. We'd like to see your strategies!

**TEACHER:** Great task! It will be interesting to see all of the different strategies. And seeing their posters will be a lot of fun!

And now, let's see what we accomplished today during our lesson.

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)

#### SMARTBOARD

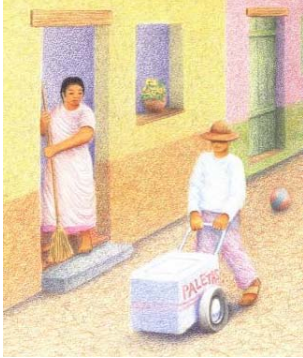
Demo on board.

#### Azulito's Corner

##### Unit 5, Lesson 1 CGI

How did you solve the CGI problem today? Please explain your strategy to us.

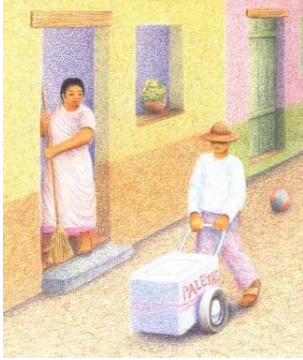




The paletas vendor sold 47 popsicles to the children. He had hoped to sell 80 popsicles. How many more popsicles did he need to sell to reach his goal?



There were 56 houses painted last month. That is 29 more than the houses painted this month. How many houses were painted this month?



El vendedor vendió 47 paletas a los niños.  
Esperaba vender 80 paletas. ¿Cuántas paletas  
más necesitaba vender para alcanzar su  
objetivo?



El mes pasado se pintaron 56  
casas. Eso es 29 casas más de  
las casas que se pintaron este  
mes. ¿Cuántas casas se  
pintaron este mes?

## Literature Vocabulary

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

## Math Vocabulary

### All reviewed vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

### TV Materials:

- Base ten sets – 1 set per student
  - 15 longs
  - 20 units

### ELPS (English Language Proficiency Standard)

1C, 1F, 2G, 3D, 3I, 4A, 4B, 5A, 5B

### CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR I.A.1., I.C.2., II.A.2., II.B.1., II.B.2.  
ELA I.A.1., I.A.2., II.A.1., II.A.3., II.B.1., III.B.1.  
MATH I.B.1., I.C.1., II.A.1., VIII.A.1., VIII.A.3.

### Technology

<http://www.roomrecess.com/pages/BlockBuster.html>

Fast moving game to find fact families.

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up



### Math Objectives:

- Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.

### Language Objectives:

- Listen and speak with a partner during our math activity.
- Explain how the base ten models relate to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

### Practice and Application, Math

*(Complete any steps to the second TV problem left incomplete.)*

### Format:

- Ask students to share their strategies.
- *Pay particular attention to how students solve the problem: base ten blocks; drawn models; number sentences. Your 1<sup>st</sup> grade students will not be assessed on double digit operations, so base ten blocks are expected. 2<sup>nd</sup> grade students will be expected to show a strategy on their assessment. The algorithm would be preferred; however, any written strategy is acceptable.*

Let students finish the game they played during the TM lesson earlier today. The coloring sheet should be completed by end of today.

### Math Journal Writing

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



**Describe the math movie to this question. What number is 19 fewer than 51?**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

### Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths, eighths).
- Use concrete models to represent and name fractional parts of a set of objects (fourths, eighths).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

### Language Objectives

- Explain why each portion is a fourth/eighth.
- Share-write what is a fourth or eighth.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

### Vocabulary

fourths  
eighths  
fair shares  
equal pieces

### Materials

- **BLM** Laughing Cow Cheese Fractions – 1 per student

### Per partners

- 3 Laughing Cow cheese wedges
- 2 paper plates
- 2 paper towels
- Chart paper with question:  
**How do you know each person would have (one-fourth or one-eighth) of the cheese?**

## Unit 5, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

We are going to share our snack together in halves. How many people will be sharing the snack if we share in halves? (2) How do you know? Halves are two equal pieces of a whole or set.

*(Distribute the snack materials.)*

- What do you see that you are going to share today? *(three foil-wrapped cheese wedges)*
- Talk to your partner about how you will share that fairly between you.

*(Give them time to talk about how they will share it. In the meantime, draw several sets of triangles on the board. When students have discussed in partners, have them explain their plans to the class. Use their descriptions to divide the drawings on the board to show their plans. As a class, decide if the plan will divide the cheese into two equal parts, or halves. When all plans have been discussed and verified, students should share their snack.)*

Today, our record sheet doesn't really have much to do with our actual snack. Let's look at the record sheet. *(Read the top portion to the students. Ask the questions below. Let them divide the circle into the fourths, and write the fractional part each would receive. Then read the second portion. Ask the questions below, and let the students divide that circle into eighths and write the fractional part each would receive.)*

### QUESTIONS:

- How many people will be dividing this piece of cheese?
- How do you know?
- What fractional part of the cheese will each person receive?
- What does one- (fourth /eighth) mean?

**Snack Fraction Writing: BLM Laughing Cow Cheese Fractions**  
**How do you know each person will have one- (fourth, then eighths) of the cheese?**

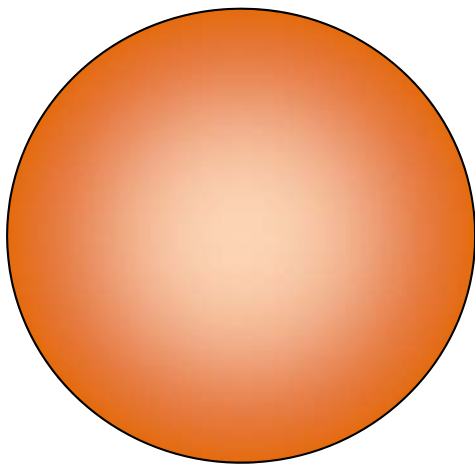
**Objectives:** Review what you learned and how you learned it.





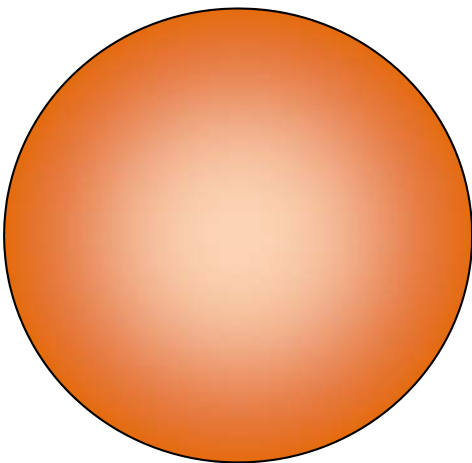
My name is \_\_\_\_\_

Marta and her 3 friends are sharing a big round of cheese.  
Draw how you would divide the cheese so that everyone has an equal piece.



What fractional part of the  
cheese will each person  
receive?

Alex and 7 of his friends are sharing a big round of cheese.  
Draw how you would divide the cheese so that everyone has an equal piece.



What fractional part of the  
cheese will each person  
receive?

BLM Unit 5, Snack Fraction Lesson 1 Laughing Cow Cheese

Wedge Fractions 

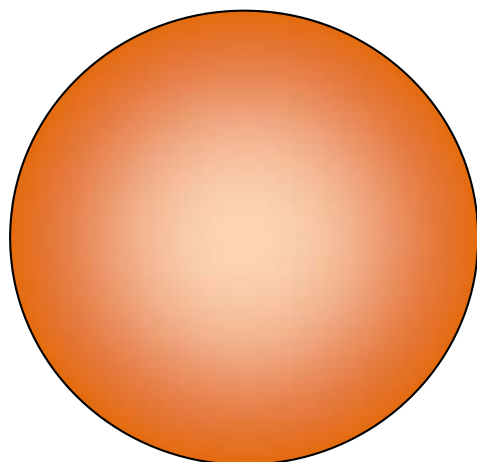
(One sheet per student)

Mi nombre es

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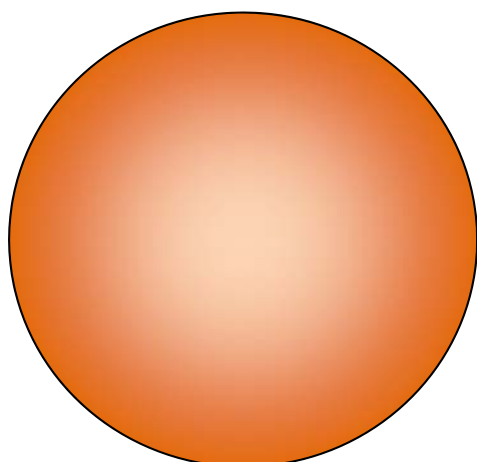


Marta y sus 3 amigas comparten un gran trozo de queso.  
Dibuja cómo dividirías el queso para que todas reciban una pieza igual.



¿Qué parte fraccional de queso recibirá cada persona?

Alex y 7 de sus amigos comparten un gran trozo de queso.  
Dibuja cómo dividirías el queso para que todas reciban una pieza igual.



¿Qué parte fraccional de queso recibirá cada persona?

**Family Fun, Unit 5 Lesson 1** 

Our book for this unit is *My Mexico, Mexico mio*.

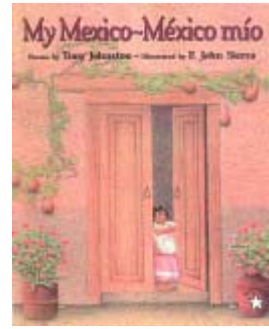
My favorite part today is \_\_\_\_\_

\_\_\_\_\_.

In math we solved word problems that we really had to think about. Here's an example:  
What is the number that is 19 fewer than 47. I can tell you the answer!

Thank you for helping me learn math!

\_\_\_\_\_



**Family Fun, Unit 5 Lesson 1** 

Nuestro libro para esta unidad es *My Mexico, Mexico mio*.

Mi parte favorite es \_\_\_\_\_

\_\_\_\_\_.

En la clase de matemáticas resolvimos problemas difciles. Puedo averiguar el número  
que es 19 menos que 47.

¡Gracias con ayudarme con las matemáticas!

\_\_\_\_\_





**Materials**

- Unknown Quantity Cards
- 50 base ten units
- **BLM** CGI Problems Unit 5 – teacher only
- **BLM** How long? How many fewer?
- **OPTIONAL BLM** Popsicle Flavors (and crayons to match the colors)

**Math Objectives**

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

**Balanced Literacy****Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

**TEKS**

Lessons 1, 2, 3

- 1<sup>st</sup> – 1.3BCF; 1.5DF. 1.6GH
- 2<sup>nd</sup> – 2.3A, 2.4BC; 2.7C

**ELPS (English Language Proficiency Standard)**

1A, 1F, 2B, 2E, 3A, 3B, 3C, 4C

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1., I.C.1., I.C.2., II.A.2., II.C.1.  
 ELA II.A.2., II.A.3., II.B.1., III.A.2  
 MATH I.A.1., I.B.1., IV.A.1., V.A.1., VI.C.2., VIII.A.2.

**Assessment Items**

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 6, 7, 82<sup>nd</sup> - 1, 2, 3, 4, 5, 6, 7**Unit 5, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Daily Routine**

*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

**ESSENTIAL**

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – 10
  - **Lesson 2 - 30**
  - Lesson 3 – 60
- **CGI Problem\***
  - Lesson 1 – Compare, Difference Unknown (1<sup>st</sup> item 5, 2<sup>nd</sup> item 6)
  - **Lesson 2 - Join, Change Unknown** (2<sup>nd</sup> item 5)
  - Lesson 3 – Part Whole. Whole Unknown (1<sup>st</sup> item 3ab)
- **What's Missing** (1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (1<sup>st</sup> item 5, 2<sup>nd</sup> item 6)\*\*
  - Lesson 1 – How far did he travel?
    - BLM – How far did he travel?
  - **Lesson 2 – How long? How many fewer?**
    - **BLM – How long? How many fewer?**
  - Lesson 3 – How long? How many fewer?
    - BLM – How long? How many fewer?

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems. Follow the guidelines in Solve It! Overview to facilitation Lessons 1, 2, and 3.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing** – **There is a BLM with pictures for each graph**
  - Lesson 1 – What flavor Popsicle would you like to eat? *(Select four flavors that are popular with your students. Color four of the Popsicle graph pictures. Students then color their graph pictures to match their choices. If possible, have flavors available to eat later in the day. However, this is NOT snack fraction.)*
  - **Lesson 2 – How do you like your corn?** *(on the cob, in a tortilla, in soup)*
  - Lesson 3 – Which weaving would you choose?

### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?

**(Assessment Item 1<sup>st</sup> grade, item #8 and 2<sup>nd</sup> grade, item #7 will be reviewed daily in Snack Fractions.)**

**\*OPTIONAL Money Matters** *(On MAS Space.)*

**Vocabulary Building** - Choose an activity listed in the Daily Routines section.


### Azulito's Corner

#### Unit 5, Lesson 2

#### Measurement Lab

Explain how you thought about your measurement lab today. Perhaps you can take a picture of the class and send it in. How did you measure the ear, and how did you compare it to an ear that wasn't pictured?

## Solve It! Problems Unit 5, Lesson 2

Pairs 

- Mrs. Gomez was busy baking again. This time she baked cookies to sell. She baked 24 sugar cookies and 60 chocolate cookies. She sold 48 cookies and saved the rest for her family. How many cookies did she save for her family?

Problem #1 – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

Problem #2 – Name: \_\_\_\_\_


Verification – Name: \_\_\_\_\_

Final Solution – Name: \_\_\_\_\_

Verification – Name: \_\_\_\_\_

You are free to take this apart any way you wish – on your own; together as a team; a mix of both. You are responsible, however, for your own paper having all problems identified and solved; verifying your Team member's page. Be sure to write your final solution with a label in the box.

## Solve It! Problems Unit 5, Lesson 2

Pairs 

La Sra. Gómez estaba ocupada horneando nuevamente. Esta vez, horneó galletas para vender. Horneó 24 galletas de azúcar y 60 galletas de chocolate. Vendió 48 galletas y guardó el resto para su familia. ¿Cuántas galletas guardó para su familia?

Problema #1 – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Problema #1 – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Solución final – Nombre: \_\_\_\_\_

Verificación – Nombre: \_\_\_\_\_

Puedes resolver esto del modo que desees - por ti mismo; en equipo; una mezcla de ambos métodos. Sin embargo, tú eres responsable de que tu propio trabajo tenga todos los problemas identificados y resueltos; verificando la página del miembro de tu equipo. Asegúrate de escribir tu solución final con una etiqueta en la caja.

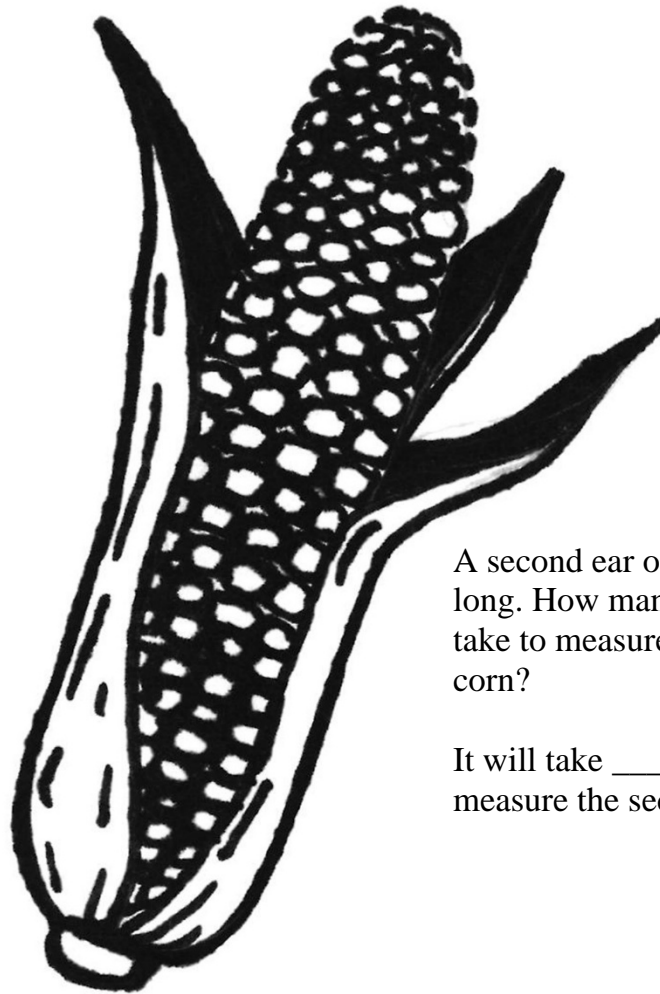


BLM Daily Routines, MEASUREMENT Unit 5, L2  
One per student

How Long? How Many Fewer? 

How long is this ear of corn? Use your  
base ten units to measure.

This ear of corn is \_\_\_\_\_ units long.



A second ear of corn is only 9 cubes  
long. How many fewer cubes will it  
take to measure the second ear of  
corn?

It will take \_\_\_\_\_ fewer cubes to  
measure the second ear of corn.

¿Cuál es el largo de esta mazorca de maíz? Usa tus unidades base diez para medir.

La mazorca de maíz es \_\_\_\_\_ unidades de largo.

Una segunda mazorca de maíz es de solo 9 cubos de largo. ¿Cuántos cubos menos se necesitan para medir la segunda mazorca de maíz?

Se necesitarán \_\_\_\_\_ cubos menos para medir la segunda mazorca de maíz.

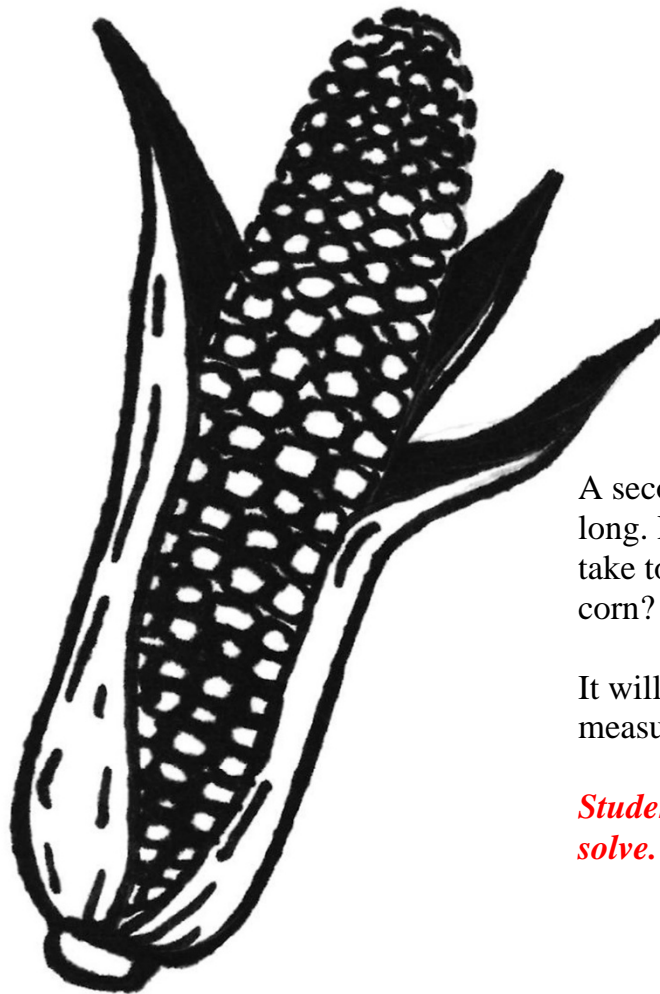


BLM Daily Routines, MEASUREMENT Unit 5, L2 **KEY**  
How Long? How Many Fewer?



How long is this ear of corn? Use your base ten units to measure.

This ear of corn is   17   units long.




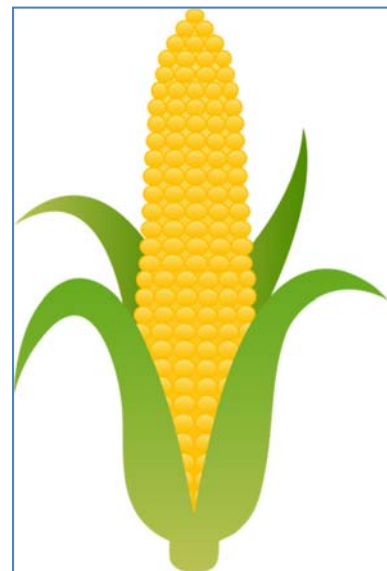
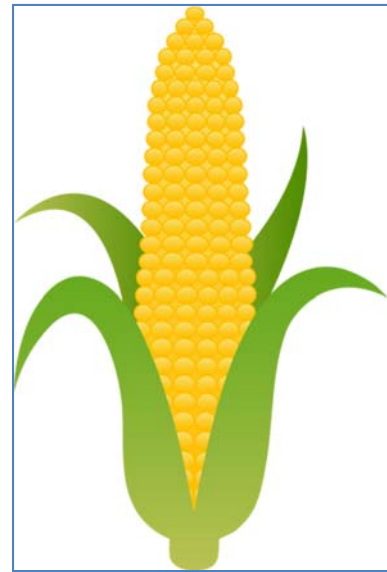
A second ear of corn is only 9 cubes long. How many fewer cubes will it take to measure the second ear of corn? Show your work.

It will take   8   fewer cubes to measure the second ear of corn.

*Students may use any strategy to solve.*



**BLM Daily Routings, GRAPH Unit 5, Lesson 2 How Do you Like your Corn?**   
(Duplicate so that the graph has one of each, and each student may select their favorite from the group.)





## Literature Selection

*My Mexico – Mexico mio*

By Tony Johnston

“Corn”

### Materials for Language Lesson

- BLM Word Cards
- Bouquet of flowers used in lesson 1
- Projected image of poem *Corn*, or written on chart paper
- Place to create T-Chart (board, chart paper)
- Place to write class poem (board, chart paper)
- Paper and art supplies for illustrations

### Materials for TM Lesson

- Several ears of Indian corn, if possible
- OPTIONAL: blue corn chips – these are made from blue Indian corn – serving of 12 chips in a bowl per student
- Dice – 2 per student
- Base Ten Sets
  - 15 longs
  - 20 units
- Magnetic base ten blocks
- Crayons: yellow, orange, blue, purple, red – 1 set per student
- BLM TM Who had More? - 1 per student
- BLM TM Indian Corn – 1 per student

### Literature Vocabulary

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

### Math Vocabulary

#### Repeated Vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson



*Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.*

### Math Objectives:

- Model 2-digit subtraction with base ten materials and connect the models to the algorithm.
- Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

### Reading Objectives:

- Find words in a poem that show what you can hear and see.

### Language Objectives:

- Use vocabulary to talk about poems.

### BEFORE READING

#### Building Background, Literature and Vocabulary

- Show students the bouquet of flowers used in lesson 1. Ask students to use their senses to describe the bouquet. What do you see when you look at the bouquet? What do they feel like? What do they smell like?
- Show students the next poem they will be reading with you: *Corn*, page 8. Read aloud the title and ask, “What do you think of when you hear the word corn?”
- Ask, “What do you see in this picture?” *As students orally to label the different things they see, help them find the stalks of corn.*
- Say, “The corn looks different from what I imagined. When I hear the word corn I immediately think of yellow corn. What does the corn look like in this picture?”
- Ask, “What sounds do you think the boy and his mother are hearing?”
- Say, “When people write poems, they try to use words to give the reader a good idea of what something looks like, or what it sounds like. When we read this poem, we will see what words the author uses to describe the corn.”

### DURING READING

#### Comprehensible Input, Literature and Vocabulary

#### Read Aloud: *Corn*

Today you will continue to work with students on **Author’s Craft**. The focus today will be on **identifying words or phrases that appeal to the senses (*sight, sound*)**. What words does the author use to give us a picture of what the corn looks like? Sounds like?

**ELPS** (*English Language Proficiency Standard*)  
1C, 2E, 2F, 3F, 3I, 4C, 4J

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.A.1.,  
II.A.7., II.A.8  
ELA II.A.1., II.A.3., II.A.6.,  
II.A.7., II.B.1., II.C.2., II.D.1.

**Listening Center Connection:**

After the read aloud, have students listen to the recorded version of *Corn* in a Listening Center as part of their independent reading time.

If you have any Spanish-speaking students, they can also listen to the Spanish version of the poem.

## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

**Note:** If your students are Spanish-speaking, you may want to read the poem first in Spanish before reading it in English. If you don't speak Spanish, you can play the recorded version of the Spanish poem for students to listen to. This will build their understanding of the poem, and improve their comprehension of the English version.

**Read aloud the poem.**

- Point to specific parts of the illustration to provide visual support for different words:
  - green corn
  - fields
  - tortillas
- **Teacher Question:** Can you make the sound of the corn shaking in the warm wind? *Have students imitate this. Model if needed what this sounds like.*

**Read aloud the poem again.**

This time, have the poem somewhere students can all see (*projected on a screen, or written on chart paper*).

- As you read aloud the poem, track the text using a pointer. Read at a natural pace that allows students to follow along with their eyes as you read.
- **Teacher Think Aloud: Author's Craft** – What I love about this poem is how the author describes the corn.
- **Teacher Question: Author's Craft** – Look at the poem. Can you find any words that tell us what the corn looks like? Talk with your partner. *After partners discuss, regroup the class and have volunteers come up to the text to point out the words/phrases:*
  - green
  - growing
  - fields
  - shaking
  - waves
  - stretching for miles
- **Teacher Question: Author's Craft** – Can you find the words that tell us what the corn sounds like? Talk with your partner. *After partners discuss, regroup the class and have volunteers come up to the text to point out the words/phrases:*
  - I hear “shhhhh” of corn



## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

- **Teacher Think Aloud: Author’s Craft** – You found the words that help us *see* the corn and *hear* the corn. Seeing and hearing are part of our five **senses**! *Point to your eyes and ears.* Ask, “What are the other **senses**?”
  - We can smell.
  - We can feel things we touch.
  - We can taste.

When people write poems, they try to use words so you can use your senses to imagine what it looks like, sounds like – maybe even what it smells like, feels like, or tastes like.

Say, “When we write another poem together as a class today, we will try to use words that use some of these senses: words that say what something *looks like* and what it *sounds like*.”

**Writing Workshop Connection**  
Writing this class poem will help students create their own poem following the same structure during Writing Workshop.

### AFTER READING

#### Shared Writing – Class Poem

Today students will write a second poem about the community they all *currently* live in. As in Lesson 1, students will illustrate this poem, and it will be added to the class book of poetry about the area you all live in right now.

Today, you will create a class poem following a similar structure as *Corn*:

When I see \_\_\_\_\_ of \_\_\_\_\_

\_\_\_\_\_.

When I hear \_\_\_\_\_ of \_\_\_\_\_

\_\_\_\_\_.

When I watch \_\_\_\_\_ of \_\_\_\_\_

\_\_\_\_\_.

It is not \_\_\_\_\_.

It is \_\_\_\_\_.



## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



1. Have students think about something they often see in your area. It should be a familiar sight for all students – something typical of the area where students currently live.
2. Decide on one of these topics for your class poem. Have students list words to describe what that thing looks like and sounds like:

 Looks like	 Sounds like
<ul style="list-style-type: none"><li>• (color words)</li><li>• (size words)</li><li>• (shape words)</li><li>• (compare it to something else)</li></ul>	<ul style="list-style-type: none"><li>• Specific verbs to describe the noise it makes</li></ul>

3. Following the poem structure, have students help you write each line of the poem using the chosen topic.
  - a. For each line, students brainstorm what to write. You may need to help students with this.
  - b. Combine students' ideas for each line, and write it down.

**Note:** This is Shared Writing – students help come up with the content of what to write, but the teacher is the one physically writing it down.

*Another option would be to use an alternate structure, one which each line describes the chosen topic through one of the senses:*

*I see \_\_\_\_\_.*

*I hear \_\_\_\_\_.*

*I taste \_\_\_\_\_.*

*I smell \_\_\_\_\_.*

*I feel \_\_\_\_\_.*

4. Once the poem is complete, give students a small piece of paper/cardstock where they can create an illustration for the poem.
5. Later, you will affix all of their illustrations on a separate page (*or on several pages, depending on the size of the illustrations and how many students you have*). Type the poem so it looks “professional.” This is now the second “published” class poem, with accompanying illustrations, for your class book of poetry.

**Math Objectives:**

- Model 2-digit subtraction with base ten materials and connect the models to the algorithm.
- Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

**Materials for TM Lesson**

- Several ears of Indian corn, if possible
- OPTIONAL: blue corn chips – these are made from blue Indian corn – serving of 12 chips in a bowl per student
- Dice – 2 per student
- Base Ten Sets
  - 15 longs
  - 20 units
- Magnetic base ten blocks
- Crayons: yellow, orange, blue, purple, red – 1 set per student
- **BLM TM** Who had More? - 1 per student
- **BLM TM** Indian Corn – 1 per student

**Math Vocabulary****Repeated Vocabulary**

regrouping  
 exchanging  
 trading  
 comparing  
 more than  
 less than  
 fewer than

**Technology:**

<http://www.ixl.com/math/grade-1/comparison-word-problems>

Free online game for comparison problems.

**ELPS** (*English Language Proficiency Standard*)

2C, 2G, 3A, 3D, 3F, 3I

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.A.1., I.C.2., II.A.2., II.A.4.

MATH I.B.1., II.A.1., IV.A.1.

**Unit 5, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math****Building Background, Math**

We are going to play our game again today (*directions provided in Lesson 1.*) Our picture to color after we have finished the arithmetic is Indian corn. Has anyone ever seen Indian corn? (*Show the demo pieces if you have them available, or show pictures from the Internet.*)

Although you could eat these, Indian corn is not very tasty. It's very high in starch. Indian corn is used mostly to grind into flour, and to use for decoration during the fall. In fact, blue corn chips are made from the kernels of blue Indian corn.

As you play your game today and solve the arithmetic problems, think about Indian corn. (*If you have the blue corn chips, distribute a small bowl of about 12 chips to each student to munch on while they work.*)

*Once students have finished the five problems, have them discuss how they solved the problems, sharing their strategies and explaining which partner had the greater number, which number was less.*

*Distribute the color sheet, asking students to decide using their problem sheets how many colors they can use to color the corn. Students might have started to manipulate the numbers so that they have more problems in which they need to regroup – the more problems that need regrouping, the more colors they may use on their color sheet.*

*Be sure to circulate the room to make sure that the students understand the trading process and have a viable strategy for doing so.*

Play until time for the TV Lesson, then review the objectives and distribute the math materials.

**Objectives:** Read the math and language objectives and have students explain how they learned them.

**Distribute TV Lesson Materials**

- Base ten sets – 1 set per student (*students may use if they wish*)
  - 15 longs
  - 20 units
- **BLM** – Corn problems – 1 per student
- **BLM** - Corn Problems **KEY** – teacher only



**BLM TM Unit 5, Lesson 2**

One sheet per student

**Who Had More?** 

I am _____	My partner is _____	Who has more?	How much more?
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	
My number is	My partner's number is	is more than	

**BLM TM Unit 5, Lesson 2**

One sheet per student

**Who Had More?** 

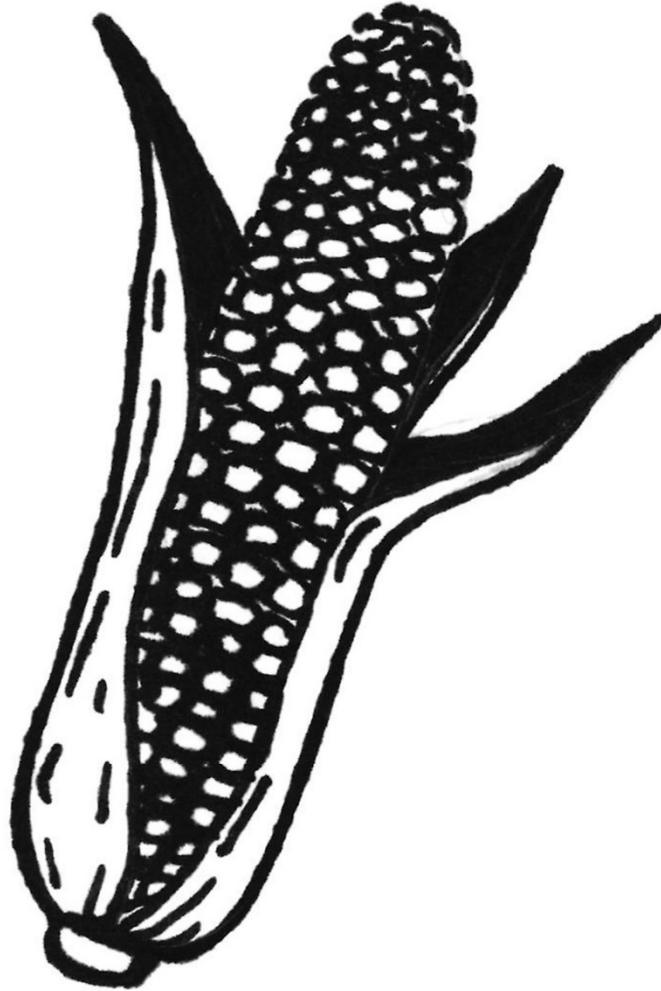
Soy _____	Mi compañero es _____	¿Quién tiene más?	¿Quién tiene menos?
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	
Mi número es	El número de mi compañero es	es más que	

## BLM TM Unit 5, Lesson 2

One sheet per student

## Indian Corn

This is Indian corn – it has many colored kernels. Follow the directions below to color your ear of Indian corn.  
Esto es maiz



Now that you have finished your game, go back and circle the number sentences where you had to regroup, exchange, trade to find the answer.

You may use that many different colors to color your Indian corn. If you regrouped, 3 times, you may use 3 colors; 5 times, 5 colors. If you never had to regroup, or regrouped only once, you may choose 2 colors to color your Indian corn.





**Literature Vocabulary**

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

**Math Vocabulary****Repeated Vocabulary**

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

**TV Materials:**

- base ten sets – 1 set per student (students may use if they wish)
  - 15 longs
  - 20 units
- **BLM** – Corn problems – 1 per student
- **BLM** - Corn Problems **KEY** – teacher only

**ELPS (English Language Proficiency Standard)**

2B, 2C, 2E, 3C, 4F

**CCRS (College and Career Readiness Standards)**

CROSS-CURRICULAR I.A.1., I.C.2, I.D.3, II.A.1., II.A.2.  
ELA II.A.1., II.A.3., II.A.6., II.B.1., III.B.2., III.B.3.  
MATH I.A.1., I.B.1., II.A.1., V.A.1., VIII.A.1., VIII.C.1

**Unit 5, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives:**

- Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.

**Language Objectives:**

- Use the math vocabulary during the activity.
- Discuss solution strategies.
- Explain how to regroup in addition and subtraction.

**Building Background, Math**

**TEACHER:** I enjoyed the poem today about corn. How many of you have lived near a corn field? I see many hands in the air! What sound does the breeze make when it blows through the field? Is it a “SHHHHH” sound?

**AZULITO:** Oh yes, the corn sings to us in the breeze. You have to be careful, though, when you walk down the rows of corn. The leaves can cut your arms if you are not careful.

**TEACHER:** That is true, Azulito. And we need to be careful when we solve our math problems, too, don’t we! Today, our problems will be about corn. We have three to finish today.

**AZULITO:** OK, I’m ready – are you boys and girls? Let’s start!

**Comprehensible Input**

You have a copy of these problems, so let’s read them together. I will read through it the first time with you so you can see the Math Movie in your mind.

**Farmer Garza planted 2 long rows of corn. In one row he had 22 plants. In the second row he had 28 plants. How many plants of corn did Farmer Garza plant? Show your work.**

Now, I will read it again, and I want each of you to solve it on your own. Azulito and I will talk about the problem after you have had time to solve it (*read again – then a generous pause*).

**AZULITO:** (*after a generous pause*) I saw two long rows of corn. One row has 22 plants in it. The other row had 28 plants in it. I could see that I needed to join the two rows together to see how many plants the farmer had planted.

## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



#### SMARTBOARD

Write the problem before teacher reads.

As Azulito describes his math movie, show pictures of the corn in the rows:

- Use base ten drawings
- Use algorithm

#### CLASSROOM TEACHERS

Please be sure that students are solving the problems. You will want to circulate the room to see how many still need help with this type of problem before the post assessment next unit.

This is what I did. First I drew a picture of my base ten blocks. Right away I could see that I had a compatible pair in the ones – two add eight equals 10. So I traded those 10 units for one ten.

And that's how I ended up with five tens, or 50 plants.

Then I use numbers to solve it (*do so and explain the steps as you work through them*).

**TEACHER:** Very good, Azulito. Boys and girls, which strategy did you use? Did you use a different strategy from Azulito? As long as your strategy works, and you can explain it, it is a good strategy. We should all have found that there are 50 plants in the two rows.

**TEACHER:** Alright, let's look at our second problem. Let me read it one time so you can see the math movie (*do so, and pause*). Now, I will read a second time and you solve it. (*Do so – generous pause*)

**AZULITO:** This one reminded me of the Unknown Quantity cards that the students are using in the Daily Routines. I see the whole ear of corn. I see that nine kernels are taken off the ear, and that six are left on the ear. What I don't know is how many kernels were on the ear to begin with. I set it up like this first (*show the box strategy*).

Then I could see that this is a basic fact, so these numbers are part of a fact family (*write the fact family*).

Now it's easy to see that there were a total of 15 kernels on that ear.

Of course, I know my basic facts, so I just added  $6 + 9$  and knew it was 15.

**TEACHER:** Good thinking Azulito! You used a lot of number sense to solve that problem and look how those fact families helped you! GREAT!

Now, I'm only going to read the last problem, and I want everyone to solve it on your own (*do so and slight pause to solve*).

**AZULITO:** Well this one was really easy! I saw that I have two different sets of objects – they are ears of corn. One set has five ears of corn. The second set has four ears of corn. All I had to do was to pick the number sentence – five ears add four ears equals nine ears. Piece of cake!

**Unit 5, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>

**TV Lesson** - continued



**TEACHER:** We accomplished three problems today! Good job, boys and girls. Thank you, Azulito, for your great strategies! And girls and boys, please be sure to talk about your strategies during the Follow-up Lesson.

**AZULITO:** That was really cool! You know, we could hear that many of the boys and girls had different strategies for solving those problems. I was wondering how they solved the CGI problem during Daily Routines today. Please go on MAS Space and share some of your posters from your CGI today. We'd like to see your strategies!

**TEACHER:** Great task! It will be interesting to see all of the different strategies. And seeing their posters will be a lot of fun!

And now, let's see what we accomplished today during our lesson.

**Objectives:** And now before we go, let's review what we have learned today! (*do so*)

**SMARTBOARD**

Demo on board.

**Azulito's Corner**

**Unit 5, Lesson 2**

**Measurement Lab**

Explain how you thought about your measurement lab today.

Perhaps you can take a picture of the class and send it in. How did you measure the ear, and how did you compare it to an ear that wasn't pictured?





Farmer Garza planted 2 long rows of corn. In one row he had 22 plants. In the second row he had 28 plants. How many plants of corn did Farmer Garza plant?  
Show your work.



Mrs. Ruiz was taking kernels off of an ear of corn. She had taken off 9 kernels and 6 kernels remained on the ear. How many kernels were on the ear to begin with?



Look at the picture.

How many ears of corn?

- A  $6 + 3 = 9$
- B  $5 - 4 = 1$
- C  $5 + 4 = 9$
- D  $4 + 4 = 8$



El granjero Garza plantó 2 largas hileras de maíz. En una hilera, tenía 22 plantas. En la segunda hilera, tenía 28 plantas. ¿Cuántas plantas de maíz plantó el granjero Garza? Muestra tu procedimiento.



La Sra. Ruiz estaba sacando granos de maíz de una mazorca de maíz. Había sacado 9 granos de maíz y quedaron 6 granos en la mazorca. ¿Cuántos granos había en la mazorca para empezar?



Mira las imágenes.

¿Cuántas mazorcas de maíz?

A  $6 + 3 = 9$

B  $5 - 4 = 1$

C  $5 + 4 = 9$

D  $4 + 4 = 8$

BLM Unit 5, TV Lesson 2

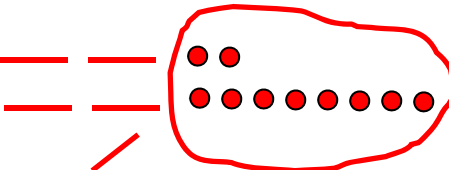
One sheet per student

Corn Problems **KEY** 



Farmer Garza planted 2 long rows of corn. In one row he had 22 plants. In the second row he had 28 plants. How many plants of corn did Farmer Garza plant?

Show your work. *Here are two strategies – students could use others – if students can explain them and they are reasonable, the strategies are acceptable.*

$$\begin{array}{r} 22 \\ +28 \\ \hline 50 \end{array}$$




Mrs. Ruiz was taking kernels of corn off of an ear of corn. She had taken off 9 kernels and 6 kernels remained on the ear. How many kernels were on the ear to begin with?

Show your work.

$$\boxed{15} - 9 = 6 \quad 9 + 6 = 15$$

$$\begin{array}{l} 6 + 9 = 15 \\ 9 + 6 = 15 \\ 15 - 9 = 6 \\ 15 - 6 = 9 \end{array}$$

*Here are two strategies – students could use others – if students can explain them and they are reasonable, the strategies are acceptable.*



Look at the picture.

How many ears of corn?

A  $6 + 3 = 9$

B  $5 - 4 = 1$

C  $5 + 4 = 9$

D  $4 + 4 = 8$





## Literature Vocabulary

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

## Math Vocabulary

### All reviewed vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

**Materials:BLM** – Corn problems  
– 1 per student (From TV Lesson)

- **BLM** - Corn Problems **KEY** – teachers only (From TV Lesson)
- Base ten sets – 1 set per student
  - 15 longs
  - 20 units

### ELPS (English Language Proficiency Standard)

1C, 1F, 2G, 3D, 3I, 4A, 4B, 5A, 5B

### CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR I.A.1., I.C.2., II.A.2., II.B.1., II.B.2.  
ELA I.A.1., I.A.2., II.A.1., II.A.3., II.B.1., III.B.1.  
MATH I.B.1., I.C.1., II.A.1., VIII.A.1., VIII.A.3.

### Technology

<http://www.roomrecess.com/pages/BlockBuster.html>

Fast moving game to find fact families.

## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up



### Math Objectives:

- Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.

### Language Objectives:

- Listen and speak with a partner during our math activity.
- Explain how the base ten models relate to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

### Practice and Application, Math

Ask students to share their strategies.

- *Pay particular attention to how students solve the problem: base ten blocks; drawn models; number sentences. Your 1<sup>st</sup> grade students will not be assessed on double digit operations, so base ten blocks are expected. 2<sup>nd</sup> grade students will be expected to show a strategy on their assessment. The algorithm would be preferred; however, any written strategy is acceptable.*

*Let students finish the game they played during the TM lesson earlier today. The coloring sheet should be completed by end of today.*

### Math Journal Writing

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.

 **Explain how can knowing fact families help you solve**  
\_\_\_\_ - 7 = 15?

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

### Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths, eighths).
- Use concrete models to represent and name fractional parts of a set of objects (fourths, eighths).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

### Language Objectives

- Explain why each portion is a fourth/eighth.
- Share-write what is a fourth or eighth.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

### Vocabulary

fourths  
eighths  
fair shares  
equal pieces

### Materials

- **BLM** Crackers and Nutella Fractions – 1 per student

### Per partners

- 4 whole graham cracker sheets
- 2 T. Nutella
- 2 paper plates
- 2 paper towels
- 2 plastic knives
- Chart paper with question:

**How do you know each person would have (one-fourth or one-eighth) of the snack?**

## Unit 5, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

We are going to share our snack together in halves. How many people will be sharing the snack if we share in halves? (2) How do you know? Halves are two equal pieces of a whole or set.

*(Distribute the snack materials.)*

- What do you see that you are going to share today? *(Four graham crackers and 2 T Nutella)*
- Talk to your partner about how you will share that fairly between you.

*(Give them time to talk about how they will share it. In the meantime, draw several sets of four rectangles to represent the crackers and two circles to represent the Nutella. When students have discussed in partners, have them explain their plans to the class. Use their descriptions to divide the drawings on the board to show their plans. As a class, decide if the plan will divide the snack into two equal parts, or halves. Ask if anyone shared a different way. When all plans have been discussed and verified, students should share their snack.)*

Today, our record sheet doesn't really have much to do with our actual snack. Let's look at the record sheet. *(Read the top portion to the students. Ask the questions below. Let them divide the circle into the fourths, and write the fractional part each would receive. Then read the second portion. Ask the questions below, and let the students divide that circle into eighths and write the fractional part each would receive.)*

### QUESTIONS:

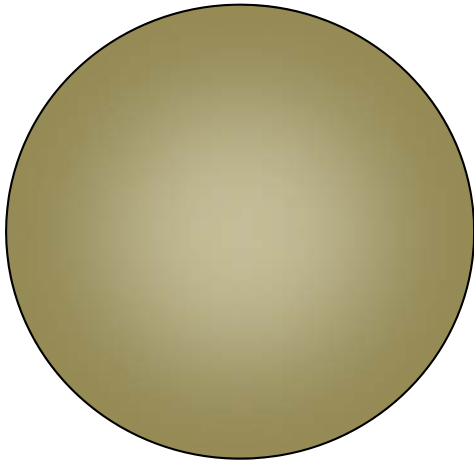
- How many people will be dividing this cup of Nutella?
- How do you know?
- What fractional part of the Nutella will each person receive?
- What does one- *(fourth/eighth)* mean?

**Snack Fraction Writing: BLM Crackers and Nutella Fractions**  
**How do you know each person would have one- *(fourth, then eighths)* of the snack?**

**Objectives:** Review what you learned and how you learned it.

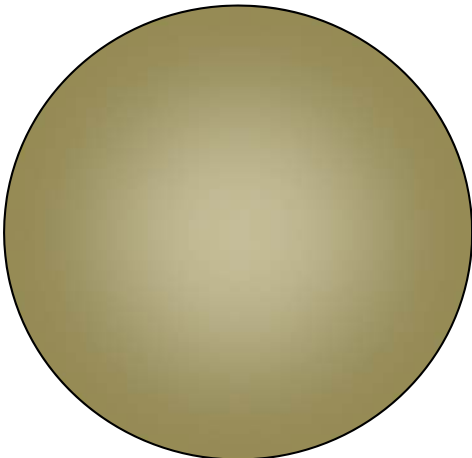
My name is \_\_\_\_\_

Mrs. Guerra put the Nutella into a big cup so that Ellie and her 3 friends could share it. They took a knife and cut the Nutella into fair shares. Draw how you would divide the Nutella so that everyone has an equal share.



What fractional part of the Nutella will each person receive?

Mrs. Romo put the Nutella into a big cup so that Marcos and his 7 friends could share it. They took a knife and cut the Nutella into fair shares. Draw how you would divide the Nutella so that everyone has an equal share.

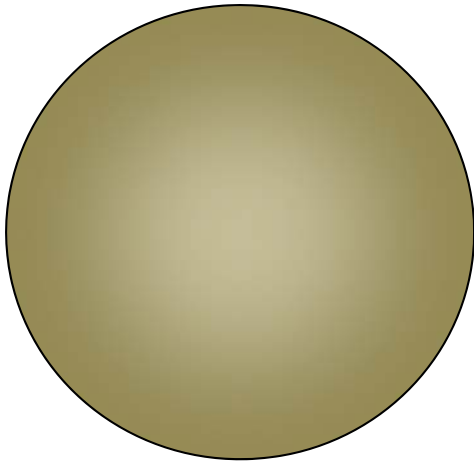


What fractional part of the Nutella will each person receive?

Mi nombre es \_\_\_\_\_

La Sra. Guerra puso la Nutella en una gran taza para que Ellie y sus 3 amigas pudieran compartirla. Tomaron un chuchillo y cortaron la Nutella en partes iguales.

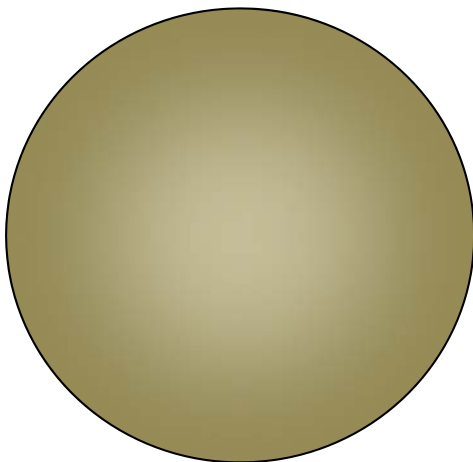
Dibuja cómo dividirías la Nutella para que todas reciban una porción igual.



¿Qué parte fraccional de la Nutella recibirá cada persona?

La Sra. Romo puso la Nutella en una gran taza para que Marcos y sus 7 amigos pudieran compartirla. Tomaron un chuchillo y cortaron la Nutella en partes iguales.

Dibuja cómo dividirías la Nutella para que todas reciban una porción igual.



¿Qué parte fraccional de la Nutella recibirá cada persona?

**Family Fun, Unit 5 Lesson 2** 

Our book for this unit is *My Mexico, Mexico mío*.

A very helpful math strategy we used today was

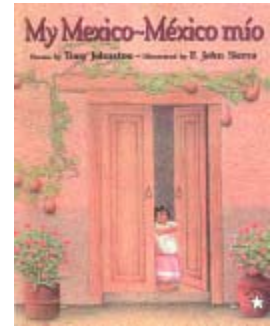
\_\_\_\_\_.

I think it will be very helpful when I \_\_\_\_\_

\_\_\_\_\_

Thank you for helping me learn math!

\_\_\_\_\_



**Family Fun, Unit 5 Lesson 2** 

Nuestro libro para esta unidad es *My Mexico, Mexico mío*.

Una estrategia que aprendimos hoy que me ayudó mucho es....

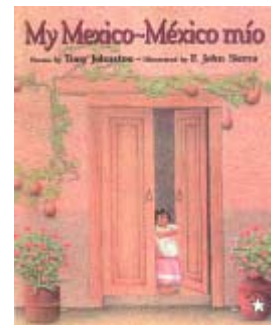
\_\_\_\_\_.

Me será muy útil cuando \_\_\_\_\_

\_\_\_\_\_

¡Gracias por ayudarme con las matemáticas!

\_\_\_\_\_





### Materials

- Unknown Quantity Cards
- 50 base ten units
- **BLM CGI Problems Unit 5** – teacher only
- **BLM How long? How many fewer?**
- **OPTIONAL BLM** weaving Samples (graph)

### Math Objectives

- Solve math word problems.
- Measure to compare.
- Represent whole numbers in a variety of ways.
- Solve addition and subtraction problems where unknowns may be any one of the terms in the problem.

### **Balanced Literacy Language Objectives**

- Listen, read and write to understand problems and explain solution strategies.

### TEKS

Lessons 1, 2, 3

- 1<sup>st</sup> – 1.3BCF; 1.5DF. 1.6GH
- 2<sup>nd</sup> – 2.3A, 2.4BC; 2.7C

### ELPS (English Language Proficiency Standard)

1A, 1F, 2B, 2E, 3A, 3B, 3C, 4C

### CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR I.A.1., I.C.1., I.C.2., II.A.2., II.C.1.  
ELA II.A.2., II.A.3., II.B.1., III.A.2  
MATH I.A.1., I.B.1., IV.A.1., V.A.1., VI.C.2., VIII.A.2.

### Assessment Items

(As a result of experiencing this unit, students will be learning skills necessary to be successful on the following assessment items.)

1<sup>st</sup> - 1, 2, 3, 4, 5, 6, 7, 8

2<sup>nd</sup> - 1, 2, 3, 4, 5, 6, 7

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Daily Routine



*The following daily activities will help prepare your students for the Post-assessment. They are essential and are not optional.*

---

### ESSENTIAL

- **Target Number** (*fundamental number sense for all items*)
  - Lesson 1 – 10
  - Lesson 2 – 30
  - **Lesson 3 – 60**
- **CGI Problem\***
  - Lesson 1 – Compare, Difference Unknown (1<sup>st</sup> item 5, 2<sup>nd</sup> item 6)
  - Lesson 2 – Join, Change Unknown (2<sup>nd</sup> item 5)
  - **Lesson 3 – Part Whole. Whole Unknown (1<sup>st</sup> item 3ab)**
- **What’s Missing** (1<sup>st</sup> and 2<sup>nd</sup> item 2 – both are subtraction)
  - Be sure that you are asking students after each card how they found the answer. Allow all volunteers time to explain their strategy. Has anyone used Fact Families? How would using Fact Families help?
- **Measurement** (1<sup>st</sup> item 5, 2<sup>nd</sup> item 6)\*\*
  - Lesson 1 – How far did he travel?
    - BLM – How far did he travel?
  - Lesson 2 – How long? How many fewer?
    - BLM – How long? How many fewer?
  - **Lesson 3 – How long? How many fewer?**
    - **BLM – How long? How many fewer?**

*\*Students must be able to show a reasonable strategy in solving the CGI problems, and should be able to verbally explain their thinking. A reasonable strategy might be different from one that you considered; however, if the students can explain how it works, and it does work, the strategy is reasonable.*

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Daily Routine - continued

**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

#### Azulito's Corner Unit 5 Lesson 3 What's Missing

Tell us how you could use fact families to solve today's What's Missing problems.

- **Solve It!** Program which teaches students how to recognize and solve multi-step word problems. Follow the guidelines in Solve It! Overview to facilitation Lessons 1, 2, and 3.
- **Calendar** – Continue activity
- **Straws** – Continue activity
- **Pennies** – Continue activity
- **Graphing** – there is a BLM with pictures for each graph
  - Lesson 1 – What flavor Popsicle would you like to eat? *(Select four flavors that are popular with your students. Color four of the Popsicle graph pictures. Students then color their graph pictures to match their choices. If possible, have flavors available to eat later in the day. However, this is NOT snack fraction.)*
  - Lesson 2 – How do you like your corn? *(on the cob, in a tortilla, in soup)*
  - **Lesson 3 – Which weaving would you choose?**

#### Graph QUESTIONS

- First, ask students to give you their observations about the graph.
- Which response seems to be the most popular?
- How many more \_\_\_\_ than \_\_\_\_?
- How many FEWER \_\_\_\_ than \_\_\_\_?
- How many chose \_\_\_\_ and \_\_\_\_?
- Which response seems the least popular?
- Why did you select the graph choice you selected?

**(Assessment Item 1<sup>st</sup> grade, item #8 and 2<sup>nd</sup> grade, item #7 will be reviewed daily in Snack Fractions.)**

**Money Matters** *(If you have a full program and wish to use this optional activity, you will find BLMs and Explanations on MAS Space.)*

**Vocabulary Building** – Choose an activity listed in the Daily Routine section.



### Solve It! Problems Unit 5, Lesson 3

Pairs 


Solve your own problem today, showing your work. Verify your partner's problem solution when you both finish your own. Discuss your work.

**Partner 1 Problem**      Name \_\_\_\_\_ Date \_\_\_\_\_

- Today was bread baking day for Mrs. Gomez. She baked a dozen loaves each of white and wheat bread. She sold a total of 18 loaves. How many loaves did she not sell?

<b>Problem Solution</b> Name:	<b>Problem Verification</b> Name:

### Solve It! Problems Unit 5, Lesson 3

Pairs 

Solve your own problem today, showing your work. Verify your partner's problem solution when you both finish your own. Discuss your work.

**Partner 2 Problem**      Name \_\_\_\_\_ Date \_\_\_\_\_

- Mrs. Gomez did not bake on Monday. She went to the store. She bought 4 pounds of butter for \$2 a pound and 5 bags of sugar for \$1 a bag. What did she spend on butter and sugar at the store?

<b>Problem Solution</b> Name:	<b>Problem Verification</b> Name:

### Solve It! Problems Unit 5, Lesson 3

Pairs 


Hoy, resuelve tu propio problema, mostrando el procedimiento. Verifica la solución de tu compañero cuando ambos terminen de hacerlo por sí mismos. Hablen sobre su trabajo.

**Partner 1 Problem**      **Name** \_\_\_\_\_ **Date** \_\_\_\_\_

- Hoy era un día de horneado de pan para la Sra. Gómez. Horneó una docena de hogazas de pan blanco y una docena de pan integral. Vendió un total de 18 hogazas. ¿Cuántas hogazas no vendió?

<b>Solución del problema</b> Nombre:	<b>Verificación del problema</b> Nombre:

### Solve It! Problems Unit 5, Lesson 3

Pairs 


Hoy, resuelve tu propio problema, mostrando el procedimiento. Verifica la solución de tu compañero cuando ambos terminen de hacerlo por sí mismos. Hablen sobre su trabajo.

#### Problema del compañero 2

Nombre \_\_\_\_\_

- El lunes, la Sra. Gómez no horneó. Fue a la tienda. Compró 4 libras de manteca a \$2 y 5 bolsas de azúcar a \$1 por bolsa. ¿Cuánto gastó en manteca y azúcar en la tienda?

<b>Solución del problema</b> Nombre:	<b>Verificación del problema</b> Nombre:

**BLM Daily Routines, MEASUREMENT Unit 5, L3 How long? How many fewer?**   
One per student



Maria made this ribbon weaving.

How long is the weaving?


The weaving is \_\_\_\_\_ base ten blocks long.

How wide is the weaving?

The weaving is \_\_\_\_\_ base ten blocks wide.

How many fewer blocks wide is the weaving than it is long? Show your work.

The weaving is \_\_\_\_\_ fewer blocks wide than long.

**BLM Daily Routines, MEASUREMENT Unit 5, L3 How long? How many fewer?**   
One per student



María hizo esta cinta  
tejiendo.

¿Qué tan largo es el tejido?


El tejido es de \_\_\_\_\_  
bloques base diez de largo.

¿Qué tan ancho es el tejido?

El tejido es de \_\_\_\_\_ base  
diez

¿Cuántos bloques menos de ancho es el tejido que de largo? Muestra tu  
procedimiento.

El tejido es de \_\_\_\_\_ bloques menos de ancho que de largo.

BLM Daily Routines, MEASUREMENT Unit 5, L3 How long? How many fewer? **KEY** 



Maria made this ribbon weaving.

How long is the weaving?

The weaving is   15   base ten blocks long.

How wide is the weaving?

The weaving is   12   base ten blocks wide.

How many fewer blocks wide is the weaving than it is long? Show your work.

The weaving is   3   fewer blocks wide than long.

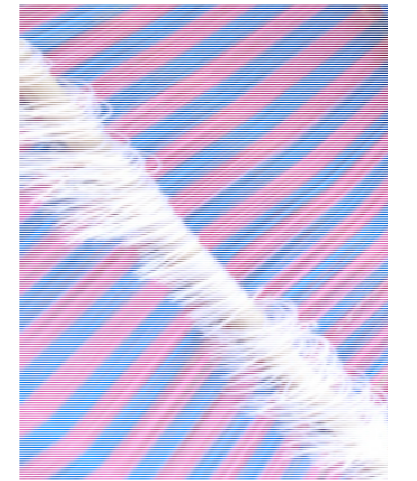
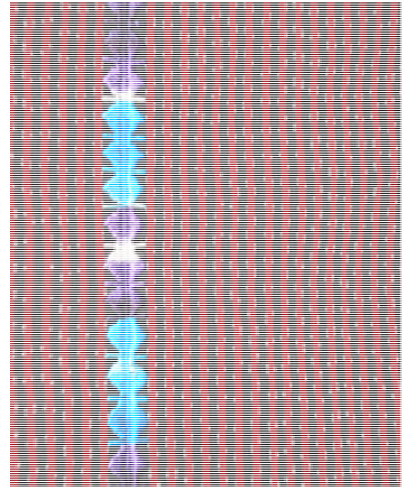
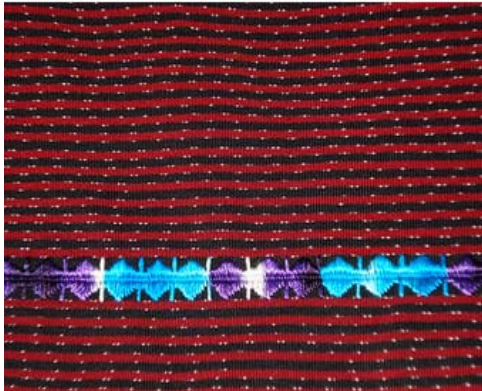
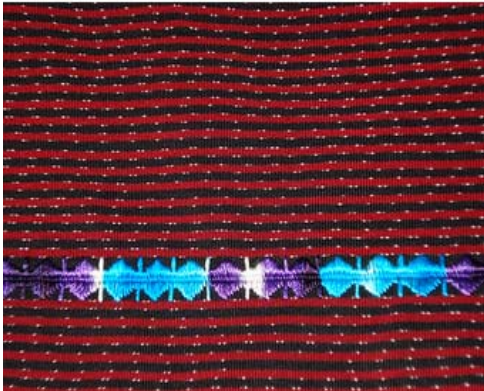




**BLM Daily Routings, GRAPH Unit 5, Lesson 3**

**Weaving Samples** 

(Duplicate so that the graph has one of each, and each student may select their favorite from the group.)





## Literature Selection

*My Mexico – Mexico mio*  
by Tony Johnston,  
“I Saw a Woman Weaving”

### Materials

#### Language Materials

- BLM Word Cards
- Projected image of poem *I Saw a Woman Weaving*, or written on chart paper
- Place to create T-Chart (board, chart paper)
- Place to write class poem (board, chart paper)
- Paper and art supplies for illustrations

#### Materials for TM Lesson

- <http://www.dickblick.com/lessons/plans/paperweaving/> - Directions for weaving project
- Teacher-made sample of the project
- 9 x 12 sheets construction paper – 2 sheets, different colors per student\*
- \*TEACHERS will probably want to pre-cut the materials as per the web directions to save time and materials.
- Base ten units – 50 per student
- Glue – 1 per student
- **Ruler – not needed if teacher precuts**
- **Scissors – not needed if teacher precuts supplies**

### Literature Vocabulary

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

### Math Vocabulary

#### Repeated Vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson



Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.

#### Math Objectives:

- Model 2-digit subtraction with base ten materials and connect the models to the algorithm.
- Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

#### Reading Objectives:

- Identify key details in a poem.
- Identify similes in a poem.

#### Language Objectives:

- Use vocabulary to talk about poems.
- Use similes to add description to a class poem.

### BEFORE READING

#### Practice and Application, Literature and Vocabulary

To help students review the vocabulary words they have been working with this week, give them the following sentence stems, and have them fill in the missing vocabulary words. For some of the words, there are follow up questions to help students use the vocabulary word as part of their oral language.

- *My Mexico – México Mío* is a book of \_\_\_\_\_. (poetry)
  - Ask, “Do you like **poetry**? Why or why not? Talk with your partner.”
- As a class we wrote a \_\_\_\_\_ yesterday. (poem)
  - Ask, “Which **poem** is your favorite so far? You can choose one of the poems we wrote together if you want! Talk with your partner.”
- Seeing and hearing are two of our \_\_\_\_\_. (senses)
- The flowers are arranged in a beautiful \_\_\_\_\_. (bouquet)

### DURING READING

#### Comprehensible Input, Literature and Vocabulary

#### Read Aloud: *I Saw a Woman Weaving*

The focus today will be to continue to be on **Author’s Craft: identifying words or phrases that appeal to the senses (*sight, sound*), identifying the similes used in the poem to cause the descriptions to come to life.** What words does the author use to give us a picture of what the weaving woman looks like? Sounds like?

**ELPS** (*English Language Proficiency Standard*)  
1C, 2E, 2F, 3F, 3I, 4C, 4J

**CCRS** (*College and Career Readiness Standards*)  
CROSS-CURRICULAR I.A.1.,  
II.A.7., II.A.8  
ELA II.A.1., II.A.3., II.A.6.,  
II.A.7., II.B.1., II.C.2., II.D.1.

**Listening Center Connection:**

After the read aloud, have students listen to the recorded version of *I Saw a Woman Weaving*, in a Listening Center as part of their independent reading time.

If you have any Spanish-speaking students, they can also listen to the Spanish version of the poem.

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

**Note:** If your students are Spanish-speaking, you may want to read the poem first in Spanish before reading it in English. If you don't speak Spanish, you can play the recorded version of the Spanish poem for students to listen to. This will build their understanding of the poem, and improve their comprehension of the English version.

**Read aloud the poem.**

- Point to specific parts of the illustration to provide visual support for different words:
  - weaving
  - ahuehuete tree
  - loom
  - plaza

*There are two words in italics included in the poem. Be sure to use the glossary at the back of the book and describe the meaning of the words to the students.*

- **Teacher Question:** Can you make the sound of clucking hens? *Have students imitate this. Model if needed what this sounds like. Do you think the women talking really sounded like clucking hens?*

**Read aloud the poem again.**

This time, have the poem somewhere students can all see (*projected on a screen, or written on chart paper*).

- As you read aloud the poem, track the text using a pointer. Read at a natural pace that allows students to follow along with their eyes as you read.
- **Teacher Think Aloud: Author's Craft** – What I love about this poem is the way the author describes what he sees and hears in the plaza.
  - The author uses similes to compare something he sees or hears to something else. A simile uses the words “like” or “as” in the comparison. If I said that you are **as** quiet **as** a mouse, I would be using a simile to describe how quiet you are.
- **Teacher Question: Author's Craft** – Look at the poem. Let's see if we can find the similes the author used. He uses a simile to describe the way her loom was wrapped around the tree. Can you find the words that describe what that looked like? Talk with your partner. *After partners discuss, regroup the class and have volunteers come up to the text to point out the words/phrases:*
  - like an arm around a friend

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

- **Teacher Question: Author’s Craft** – Let’s see if we can find another simile the author used. He uses a simile to describe the sounds of the women talking. Can you find the words that describe what that sounded like? Talk with your partner. *After partners discuss, regroup the class and have volunteers come up to the text to point out the words/phrases:*
  - warm as hens clucking in the sun

#### Writing Workshop Connection

Writing this class poem will help students create their own poem following the same structure during Writing Workshop.

When people write poems, they try to use words so you can use your senses to imagine what it looks like, sounds like – maybe even what it smells like, feels like, or tastes like.

Then people write poems they also use similes to add descriptive details to their writing. Using descriptive writing, like similes helps the reader to visualize what the author was saying.

Say, “When we write another poem together as a class today, we will try to use words that use some of the senses: words that say what something *looks like* and what it *sounds like*. We are also going to use similes to compare the sights and sounds to something else.”

#### AFTER READING

##### Practice and Application, Literature and Vocabulary

##### Shared Writing – Class Poem

Today students will write a third poem about the community they all *currently* live in. Students will again illustrate the poem, and it will be added to the class book of poetry about the area you all live in right now.

Today, you will create a class poem following a similar structure as, *I Saw a Woman Weaving*:

**I saw** \_\_\_\_\_.

*(The body of the poem will describe what you saw. Be sure to use words that will appeal to the reader’s senses. Uses similes to help the reader visualize what you are seeing, hearing, touching, etc.)*

**I saw** \_\_\_\_\_.



## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

1. Have students think about a place they often see in your area. It should be a familiar sight for all students – something typical of the area where students currently live.
2. Decide on one of these locations/topics for your class poem (*examples: grocery store, market, lake, playground, flea market, etc.*). Have students list words to describe what that thing looks like and sounds like:

Location/Topic	
 Looks like	 Sounds like

3. Following the poem structure, have students help you write each line of the poem using the chosen topic. For the “I saw...” poem, you can have as many or as few lines as you’d like.
  - a. For each line, students brainstorm what to write. You may need to help students with this.
  - b. Combine students’ ideas for each line, and write it down.

**Note:** This is Shared Writing – students help come up with the content of what to write, but the teacher is the one physically writing it down.

*Another option would be to use an alternate structure, one which each line describes the chosen topic through one of the senses:*

*What the location/topic looks like.*

*What the location/topic sounds like.*

*What the location/topic tastes like.*

*What the location/topic smells like.*

*Maybe, how you feel when you are there.*

4. Once the poem is complete, give students a small piece of paper/cardstock where they can create an illustration for the poem.

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



5. Later, you will affix all of their illustrations on a separate page (*or on several pages, depending on the size of the illustrations and how many students you have*). Type the poem so it looks “professional.” This is the final “published” class poem, with accompanying illustrations, for your class book of poetry. Combine all three poems and illustrations together, and create a cover for the class book of poetry. Title it, “My \_\_\_\_\_” using the name of your town/city.

**Math Objectives:**

- Model 2-digit subtraction with base ten materials and connect the models to the algorithm.
- Subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.

**Materials for TM Lesson**

- <http://www.dickblick.com/lessonplans/paperweaving/> - Directions for weaving project
- Teacher-made sample of the project
- 9 x 12 sheets construction paper – 2 sheets, different colors per student\*
- \*TEACHERS will probably want to cut the materials ahead of time as per the web directions.
- Base ten units – 50 per student
- Glue – 1 per student
- Ruler – not needed if teacher precuts
- Scissors – not needed if teacher precuts supplies

**Math Vocabulary****Repeated Vocabulary**

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

 **Technology:**

<http://www.ixl.com/math/grade-1/comparison-word-problems>

Free online game for comparison problems.

**ELPS** (*English Language Proficiency Standard*)

2C, 2G, 3A, 3D, 3F, 3I

**CCRS** (*College and Career Readiness Standards*)

CROSS-CURRICULAR I.A.1., I.C.2., II.A.2., II.A.4.  
MATH I.B.1., II.A.1., IV.A.1.

**Unit 5, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math****Building Background, Math**

You have been working very hard this unit to solve problems and review our summer skills. Today, we are going to create something different – paper woven mats. (*Show the sample you made, and then follow the directions from the link to guide students in creating their own. This will take much less time and frustration if the Classroom teacher will prepare the construction paper ahead of time for each student.*)

When everyone has finished their mats, and the edges have been glued down, have students use the base ten blocks to measure the length and width of their weaving (*length about 30 units; width about 23 units.*)

*Verbally ask:*


- How long is your mat? (*about 30 units*)
- How wide is your mat? (*about 23 units*)
- Can you use number sense to tell me how many fewer blocks you used to measure the width than the length? (*Students could count up; but maybe someone will look for compatible numbers and see that you need a three add seven to equal 10; otherwise, have students solve with regrouping subtraction.*)


**Objectives:** Read the math and language objectives and have students explain how they learned them.

**Distribute TV Lesson Materials**

- <https://www.google.com/search?q=ahuehuete+trees&client=firefox-a&hs=zUK&rls=org.mozilla:en-US:official&channel=sb&tbm=isch&tbo=u&source=univ&sa=X&ei=kpYGU5biG4ex2AXbqoCoBw&ved=0CEAQsAQ&biw=967&bih=425> – pictures of Montezuma Cypress (ahuehuete trees)
- **BLM** – Weaving – 1 per student
- **BLM** - Weaving **KEY** – teacher only



<p><b>Literature Vocabulary</b> poem poetry line bouquet phrase senses simile</p> <p><b>Math Vocabulary</b> <b>Repeated Vocabulary</b> regrouping exchanging trading comparing more than less than fewer than</p> <p><b>TV Materials:</b></p> <ul style="list-style-type: none"> <li>• Sample of a paper weaving that Azulito can display (<i>see TM lesson for directional link</i>) – TV Teacher only</li> <li>• <a href="https://www.google.com/search?q=ahuehuete+trees&amp;client=firefox-a&amp;hs=zUK&amp;rls=org.mozilla:en-US:official&amp;channel=sb&amp;tbn=isch&amp;tbo=u&amp;source=univ&amp;sa=X&amp;ei=kpYGU5biG4ex2AXbqoCoBw&amp;ved=0CEAQsAQ&amp;biw=967&amp;bih=425">https://www.google.com/search?q=ahuehuete+trees&amp;client=firefox-a&amp;hs=zUK&amp;rls=org.mozilla:en-US:official&amp;channel=sb&amp;tbn=isch&amp;tbo=u&amp;source=univ&amp;sa=X&amp;ei=kpYGU5biG4ex2AXbqoCoBw&amp;ved=0CEAQsAQ&amp;biw=967&amp;bih=425</a></li> <li>• <b>BLM</b> – Weaving – 1 per student</li> <li>• <b>BLM</b> - Weaving <b>KEY</b> – teacher only</li> </ul> <p><b>ELPS</b> (<i>English Language Proficiency Standard</i>) 2B, 2C, 2E, 3C, 4F</p> <p><b>CCRS</b> (<i>College and Career Readiness Standards</i>) CROSS-CURRICULAR I.A.1., I.C.2, I.D.3, II.A.1., II.A.2. ELA II.A.1., II.A.3., II.A.6., II.B.1., III.B.2., III.B.3. MATH I.A.1., I.B.1., II.A.1., V.A.1., VIII.A.1., VIII.C.1</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b> </p> <p><b>Unit 5, Lesson 3</b> <b>TV Lesson</b></p> <p><i>Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.</i></p> <p><b>Math Objectives:</b></p> <ul style="list-style-type: none"> <li>• Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.</li> </ul> <p><b>Language Objectives:</b></p> <ul style="list-style-type: none"> <li>• Use the math vocabulary during the activity.</li> <li>• Discuss solution strategies.</li> <li>• Explain how to regroup in addition and subtraction.</li> </ul> <p><b>Building Background, Math</b> <b>TEACHER:</b> You know, Azulito, the girls and boys did paper weaving today in their Transition to Math lesson.</p> <p><b>AZULITO:</b> I know! I hope they will share their projects online with us. Boys and girls, you could upload pictures of your finished weavings. We would love to see them! Here is my paper weaving. I had fun making it!</p> <p><b>TEACHER:</b> Very nice, Azulito. And yes we would like to see the boys’ and girls’ projects! Weaving is an art. Look at the clothing you are wearing – your fabric is either woven, or it is knitted. Today’s process is much, much faster, but it still uses the same over and under motion we used to make our paper weavings!</p> <p><b>AZULITO:</b> There was something I didn’t understand in the poem about the woman weaving. What is an ahuehuete tree?</p> <p><b>TEACHER:</b> I wondered that, too, Azulito, so I looked it up. Here are pictures of several ahuehuete trees. They are Montezuma Cypress trees that grow very big around. (<i>Show pictures from the link.</i>)</p> <p>And when we look at our problem sheet for today, we will see a picture of a woman weaving with her loom attached to an ahuehuete tree. Let’s take a look.</p> <p><b>Comprehensible Input</b> You have a copy of these problems, so let’s read them together. I will read through a problem the first time with you so you can see the Math Movie in your mind. Then I will read the problem a second time for you to solve. We will talk about the problem after you have solved it.</p>
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<p><b>CLASSROOM TEACHERS</b> Please be sure that students are solving the problems. You will want to circulate the room to see how many still need help with this type of problem before the post-assessment next unit.</p> <p><b>Azulito's Corner</b> <b>Unit 5 Lesson 3</b> <b>What's Missing</b> Tell us how you could use fact families to solve today's What's Missing problems.</p>	<p><b>Unit 5, Lesson 2</b> <span style="float: right;">1<sup>st</sup> – 2<sup>nd</sup></span> <b>TV Lesson</b> - continued </p> <p><b>AZULITO:</b> <i>(after a generous pause – there are possible strategies for patterns on the key).</i></p> <ul style="list-style-type: none"> <li>• Describe the math movie.</li> <li>• Draw base ten block, explaining process as you go.</li> <li>• Solve with the traditional algorithm, explaining as you go.</li> </ul> <p><b>TEACHER:</b> Repeat the process with the next two problems.</p> <p><b>TEACHER:</b> We accomplished three problems today! Good job, boys and girls. Thank you Azulito for your great strategies! And girls and boys, please be sure to talk about your strategies during the Follow-up Lesson.</p> <p><b>AZULITO:</b> That was really cool! You know, we could hear that many of the boys and girls had different strategies for solving those problems. I was wondering how they solved the CGI problem during Daily Routines today. Please go on MAS Space and share some of your posters from your CGI today. We'd like to see your strategies!</p> <p><b>TEACHER:</b> Great task! It will be interesting to see all of the different strategies. And seeing their posters will be a lot of fun!</p> <p>And now, let's see what we accomplished today during our lesson.</p> <p><b>Objectives:</b> And now before we go, let's review what we have learned today! <i>(do so)</i></p>
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**BLM Unit 5, TV Lesson 3**

One sheet per student

**Weaving** 



To make this pattern, the woman weaving needed 35 yards of red yarn and 17 yards of black yarn. How many fewer yards of black yarn did she need? Show your work.

The woman weaving measured her yarns. She had 27 yards of yellow yarn, but she needed 50 yards of yellow yarn. How many more yards of yellow yarn does she need? Show your work.

The woman weaving had 35 yards of purple yarn and 27 yards of blue yarn. How many yards of purple and blue yarn did she have? Show your work.

**BLM Unit 5, TV Lesson 3**

One sheet per student

Weaving 



Para hacer este patrón, la mujer que tejía necesitaba 35 yardas de hilo rojo y 17 yardas de hilo negro. ¿Cuántas yardas menos de hilo negro necesitaba? Muestra tu procedimiento.

La mujer que tejía midió sus hilos. Tenía 27 yardas de hilo amarillo, pero necesitaba 50 yardas de hilo amarillo. ¿Cuántas yardas más de hilo amarillo necesita? Muestra tu procedimiento.

La mujer que tejía tenía 35 yardas de hilo púrpura y 27 yardas de hilo azul. ¿Cuántas yardas de hilo púrpura y azul tenía? Muestra tu procedimiento.

BLM Unit 5, TV Lesson 3  
One sheet per student

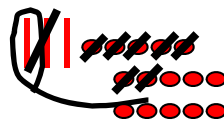
Weaving **KEY** 



To make this pattern, the woman weaving needed 35 yards of red yarn and 17 yards of black yarn. How many fewer yards of black yarn did she need? Show your work.

**Math Movie:** I see that in the story she is comparing how much red yard she has to how much black yarn she has. There are several ways to solve this problem. I'm just going to use subtraction because I know I can find the difference that way.

One way is to draw base ten. Another is to use the Number sentence.



1 ten 8 ones = 18

$$\begin{array}{r} 215 \\ 35 \\ -17 \\ \hline 18 \end{array}$$

*Students could also use a comparison model with the blocks – we just haven't used that model, but Classroom teachers should know this is a viable model.*

The woman weaving measured her yarns. She had 27 yards of yellow yarn, but she needed 50 yards of yellow yarn. How many more yards of yellow yarn does she need? Show your work.

**MATH MOVIE:** This time I see how much she needs which is 50 yards. She doesn't have enough. She only has 27. This is like  $27 + ? = 50$ . I know these are related facts, like fact families. So I can take the 50 and subtract the 27 to find the amount she still needs



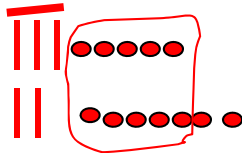
2 tens 3 ones = 23

$$\begin{array}{r} 410 \\ 50 \\ -27 \\ \hline 23 \end{array}$$

*During explanation, be sure to mention compatible numbers – 7 and 3 make 10.*

The woman weaving had 35 yards of purple yarn and 27 yards of blue yarn. How many yards of purple and blue yarn did she have? Show your work.

**MATH MOVIE:** This one is easy. She has 35 yards and 27 yards. I need to combine them to find the total number of yards.



6 tens 2 ones = 62

$$\begin{array}{r} 1 \\ 35 \\ +27 \\ \hline 62 \end{array}$$

**5 add 7 = 12. That's 2 ones and 1 ten. I regroup that 1 ten into the tens place. 1 add 3 add 2 = 6 tens. 62 is the answer.**



## Literature Vocabulary

poem  
poetry  
line  
bouquet  
phrase  
senses  
simile

## Math Vocabulary

### All reviewed vocabulary

regrouping  
exchanging  
trading  
comparing  
more than  
less than  
fewer than

### Follow-Up Materials:

- Solution strategies from TV Lesson
- Family Fun Game materials
- Family Fun Game Board
- Family Fun Movement Cards
- 20 counters
- Games Markers
- **BLM** Family Fun Problem Cards, Unit 2
- **BLM** Special Instructions
- **BLM** All-School Answer Key

### ELPS (English Language Proficiency Standard)

1C, 1F, 2G, 3D, 3I, 4A, 4B, 5A, 5B

### CCRS (College and Career Readiness Standards)

CROSS-CURRICULAR I.A.1., I.C.2., II.A.2., II.B.1., II.B.2.  
ELA I.A.1., I.A.2., II.A.1., II.A.3., II.B.1., III.B.1.  
MATH I.B.1., I.C.1., II.A.1., VIII.A.1., VIII.A.3.

### Technology

<http://www.roomrecess.com/pages/BlockBuster.html>

Fast moving game to find fact families.

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up



### Math Objectives:

- Practice previously learned skills. Solve one-step and multi-step word problems involving addition and subtraction within 1000 using a variety of strategies based on place value, including algorithms.

### Language Objectives:

- Listen and speak with a partner during our math activity.
- Explain how the base ten models relate to the number representation.
- Use the math vocabulary during the activity.
- Share-write math journal response.

### Practice and Application, Math

Ask students to share their strategies from the TV Lesson problems.

- *Pay particular attention to how students solve the problem: base ten blocks; drawn models; number sentences. Your 1<sup>st</sup> grade students will not be assessed on double digit operations, so base ten blocks are expected. 2<sup>nd</sup> grade students will be expected to show a strategy on their assessment. The algorithm would be preferred; however, any written strategy is acceptable.*

*Family Fun Game – read through every card with the students, asking them to discuss the math movie, and strategies they would use to solve the problems.*

*Play the game if you have time. The problems in this final Family Fun Game may need to be read.*

### Math Journal Writing

Daily students will use the day's vocabulary to Write or Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.



**Explain how you would solve 20 – 8.**

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.







## Generic Family Fun Game Board

### Materials Generic to All Units:

- Game Markers
- Game Cards for your Level
- Answer Key for your Level
- Game Movement Cards (white)
- Unit-specific Materials List

### Playing the Game

1. Begin in one of the corner shapes. There may be more than 1 player in each starting shape. Remember where you started.
2. On your turn, draw one of your level game cards and work the problem.
3. One of the other players uses the Answer Key to check your answer. If correct, draw a movement card and move the given places
  - Forward movement in a clockwise direction.
  - Backward movement in a counter clockwise direction.If incorrect, do not move.
4. Game is over when the first person runs the entire track, ending back on the starting shape.



<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 1 space</b>	<b>Move forward 1 space</b>	<b>Move forward 1 space</b>
<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 2 spaces</b>
<b>Move back 1 space</b>	<b>Move back 1 space</b>	<b>Move back 1 space</b>
<b>Move forward 3 spaces</b>	<b>Move forward 2 spaces</b>	<b>Move forward 3 spaces</b>

Units 1 – 2 – 3 -- FAMILY FUN

One per student for home

One per partner pair in class



Print on white paper.

Family Fun – Movement Cards

<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza un espacio</b>	<b>Avanza un espacio</b>	<b>Avanza un espacio</b>
<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>	<b>Avanza 2 espacios</b>
<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>	<b>Retrocede 1 espacio</b>
<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>	<b>Avanza 3 espacios</b>

**BLM Unit 5, Follow-up Lesson 3**

**Family Fun Game Cards** 

Printed in **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**All cards are review cards this unit.**

**A.** Solve using any strategy.

$$\begin{array}{r} 42 \\ -19 \\ \hline \end{array}$$

**B.** Solve using any strategy.

$$\begin{array}{r} 60 \\ -21 \\ \hline \end{array}$$

**C.** Solve using any strategy.

$$\begin{array}{r} 82 \\ -12 \\ \hline \end{array}$$

**D.** Jesse shucked 18 ears of corn. His brother Juan shucked 19 ears of corn. How many ears of corn did they shuck together?

**E.** Marie ran 25 blocks through the streets of the colorful houses. She ran 19 blocks more than her little sister, Ann. How many blocks did Ann run?

**F.** Able rode his bicycle 35 blocks through the colorful streets. He rode 18 blocks fewer than his older brother Elias. How many blocks did Elias ride?

**G.** The woman weaving had 19 yards of red yarn. She needed 40 yards of red yarn. How many more yards of red yard does she need?

**H.** The woman weaving had 27 yards of yellow yarn and 39 yards of green yarn. How many yards of yarn did she have?

**I.** You are fair sharing with yourself and 7 friends. What will be the fractional portion of your share?

**BLM Unit 5, Follow-up Lesson 3****Family Fun Game Cards** 

Printed in **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**All cards are review cards this unit.**

**A.** Resuelve usando cualquier estrategia.

$$\begin{array}{r} 42 \\ -19 \\ \hline \end{array}$$

**B.** Resuelve usando cualquier estrategia.

$$\begin{array}{r} 60 \\ -21 \\ \hline \end{array}$$

**C** Resuelve usando cualquier estrategia.

$$\begin{array}{r} 82 \\ -12 \\ \hline \end{array}$$

**D.** Jesse peló 18 mazorcas de maíz. Su hermano Juan peló 19 mazorcas de maíz. ¿Cuántas mazorcas de maíz pelaron juntos?

**E.** Marie corrió 25 manzanas a través de las calles de las casas coloridas. Corrió 19 manzanas más que su pequeña hermana, Ann. ¿Cuántas manzanas corrió Ann?

**F.** Able anduvo 35 cuadras en bicicleta a lo largo de las calles coloridas. Anduvo 18 manzanas menos que su hermano mayor Elías. ¿Cuántas manzanas anduvo Elías?

**G.** La mujer que tejía tenía 19 yardas de hilo rojo. Necesitaba 40 yardas de hilo rojo. ¿Cuántas yardas más de hilo rojo necesita?

**H.** La mujer que tejía tenía 27 yardas de hilo amarillo y 39 yardas de hilo verde. ¿Cuántas yardas de hilo tenía?

**I.** Estás compartiendo de manera justa para ti y 7 amigos. ¿Cuál será la porción fraccional de lo que compartes?

**BLM Unit 5, Follow-up Lesson 3****Family Fun Game Cards**

Printed in **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.** You are fair sharing this cake with yourself and 7 friends. Draw how you would share.



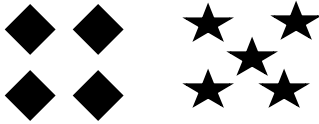
**K.** Is this rectangle cut into halves? How do you know?



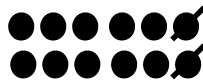
**L**

$$15 - \square = 7$$

**M.**  
Write a number sentence that matches this picture.



**N.**  
Write a number sentence that matches this picture.



**O.**

There were 19 wild things in the trees. 7 were swinging. The rest were climbing. How many were climbing?

**P.**  
13 wild things danced. 22 wild things swung from the trees. How many fewer wild things danced?

**Q.** Look at this number sentence.

$$7 + 3 + 9 = 19$$

Which numbers are compatible, or make ten?

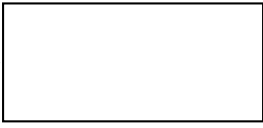
**R.**

Use the following numbers to make a fact family.


9, 5, 14

Printed in **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.** Estás compartiendo este pastel de manera justa para ti y 7 amigos. Dibuja cómo lo compartirías.



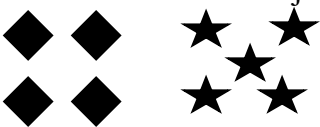
**K.** ¿Este rectángulo está dividido en mitades? ¿Cómo lo sabes?



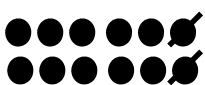
**L**

$$15 - \square = 7$$

**M.** Escribe una oración numérica que coincida con este dibujo.



**N.** Escribe una oración numérica que coincida con este dibujo.



**O.** Había 19 cosas salvajes en los árboles. 7 se estaban columpiando. El resto estaba trepando. ¿Cuántas estaban trepando?

**P.** 13 cosas salvajes bailaron. 22 cosas salvajes se columpiaron de los árboles. ¿Cuántas cosas salvajes menos bailaron?

**Q.** Mira esta oración numérica.

$$7 + 3 + 9 = 19$$

¿Cuáles números son compatibles, o suman diez?

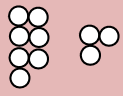
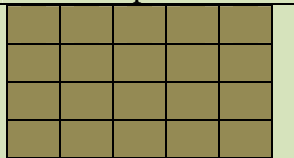

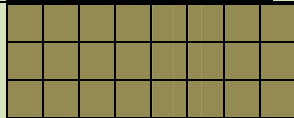
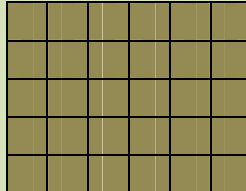


**R.** Usa los números siguientes para formar una familia de hecho

9, 5, 14



BLM All-School Unit 5, Lesson 3

Family Fun Game Answer Key

Problem Letter	Kinder	1-2	3-4	5-6	7-8
A	5 baby ducks	23	10	0.5	3 units
B	9 baby ducks	39	6	$8\frac{1}{8}$	1 unit
C	9 baby ducks	70	48	\$0.01	2 units
D	3 kernels	37	8 cells	1,111,111,110	50%
E	8 kernels	6	6 bees	54.657 grams salt	50%
F	1 crumb	17	40 plants	11.92% chemical B	75%
G	 10	21		\$27.45 tax	20
H		66		\$350 tip	32.5
I	Half OR one of 2 equal pieces OR fair shares. (See Kinder Special Instructions for answer to second part.)	$\frac{1}{8}$		\$90 interest	18
J	Dime	Cut the cake into 8 shares	5.21	\$230 charged	\$5.00 earned
K	Penny	Yes. There are 2 equal pieces	$5 \times 7 = 35$ $7 \times 5 = 35$ $35 \div 7 = 5$ $35 \div 5 = 7$	3 cups cashews	\$6.00 earned
L	Nickel	8	xx xx xx xx xx xx	10% tip	\$16.74 total bill with tip
M	Quarter	$4 + 5 = 9$	Eleven and seven hundredths	False. Scale factor not consistent	\$3.00 tip
N	Top group	$12 - 2 = 10$	 $\frac{2}{4}$  $\frac{4}{8}$	True. Scale factor = $(\div 4)$ or $(\times \frac{1}{4})$	\$11.10 tip
O	Bottom group	12	0.3	120 cotton balls: 1 bag	\$6.97
P	14	9	Line closest to 0	48 babies	\$20.00 retail
Q	9	7, 3	Line in the middle	$\frac{12}{12}$ or 1 whole	\$22.50 sales price
R	15 beans Card 15	$9 + 5 = 14$ $5 + 9 = 14$ $14 - 9 = 5$ $14 - 5 = 9$	Between 0.5 and 0.75, closer to 0.75	$2\frac{7}{15}$	\$9.00 sales price



## Math Objectives

- Use concrete models to represent and name fractional parts of a whole (fourths, eighths).
- Use concrete models to represent and name fractional parts of a set of objects (fourths, eighths).
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Language Objectives

- Explain why each portion is a fourth/eighth.
- Share-write what is a fourth or eighth.
- Use appropriate language to describe part of a set, such as 3 out of 4 crayons are red.

## Vocabulary

fourths  
eighths  
fair shares  
equal pieces

## Materials

- **BLM** Bagel and Cream Cheese Fractions – 1 per student

## Per partners

- 1 large bagel
- 4 T. cream cheese
- 2 paper plates
- 2 paper towels
- 2 plastic knives
- Chart paper with question:  
**How do you know each person would have (one-fourth or one-eighth) of the snack?**

## Unit 5, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



*Children should wash their hands before this activity if using food items.*

### Snack Fractions

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

We are going to share our snack together in halves. How many people will be sharing the snack if we share in halves? (2) How do you know? Halves are two equal pieces of a whole or set.

*(Distribute the snack materials.)*

- What do you see that you are going to share today? (*one bagel and four T. cream cheese*)
- Talk to your partner about how you will share that fairly between you.

*(Give students time to talk about how they will share it. In the meantime, draw several sets of one large circle to represent the bagel and four small circles to represent the cream cheese. When students have discussed in partners, have them explain their plans to the class. Use their descriptions to divide the drawings on the board to show their plans. As a class, decide if the plan will divide the snack into two equal parts, or halves. Ask if anyone shared a different way. When all plans have been discussed and verified, students should share their snack.)*

Today, our record sheet will ask us to look at fourths and eighths. Let’s look at the record sheet. *(Read the top portion to the students. Ask the questions below. Let them divide the circle into the fourths, and write the fractional part each would receive. Then read the second portion. Ask the questions below, and let the students divide that circle into eighths and write the fractional part each would receive.)*

### QUESTIONS:

- How many people will be dividing this large bagel?
- How do you know?
- What fractional part of the bagel will each person receive?
- What does one- (*fourth/eighth*) mean?
- Would you rather have a fourth or an eighth? Why?

**Snack Fraction Writing: BLM Bagel and Cream Cheese Fractions**  
**How do you know each person would have one- (*fourth, then eighths*) of the snack?**

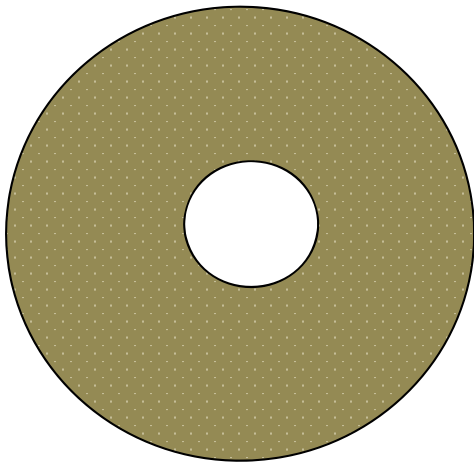
**Objectives:** Review what you learned and how you learned it.





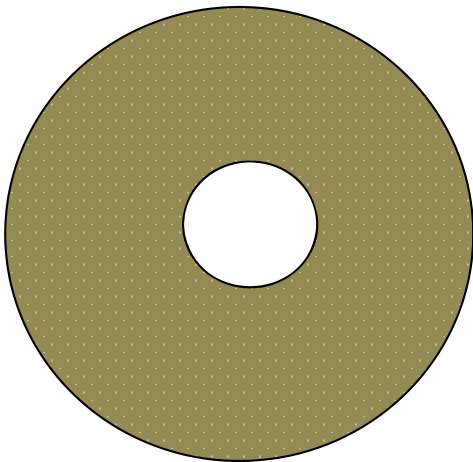
My name is \_\_\_\_\_

Artie and his 3 friends are going to share this bagel.  
Draw how you would divide the bagel so that everyone has an equal share.



What fractional part of the bagel will each person receive?

Beth and her 7 friends are going to share this bagel.  
Draw how you would divide the bagel so that everyone has an equal share

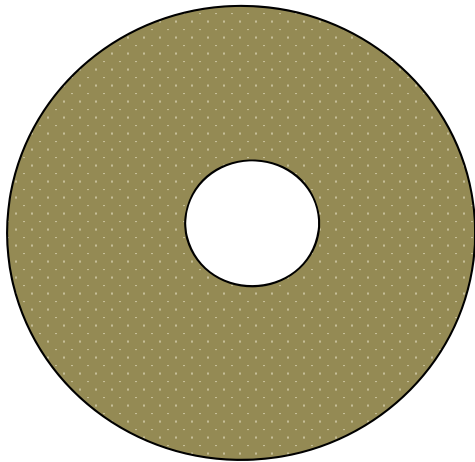


What fractional part of the bagel will each person receive?



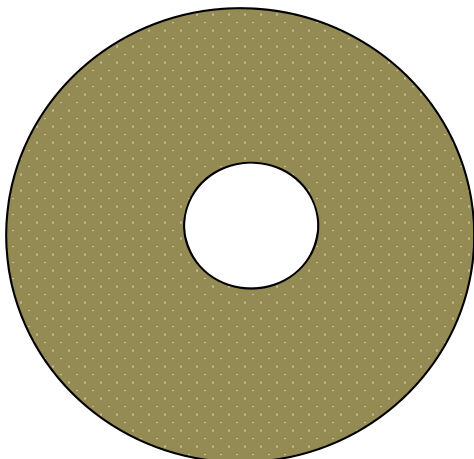
Mi nombre es \_\_\_\_\_

Artie y sus 3 amigos van a compartir este beigel.  
Dibuja como lo dividirías para que todos tengan una porción igual.



¿Qué parte fraccional del  
beigel recibira cada persona?

Beth y sus 7 amigas van a compartir este beigel.  
Dibuja como lo dividirías para que todos tengan una porción igual.



¿Qué parte fraccional del  
beigel recibira cada persona?

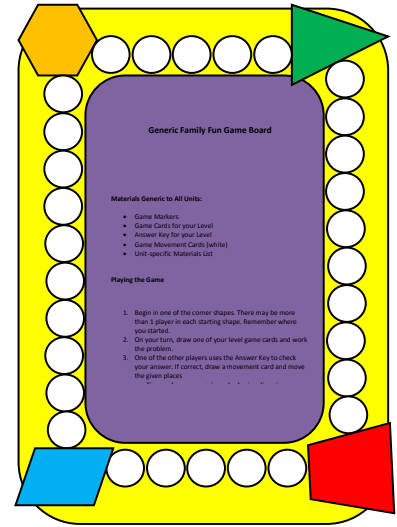
**Unit 5 Lesson 3, Grades 1-2**

**Family Fun Game!**

Dear \_\_\_\_\_,

This is our last Family Fun Game that will come home during this summer session.

We can save all of our cards, though, and play the old games again and again. The more practice we have, the better we'll understand the skills.



One math skill I could still use a little help in doing is \_\_\_\_\_

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We're learning a lot of math!

Thank you for helping me learn!

Sincerely,

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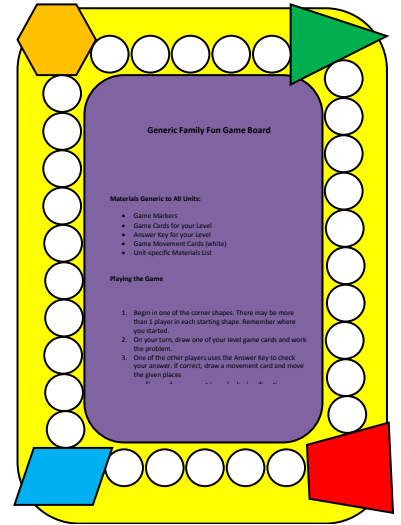
**Unit 5 Lesson 3, Grades 1-2**

**Juego de diversion familiar**

Querido \_\_\_\_\_,

Este el ultimo juego que voy a traer a casa.

Podemos guardas las tarjetas y jugar una y otra vez. Lo mas que practicamos, los mejor vamos a entender estas habilidades.



Una habilidad que necesito practicar es...

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¡Estamos aprendiendo muchas matemáticas!

¡Gracias por ayudarme aprender matemáticas!

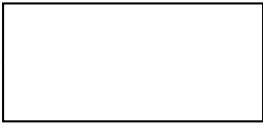
Atentamente,

---




Printed in **Blue** –one set per partners for class; one set per student for home. (There are two pages of cards.)

**J.** Estás compartiendo este pastel de manera justa para ti y 7 amigos. Dibuja cómo lo compartirías.



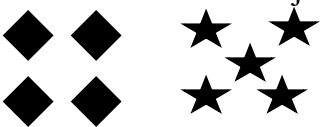
**K.** ¿Este rectángulo está dividido en mitades? ¿Cómo lo sabes?



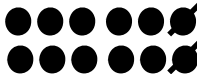
**L**

$$15 - \square = 7$$

**M.**  
Escribe una oración numérica que coincida con este dibujo.



**N.**  
Escribe una oración numérica que coincida con este dibujo.




**O.**  
Había 19 cosas salvajes en los árboles. 7 se estaban columpiando. El resto estaba trepando. ¿Cuántas estaban trepando?

**P.**  
13 cosas salvajes bailaron. 22 cosas salvajes se columpiaron de los árboles. ¿Cuántas cosas salvajes menos bailaron?

**Q.** Mira esta oración numérica.  
 $7 + 3 + 9 = 19$   
¿Cuáles números son compatibles, o suman diez?

**R.**  
Usa los números siguientes para formar una familia de hecho  
9, 5, 14

## **FAMILY FUN Involvement**

1<sup>st</sup> – 2<sup>nd</sup> 

Overview for Unit 5, *My Mexico – Mexico mio*

This overview will provide a one-page view of the suggested Family Fun Activities for this unit, as well as other opportunities provided for Family Involvement.

### **Lesson 1**

- Vocabulary Cards so students can practice language and math vocabulary at home
- Family Fun Unit 5 Lesson 1 Letter with ideas for involving the family in fables night

### **Lesson 2**

- Family Fun Unit 5 Lesson 2 Letter inviting parents to help students add and subtract 2-digit numbers

### **Lesson 3**

- Family Fun Unit 5, Lesson 3 attached to the Family Fun Game supplies

### **Enrichment Suggestions**

- PE Games suggestions
- Create a mural at home depicting colorful houses
- Sample different types of corn

**This portion of the curriculum, although NOT required, should be used as needed to supplement and enrich the Unit’s activities.**

**Family Fun Suggestions:**

- Science Connection and Social Studies – send home one or more of the facts about corn to share at home.
- Health/Physical Ed – send home the Pin the Bee on the Flower Game

**Possible Center Suggestions:**

- Online Math Games
- Art Projects – magnets, thumb prints, coloring activity

**MATH WALK**

Take a poetry walk around your campus to observe and record sensory images – the sights, sounds, smells, textures of nature. Students could be given a special bound book in which to start their journal of observations. For more information, see <http://www.readingrockets.org/article/48491/>.

**Technology Connections**

• **Math Practice**

[http://www.coolmath-games.com/0-math-lines/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29](http://www.coolmath-games.com/0-math-lines/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+blogspot%2FHUFI+%28Higher+Up+and+Further+In%29)

Challenging game for making 10

<http://www.math-play.com/soccer-math-adding-two-digit-whole-numbers/adding-two-digit-numbers.html>

Adding 2-digit numbers

• **Science Connection**

<http://www.examiner.com/article/indian-corn-corn-of-a-different-color>

Facts about Indian corn

• **Social Studies Connection**

<http://www.heritage-history.com/?c=read&author=eggleston&book=adventure&story=corn>

History of Indian corn

• **Health/Physical Ed Connection**

<http://peplus.wordpress.com/category/relay-games/>

Relay games to play, some that require weaving.

• **Art Connection**

Create a mural of colorful painted houses – use the picture, Lesson 1 TV, for model.

<http://www.123child.com/lessonplans/seasonal/fall/thanksgivingcorn.php>

Activities with corn - these are very simple for pre-schoolers, but you can certainly adapt to older children.

<http://www.pinterest.com/lainevan/elementary-art-collage-and-paper-weaving/>

Interesting weaving projects

<http://nativeamericans.mrdonn.org/games.html>

Weave a virtual wampum belt.



<p><b>Math Objectives</b> (TV1) Focus is on 2-digit subtraction w/regrouping</p> <ul style="list-style-type: none"> <li>Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.</li> </ul> <p>(TV2) Focus in on 1<sup>st</sup> grade items 1, 3, 5</p> <ul style="list-style-type: none"> <li>Solve one-step word problems involving addition and subtraction within 100 using a variety of strategies based on place value, including algorithms.</li> </ul>	<p><b>Materials</b> (TV1)</p> <ul style="list-style-type: none"> <li>Copy of the My Mexico, turned to pages 4-5</li> <li>base ten sets – 1 set per student (students may use if they wish) <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units</li> </ul> </li> <li>BLM – Color Houses Stories – 1 per student</li> <li>BLM - Colorful Houses Stories KEY – teacher only</li> </ul> <p>(TV2)</p> <ul style="list-style-type: none"> <li>base ten sets – 1 set per student (students may use if they wish) <ul style="list-style-type: none"> <li>15 longs</li> <li>20 units</li> </ul> </li> <li>BLM – Corn problems – 1 per student</li> <li>BLM - Corn Problems KEY – teacher only</li> </ul> <p><b>Family Fun</b></p> <ul style="list-style-type: none"> <li>BLM Family Fun Game board (already home)</li> <li>BLM Kinder Special Instructions</li> <li>BLM Family Fun Movement Cards (already home)</li> <li>BLM Family Fun Problem Cards (blue)</li> <li>BLM Family Fun Answer Key – all levels</li> <li>BLM Family fun Answer Key Addendum</li> <li>BLM Family Fun Game Number Lines</li> <li>BLM Family Fun Hundreds Chart</li> <li>Money Kits (already home)</li> <li>Base ten sets (1 hundred, 12 longs, 12 units) per student</li> <li>Game markers</li> </ul> <p><b>Snack Fractions – TV Lesson 2</b></p> <ul style="list-style-type: none"> <li>BLM Laughing Cow Cheese Fractions – 1 per student</li> </ul> <p><b>Per partners</b></p> <ul style="list-style-type: none"> <li>3 Laughing Cow cheese wedges</li> <li>2 paper plates</li> <li>2 paper towels</li> <li>Chart paper with question: <b>How do you know each person would have (one fourth or one eighth) of the cheese?</b></li> </ul>
<p><b>Differentiate</b></p> <p>Differentiating comes in your choice of which lesson to teach. You will also want to choose activities in the Daily Routines that teach/review the skills you need for your students to learn/review.</p>	
<p><b>Snack Fraction Notice</b></p> <p>All snack fractions are common throughout the grade bands. All grade bands have daily snack fraction activities provided. All snack fractions for a unit in a specific grade band will practice the same set of skills. Therefore, you may choose from any of the 3 activities. Lesson 1 has been suggested for its ease of delivery.</p>	

## QUESTIONING

As a result of this lesson, your students should be able to respond to the following:

- Explain the process of regrouping, trading, exchanging in addition and subtraction.
- Explain the importance of fact families and compatible numbers.

**Math Vocabulary**

(repeated vocabulary)

regroup, exchange, compare, more than, less than, fewer than

**CGI Problem (select one)**

- Compare, Difference Unknown (2<sup>nd</sup> assessment item 6)
- Join, Change Unknown (2<sup>nd</sup> assessment item 5)
- Separate, Result Unknown (1<sup>st</sup> Item 6; 2<sup>nd</sup> Item 3)

**Journal Writing**

Explain how knowing the fact family can help you solve \_\_\_\_ -9 = 8.

**Family Fun** (A generic game board is being used in all grade levels, differentiated by game cards specific to the grade level.) There is only one type of game this year. All games will have problem cards and an answer key at all levels. Please be sure the 1<sup>st</sup> – 2<sup>nd</sup> grade cards are printed on **blue** cardstock. All of the problems are review problems.

**Snack Fractions** - Lesson 2

The record sheet is very different from previous snack fractions. Except for the theme, it does not apply directly to what they shared. Rather, the students solve fraction problems related to their sharing, but are sharing among four, then eight people. All three lessons practice exactly the same skills. Lesson 1, Laughing Cow Cheese Wedges just seems easier to transport.

**Assessment** – Students will be introduced to and practice skills for items

**1<sup>st</sup>** - 1, 2, 3, 4, 5, 6, 7, 8 (many are practiced in the Daily Routines – items are noted on the DR pages)

**2<sup>nd</sup>** - 1, 2, 3, 4, 5, 6, 7 (many are practiced in the Daily Routines – items are noted on the DR pages)



# 1<sup>st</sup>-2<sup>nd</sup>

# Overview

## Unit 6 My Engineering the ABC's: How Engineers Shape Our World

This is a quick snapshot of the three math lessons for this unit. For detailed instructions, balance literacy objectives/extended activities, enrichment ideas refer to the complete lesson plans for each lesson.

Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
Unit 6 Lesson 1 <i>Daily Routine</i> 30 – 45 minutes	<b>POST-ASSESSMENT</b>	<b>POST-ASSESSMENT</b>	<b>POST-ASSESSMENT</b>	<b>POST-ASSESSMENT</b>	<ul style="list-style-type: none"> <li>• <b>BLM</b> – 1<sup>st</sup> grade Assessment</li> <li>• <b>BLM</b> – 2<sup>nd</sup> grade Assessment</li> </ul>
Unit 6 Lesson 1 <i>Classroom</i> 1 to 1.5 hour	<p><b>Math</b></p> <p>Measure and compare lengths. Explain your strategies.</p>	<p><b>Reading</b></p> <p>Listen: Listen to the reading selections. Make observations about the different technologies you see. Speak: Predict what the book will be about and problems some of the technologies solved. Read: Read and use the vocabulary words. Write: Share-Write Important Things to Know about the problem to solve</p>	<p><b>Literature Vocabulary</b></p> <p>technology engineer engineered recycling mold deckle pulp slurry</p> <p><b>Read Literature</b> <i>Engineering the ABC's</i> by Patty O'Brien Novak NOTE: There are many websites for you to select copies of pictures to show your students.</p>	<p><b>Reading</b></p> <ul style="list-style-type: none"> <li>• An ABC book – just to show that ABC books show their materials in ABC order.</li> <li>• Internet connect and projector OR pictures of a runway at night</li> <li>• Large 4-function calculator</li> <li>• Examples of pop-up books</li> </ul>	<p><b>Reading</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> Word Cards</li> </ul>
			<p><b>Transition to Math</b></p> <p><b>Video to watch</b> <a href="http://www.wikihow.com/Make-a-Pop-up-Book">http://www.wikihow.com/Make-a-Pop-up-Book</a> Three ways to make a pop-up book. Gives the perfect steps to planning a pop-up book. <i>(If you do not have this</i></p>	<p><b>Transition to Math</b></p> <ul style="list-style-type: none"> <li>• chart paper, preferably sticky back to hang on wall</li> <li>• EiE Engineering Design Process Poster(s) <a href="http://www.etestore.com/posters.html">http://www.etestore.com/posters.html</a></li> <li>• Internet access and projection device</li> </ul>	<p><b>Transition to Math</b></p> <ul style="list-style-type: none"> <li>• <b>BLM</b> The Problem – 1 per student</li> <li>• <b>BLM</b> Making our Plan</li> <li>• <b>BLM</b> Constructing My Page</li> </ul>

<p><b>Unit 6</b> <b>Lesson 1</b> <b>TV</b> 30 minutes</p>	<p>Explain your observations. Use logical reasoning to justify your thinking.</p>	<p>Listen: Listen to the TV Teacher and Azulito, and your Classroom Teacher and classmates. Speak: Explain what you are seeing to your classmates. Read: Read the research. Write: Share-Write what you know now about the project.</p>	<p><i>video, you will need to outline the steps. You might find,</i> <a href="http://library.thinkquest.org/J001156/makingbooks/em_popup.htm">http://library.thinkquest.org/J001156/makingbooks/em_popup.htm</a>, <i>helpful for this off-line purpose.</i>)</p>	<ul style="list-style-type: none"> <li>• <a href="http://www.wikihow.com/Make-a-Pop-up-Book">http://www.wikihow.com/Make-a-Pop-up-Book</a> “Three Ways to Make a Pop-up Book,” gives the perfect steps to planning a pop-up book.</li> <li>• scissors – 1 per student</li> <li>• primary ruler - 1 each per student</li> <li>• 2 color tiles per student</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> Questions for Making Paper – 1 per student</li> <li>• <b>BLM</b> Where in the World was Paper Made? 1 per student (enrichment)</li> </ul>
		<p><b>Building Background</b> Introduce questions</p> <p><b>Mathematics</b> Students observe homemade paper being made.</p> <p>TV Teacher AND Classroom Teacher should view the video for reference: <a href="http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn">http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn</a> –</p>	<ul style="list-style-type: none"> <li>• <a href="http://www.wikihow.com/Make-a-Pop-up-Book">http://www.wikihow.com/Make-a-Pop-up-Book</a> “Three Ways to Make a Pop-up Book,” gives the perfect steps to planning a pop-up book.</li> <li>• scissors – 1 per student</li> <li>• primary ruler - 1 each per student</li> <li>• 2 color tiles per student</li> <li>• EiE Engineering Design Process Poster(s) - class <a href="http://www.eteetore.com/posters.html">http://www.eteetore.com/posters.html</a></li> </ul> <p><b>TV Teacher ONLY</b></p> <ul style="list-style-type: none"> <li>• samples of homemade paper – from craft store or some you have made in practicing</li> <li>• 2 identical cheap wooden frames</li> <li>• screening that will stretch across each of the 2 frames plus 1 frame to dip into the pulp</li> <li>• scissors to cut the screening</li> <li>• duct tape</li> <li>• an old blender</li> <li>• 2 pieces of felt</li> <li>• an old sponge</li> <li>• newspaper</li> <li>• large tub</li> <li>• scraps of paper to recycle such as construction paper scraps, wrapping paper scraps, newspaper</li> <li>• flower petals or other add –ins</li> <li>• <a href="http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn">http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn</a> – teacher</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="http://www.wikihow.com/Make-a-Pop-up-Book">http://www.wikihow.com/Make-a-Pop-up-Book</a> “Three Ways to Make a Pop-up Book,” gives the perfect steps to planning a pop-up book.</li> <li>• scissors – 1 per student</li> <li>• primary ruler - 1 each per student</li> <li>• 2 color tiles per student</li> <li>• EiE Engineering Design Process Poster(s) - class <a href="http://www.eteetore.com/posters.html">http://www.eteetore.com/posters.html</a></li> </ul> <p><b>TV Teacher ONLY</b></p> <ul style="list-style-type: none"> <li>• samples of homemade paper – from craft store or some you have made in practicing</li> <li>• 2 identical cheap wooden frames</li> <li>• screening that will stretch across each of the 2 frames plus 1 frame to dip into the pulp</li> <li>• scissors to cut the screening</li> <li>• duct tape</li> <li>• an old blender</li> <li>• 2 pieces of felt</li> <li>• an old sponge</li> <li>• newspaper</li> <li>• large tub</li> <li>• scraps of paper to recycle such as construction paper scraps, wrapping paper scraps, newspaper</li> <li>• flower petals or other add –ins</li> <li>• <a href="http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn">http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn</a> – teacher</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> Questions for Making Paper – 1 per student</li> <li>• <b>BLM</b> Where in the World was Paper Made? 1 per student (enrichment)</li> </ul>



<p><b>Unit 6</b> <b>Lesson 1</b> <b>Follow-up</b> <b>and Snack</b> <b>Fraction 1</b> .5 to 1 hour</p>	<p>Measure and compare lengths. Explain your strategies. Explain your observations. Use logical reasoning to justify your thinking.</p>	<p>Listen: Listen to your teacher and your classmates. Speak: Explain your observations from the TV Lesson answers to questions. Speak: Be able to explain why you believe as you do. Read: Read your comments on the Questions Checklist. Write: Write your letters to your families.</p>	<p>Students help teacher make homemade paper – whole class activity. <a href="http://video.about.com/fami/crafts/How-to-Make-Paper-With-Kids.htm#vidTrn">http://video.about.com/fami/crafts/How-to-Make-Paper-With-Kids.htm#vidTrn</a> – teacher resource video and transcript that shows how to make the paper.</p>	<p>resource video and transcript that shows how to make the paper.</p> <ul style="list-style-type: none"> <li>• samples of homemade paper – from craft store or some you have made in practicing</li> <li>• 2 identical cheap wooden frames</li> <li>• screening that will stretch across each of the 2 frames plus 1 frame to dip into the pulp</li> <li>• scissors to cut the screening</li> <li>• duct tape</li> <li>• sponge</li> <li>• an old blender</li> <li>• 2 pieces of felt</li> <li>• an old sponge</li> <li>• newspaper</li> <li>• large tub</li> <li>• scraps of paper to recycle such as construction paper scraps, wrapping paper scraps, newspaper</li> <li>• flower petals or other add –ins</li> </ul>	<ul style="list-style-type: none"> <li>• none</li> </ul>
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	<p><b>SNACK FRACTIONS</b> Share a snack in half. Explain why each portion is half.</p> <p>Listen: Listen to your teacher and your classmates. Speak: Explain your observations from the TV Lesson answers to questions. Speak: Be able to explain why you believe as you do</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is half. Share-write what is a half. Students complete TV Lesson, play a game similar to concentrate to practice compatible numbers, and complete the cloze letter home.</p>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Some direction to understand grouping</p> <p><b>Vocabulary</b> fourths, halves fair share equal pieces</p> <p>Students first halve the snack to get half for partnership, then half again for each partner.</p> <ul style="list-style-type: none"> <li>• Inchworms or color tiles – 20 per student</li> <li>• Primary rulers – 1 per student</li> <li>• Feet by the Foot 3 per student</li> <li>• Box of crayons – 1 per student</li> </ul>	<p><b>SNACK FRACTIONS</b> <b>Per group of 4</b></p> <ul style="list-style-type: none"> <li>• one 8.5 x 5.5 sheet of paper (whole duplicating sheet cut in half) per group of 4</li> <li>• Energy Snack Mix (<i>you may have the students mix this, in which case you need all of the measuring cups, spoons, bowls and mixing spoons; or you may pre-mix and give the groups of 4 the pre-mixed ingredients in a quart plastic bag.</i>) <ul style="list-style-type: none"> <li>○ 1 cup choc chips</li> <li>○ ½ c oatmeal</li> <li>○ ½ c crunchy peanut butter</li> <li>○ ½ c nuts</li> <li>○ 1 T honey</li> <li>○ Wheat germ (optional)</li> </ul> </li> <li>• quart Ziploc bags</li> <li>• 4 paper plates</li> <li>• 4 paper towels</li> <li>• Chart paper with question: <b>How do you know you each have half of the snack?</b></li> </ul>	<p><b>SNACK FRACTIONS</b> No BLM for this unit.</p>
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Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<b>Unit 6</b> <b>Lesson 2</b> <b>Daily Routine</b> 30 – 45 minutes	<b>ESSENTIAL</b> Solve addition and comparison word problems  <b>OPTIONAL</b> Count days in school with straws and with pennies. Recognize and count coins. Count and group by tens and ones.	Speak to partners, teacher, and class using vocabulary. Explain problem solving strategy. Reason, model and solve oral word problems.	<b>ESSENTIAL</b> <ul style="list-style-type: none"> <li>CGI</li> </ul> <b>OPTIONAL</b> <ul style="list-style-type: none"> <li>Calendar</li> <li>Straws</li> <li>Pennies</li> <li>Vocabulary building</li> </ul>	<b>ESSENTIAL</b> <ul style="list-style-type: none"> <li>Counters</li> </ul> <b>OPTIONAL</b> <ul style="list-style-type: none"> <li>Pennies, Nickels, Dimes</li> <li>Quarters (sets for all students)</li> <li>Sets of 20 straws and bands per student</li> <li>Daily Calendar</li> </ul>	<b>ESSENTIAL</b> <ul style="list-style-type: none"> <li>CGI – Teacher only</li> </ul> <b>OPTIONAL</b> <ul style="list-style-type: none"> <li>BLM Number Cards through the number of days you have been in school. (set for all students)</li> <li>Daily Calendar</li> </ul>
<b>Unit 6</b> <b>Lesson 2</b> <b>Classroom</b> 1 to 1.5 hour	<b>Math</b> Apply mathematics to real life problems. Explain your thinking.	<b>Reading and Math</b> <b>Listen:</b> Listen to the teacher to learn and use new words. <b>Speak:</b> Discuss your thoughts about the project. <b>Read:</b> Read and use the vocabulary words. <b>Write:</b> Share-Write Our Plan for Alex’s Pop-up Book.	<b>Reading</b> <b>Vocabulary Building</b> technology engineer engineered spine spar frame cover bridle flying line tail  <b>Read Literature</b> <i>Engineering the ABC’s</i> by <i>Patty O’Brien Novak</i>	<b>Reading</b> <ul style="list-style-type: none"> <li>teacher’s camera for taking shots of students in action (still or movie)</li> <li>EiE Engineering Design Poster(s) in the room.</li> <li>plenty of pictures, magazines, or post cards of your area, the school or site, crops that are being harvested, some memorable landmark or manmade site in the area – anything that might help tell your classes’ story. You can find many of these on the Internet, and can size them accordingly.</li> <li>Consider providing some line drawings that students can color on their own.</li> </ul>	<b>Reading</b> <ul style="list-style-type: none"> <li>BLMs from TV Lesson 1 that students have completed – each student has his/her own.</li> </ul>
			<b>Transition to Math</b> <b>Video to watch</b> <a href="http://www.wikihow.com/Make-a-Pop-up-Book">http://www.wikihow.com/Make-a-Pop-up-Book</a> Three ways to make a pop-up	<b>Transition to Math</b> <ul style="list-style-type: none"> <li><a href="http://www.marthastewart.com/918288/creating-pop-books-robot-sabuda">http://www.marthastewart.com/918288/creating-pop-books-robot-sabuda</a> This whole lesson segment depends upon watching           </li> </ul>	<b>Transition to Math</b> <ul style="list-style-type: none"> <li>EiE Engineering Design Poster(s) in the room</li> <li>BLMs from TV</li> </ul>

<p><b>Unit 6</b> <b>Lesson 2</b> <b>TV</b> 30 minutes</p>	<p>Explain your observations. Use logical reasoning to justify your thinking.</p>	<p>Listen: Listen to the TV Teacher and Azulito, and your Classroom Teacher and classmates. Speak: Explain what you are seeing to your classmates. Read: Read the Improvement Checklist and make judgments on the TV Teacher's and Azulito's project. Write: Share-Write what you learned from this lesson that can help you test your project.</p>	<p>book. Gives the perfect steps to planning a pop-up book. <i>(If you do not have this video, you will need to outline the steps. You might find <a href="http://library.thinkquest.org/J001156/makingbooks/em_popup.htm">http://library.thinkquest.org/J001156/makingbooks/em_popup.htm</a> helpful for this off-line purpose.)</i></p>	<p>this video.</p> <ul style="list-style-type: none"> <li>• teacher's camera for taking shots of students in action (still or movie)</li> <li>• sentence strip title: Our Pop-up Book Plan</li> <li>• sentence strip to write the sentence stem for pop-up written on it</li> <li>• sentence strips to write the students' page ideas on as they give them to you.</li> <li>• tape to tape the sentence strips to the board or wall so that you can move them if they need to be reordered</li> <li>• dark marker</li> <li>• pictures, etc. from reading lesson</li> </ul>	<p>Lesson 1 that students have completed – each student has his/her own.</p>
			<p><b>Building Background</b> Relay information about bees. <b>Vocabulary Building</b> (repeat vocabulary) regroup exchange compare fewer than less than more than <b>Mathematics</b> Students observe TV testing of kite and record observations.</p>	<ul style="list-style-type: none"> <li>• EiE Engineering Design Process Poster(s) <a href="http://www.eistore.com/posters.html">http://www.eistore.com/posters.html</a></li> <li>• sentence strip planning as per the TV Teacher Planning Guide – make and display the sentence strips to show your planning. – TV teacher only</li> <li>• Pre-make 7 pages plus a cover for the pop-up book. You may create your own about San Antonio, or you may use the ideas on the TV Lesson Pop-up Book Ideas.</li> <li>• Box of large paperclips. You will model paper clipping the book together rather than glue it – it is your prototype which you might want to rearrange or</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM Improvement Checklist</b> – 1 per student</li> <li>• <b>BLM TV Lesson</b> Pop-up Book Ideas (optional) – TV pre-made pages for San Antonio team pop-up book</li> </ul>

<p><b>Unit 6</b> <b>Lesson 2</b> <b>Follow-up</b> <b>and Snack</b> <b>Fraction 2</b> .5 to 1 hour</p>	<p>Explain your strategies. Explain your observations. Use logical reasoning to justify your thinking.</p>	<p>Listen: Listen to your teacher and your classmates. Speak: Explain your observations from the TV Lesson answers to questions. Speak: Be able to explain why you believe as you do. Read: Read your comments on the Questions Checklist. Write: Write your letters to your families.</p>	<p>Help teacher make homemade paper – whole class activity. <a href="http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn">http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vidTrn</a> – teacher resource video and transcript that shows how to make the paper.</p>	<p>need to add to.</p> <ul style="list-style-type: none"> <li>pop-up book pages that students created in Lesson 1</li> <li>sentence strip planning from TM lesson</li> <li>box of large paper clips – 4 clips per student</li> <li>pictures, etc., from reading and TM lesson</li> <li>extra pages of white paper so that new popup book pages can be created if necessary to correct errors.</li> <li>markers, crayons or water colors – 1 set of chosen medium per student</li> <li>primary rulers – 1 per student</li> <li>glue sticks – 1 per student</li> <li>scissors – 1 pair per student</li> </ul>	<ul style="list-style-type: none"> <li><b>BLM</b> Lined Writing Paper – 2 or 3 per student</li> <li><b>BLM</b> Improvement Checklist from the TV Lesson</li> </ul>
<p><b>SNACK FRACTIONS</b> Share a snack in half. Explain why each portion is half.</p>	<p><b>SNACK FRACTIONS</b> Explain why each portion is half. Share-write what is a half.</p>	<p><b>SNACK FRACTIONS</b> <b>Building Background</b> Students should be able to accomplish with only teacher introduction.</p> <p><b>Vocabulary</b> halves fair share equal pieces</p>	<p><b>SNACK FRACTIONS</b> <b>Per partners</b></p> <ul style="list-style-type: none"> <li>1 oz turkey</li> <li>1 piece Swiss cheese</li> <li>1 leaf lettuce</li> <li>1 T cranberry relish</li> <li>1 burrito-size tortilla</li> <li>2 paper plates</li> <li>2 paper towels</li> <li>2 plastic knives</li> <li>Chart paper with question: <b>How do you know you each have half of the snack?</b></li> </ul>	<p><b>SNACK FRACTIONS</b> No BLM for this unit.</p>	

Lesson Segment	Math Objectives	Language Objectives	Activity	Materials	Blackline Masters
<p><b>Unit 6</b> <b>Lesson 3</b> <b>Daily Routine</b> 30 – 45 minutes</p>	<p><b>ESSENTIAL</b> Solve addition and comparison word problems.</p> <p><b>OPTIONAL</b> Count days in school with straws, and with pennies. Recognize and count coins. Count and group by tens and ones.</p>	<p>Speak to partners, teacher, and class using vocabulary. Explain problem solving strategy. Reason, model and solve oral word problems.</p>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>CGI</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Calendar</li> <li>Straws</li> <li>Pennies</li> <li>Vocabulary building</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>Counters</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>Pennies, Nickels, Dimes Quarters (sets for all students)</li> <li>Sets of 20 straws and bands per student</li> <li>Daily Calendar</li> </ul>	<p><b>ESSENTIAL</b></p> <ul style="list-style-type: none"> <li>CGI – Teacher only</li> </ul> <p><b>OPTIONAL</b></p> <ul style="list-style-type: none"> <li>BLM Number Cards through the number of days you have been in school. (set for all students)</li> <li>Daily Calendar</li> </ul>
<p><b>Unit 6</b> <b>Lesson 3</b> <b>Classroom Lesson</b> 30 – 45 minutes</p>	<p><b>Math Objectives</b> Use math to solve real world problems. Explain your strategies. Explain your observations. Use logical reasoning to justify your thinking.</p>	<p><b>Reading &amp; Math</b> Listen: Listen to the teacher to learn and use new words. Speak: Discuss your thoughts about the pop-up project. Read: Read about more technology that is part of the pop-up book.</p>	<p><b>Reading Activity</b> Review vocabulary. Trace the use of technology throughout the unit in building the pop-up book Refer back to the reading book to find technology mentioned that was used in the project.</p>	<p><b>Reading</b></p> <ul style="list-style-type: none"> <li>Teacher’s camera for taking shots of students in action (still or movie)</li> <li>EiE Engineering Design Poster(s) in the room.</li> </ul>	<p><b>Reading</b></p> <ul style="list-style-type: none"> <li>BLM Word Cards</li> <li>BLM Improvement Checklist</li> </ul>
		<p><b>Transition to Math</b> Final construction of the popup book.</p>	<p><b>Transition to Math</b></p> <ul style="list-style-type: none"> <li>teacher’s camera for taking shots of students in action (still or movie)</li> <li>glue stick</li> <li>EiE Engineering Design Poster(s) in the room</li> <li>Chart paper and marker</li> <li>TEACHER RESOURCE VIDEOS in assembling the book. The cover needs to be completed before class.</li> </ul>	<p><b>Transition to Math</b></p> <p>BLMs Improvement Checklist already completed</p>	

<p><b>Unit 6</b> <b>Lesson 3</b> <b>TV</b> 30 – 45 minutes</p>	<p>Explain your observations. Use logical reasoning to justify your thinking.</p>	<p>Listen: Listen to the TV Teacher and Azulito, and your Classroom Teacher and classmates. Speak: Explain what you are seeing to your classmates. Read: Read the Improvement Checklist and make judgments on the TV Teacher's and Azulito's project. Write: Share-Write what you learned from this lesson that can help you test your project.</p>	<p>Show students the final pop-up book and how it was improved based on testing.  Show students through problem solving how math was used in this unit.</p>	<ul style="list-style-type: none"> <li>• <a href="http://www.youtube.com/watch?v=686DHL5kCC4">http://www.youtube.com/watch?v=686DHL5kCC4</a> how to glue pages together and put on a simple cover for 10 or less pages</li> <li>• <a href="http://www.youtube.com/watch?v=vk9t4OUAig">http://www.youtube.com/watch?v=vk9t4OUAig</a> how to create a cover from cardboard with a wider spine for books of more than 10 pages.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> Azulito's Math Problems</li> <li>• <b>BLM</b> Improvement Checklist – 1 per student\</li> </ul>
<p><b>Unit 6</b> <b>Lesson 3</b> <b>Follow-up</b> <b>Snack</b> <b>Fraction</b> 30 – 45 minutes</p>	<p>Subtract 2-digit numbers. Explain your strategies. Explain your observations. Use logical reasoning to justify your thinking.</p>	<p>Listen: Listen to your teacher and your classmates. Speak: Explain your observations from the TV Lesson answers to questions. Speak: Be able to explain why you believe as you do. Read: Read Azulito's Project Math. Write: Write your letters to your families.</p>	<p>Students work the math problems independently (except for reading the stories to the students).  They then create a popup card to send home for their family letter</p>	<ul style="list-style-type: none"> <li>• Base ten sets available in the room</li> <li>• Scissors – 1 per student</li> <li>• Glue stick – 1 per student</li> <li>• Primary ruler – 1 per student</li> </ul>	<ul style="list-style-type: none"> <li>• <b>BLM</b> Azulito's Project Math (D in TV Lesson)</li> <li>• <b>BLM</b> Constructing My Card</li> <li>• <b>BLM</b> Summer Family Letter – half sheet per student</li> <li>• <b>BLM</b> Summer Pop-ups – half sheet per student</li> </ul>

<p><b>Unit 6</b> <b>Lesson 3</b> <b>Snack</b> <b>Fraction</b></p>	<p>Share a snack in half. Explain why each portion is half.</p>		<p>Explain why each portion is half. Share-write what is a half.</p>	<p>Students just enjoy the last snack fraction together.</p>	<p><b>Per partner pair:</b></p> <ul style="list-style-type: none"> <li>• 1 personal pan pizza</li> <li>• 2 individual servings fruit juice</li> <li>• 2 Paper plates</li> <li>• 2 paper towels</li> <li>• 2 plastic knives</li> <li>• Chart paper with question:</li> </ul> <p><b>How do you know you each have half of the snack?</b></p>	<p>none</p>
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## Project SMART/Math MATTERS 2014

**Grade Level: 1-2**

**Unit 6 / Lessons 1 – 2 - 3**

### **Daily Routine Math Objectives:**

Model and solve oral word problems.  
Model and solve 2-step word problems.  
Determine a missing number in an equation.  
Recognize and name coins (penny, nickel, dime, quarter).  
Count a collection of coins up to one dollar.  
Read and use a calendar.  
Count objects, group in ones and tens.

### **Daily Routine Language Objectives:**

Listen to, read and speak the calendar vocabulary.  
Speak to partner, teacher, and class using vocabulary introduced in Daily Routines.  
Reason, model and solve oral word problems.  
Explain strategies and thought processes.

### **Unit Math Objectives (Integrated Lesson including snack fractions):**

Model and create addition and subtraction problems situations with concrete objects and write corresponding number sentences which include part-whole situations and comparing situations.  
Explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models and number sentences.  
Use concrete models to represent and name fractional parts of a whole objects (fourths and halves).

### **Unit Language Objectives:**

Think, pair, share questions throughout the unit.  
Learn and use new vocabulary.  
Listen to the story for enjoyment and to develop an understanding of the vocabulary.  
Listen to, speak, read and write unit vocabulary in a variety of group and individual settings.  
Share-write math sentences.  
Describe why a snack is or is not half.  
Describe why a portion is a fourth; an eighth.

### **Technology Objectives:**

Use research skills and electronic communication, with appropriate supervision, to create new knowledge.  
Technology suggested in this unit: iPad, SMART Board or other “smart” projection device, Internet

**Key Vocabulary, MATH:** (repeat vocabulary) regroup, exchange, compare, fewer than, less than, more than  
**Key Vocabulary, LANGUAGE:** technology, engineer, engineered, recycling, mold, deckle, pulp, slurry

### **Resources/Literacy Links**

*Engineering the ABC's: How Engineers Shape Our World* by Patty O'Brien Novak  
Related links:

### Lesson Sequence

- Daily Routine: 30 to 45 minutes
- Classroom Lesson: 1 to 1.5 hour
- TV Lesson: 30 minutes
- Classroom Follow-up including Snack Fractions: .5 to 1 hour

### MATH WALK

Once you have worked in the unit enough for students to understand what an Engineer is and does, take a walk around the campus and look for the technology engineered to solve a problem. These can be as simple as hand tools or as complex as heating systems. Take a BIG notebook to write them all.

### Technology Connections

#### • Math Practice

[http://www.learn4good.com/games/kids/double\\_digits.htm](http://www.learn4good.com/games/kids/double_digits.htm)

Add/Subtract double digits

<http://resources.oswego.org/games/SpeedGrid/Addition/urikares.html>

Two-digit center game for one person OR you could set up teams.

<http://www.amblesideprimary.com/ambleweb/mentalmaths/pyramid.html>

Fun once you understand how the pyramid builds. Level 1 great place to gain the understanding of the game. Level 2 is probably where your 1<sup>st</sup> graders will be. Level 3 is great for stretching 2<sup>nd</sup> graders.

#### • Science Connection

<http://rubberstamping.about.com/od/projects/ss/HandmadeSeedPaper.htm>

Making paper that contains plantable seeds.

[http://www.tappi.org/paperu/all\\_about\\_paper/faq.htm](http://www.tappi.org/paperu/all_about_paper/faq.htm)

Frequently asked questions about Paper manufacturing.

#### • Social Studies Connection

<http://inventors.about.com/od/pstartinventions/a/papermaking.htm>

Teacher resource of history of making paper. Students could make a timeline.

<http://www.paperonline.org/history-of-paper>

Another teacher resource for the history of paper timeline.

[https://www.google.com/search?q=history+of+making+paper&client=firefox-a&hs=PaL&rls=org.mozilla:en-US:official&channel=sb&tbm=isch&tbo=u&source=univ&sa=X&ei=xuwNU7\\_tNOmu2QX6iYAg&ved=0CFIQsAQ&biw=1280&bih=643](https://www.google.com/search?q=history+of+making+paper&client=firefox-a&hs=PaL&rls=org.mozilla:en-US:official&channel=sb&tbm=isch&tbo=u&source=univ&sa=X&ei=xuwNU7_tNOmu2QX6iYAg&ved=0CFIQsAQ&biw=1280&bih=643)

Pictures and photographs for the timeline

#### • Health/Physical Ed Connection

[http://www.ehow.com/list\\_5980457\\_physical-education-outdoor-games.html](http://www.ehow.com/list_5980457_physical-education-outdoor-games.html)

Five games to play outside with minimal (beach ball, softball, playground ball) to no equipment.

#### • Art Connection

<http://www.pinterest.com/origamitwist/clever-paper-crafts/>

Many ideas for paper crafting – here are samples of a few from the page:

- <http://www.pinterest.com/pin/340655159285897277/>  
Pretty cards, heart theme
- <http://www.pinterest.com/pin/340655159286228973/>  
Owl templates
- <http://www.pinterest.com/pin/340655159286192327/>
- Paint chip (gather from local paint store) skylines.

## Unit 6, Teacher Introduction

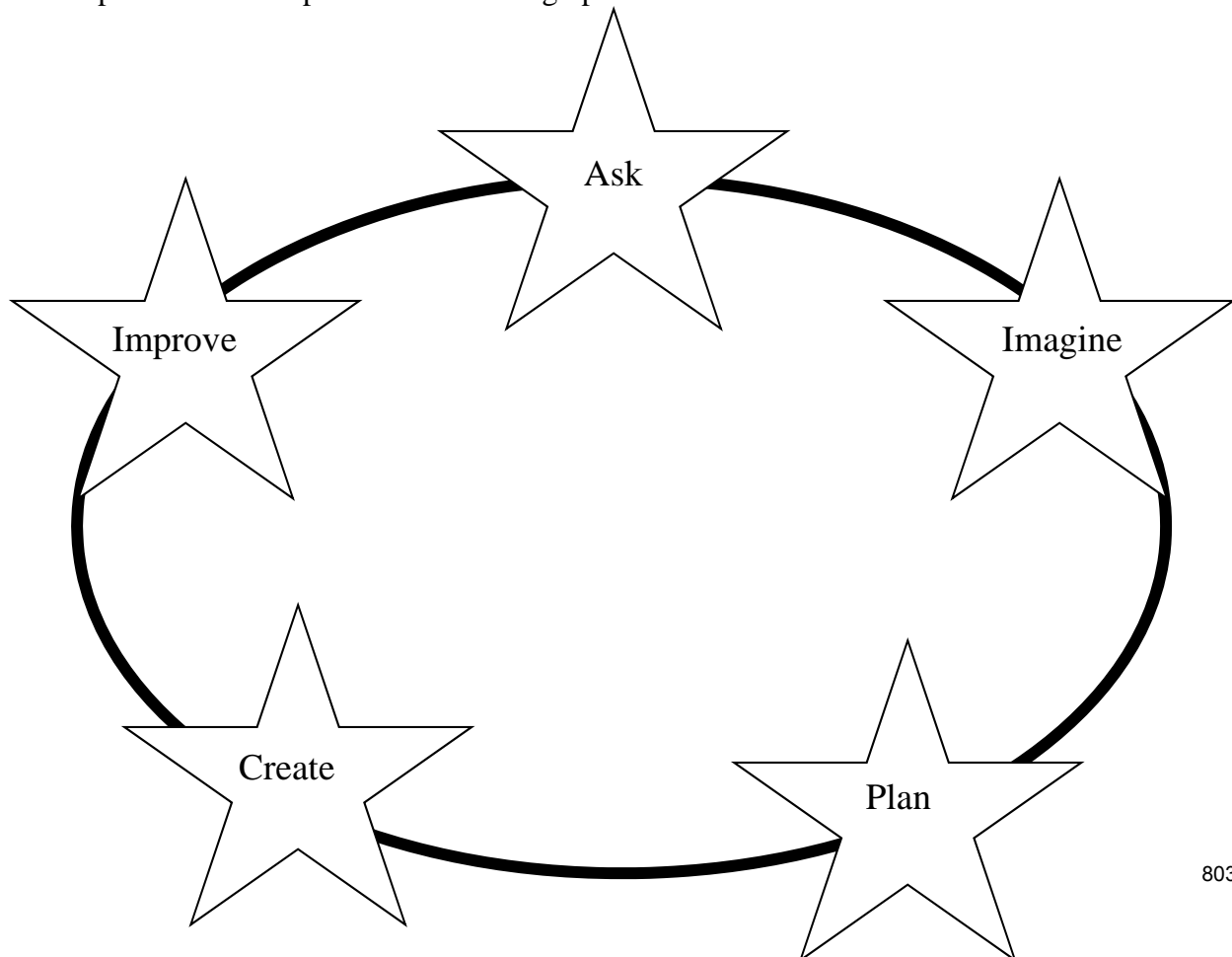
Although this is not technically a STEM (Science, Technology, Engineering, Math) or STEAM (Science, Technology, Engineering, Art, Math) or EiE (Engineering is Elemental) project, the unit has been written to incorporate the same philosophies as each of those projects.

Students begin to see the science and engineering all around them in their everyday lives, and as they plan and create their projects, they will be consciously using the Engineering Design Process. As teachers we are probably not as familiar with “technology” as we are the science around us. Technology is defined as *anything that has been designed by engineers to fulfill a human need*. So simple things like pencils, chairs, toothbrushes, as well as those complex things we usually think of as engineered such as cell phones, buildings, computers, space shuttles, are all representations of engineered projects in our world. These *technologies* are all *engineered* to solve a particular human need.

Engineers follow a process, much like the scientific process. There is a difference between the two processes because the objectives are different. The scientific process is used when you are investigating how something in nature works by making observations and doing experiments, while the engineering process is used when you are creating a solution to a problem.

Each grade band K-6 has a book of projects which will be read, discussed and enjoyed by the students using literary devices. The teacher will then pose a problem that needs to be solved, and the students will use the Engineering Design Process to create a solution to that problem.

Engineering Design Process. EiE (Engineering is Elementary) has simplified the process into five steps which encompass the entire design process.



Because of the nature of this unit, there will be major breaks in the formal pattern to which we are all so accustomed. Daily Routines are present; however, several activities have been removed to accommodate more time for project design.

The literature reading will be less a focus in lessons 2 & 3 because the focus is directed toward the Engineering Design Process.

TV Lessons will be more of a demonstration so that students will understand their Follow-up design lessons. Students are still expected, however, to respond and maintain engagement.

Other changes are:

- **Family Fun Game**, which will not go home this unit. Families that wish may still, of course, play the old cards – there are five units worth of very good practice problems they can incorporate into their game time.
- **Snack Fractions** will not have a BLM this unit. Students will be asked verbally, but will for the most part, be allowed time to enjoy a snack shared with a friend.
- **In-Home lessons** are very different – Because lessons 1, 2, and 3, build upon one another, there really is no single lesson that could be chosen to teach. Instead, it is suggested that ALL grade bands use the Kinder book, *Simple Machines*, by Deborah Hodge; and that the Teacher select one project within the book that her families could accomplish together. Bring the supplies, read the activity and let the siblings work together to experience the learning of simple machines.

We hope you enjoy this final unit and that your Summer Session has been most successful.

## **Unit 6 Project**

### **STEM or STEAM Projects**

You are about to begin the final lesson of this unit. If you and your students are going to participate in the project suggested for this unit, now is the time to prepare.

**Project for this unit is:** Display of STEM projects completed during this unit.

#### **Synopsis**

Students share the projects they have worked on during this unit. This would be a wonderful venue for a family end-of-the-summer party.

#### **Materials:**

- Display tables in a large room
- Snacks and punch
- Photos or PowerPoint type presentation of students working through the unit

#### **Objectives**

- Students create their STEM project.
- Students prepare a final draft of their project prospectus to be displayed with their projects.

#### **Procedures:**

The event should be a museum-type display, with work displayed on tables set up so that people can walk around the displays, seeing them from all angles. “Please do not touch” signs should be placed on all displays to protect them, and all classes should be trained in the art of viewing displays. Provide appropriate snacks at the end of the displays, and engage students and adults in comments and questions. This would be a super opportunity to engage family and community members.

#### **Online resources**

- <http://museumplanner.org/museum-exhibition-design-2/>
- [http://morrisoncountyhistory.org/?page\\_id=1449](http://morrisoncountyhistory.org/?page_id=1449)
- <http://www.adlerdisplay.com/museum-displays/index.php>  
Commercial site, but has interesting photos of possible display venues.
- <http://www.thehistoryworkshop.com/Portfolio/exhibits.html#!nav=1&gallery=1>  
Another commercial site, but interesting ideas to glean.

**Materials**

- BLM Post-assessment Grade 1
- BLM Post-assessment Grade 2

**Math Objectives**

- Post-assessment objectives

 **Balanced Literacy**

**Language Objectives**

- Speak to partners, teacher, and class using vocabulary.
- Explain problem solving strategy.
- Verbalize observations about graph data.
- Discuss wants and needs.

**TEKS**

1<sup>st</sup> – 1.1B, 1.3A,B,  
2<sup>nd</sup> - 2.2A,B, 2.3A,B,C, 2.5A,

**Assessment Items**

Post-assessment of all items

**Azulito’s Corner**

**Lesson 1**

What were your favorites during this summer?

book:

language activity:

TV lesson:

home connection:

Take time to think about what you have done this summer, and talk about your favorites and why they are favorites.

**Unit 6, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Daily Routine**



**Post – assessment Today!**  
**There are no Daily Routines today to allow time for the Post-assessment**

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**ESSENTIAL**

**CGI Problem**

- Lesson 1 – Post-assessment
- Lesson 2 – Join Change Unknown
- Lesson 3 – Compare, Difference Unknown

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**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

**Calendar**

**Straws**

**Pennies**

**Money Matters**

**Vocabulary Building**

**Assessment Item 1<sup>st</sup> grade #8 and 2<sup>nd</sup> grade #7 will be reviewed daily in Snack Fractions.**



<p><b>Join</b></p>	<p><i>(Result Unknown)</i></p> <p>Long ago, people living on the island of Fiji originally built kites to catch fish. One day, a little boy caught ___ fish using his kite. His brother caught ___ fish. How many fish did they catch that day?</p> <p>13, 3    15, 5    16, 9</p>	<p><i>(Change Unknown)</i></p> <p>I am making noodles for my family. I have already made ___ cups of noodles. How many more cups of noodles do I need to make so that I will have ___ cups of noodles—enough for everyone in my family?</p> <p>2, 12    9, 12    6, 19</p>	<p><i>(Start Unknown)</i></p> <p>When the doctor used a stethoscope to listen to my heart rate, he said it was great. Then he had me do jumping jacks and my heart rate increased by ___ beats, to ___ beats per minute. What was my heart rate to start?</p> <p>10, 57    15, 60    5, 72</p>
<p><b>Separate</b></p>	<p><i>(Result Unknown)</i></p> <p>Research says it takes 50 licks to eat an ice cream cone. If you licked your ice cream cone 35 times, how many more licks would you have to finish the cone?</p>	<p><i>(Change Unknown)</i></p> <p>The first portable vacuum cleaners weighed 92 pounds and did not sell well because they were too heavy. Three years later, engineers were able to make them weighing only 40 pounds. How many pounds did they remove?</p>	<p><i>(Start Unknown)</i></p> <p>There were some gallons of water in the bathtub. My brother pulled the plug and let out ___ gallons of water. Now there are only ___ gallons of water in the tub and I can barely float! How many gallons were there to start?</p> <p>6, 6    4, 8    10, 7</p>
<p><b>Part-Part-Whole</b></p>	<p><i>(Whole Unknown)</i></p> <p>It was my lucky day! I caught ___ blue gills and ___ catfish when I went fishing with my kite. How many fish did I catch that day?</p> <p>7, 7    6, 8    9, 4</p>	<p><i>(Part Unknown)</i></p> <p>Engineers invented bike helmets to keep riders safe from head injuries in case of a fall. Out of 100 kids, 53 do not wear a helmet when riding a bike. How many kids do wear a helmet?</p>	
<p><b>Compare</b></p>	<p><i>(Difference Unknown)</i></p> <p>A Model T car could go an average speed of 40 miles per hour. Today’s cars can easily average 65 miles per hour. How many more miles per hour can today’s cars go than the Model T?</p>	<p><i>(Quantity Unknown)</i></p> <p>There are 63 wind turbines at Mendota Hills Wind Farm. Camp Grove Wind Farm has 37 more turbines than Mendota Hills. How many turbines does Camp Grove have?</p>	<p><i>(Referent Unknown)</i></p> <p>There are ___ rungs on a short ladder. That is ___ rungs fewer than on a tall ladder. How many rungs are on a tall ladder?</p> <p>4, 12    8, 8    12, 15</p>
	<p><b>Multiplication</b></p>	<p><b>Measurement Division</b></p>	<p><b>Partitive Division</b></p>

<b>Grouping and Partitioning</b>	<p>You have ___ quarters. If each quarter is worth \$0.25, How much money do you have?</p> <p style="text-align: center;">4   8   10</p>	<p>One type of xylophone is 12 feet long. If each person takes up 2 feet of space, how many people can play it at once?</p>	<p>Some airplane wings are 240 feet long! If 6 school buses could be placed end-to-end and be equal to the length of the wings, how long is each school bus?</p>
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<b>Unir</b>	<i>(Resultado Desconocido)</i> Hace mucho tiempo, la gente que vivía en la isla de Fiji solía construir cometas para atrapar peces. Un día, un niño pequeño atrapó ___ peces usando su cometa. Su hermano atrapó ___ peces. ¿Cuántos peces atraparon ese día? 13, 3    15, 5    16, 9	<i>(Cambio Desconocido)</i> Estoy haciendo fideos para mi familia. Ya he hecho ___ tazas de fideos. ¿Cuántas tazas de fideos más tengo que hacer para tener ___ tazas de fideos, suficiente para todos en mi familia? 2, 12    9, 12    6, 19	<i>(Inicio Desconocido)</i> Cuando el médico usó el estetoscopio para escuchar mi frecuencia cardíaca, dijo que era excelente. Después, me hizo hacer tijeretas y mi frecuencia cardíaca aumentó en ___ latidos, a ___ latidos por minuto. ¿Cuál era mi frecuencia cardíaca al principio? 10, 57    15, 60    5, 72
<b>Separar</b>	<i>(Resultado Desconocido)</i> Hay estudios que señalan que se necesita 50 lamidas para comer un helado de cono. Si diste 35 lamidas a tu helado de cono, ¿cuántas lamidas necesitas para terminar el cono?	<i>(Cambio Desconocido)</i> Las primeras aspiradoras portátiles pesaban 92 libras y no se vendieron bien porque eran muy pesadas. Tres años después, los ingenieros lograron hacer que pesaran solo 40 libras. ¿Cuántas libras eliminaron?	<i>(Inicio Desconocido)</i> Había algunos galones de agua en la bañera. Mi hermano sacó el tapón y dejó salir ___ galones de agua. ¡Ahora hay solo ___ galones de agua en la bañera y apenas puedo flotar! ¿Cuántos galones había al principio? 6, 6    4, 8    10, 7
<b>Parte-Parte-Entero</b>	<i>(Entero Desconocido)</i> ¡Fue mi día de suerte! Atrapé ___ percas azules y ___ bagre(s) cuando salí a pescar con mi cometa. ¿Cuántos peces atrapé ese día? 7, 7    6, 8    9, 4		<i>(Parte Desconocida)</i> Los ingenieros inventaron los cascos para conductores de bicicletas a fin de mantenerlos a salvo de lesiones en la cabeza en caso de caída. De 100 niños, 53 no usan un casco cuando andan en bicicleta. ¿Cuántos niños sí usan casco?
<b>Comparar</b>	<i>(Diferencia Desconocida)</i> Un auto Modelo T podía moverse a una velocidad promedio de 40 millas por hora. Los autos actuales fácilmente pueden alcanzar un promedio de 65 millas por hora. ¿Cuántas millas más por hora pueden recorrer los autos actuales en comparación con el Modelo T?	<i>(Cantidad Desconocida)</i> Hay 63 turbinas eólicas en el Parque Eólico Mendota Hills. El Parque Eólico Camp Grove tiene 37 turbinas más que Mendota Hills. ¿Cuántas turbinas tiene Camp Grove?	<i>(Referente Desconocido)</i> Hay ___ peldaños en una escalera corta. Eso es ___ peldaños menos que en una escalera larga. ¿Cuántos peldaños hay en una escalera larga? 4, 12    8, 8    12, 15
	<b>Multiplicación</b>	<b>División de medidas</b>	<b>División partitiva</b>

<b>Formación de grupos y Participación</b>	<p>Tienes ____ monedas de veinticinco centavos. Si cada cuarto vale \$0.25, ¿cuánto dinero tienes?</p> <p>4    8    10</p>	<p>Un tipo de xilófono tiene 12 pies de largo. Si cada persona ocupa 2 pies de espacio, ¿cuántas personas pueden tocarlo al mismo tiempo?</p>	<p>¡Las alas de algunos aviones tienen 240 pies de largo! Si se pusieran 6 buses escolares en fila, equivaldrían a la longitud de las alas. Entonces, ¿cuál es el largo de cada bus escolar?</p>
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**Literature Selection**

*Engineering the ABC's: How Engineers Shape Our World*  
by Patty O'Brien Novak

**Materials****Language Materials**

- BLM Word Cards
- an ABC book – just to show that ABC books show their materials in ABC order.
- Internet connect and projector OR pictures of a runway at night
- large 4-function calculator
- examples of pop-up books

**Materials for Transition to Math Lesson**

- Chart paper, preferably sticky back to hang on wall
- EiE Engineering Design Process Poster(s)  
<http://www.eiestore.com/posters.html>
- Internet access and projection device
- <http://www.wikihow.com/Make-a-Pop-up-Book> “Three Ways to Make a Pop-up Book,” gives the perfect steps to planning a pop-up book.
- scissors – 1 per student
- primary ruler - 1 each per student
- 2 color tiles per student
- BLM The Problem – 1 per student
- BLM Making our Plan
- BLM Constructing My Page

**Literature Vocabulary**

technology  
engineer  
engineered  
recycling  
mold  
deckle  
pulp  
slurry

**Math Vocabulary**

Repeated from Word Wall words

**Unit 6, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson**

Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.

**Math Objectives:**

- Measure and compare lengths.
- Explain your strategies.

**Language Objectives:**

- Listen: Listen to the reading selections. Make observations about the different technologies you see.
- Speak: Predict what the book will be about and problems some of the technologies solved.
- Read: Read and use the vocabulary words.
- Write: Share-Write Important Things to Know about the problem to solve.

**Science Objectives:**

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

**Building Background, Vocabulary**

We are beginning a very different type of unit today. We are going to be talking about (*word card*) ENGINEERS. Can someone tell me what an engineer does? (*Accept all responses – most probably know the train engineer.*)

(*Acknowledge all answers that are accurate by repeating them and saying, “those are all engineers.”*)

The type of engineers we are going to think about during our lessons this unit are men and women who are trained to find solutions to problems that we humans have.

The engineers research to find the best solution possible to the problem. They test and test and make improvements on those creations, and then they provide the solutions so we all have a happier and healthier life.

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

(word card) **TECHNOLOGY** – what is technology? (*most will think about computers, iPads, cell phones, etc.*) All of those things are technology, not because they are complicated, but because they were designed to solve human problems.

But these are examples of “technology,” too (*screw driver, fork, helmet*). These were designed, or (word card) **ENGINEERED**, to solve problems.

What problems does each of these examples of technology solve?

- Screwdriver – easier way to attach a screw. Where can you see a screwdriver being used? (*Accept all answers.*)
- Fork – less messy way to get the food into your mouth. What other ways are there of putting food into your mouth besides your fingers? (*chopsticks, spoons, etc.*)
- Helmet – helps protect your head from serious injuries. Where can you see a helmet being worn? (*Accept all answers.*) Do you ever wear a helmet? When? (*Riding bicycle, skate boards, skating, football, baseball batter or catcher, etc.*)

### Practice and Application, Vocabulary

So when we talk about TECHNOLOGY in this unit, what will we be talking about? Give me some examples of Technology in the room (*pencils, paper, desks, shoes, clothes, lights, floors and flooring, windows – etc.*) Anything that is manmade to solve a problem.

Later today, you are going to become an ENGINEER. You are going to be given a problem to solve by ENGINEERING some TECHNOLOGY as the problem’s solution. We will talk more about that a little later. But for now, let’s take a look at our literature books.

### Building Background, Literature

(*Show cover of the book and read the title*)

- What do you think this book will tell us?
- When a book says, “ABC’s” how do you expect the pages to be arranged? (*by ABC or alphabetical order*)
- Look at the name of the author. Do you know anything about the author? (*woman – show picture and tell that she is a Mechanical Engineer*) In fact, the publishing of this book was supported by the Society of Women Engineers. There are many women engineers! And of course, there are many men engineers, too.
- (*Open book to page 4*) What kind of a sentence do you see in the orange stripe at the top of this page? (*question*) Look at the next page in the green stripe – what kind of sentence (*also a question*)? That is one thing about ENGINEERS; they are always asking questions and researching to find the answers. You will be, too!

Photo, landing strip at night  
[http://www.123rf.com/search.php?word=airport\\_runway&start=60&searchopts=&itemsperpage=60](http://www.123rf.com/search.php?word=airport_runway&start=60&searchopts=&itemsperpage=60)



## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

Our book for this unit is *Engineering the ABCs – How engineers Shape Our World* (show the book).

How many of you have read an ABCs book? (*response*)

In an ABC book, the material on each page is arranged in a special way? Let's look at our copy of an ABC book and see if we can tell how the material is arranged. (*Go through the book until everyone can anticipate the next letter and guess at the word it will illustrate.*)

Now, who can tell us how the materials are arranged in an ABC book? (*response*) Yes, the materials the author wrote about are arranged in ABC order.

In our *Engineering the ABCs*, we will find technology that Engineers have designed to help solve human problems. Since the authors have told us this is an ABCs book, how do you think they have arranged their materials? (*response*) Let's see if we are correct.

### Comprehensible Input, Literature

What is this first page about? (*airplanes*) And the second page? (*bicycles*) We predicted that the book would be arranged in ABC order. What do you think now that you see the first two pages? (*responses*) What makes you think so? (*First page is a technology starting with "A" and second page technology starts with "B."*)

(*Read the A, Airplane; the question, and the answer.*)

Look at the picture – what do you think that lady is doing? (*Measuring the airplane. Probably looking for more questions and more answers to make the airplane even better.*)

Have any of you ever been to the airport at night? (*responses*) What is the landing runway lined with to help the pilots land at night? (*very bright lights – now read the orange rectangle*) Why do you think we use very bright lights now instead of bonfires and beacons? (*safer, easier to see, etc.*) Those bonfires were a problem. ENGINEERS worked on that problem and started developing very bright lights to line the run way so the flight could land safely.

At the bottom of the page there is a "Let's Discover" portion in the purple stripe. Let's discover this one (*read it*). Can anyone suggest a simple way to solve this problem? Talk to your elbow partner – how can you find out how many 40 ft. school buses there would be in 250 feet? (*Pause, then accept their strategies – use any that are simple.*)

Pictures of cars before 1908  
<https://www.google.com/search?q=pics+of+cars+before+1908&client=firefox-a&hs=4q2&rls=org.mozilla:en-US:official&channel=sb&tbm=isch&tbo=u&source=univ&sa=X&ei=idMMU6XKAsa2yAHlyYGACw&ved=0CCkQsAQ&biw=1024&bih=651>

Examples of pop-up books, pop-up cards.

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

We could also add 40 feet until we reach a number close to 250. But that is a lot of 40s. I have a calculator. Since this arithmetic is a little beyond what we can do right now, I can find out how many 40s there are in 250. (*divide*) WOW! That wing could hold 62 school buses! Imagine that!

*(Read B, Bicycle, Question, Answer – ask about students’ experiences with bicycles. And what do the pictured children have on their heads? Helmets! Read the “Let’s Discover.” Why might it be important to have a bicycle that glows in the dark?)*

*Read C, Card Question, Answer – ask about students’ experiences with bicycles. And what do the pictured children have on their heads? Helmets! Read the “Let’s Discover.” Show students pictures of pre-1908 cards. How are they different from today? How are they the same?*

*(Read H, Helmet, Question, Answer – Answer talks about helmets being “tested.” The students are going to be testing their ideas, too! Ask students where are helmets worn? Then read purple stripe.)*

We are going to use this book as a resource book. That means that we are not going to read every page, but are going to read certain pages. These first few pages are things I chose that would help us understand what engineers do.

This next page, paper, will help us get started with our project for this unit. We are going to turn all the way to P for paper. Look around the room. How many things do you see that are made from paper? (*Accept all reasonable answers. Inset those that have been overlooked, making sure to include books.*)

Did you ever stop to think how paper is made? Let’s read and find out a little bit about how paper is made.

*(Skip to P, Paper, read how paper is made. Talk about recycling – what is it? Why is it important to the environment? What paper products are being thrown into the landfill that could be used to make paper? Then read the Let’s Discover.)*

What is a pop-up book? (*responses*) I have examples here of pop-up books and pop-up cards. Let’s see if we can determine what they are by looking at examples. (*do so*) What are pop-up books and pop-up cards? (*Books or cards that have parts of them that “pop-up” when read.*)

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

What do you think our project for this unit will be? (*pop-up book or card*)  
What made you predict pop-ups? (*special attention to the books*)

Let's get a little exercise before we go on to our Transition to Math Lesson.

Everyone stand up tall and reach for the ceiling (*do so*). This is what the pop-up looks like when the page is open, doesn't it?  
Now everyone bend over and reach for the floor (*do so*). This is what the pop-up looks like when the page is closed.

When I say POP-UP, everyone stand up tall and reach for the ceiling – ready – POP-UP!

Now we will pretend we are closing the page and FOLD DOWN. When I say, "FOLD DOWN," bend over and reach for the floor --- ready – FOLD DOWN!

*(Repeat for a few times, then have students march around the room and settle in for the math lesson.)*





technology

engineer

engineering

recycling



tecnología

ingeniero

ingeniería

reciclaje



(Create on cardstock – one set for the room, and one set for each student to take home at end of Lesson 1 for practice)

mold

deckle

pulp

slurry



molde

deckle

pulpa

estiércol líquido






**Math Objectives:**

- Measure and compare lengths.
- Explain your strategies.

**Materials for Transition to Math Lesson**

- Chart paper, preferably sticky back to hang on wall
- EiE Engineering Design Process Poster(s)  
<http://www.eiestore.com/posters.html>
- Internet access and projection device
- <http://www.wikihow.com/Make-a-Pop-up-Book> “Three Ways to Make a Pop-up Book,” gives the perfect steps to planning a pop-up book.
- scissors – 1 per student
- primary ruler - 1 each per student
- 2 color tiles per student
- **BLM** The Problem – 1 per student
- **BLM** Making our Plan
- **BLM** Constructing My Page

 **Technology:** Free online game to practice making number sentences from the three numbers in a fact family.  
<http://www.ezschoo.com/Games/FactFamily1.htm>

**Teachers:**

If you do not have Internet access and a way to project to your class, please go to the sites and make copies of the pictures you want to share with your students.

**Unit 6, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math Building Background, Math**

Earlier in the lesson I promised you that you are going to be Engineers during this unit. Can someone remind us of what an Engineer is and does? (*a person who creates a technology to solve a problem*)

Well, I have a friend who has a problem and has sent me a letter asking for our help. Here is his letter. (*Give a copy of BLM The Problem to each student. Read the letter.*)

So what do you think, boys and girls – are we up to the challenge? (*response, hopefully positive*) I thought so! From this point forward, we are all Engineers. So we are going to follow the Engineering Design Process. (*Show students the poster you have displayed in the room. Make sure students are positioned so everyone can see the poster.*)

Let’s look at this poster. This is really the process that adult engineers follow to think through the problem and design a solution specific to that problem.

We are going to divide our three lessons into working through this design process.

**Lesson 1****Ask**

- Decide what our problem is that we want to solve.
- Research ways to solve that problem.

**Imagine**

- Imagine many possible solutions to the problem.
- Try some of the possibilities.

**Lesson 2****Plan**

- Use what we learned in our imagining stage to plan the solution to our specific problem.

**Create**

- Create a solution that we believe will solve the problem

**Lesson 3****Improve**

- Use the engineered technology again and again to make improvements until we have what we think is the best solution.
- Share the technology with others to use and to help improve.

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued TRANSITION to Math

What do we need to do first? (*figure out the problem*)

Well, what is my friend's problem? (*He needs to have a team make a pop-up book that tells about the team and where they live. The book has to contain homemade paper made from recycled paper.*)

What do we do next? We start asking questions and research to find the answers. What do we need to know before we can start thinking about a solution to this problem? (*Write all questions on a large chart paper to leave in the room for reference later. Included should be:*

- *How do you make a pop-up book?*
- *How do you make homemade paper?*
- *What will our book look like?*
- *How will we make each page?*

To answer our first question, I have a short video for us to watch. It is a silent film that shows the steps in making a simple pop-up book. Let's watch it.

- <http://www.wikihow.com/Make-a-Pop-up-Book> "Three Ways to Make a Pop-up Book," gives the perfect steps to planning a pop-up book. wikiHow

What do you think, boys and girls? (*responses – reactions*) Can we solve this problem by working through the Engineering Process?

Let's look at our Engineering Process Posters

- We have already identified the problem as needing to make this book for Alex Fuentes.
- And we have begun our research by watching the video. We may need more research, but at least we have a start on what to do.
- What do we need to do next? *Imagine many possible solutions to the problem.*

So, let's decide on the topic for our book by imagining what we might write about!

**Decide on your topic for the book.** We know we are going to write about ourselves and where we live. We also know that each of us must have one page in the book. Let's brainstorm ways to write our class book. I will keep a record of everything we have said. (*Facilitate a discussion of what the book can look like and what each page should contain. It could be about the students themselves, each page being a sentence or two about that student. Or it could be a book where each student tells what they like about where they are living now or what makes the area special, or the summer school.*)

#### Video to watch

- <http://www.wikihow.com/Make-a-Pop-up-Book> "Three Ways to Make a Pop-up book," gives the perfect steps to planning a pop-up book.
- (*If you do not have this video, you will need to outline the steps. You might find [http://library.thinkquest.org/J001156/makingbooks/em\\_popup.htm](http://library.thinkquest.org/J001156/makingbooks/em_popup.htm) helpful for this off-line purpose.*)

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### TRANSITION to Math

#### Building Background, Math

*Or perhaps each student tells about something they observed about where they live so other students can compare – weather, nature, the people, -- what makes this place different from other places (or what makes this place the same as other places) – Remember this is the imagining stage, anything goes on the brainstorming chart.*

These are great ideas! We will take another look at them a little later to decide on which topic to use for our pop-up book. Before we watch the TV Lesson, let's make the blank pages for our book. You will each make one page, and I will make one, also.

We will be using a ruler today. Look first at the ruler. Do you see the large marks that have the whole numbers as labels? These are inches. Take one of your color tiles and use the primary ruler to measure the edge of the tile. You do that by placing one end of the tile on the ZERO (*demonstrate*) and seeing how long the edge is. Where does the edge stop on the ruler? (*one inch*) That means the edge of this color tile is one inch long. We have been using coloring tiles to measure distances. You were really measuring in inches!

Now let's follow the directions on your Constructing My Page. (*Talk through the process with the students, making sure they are following with you.*)

- *Make sure folds are at the top in step 2 – makes marking the slits easier!*
- *Make sure students make the slit lines one inch apart – gives a better surface for gluing later. You will want the students to measure one inch on the top of the card – just put a dot at zero and a dot at one.*
- *Make sure the students start their two inch slit line at each dot.*
- *Draw the slit lines, then cut them, stopping the cut at the bottom of the slit. It is very important that the slits be the same length.*

Alright, we have each constructed our page for the book. Let me pick it up now so we will have them for Lesson 2 when we actually make our books.

We are almost ready for the TV Lesson. Our TV Teacher and Azulito are going to help us with another part of the book problem. They are going to show us how to make homemade paper. We are going to make the paper, too, in our Follow-up lesson.

We don't have to have a lot of homemade paper, but each of us will need a little on our pages!

**Objectives:** Review the math and language objectives to see how they were accomplished.

#### Materials:

BLM Constructing My Page  
Color tiles

#### Distribute the TV Materials

- EiE Engineering Design Process Poster(s) - class  
<http://www.eiestore.com/posters.html>
- BLM Questions for Making Paper – 1 per student
- Large chart paper copy of the questions on the BLM – 1 for class demo



## BLM-TM Unit 6, Lessons 1, 2, 3

## The Problem



One per student

Hello Girls and Boys,

My name is Alex Fuentes. Students helped me last year to win a kite competition by designing a special kite. Thank you! The kite was a beauty!

I am entering a different kind of contest this year. It's a pop-up book contest. Now the judges don't expect me to be a professional artist. They want to know how creative my team can be – and I'm hoping you will be my team.

The first requirement is that the pop-up book must contain homemade paper that is made of recycled paper. So I'm guessing that would be old scraps of paper that will melt down into a slurry or pulp. I would think colorful scraps of paper like construction paper, wrapping paper, lined notebook paper, newspaper – anything that can be mixed with water and whirred in a blender to chop it up and make a, well a slurry! After you have the slurry, you can drop in accent pieces like leaves, yarn or string, flower petals – anything that can mix into the slurry.

Now, the homemade paper doesn't have to be a lot of the book – just has to be a part of the book somewhere.

The next requirement is that the pop-up book must contain a page from each member of my team, and the book should tell a story about your team and where you live.

### Here are the specifications:

- Book must contain some pieces of homemade paper made from recycled paper.
- Book must contain a page from each team member.
- Book must tell a story of your team and include where you live.

I really need your help on this because I'm not all that creative.

Will you be my team this year?

Thank you,  
Alex





Uno por estudiante

Hola niños,

Mi nombre es Alex Fuentes. Los estudiantes me ayudaron el año pasado ganar una competencia de diseñar una cometa especial. ¡Gracias! ¡La cometa era una belleza!

Estoy ingresando en un concurso diferente este año. Es una competencia de libros de tipo “pop up”. Los jueces no esperan que sea un artista profesional. Solo quieren saber qué tan creativos puede ser mi equipo – y estoy deseando que puedas estar en mi equipo.

El primer requisito es que el libro pop-up debe contener papel hecho en casa que está hecho de papel reciclado. Así que supongo que sería, por ejemplo, trozos de papel que van a fundir en un lodo líquido o una pasta. Pienso que funcionarían tiras de diferentes tipos de papel de colores como papel de cartulina, papel de embalaje, papel de cuaderno rayado, periódico - cualquier cosa que se puede mezclar con agua y ser batido en una licuadora para cortarlo en pedazos y hacer una pasta. Después de hacer la pasta, se puede agregar piezas decorativas como hojas, hilo o lana, pétalos de flores - cualquier cosa que se puede mezclar con la pasta.

Ahora, el papel hecho en casa no tiene que ser una gran parte del libro – solo tiene que ser parte del libro en alguna parte.

El siguiente requisito es que el libro pop up tiene que contener una pagina de cada miembro de mi equipo y tiene que contar una historia sobre el equipo y donde viven los miembros.

**Aquí están las especificaciones:**

- El libro debe contener algunas piezas de papel hecho en casa hecho de papel reciclado.
- El libro debe contener una página de cada miembro del equipo.
- El libro debe contar una historia del equipo, incluyendo donde viven los miembros.

La verdad es que necesito tu ayuda con esto porque no soy tan creativo.

¿Puedes estar en mi equipo este año?

Gracias,  
Alex



**BLM-TM Unit 6, Lessons 1**

One per student

**Making our Plan** 


**Decide on Our Topic for the Book:**

**Our Supplies:**

- ❖ Homemade paper (*small amount for each student to have on his/her page*)
- ❖ Sturdy paper – 1 piece per student, 1 piece for the cover
- ❖ Scissors
- ❖ Ruler
- ❖ Glue
- ❖ Pictures
- ❖ Crayons or makers

## **BLM-TM Unit 6, Lessons 1**

Uno por estudiante

Haciendo el plan 

**Decide en Nuestro tema del libro:**

### **Nuestros Materiales:**

- ❖ Papel hecho en casa (cantidad pequeña para que cada estudiante tenga su propia página)
- ❖ Papel grueso – uno para cada estudiante para la portada
- ❖ Tijeras
- ❖ Regla
- ❖ Pegamento
- ❖ Dibujos
- ❖ Crayones o marcadores



**BLM-TM Unit 6, Lessons 1**

**Constructing My Page** 

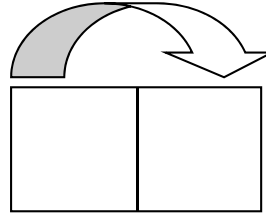
One per student

**Materials per student**

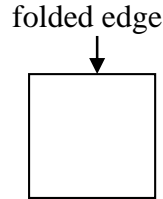
- 1 sheet of white cardstock (sturdy paper) 8.5 x 11 inches
- Ruler
- Scissors
- pencil

**Process**

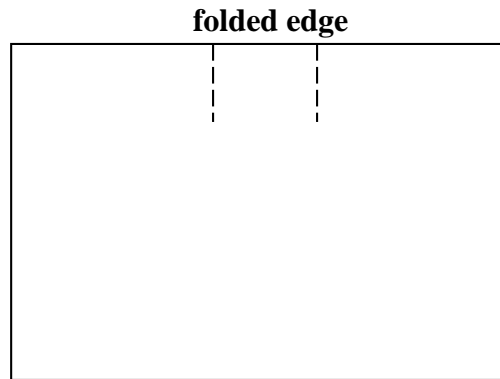
- Take your sheet of sturdy paper and fold in half



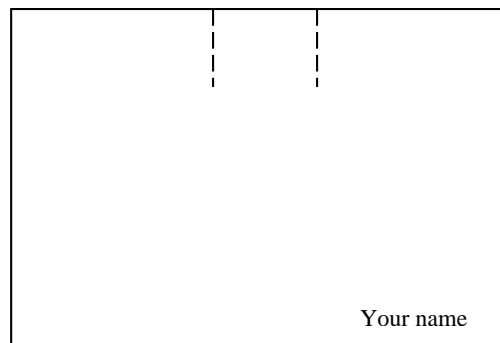
- Place it fold UP on your desk.



- Use your ruler to cut two slits in the folded edge – 1 inch apart, 2 inches down



- Write your name in the lower right hand corner of the card. Your teacher will pick up the card to give you when it is time to make your page.





### Literature Vocabulary

technology  
engineer  
engineered  
recycling  
mold  
deckle  
pulp  
slurry

### Math Vocabulary

Repeated from Word Wall words

### Materials

- EiE Engineering Design Process Poster(s) - class  
<http://www.eiestore.com/posters.html>
- **BLM** Questions for Making Paper – 1 per student
- **BLM** Where in the World was Paper Made? 1 per student (enrichment)

### TV Teacher ONLY

- Samples of homemade paper – from craft store or some you have made in practicing
- 2 identical cheap wooden frames
- screening that will stretch across each of the 2 frames plus 1 frame to dip into the pulp
- scissors to cut the screening
- duct tape
- sponge
- an old blender
- 2 pieces of felt
- an old sponge
- newspaper
- large tub
- scraps of paper to recycle such as construction paper scraps, wrapping paper scraps, newspaper
- flower petals or other add –ins
- <http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vdTrn> – teacher resource video and transcript that shows how to make the paper.

### Time Clue

**BB** = 7 minutes

**CI** = 20 minutes

**AC** = 1 minutes

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson



*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

### Math Objectives:

- Explain your observations.
- Use logical reasoning to justify your thinking.

### Language Objectives:

- Listen: Listen to the TV Teacher and Azulito, and your Classroom Teacher and classmates.
- Speak: Explain what you are seeing to your classmates.
- Read: Read the research.
- Write: Share-Write what you know now about the project.

### Science Objectives:

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

### Building Background, Math

This is really exciting, boys and girls! Thank you for inviting us to be a part of your engineering adventure! Azulito and I have been thinking about the question we have researched and are going to help you answer today, how do you make homemade paper?

As we started our research, we saw that there were several questions we wanted to answer. We have made a blackline master for you (*show BLM Questions for Making Paper*) which you should each have a copy of. Please use this checklist as we work through our model today to jot down when we answered these questions and the answers. You will use your checklist in a discussion during the Follow-up.

Our questions about making handmade paper are:

- What is used to make homemade paper?
- What supplies do we need?
- How long does it take to make homemade paper?
- How long does homemade paper take to dry?
- How does making homemade paper make use of recycling?

**ELPS** (English Language Proficiency Standard)

 **SMARTBOARD**

Questions – put up one at a time.

**CLASSROOM TEACHERS**

Stand by your large chart copy of the BLM Questions for Making Paper to fill in the first two questions.

-What is used to make homemade paper?

-What supplies do we need?

**Unit 6, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**TV Lesson** - continued



**TEACHER:** As you and I go through our research today, the girls and boys are going to see how well we answered our questions by checking under those little funny faces. Let's look at those funny faces – our response icons.

- Look at the first face. He is writing something down, and looks pretty interested, doesn't he. You will put a check in his column when this experiment gives you a positive response to the questions. If the experiment answers your questions, put a check in this icon's box.
- But, if you are not sure, you can use the second icon. See the question mark above his head. He is thinking about the question, but not sure. You would want to investigate this one further.
- And that last icon – if the experiment doesn't help you. If the experiment doesn't answer your questions, or give you ideas, or help you answer the question, then you would put a check under this icon.

**AZULITO:** Ahh, I see. And I also see that you have extra spacing under some of the questions. Are these for taking notes?

**TEACHER:** Right you are Azulito! Your teacher has a large chart of these questions and will keep track of the answers as you are. You can compare notes with her after the demonstration.

You know, Azulito, people all of the world have been making paper for over 2000 years! Their practices and traditions in paper making have been passed down from generation to generation. Perhaps some of our boys and girls have family members who learned how to make paper. There is an enrichment page that you might look at later that shows the very early examples of paper making that date back over 2000 years.

Paper Engineers who people who work with paper. Either they find better ways of making the paper, or they find different ways of using the paper. These Paper Engineers have learned from the experiences and practices of all of those 2000 years of paper making. That is how we have commercially made paper manufactured in big factories. And it is how we have the simple techniques we'll show you today for making paper.

**AZULITO:** This sounds like so much fun! I can't wait!

**TEACHER:** Well, then, let's not wait. Let's begin right away!

**CLASSROOM TEACHERS**  
*Keep students engaged by having them take notes, even if it's pictures, on the Questions checklist.*

**The rest of the supplies to make paper**

- 2 identical cheap wooden frames
- screening that will stretch across each of the two frames plus one frame to dip into the pulp
- scissors to cut the screening
- duct tape
- sponge
- an old blender
- 2 pieces of felt
- newspaper
- large tub

**Unit 6, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**TV Lesson** - continued



**AZULITO:** Hmm, I see that you have lots of paper scraps here. What will you do with those? (*Show the scraps of paper.*)

**TEACHER:** These are old pieces of paper that are not big enough to be used anywhere else. They would probably have been thrown away. We are going to recycle these by putting them into water and chopping them up very finely with a blender to make a pulp, or slurry. This will be our base for the homemade paper.

**AZULITO:** And I see some other things there that look like (*flowers, string, yarn – whatever add-ins you have collected*). How will you use those?

**TEACHER:** Once we chop up our pulp or slurry, we will add these to the mixture. We don't want these to be chopped up finely because we want them to show in the paper just as they are.

**AZULITO:** Cool! So that is going to make the actual pulp or slurry that will dry into the paper. But what are all of the other supplies you have?

**TEACHER:** (*Name and describe the function of each of the other materials. Deckle and Mold are vocabulary words – be sure you explain them.*)

**AZULITO:** OK, I think I'm ready to start. Are you ready, boys and girls?

**Comprehensible Input**

**TEACHER:** Then let's begin our paper making process!

(*Follow the directions from the video clip or transcript to make paper. Here are some helpful hints to work within your time constraints.*)

- *Keep track of the time it takes you so students can answer question #3.*
- *Have two sets of cheap frames – one set already made as the mold and the deckle; one set of frames, screen and duct tape before assembled.*
- *Have your tub of water and drying area all set up and ready to go.*
- *Be sure that you have several samples that are dry that you can show once you have completed the process. Hopefully you can have several colors to see – control the colors by controlling the colors of scraps you use in the blender – red construction paper really makes things red!*

 SMARTBOARD

Empty chart for Questions  
Checklist placed next to the list of questions. Questions “fly” onto the Questions Checklist one at a time.  
Smiley Faces “fly” as they are being discussed.

**Azulito’s Corner  
Lesson 1**

What were your favorites during this summer?  
book:  
language activity:  
TV lesson:  
home connection:  
Take time to think about what you have done this summer, and talk about your favorites and why they are favorites.

**Unit 6, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup> TV



**Lesson** - continued

**AZULITO:** That was a lot of fun! This paper is going to be beautiful! And it didn’t take that long, really. We finished in (*minutes*). How long with this paper take to dry?

**TEACHER:** This will take several hours. I think we will leave ours till tomorrow to make sure it is very dry before we try to cut it apart.

**Azulito:** (*Describe the task – talk about some things we have learned.*)

**TEACHER:** Azulito and I are going to take our notes and start imagining our pop-up book. You have already started the imagination process. You will continue to imagine, and to make paper during your follow-up lesson.

**Objectives**




- **TV Teacher:** Tomorrow you and Azulito will be making a pop-up book. See the silent video, <http://www.wikihow.com/Make-a-Pop-up-Book> “Three Ways to Make a Pop-up Book,” gives the perfect steps to planning and creating a simple pop-up book.

**BLM Unit 6, TV & Follow-up Lesson 1**

**Questions for Making Paper**





One sheet per student

			
What is used to make homemade paper?			
What supplies do we need?			
How long does it take to make homemade paper?			
How long does homemade paper take to dry?			
How does making homemade paper make use of recycling?			
What else did I learn today about homemade paper?			



One sheet per student

			
¿Qué se usa para hacer papel hecho en casa?			
¿Qué materiales necesitamos?			
¿Cuánto tiempo se tarda para hacer papel hecho en casa?			
¿Cuánto tiempo se tarda para que se seque el papel hecho en casa?			
¿Cómo se utiliza el reciclaje en hacer papel en casa?			
¿Qué más aprendí hoy acerca de hacer papel hecho en casa?			



# BLM Unit 6, TV & Follow-up Lesson 1 Where in the World Was Paper Made?



One sheet per student



The earliest form of paper was found on the:  
Asian continent in China; American continent –  
the Mayans of Mexico.

Trading brought the art of papermaking to:

- Portugal
- Spain
- Italy
- Southern France
- Germany
- Japan
- Pakistan
- Uzbekistan
- Egypt
- Morocco

Las primeras formas de papel se encontraron  
en: el continente asiático en China; el  
continente americano - los mayas de México

El comercio trajo el arte de la fabricación de  
papel a:

- Portugal
- España
- Italia
- Sur de Francia
- Alemania
- Japón
- Pakistán
- Uzbekistán
- Egipto
- Marruecos



**Literature Vocabulary**

technology  
 engineer  
 engineered  
 recycling  
 mold  
 deckle  
 pulp  
 slurry

**Math Vocabulary**

Repeated from Word Wall words

**Materials**

- samples of homemade paper – from craft store or some you have made in practicing
- 2 identical cheap wooden frames
- screening that will stretch across each of the 2 frames plus 1 frame to dip into the pulp
- scissors to cut the screening
- duct tape
- sponge
- an old blender
- 2 pieces of felt
- an old sponge
- newspaper
- large tub
- scraps of paper to recycle such as construction paper scraps, wrapping paper scraps, newspaper
- flower petals or other add -ins
- <http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vdTrn> – teacher resource video and transcript that shows how to make the paper.

- <http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vdTrn>

**Unit 6, Lesson 1**

1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up****Math Objectives:**

- Measure and compare lengths.
- Explain your strategies.
- Explain your observations.
- Use logical reasoning to justify your thinking.

**Language Objectives:**

- Listen: Listen to your teacher and your classmates.
- Speak: Explain your observations from the TV Lesson answers to questions.
- Speak: Be able to explain why you believe as you do.
- Read: Read your comments on the Questions Checklist.
- Write: Write your letters to your families.

**Science Objectives:**

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words

**Practice and Application, Math**

*First have students talk about the notes they took during the TV lesson. Notes might have just been pictures, but that is just fine – as long as the students can tell you why they wrote what they did. Use your notes from the lesson to help fill in any gaps. Take each question individually and ask the following questions. Make a chart for each question and write down what the students tell you. This is their data. Refer to it when making the final decision for the planning session, Classroom Lesson 2.*

- What did we learn from the TV Lesson about (*question topic*)?
- Was that enough information to help formulate our plan and make homemade paper? Why or Why not?
- What else did you learn about paper from the TV Lesson? (*refer to your notes on the Class Question Chart*)

[afts/How-to-Make-Paper-With-Kids.htm#vdTrn](#) – teacher resource video and transcript that shows how to make the paper.



**Technology**  
(repeat practice)

[http://www.learn4good.com/games/kids/double\\_digits.htm](http://www.learn4good.com/games/kids/double_digits.htm)  
Add/Subt. double digits

<http://resources.oswego.org/games/SpeedGrid/Addition/urikares.html> two-digit center game for one person OR you could set up teams.

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>



### Follow-up - continued

*(Once you have gathered their information, continue, you will have the students help you create the paper that you will use small amounts of in the pop-up book.*

*You will need a large supply of scrap paper. Keep the following in mind:*

- *Using brightly colored construction paper will make your paper vivid colors. Even a small amount of red or green or blue will color the pulp.*
- *Mixing different colors of construction paper will be like mixing different colors of dye or paint. Too many different colors will end up with a very dark muddy paper.*
- *The color you choose will limit your use of the homemade paper in the pop-up book.*
- *Be sure to add ample add-ins so that your piece of paper will have a generous amount distributed around it.*

*If you can, watch the online video with the students. It would be very helpful. <http://video.about.com/familycrafts/How-to-Make-Paper-With-Kids.htm#vdTrn> – You can compare and contrast to the TV Lesson. TV Teachers were also given this link as a resource to help model their lessons.*

*You will probably want to do this activity as a large group. If you can work outside, so much the better. Be sure, though, that you have the newspaper, felt and drying area set up on a board that can be taken inside once you are finished for today.*

*Let the paper dry until Lesson 2.*

*You can make a second sheet of paper by using the unattached screen in the pulp slurry. Just dip in the screen as you did the mold and deckle. This will give you an irregularly shaped paper model. Naturally, you will need a second drying area: two more sheets of felt and more newspaper.*

Great paper! We will use this paper tomorrow as we begin to plan our pop-up book and our individual pages.

### Math Journal Writing

How did you use your observation skills today?

**Objectives:** Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.

**Math Objectives**

- Share a snack in half.
- Explain why each portion is half.

**Language Objectives**

- Explain why each portion is half.
- Share-write what is a half.

**Vocabulary**

half

fair shares

equal pieces

**Materials**

- one 8.5 x 5.5 sheet of paper (whole duplicating sheet cut in half) per group of 4
- Energy Snack Mix (*you may have the students mix this, in which case you need all of the measuring cups, spoons, bowls and mixing spoons; or you may pre-mix and give the groups of 4 the pre-mixed ingredients in a quart plastic bag.*)
  - 1 cup choc chips
  - ½ c oatmeal
  - ½ c crunchy peanut butter
  - ½ c nuts
  - 1 T honey
  - Wheat germ (optional)
- Quart Ziploc bags
- 4 paper plates
- 4 paper towels
- 4 plastic knives
- Chart paper with question: **How do you know you each have half of the snack?**

Snack Fractions will be simple during this unit because of the extensive project design in the main unit. Students simply share and answer orally administered questions.

**Unit 6, Lesson 1**1<sup>st</sup> – 2<sup>nd</sup>**Snack Fractions**

*Children should wash their hands before this activity if using food items.*

**Snack Fractions**

As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.

You are going to work in partners, but with another set of partners for this activity. So get a partner, then I will pair you with other partners

*(If you are having the students mix the ingredients, do it before you begin the lesson that follows.)*

This mix is to make an Energy Snack. First, I want the four of you to decide how you will divide the mix so each partner pair will have half of the mix. *(Give students time to plan.)*

*(When all partners are ready, share their plans as follows.)*

Alright, let’s talk about your plans. I have cut rectangles so that as you describe your plan, I can divide the rectangle as you have described *(or let the student pairs come up and draw as they explain – your choice)*. This large rectangle represents the whole mix of energy snack mix. How will you divide this rectangle so that each pair will have an equal share of the mix?

*(Let each group of four describe their sharing. Divide the rectangle exactly as the group describes, then have the class decide whether they have divided into fair shares. The intent is for the pairs to divide the snack mix in HALF; however, some may see that each person in the group of four should get one-fourth. That is alright, as long as they can explain what they did once the mix has been cut into the fractional parts. That group, of course, will not do the next part of the activity.)*

Now, as partners, how will you divide your portion of the snack mix? *(Share the mix into two equal parts or halves. If another group did divide into fourths, have them now prove that their two-fourths is the same amount as the halves the other partners took. )*

- What fractional part of the partner portions do you have? (*half*)
- How do you know you have half of the partner mix? (*two equal portions*)
- What is a fractional part of a whole or set?

## Unit 6, Lesson 1

1<sup>st</sup> – 2<sup>nd</sup>

### Snack Fractions



#### Writing:

- Share-write the student answers to: **How do you know you each have a fractional part of the snack? What fractional part do you have?**

#### Objectives:

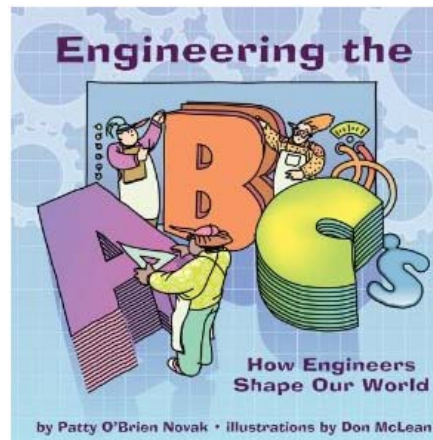
Read the objectives. How did we accomplish these in our snack fraction lesson?

Family Fun – 1<sup>st</sup>-2<sup>nd</sup>, Unit 6 Lesson 1



Dear \_\_\_\_\_,

We read, *Engineering the ABC's* about how engineers shape our world with the technology they build to solve problems.



One of the creations of engineers is \_\_\_\_\_.

Did you know that \_\_\_\_\_

Today in math we learned \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

My teacher would like for us to:

- Look around the house and find as many engineered creations as we can find.

Sincerely,

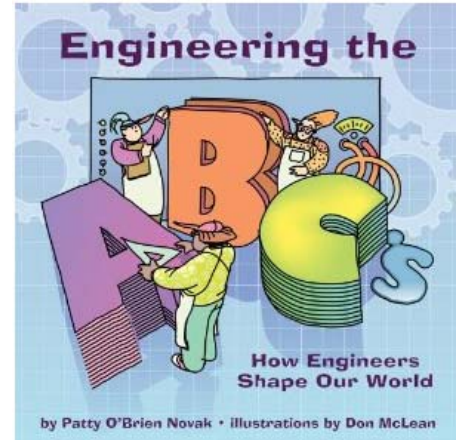
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Diversión en Familia – 1<sup>ro</sup>-2<sup>do</sup>, Unidad 6 Lección 1



Querido \_\_\_\_\_,

Leímos *Engineering the ABC's* que trata sobre cómo los ingenieros dan forma a nuestro mundo con la tecnología que construyen para resolver problemas.



Una de las creaciones de los ingenieros es

\_\_\_\_\_.

Sabías que

\_\_\_\_\_?

Hoy en matemáticas aprendimos

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_.

A mi maestra le gustaría que nosotros:

- Recorramos la casa y encontremos todas las creaciones de ingenieros que podamos.

Atentamente,

\_\_\_\_\_



**Materials**

- BLM CGI Unit 6 – teacher only

**Math Objectives**

- Problem Solving

 **Balanced Literacy**

**Language Objectives**

- Speak to partners, teacher, and class using vocabulary.
- Explain problem solving strategy.
- Verbalize observations about graph data.
- Discuss wants and needs.

**TEKS**

1<sup>st</sup> – 1.1B, 1.3A,B,  
2<sup>nd</sup> - 2.2A,B, 2.3A,B,C, 2.5A,

**Assessment Items**

Post-assessment of all items

**Azulito’s Corner**

**Lesson 2**

Describe your Engineering project, and tell us how it will solve the problem. You can use your plan.

**Unit 6, Lesson 2**

1<sup>st</sup> – 2<sup>nd</sup>

**Daily Routine**



-----  
**ESSENTIAL**

**CGI Problem**

- Lesson 1 – Post-assessment
- Lesson 2 – **Join Change Unknown**
- Lesson 3 – Compare, Difference Unknown

-----  
**OPTIONAL:** *These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.*

**Calendar** – Continue activity

**Straws** – Continue activity

**Pennies** – Continue activity

**Money Matters**

**Vocabulary Building**

**Literature Selection**

*Engineering the ABC's: How Engineers Shape Our World*  
by Patty O'Brien Novak

**Materials****Language Materials**

- BLMs from TV Lesson 1 that students have completed – each student has his/her own.
- Teacher's camera for taking shots of students in action (still or movie)
- EiE Engineering Design Poster(s) in the room.
- Plenty of pictures, magazines, or post cards of your area, the school or site, crops that are being harvested, some memorable landmark or manmade site in the area – anything that might help tell you classes' story. You can find many of these on the Internet, and can size them accordingly. Consider providing some line drawings that students can color on their own.

**Materials for Transition to Math Lesson**

- <http://www.marthastewart.com/918288/creating-pop-books-robert-sabuda> This whole lesson segment depends upon watching this video.

**Literature Vocabulary**

technology  
engineer  
engineered  
recycling  
mold  
deckle  
pulp  
slurry

**Math Vocabulary (repeat vocabulary)**

regroup  
exchange  
compare  
fewer than  
less than  
more than

**Unit 6, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson**

Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.

**Math Objectives:**

- Apply mathematics to real life problems.
- Explain your thinking.

**Language Objectives:**

- Listen: Listen to the teacher to learn and use new words.
- Speak: Discuss your thoughts about the kite project.
- Read: Read and use the vocabulary words.
- Write: Share-Write Our Plan for Alex's Kite.

**Science Objectives:**

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

**Building Background, Vocabulary**

You worked really hard in Lesson 1 to research information and to make our homemade paper, one of the essential parts of the contest pop-up book. I know this will be helpful to my friend Alex. Thank you for your hard work!

Today we will continue our imagining, we will create a plan, and later on today we will actually start creating our pop-up books.

Which words on the word wall did we use in Lesson 1? (*technology, engineer, engineered*) Can someone tell me what each of those words means? Can someone use each of those words in a sentence?

**Practice and Application, Vocabulary**

When we talk about TECHNOLOGY in this unit, what will we be talking about? (*something manmade that was created to solve a problem*) Give me some examples of Technology in the room (*pencils, paper, desks, shoes, clothes, lights, floors and flooring, windows – etc.*) Anything that is manmade to solve a problem.

And what does an ENGINEER do? (*Works through the Engineering Design Process to solve a problem by ENGINEERING some TECHNOLOGY as the problem's solution.*)

## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



*(Hold up your camera) What is this? (camera) What does it do? (Takes pictures – either still or moving – or perhaps you have your phone – whatever you have, it will work.)*

#### Comprehensible Input, Literature

This camera is a piece of technology. It is actually “high tech,” or technology that is very complicated to create. Our literature book even mentions movies and the cameras it takes to make a movie (*p 16 – read in the same format as before*). I’m going to use this camera to document what we are doing in our classroom. We can use the pictures in our presentation display, so when you see me clicking away, just ignore me and keep working – we only want working shots, OK?

So, Junior Engineers, let’s get working again on the problem. What is the problem that we are working on in this unit? *(Alex’s pop-up book)*

Let’s go back to our literature book *(distribute books to partners as you talk)*, turn to page 14, and read again about kites and what makes them fly.

*(Read the question, then the answer.)*

To continue our research into making pop-up books, I would like for us to watch a video about a real Paper Engineer. Yes, that is right, there is a job called, paper engineer. These engineers work in many ways to either make the process of manufacturing paper easier and more efficient; or they work to find ways to use paper. Let’s see what you think of Robert Sabuda and how he uses his knowledge of math and problem solving and his artistic talent to be a Paper Engineer.

<http://www.marthastewart.com/918288/creating-pop-books-robert-sabuda>

*(Teachers, the entire lesson is built around this video.)*

Alright, now that we have viewed the video, let’s talk about it a little bit.

- What type of Engineer is Robert Sabuda? *(paper)*
- Why do you think he is called a Paper Engineer? *(He uses paper to design books for enjoyment.)*
- When and how did Robert Sabuda begin his love of pop-up books? *(He has always been an artist from Kinder on, making big messes. He would take pop-up books apart as a child to find out how they worked.)*
- Would you say that Robert Sabuda is a quitter? *(No – most of his folds fail the first time he tries them. He keeps trying until he finds a way to make it work.)*

## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



During Lesson 1 we began our imagining process by thinking about our topic for our book. First of all, do you think our book can be as detailed as Robert Sabuda's books? *(response)* Why do you think that way? *(responses)* *(First of all, there isn't enough time. But more than that, even Robert Sabuda started out simply to learn how to create. He has developed his technique for over 30 years. We're just starting.)*

Let's talk about our project. What are the specifications that Alex gave us?

- Book must contain some pieces of homemade paper made from recycled paper.
  - Do we have that material available to use? *(Yes, the class made it in Lesson 1 Follow-up.)*
- Book must contain a page from each team member.
  - How do you know that each of us will make a page for the book? *(In lesson 1 the class created a blank page to use to generate the page for the book.)*
- Book must tell a story of your team and include where you live.
  - This is the part we have not decided upon yet.

Before we read through our brainstorming selections, I brought some pictures in that might be used as pop-ups. *(Show your collection of pictures, magazines, post cards of your area, the school or site, crops that are being harvested, some memorable landmark or manmade site in the area. Talk about each one and how it reflects your classes' story.)*

Now, let's read through the brainstorm ideas. Maybe these pictures will help us see story. *(Do so, making no comment as to whether it will work or not— just reading and making sure students understand what the idea means.)*

Are there any here that will not work because of the time we have to create it? *(Responses from the students – be sure they explain why they think they could not accomplish the task. Everyone must agree that the idea is good, but probably would take longer to make than we have time to make it. Strike through that idea with a marker so it won't be considered in the next discussion.)*

Now I'd like for you to group with two or three people around you and talk about each one of the brainstormed ideas that are left. When you find one idea that you really like and believe that we can finish in the time we have, I'd like for you to prepare a quick presentation that you will give to the class telling us why you like the idea and how we would go about dividing the book so that everyone has a page to do.

## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



Alright, you need to be in groups of three or four. I will give you a few minutes to discuss the ideas and decide on one you will present to the class.

*(Walk around the room to listen to the discussion, jump starting any groups that might be stalled. Be sure to draw their attention to the many pictures you have brought in – where might they be used?)*

Let's hear your presentations. Begin with "Our group likes.... because"  
*(Each group should present. Be sure to involve every member of that group.)*

You have heard all of the presentations. We have talked about the importance of meeting the needs of the problem; and we have talked about how important it is to choose a pop-up idea that we can finish in the time limit.

I'm going to number these ideas (*do so, 1, 2, 3 . . .*). Number 1 is (*read*). Number 2 is (*read*). Number 3 is (*read*). We are going to vote as a class. You will all close your eyes, and when I say the number of the idea you want to do for the pop-up book, simply raise your hands. **KEEP YOUR EYES CLOSED** until we are all finished. Ready?

Those that would like Number 1 (*read*) raise your hands. (*Write number beside idea. Repeat for the rest of the presented ideas.*)

We have just used an Engineering Process. We thought about the options and we chose one to try based on our research and how closely it related to our goals.

**Math Objectives:**

- Apply mathematics to real life problems.
- Explain your thinking.

**Materials for Transition to Math Lesson**

- Sentence strip title: Our Pop-up Book Plan
- Sentence strip to write the sentence stem for pop-up written on it
- Sentence strips to write the students' page ideas on as they give them to you.
- Tape to tape the sentence strips to the board or wall so that you can move them if they need to be reordered
- dark marker
- pictures, etc., from Reading Lesson.

**Unit 6, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Classroom Lesson** - continued**TRANSITION to Math  
Building Background, Math**

What stages of the Engineering Design Process have we completed?  
(*Ask, Imagine*) Check the poster – have we . . . ? (*ask each of the deciding factors individually*):

**Lesson 1****Ask**

- Decide what our problem is that we want to solve.
- Research ways to solve that problem.

**Imagine**

- Imagine many possible solutions to the problem.
- Try some of the possibilities.

What should we do next? (*plan and create*)

**Lesson 2****Plan**

- Use what we learned in our imagining stage to plan the solution to our specific problem.

**Create**

- Create a solution that we believe will solve the problem

And in Lesson 3, we will test and improve before we present.

**Lesson 3****Improve**

- Use the engineered technology again and again to make improvements until we have what we think is the best solution.
- Share the technology with others to use and to help improve.

We now know that our theme or topic for our pop-up book is (*whatever you chose in the reading lesson*).

What we need to do now is to plan how we will break that apart both in pictures that pop up, and in the sentences that we write.

In lesson 1 we watched a video that showed how to make a pop-up book. Let's watch part of that again. <http://www.wikihow.com/Make-a-Pop-up-Book>

We have already chosen our topic – that is step 1.  
And we know what supplies we are going to use – that is step 2.  
What we need to do now is to plan our story – step 3.

## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



#### TV Materials:

- BLM Improvement Checklist  
– 1 per student

#### TRANSITION to Math

*(You are on your own with this planning because the pop-up book depends upon which idea your class decided to take. Here are guidelines to help you:*

- *Help the students by writing the very first page according to your theme. For example, if you have chosen, “What makes this Area Special,” you might begin:  
We live in \_\_\_\_\_. This area is special to me because we grow the very best \_\_\_\_\_.  
Talk about how you could see your illustration in your mind – maybe a background of green and a pop-up of the fruit or vegetable.*
- *Use your opening statement as a sentence stem for each to follow. Write the sentence stem on chart paper.*
- *Ask each student to complete the sentence stem on his or her own and think about how they could illustrate that with a background and a pop-up. Be sure you have the pictures, magazines, post cards, etc., in prominent view so that students can see the collection.*
- *As students tell the class what their page could be, write their ideas on the chart paper. When you finish, you will have your pop-up book contents.)*

We have each talked about what we could write on our page, and each page is now on a sentence strip. Now it is time to plan the book.

Is there a special order that we need to tell the story? *(Do you need to sort by the types of things students are representing? By timeline? By a direction that you would walk through the area, say south to north? Is there a specific order, or just any order will do. Rearrange the sentence strips if you need to have a specific order – you will probably need to lead them in this reorganization.)*

Are there pictures here that you would like to use? We could tape those by your sentence strips. *(Read through each page plan and ask the student whose plan that is if there is a picture they would like to use for the pop-up. Tape that next to the sentence strip.)*

#### Distribute the TV Materials

And now, Junior Engineers, we have our plan. We will keep this in front of us as we watch our TV lesson. But first, let’s get up and move! *(Lead the pop-up and bend down activity again.)*

**Objectives:** Review the math and language objectives to see how they were accomplished.

**Literature Vocabulary**

technology  
 engineer  
 engineered  
 recycling  
 mold  
 deckle  
 pulp  
 slurry

**Math Vocabulary  
(repeat vocabulary)**

regroup  
 exchange  
 compare  
 fewer than  
 less than  
 more than

**Materials**

- EiE Engineering Design Process Poster(s)  
<http://www.eiestore.com/posters.html>
- Sentence Strip planning as per the TV Teacher Planning Guide – make and display the sentence strips to show your planning. – TV teacher only
- **BLM** Improvement Checklist – 1 per student
- **BLM TV** Lesson Pop-up Book Ideas (optional) – TV pre-made
- Pre-make 7 pages plus a cover for the pop-up book. You may create your own about San Antonio, or you may use the ideas on the TV Lesson Pop-up Book Ideas.
- Box of large paperclips. You will model paper clipping the book together rather than glue it – it is your prototype which you might want to rearrange or need to add to.

**Unit 6, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives:**

- Explain your observations.
- Use logical reasoning to justify your thinking.

**Language Objectives:**

- Listen: Listen to the TV Teacher and Azulito, and your Classroom Teacher and classmates.
- Speak: Explain what you are seeing to your classmates.
- Read: Read the Improvement Checklist and make judgments on the TV Teacher's and Azulito's project.
- Write: Share-Write what you learned from this lesson that can help you test your project.

**Science Objectives:**

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

**Building Background, Math**

Azulito and I have made our plan for our solution to the problem, too.

*(Show the chart you made of your plan following the BLM Teacher Working Copy of Play. Talk to the students about each element on the plan.)*

I know that you brainstormed several possible plans. Then you looked at each one to see if they met the needs for your project. Let's look at that needs list now and make sure that Azulito's and my plan meets all the needs, too.

- Book must contain a page from each team member.
- Book must tell a story of your team and include where you live
- Book must contain some pieces of homemade paper made from recycled paper on each page.

**AZULITO:** Our plan makes sure that all of those specifications are met.



## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



**TEACHER:** And we added a few more things that we thought needed to be checked if we are going to create a beautiful book. We have put everything on a checklist for you (*show the BLM Improvement Checklist*). You should have one now to use to check us for improvement, then you will use the same list when you check your book for improvement in Lesson 3.

**AZULITO:** And I see the same funny faces at the top – the first one is checking that we are OK on that specification. The next one says that there is still a question about whether we really met that specification. The last one says “NO, we did not meet that specification!” (*Read through the BLM with the students.*)

**TEACHER:** Then, let’s get started building our technology! Remember, the definition of technology is something manmade that is created to solve a problem. Even though we are building a book out of paper, we are creating something that will solve Alex’s problem. The popup book is technology!

**AZULITO:** Yes, and remember the Paper Engineer, Robert Sabuda, from the video during the reading lesson – he makes a living by engineering pop-up books.

#### Azulito’s Corner Lesson 2

Describe your Engineering project, and tell us how it will solve the problem. You can use your plan.

#### Comprehensible Input

**TEACHER:** We have seven members to our team (*name the team members – use the video teams or make up your own names*). Each member made one page of the book, and we are ready to put the pop-up book together. We are going to use paperclips, though, instead of glue today so that we can make improvements where we need to.

**AZULITO:** Let’s check all of our individual pages first – that way we can see if everything is working. (*Go through each page, finding the improvements needed that you have purposefully made in the pages. Don’t mention that they are on the checklist, just note that something needs to be redone. These pages will have to be done again so they fit the specifications sheet. Students should recognize that these are improvements needed – but you will check that out with them as soon as you have finished paper clipping the book together. Azulito and Teacher should play this part back and forth.*)

**TEACHER:** (*Put the book together as best you can with the paperclips so you can see how the book will look.*)

## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson - continued



We found several places that need improvement. Did you find them, too? Let's read our Improvement Checklist and see if you found what we found. *(The funny faces you mark are dependent upon the errors you made in the pages.)*

- **Book must contain a page from each team member**
- **Book must tell a story of your team and include where you live.** We did this one. *(If one page is missing, just say that you saw it and you know it fits the criteria. The team member just forgot to turn it in.)*
- **Book must contain at least one piece of homemade paper made from recycled paper on each page.**

And here are the three that we added.

- **Pop-ups fit neatly inside the book.**
- **Pop-ups work.**
- **Words are written neatly and carefully.**

**AZULITO:** *(Talk about the things you learned from working and what still needs to be done to improve the book, then explain Azulito's Corner).*

**TEACHER:** Thank you, Azulito. We will go over your Improvement Checklist to make our improvements! We will have our finished product to show you in Lesson 3!

**Objectives:** Review the math and language objectives to see how they were accomplished.

**BLM Unit 6, TV & Follow-up Lesson 2**    **BLM TV Lesson Pop-up Book Ideas** 

OPTIONAL - TV Teacher, you may certainly create your own 7 page plus a cover book; however, here are ideas for a 7-page book about San Antonio if you'd like to use it.




<b>Page Writing (handwritten, not typed)</b>	<b>Popup</b>	<b>Background</b>
<b>Cover</b> What is special about San Antonio	none	Outline of the state of Texas with a heart made out of the homemade paper placed where San Antonio is.
<b>Page 1</b> My name is (name) I think San Antonio is special because the Alamo is here.	Picture of the Alamo	Painted blue sky Cottonwood tree cut from homemade (HM) paper
<b>Page 2</b> My name is (name) I think San Antonio is special because we Fiesta every April.	Picture of Mexican Dancers	Yellow wash background With line drawing La Villita building Lanterns hanging, one in HM paper
<b>Page 3</b> My name is (name) I think San Antonio is special because at Christmas the River Walk has millions of colorful lights hanging from trees.	Picture of huge tree with lights hanging from the trees Part of tree made of HM paper	Daubed painted trees with daubs of lights. River running
<b>Page 4</b> My name is (name) I think San Antonio is special because we have the Tower of Americas.	Picture of Tower	Night sky Stars of HM paper
<b>Page 5</b> My name is (name) I think San Antonio is special because we have the Riverwalk.	Picture of river barge	Magazine picture of the Riverwalk Ducks of HM paper
<b>Page 6</b> My name is (name) I think San Antonio is special because AMTRAK comes through our city.	Picture of engine	Sunrise sky Silhouette of skyline Rest of the train behind the engine HM paper ballast
<b>Page 7</b> My name is (name) I think San Antonio is special because we are here.	Picture of Azulito Standing on HM paper cloud	Pastel background Photos of the other 6 on the team

**TV TEACHER:** Remember that you will need to make TWO of each of the pages that contain an error.



**BLM Unit 6, TV & Follow-up Lesson 2**  
 One sheet per student

**Improvement Checklist** 

			
<ul style="list-style-type: none"> <li>• Book must contain a page from each team member.</li> </ul>			
<ul style="list-style-type: none"> <li>• Book must tell a story of your team and include where you live.</li> </ul>			
<ul style="list-style-type: none"> <li>• Book must contain at least one piece of homemade paper made from recycled paper on each page.</li> </ul>			
<ul style="list-style-type: none"> <li>• Pop-ups fit neatly inside the book.</li> </ul>			
<ul style="list-style-type: none"> <li>• Words are written neatly and carefully.</li> </ul>			
<ul style="list-style-type: none"> <li>• Any other issues we didn't consider.</li> </ul>			



**Literature Vocabulary**

technology  
 engineer  
 engineered  
 recycling  
 mold  
 deckle  
 pulp  
 slurry

**Math Vocabulary  
(repeat vocabulary)**

regroup  
 exchange  
 compare  
 fewer than  
 less than  
 more than

**Materials**

- Pop-up book pages that students created in Lesson 1
- Sentence strip planning from TM lesson
- Box of large paper clips – 4 clips per student
- Pictures, etc., from reading and TM lesson
- Extra pages of white paper so that new pop-up book pages can be created if necessary to correct errors.
- Markers, crayons or water colors – 1 set of chosen medium per student
- Primary rulers – 1 per student
- Glue sticks – 1 per student
- Scissors – 1 pair per student
- **BLM** Lined Writing Paper – 2 or 3 per student
- **BLM** Improvement Checklist from the TV Lesson

**Unit 6, Lesson 2**1<sup>st</sup> – 2<sup>nd</sup>**Follow-up****Math Objectives:**

- Explain your strategies.
- Explain your observations.
- Use logical reasoning to justify your thinking.

**Language Objectives:**

- Listen: Listen to your teacher and your classmates.
- Speak: Explain your observations from the TV Lesson answers to questions.
- Speak: Be able to explain why you believe as you do.
- Read: Read your comments on the Questions Checklist.
- Write: Write your letters to your families.

**Science Objectives:**

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

**Practice and Application, Math**

Before we start to build our technology, let's look at your Improvement Checklist for the TV Teacher and Azulito. What did you observe as you watched the test of Azulito and the TV Teacher's technology? (*Students share their markings on the BLM. Talk about any differences. Let the students support their own answers, explaining why they marked the column they did.*)

What improvements would you suggest they make in their technology before I would take it to Alex? (*Listen and write on board.*)

We are ready to create our technology. We want to follow our plan. We also want to learn from Azulito and the TV Teacher's project. What improvements did you suggest for them that we should watch out for, too? (*Go back to the list to relate to your own plan.*)

Now, let's look at our research video again to see how we can create our backgrounds and writing, then add the pop-ups.

## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up - continued



(Show <http://www.wikihow.com/Make-a-Pop-up-Book>, starting with Method 2 of 3, step 4.

- **Step 4** – Each student already has their page created. If they find they need a new one, you have plenty of materials and can help them quickly make a new one. Remember, Robert Sabuda – he learns from his mistakes and works till he gets the project to suit himself.
- **Step 5** - Students already have their sentence strips which they can copy onto the lined paper, then cut out the paper to paperclip to their page. Let students do this part of the project and have it ready to paperclip on when the rest of the page is finished. Put the sentence strips back on the board and in order before you go on.
- **Step 6** – Students have already chosen a picture for their pop-up if they are using one you have provided. Use this to think about a background. Notice that the video shows very simple backgrounds. The TV Teacher and Azulito had very simple backgrounds.
- **Method 3 of 3: Making it Pop!** Now students will see how to attach the pop-up.
- **Step 1** – Notice where the glue goes – it can only touch the “leg” of the pop-up bench and the pop-up picture. Otherwise the pop-up might not work.

This is the end of the video that we need to see today. I will be circulating the room to answer any questions. For you.

(Write bolded steps on the board.)

1. What do we do first? **Write the Message** (Use the lined paper and write our words – be sure you have given students their lined paper. Have additional papers readily available should students make an error and need to write again.)
2. What do we do next? **Create a simple background.** (Ask students to think about their pop-up. What would make their pop-up stand out? Simple is best.)
3. What do we do last? **Cut out and attach the pop-up.** (Make sure the pop-up doesn't hang outside of the card when it is closed. Check that before you glue it in permanently.)

Time for you to create your page. (Give students time. When you see everyone has finished, proceed.)

We have one more specification to add. Does anyone know what that is? (Everyone must add a little homemade paper to their pop-up in some way. Give each student a piece of the homemade paper to use anyway they wish on the card. They may attach the paper with the glue.)



## Unit 6, Lesson 2

1<sup>st</sup> – 2<sup>nd</sup>



### Follow-up - continued

In Lesson 3 we will assemble the pop-up book with paperclips to check for improvements needed. For now, let's hand in your pages so we keep them tidy.

What wonderful problem solvers you are! You have researched, made a plan, and engineered a technology. In Lesson 3 we will complete the Engineering Process by testing our pages to check for needed improvements! Well done!

### Shared or Interactive Writing Topic

Daily students will use the day's vocabulary to Share-Write a statement about the learning. Teacher has a marking pen and a large chart with a question written at the top. Children give complete sentences. Encourage them to use today's vocabulary.

### **How have we used math in our engineering project?**

*(Teachers, the students have used a lot of problem solving skills during this engineering project plus measuring, sorting, looking for patterns and more. This is a very rich critical thinking unit.)*

### **Technology**

(repeat practice)

[http://www.learn4good.com/games/kids/double\\_digits.htm](http://www.learn4good.com/games/kids/double_digits.htm)

Add/Subt. double digits

<http://resources.oswego.org/games/SpeedGrid/Addition/urikares.html> two-digit center game for one person OR you could set up teams.

### **Technology**

Either of the two suggested sites could be a self-checking center activity.

**Objectives:** Review the math, language and science objectives, having students tell you how they accomplished each.



**BLM Unit 6, Follow-up Lesson 2**

**BLM Lined Writing Paper** 

One sheet per student, but have extras copied just in case. You need one for your book. There are extras if you make a mistake and need to correct it. And I have plenty more if needed. Make your copy neat and tidy.

My name is \_\_\_\_\_

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My name is \_\_\_\_\_

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---

My name is \_\_\_\_\_


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<p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Share a snack in half.</li> <li>• Explain why each portion is half.</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Explain why each portion is half.</li> <li>• Share-write what is a half.</li> </ul> <p><b>Vocabulary</b>  half  fair shares  equal pieces</p> <p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• 1 oz turkey</li> <li>• 1 piece Swiss cheese</li> <li>• 1 leaf lettuce</li> <li>• 1 T cranberry relish</li> <li>• 1 burrito-size tortilla</li> <li>• 2 paper plates</li> <li>• 2 paper towels</li> <li>• 2 plastic knives</li> <li>• Chart paper with question: <b>How do you know you each have half of the snack?</b></li> </ul> <p>Snack Fractions will be simple during this unit because of the extensive project design in the main unit. Students simply share and answer orally administered questions.</p>	<p style="text-align: right;">1<sup>st</sup> – 2<sup>nd</sup></p> <p style="text-align: right;"></p> <p><b>Unit 6, Lesson 2</b></p> <p><b>Snack Fractions</b></p> <p><i>Children should wash their hands before this activity if using food items.</i></p> <p><b>Snack Fractions</b></p> <p>As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.</p> <p>Today is very simple, girls and boys. Divide the snack ingredients with a partner so that you each have fair shares. When I come around, be ready to answer these questions:</p> <ul style="list-style-type: none"> <li>• What fractional part of the partner portions do you have? (<i>half</i>)</li> <li>• How do you know you have half of the partner mix? (<i>two equal portions</i>)</li> <li>• What is a fractional part of a whole or set?</li> </ul> <p><b>Writing:</b></p> <ul style="list-style-type: none"> <li>• Share-write the student answers to: <b>How do you know you each have a fractional part of the snack? What fractional part do you have?</b></li> </ul> <p><b>Objectives:</b></p> <p>Read the objectives. How did we accomplish these in our snack fraction lesson?</p>
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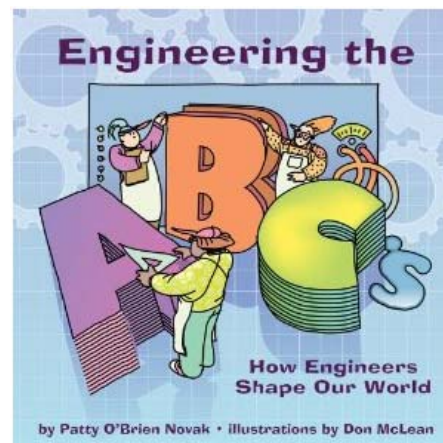


**Family Fun – 1<sup>st</sup>-2<sup>nd</sup>, Unit 6 Lesson 2**



Dear \_\_\_\_\_,

We're learning a lot about pop-up books, but also about the Engineering Design Process. Please ask me about what part of the process we have worked in so far this unit.



I think this process will be helpful to me

when I \_\_\_\_\_

\_\_\_\_\_

One thing I would like to do at home using what I have learned

during this summer session is \_\_\_\_\_

\_\_\_\_\_

Sincerely,

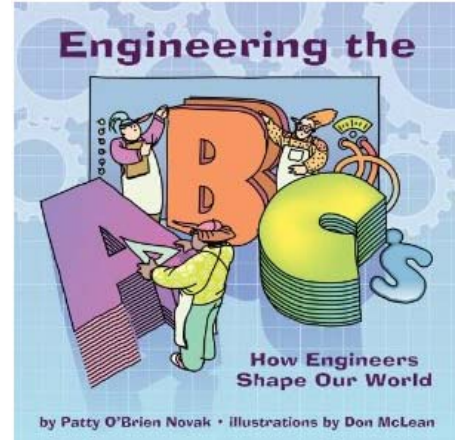
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**Diversión en Familia – 1<sup>ro</sup>-2<sup>do</sup>, Unidad 6 Lección 2**



Querido \_\_\_\_\_,

Estamos aprendiendo muchísimo sobre cometas, pero también sobre el Proceso de Diseño de Ingeniería. Por favor pregúntenme sobre qué parte del proceso hemos trabajado hasta ahora en esta unidad.



Creo que este proceso me será útil

cuando yo \_\_\_\_\_

\_\_\_\_\_.

Una cosa que me gustaría hacer en la casa aprovechando lo que aprendí en esta jornada de verano es



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_.

Atentamente,



<p><b>Materials</b></p> <ul style="list-style-type: none"> <li>• BLM CGI Unit 6 – teacher only</li> </ul> <p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Problem Solving</li> </ul> <p> <b>Balanced Literacy</b></p> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Speak to partners, teacher, and class using vocabulary.</li> <li>• Explain problem solving strategy.</li> <li>• Verbalize observations about graph data.</li> <li>• Discuss wants and needs.</li> </ul> <p><b>TEKS</b> 1<sup>st</sup> – 1.1B, 1.3A,B, 2<sup>nd</sup> - 2.2A,B, 2.3A,B,C, 2.5A,</p> <p><b>Assessment Items</b> Post-assessment of all items</p> <p><b>Azulito’s Corner</b> <b>Lesson 3</b> Describe how you will present your Engineering project.</p>	<p style="text-align: right;">1<sup>st</sup> – 2<sup>nd</sup> </p> <p><b>Unit 6, Lesson 3</b> <b>Daily Routine</b></p> <hr style="border-top: 1px dashed black;"/> <p><b>ESSENTIAL</b></p> <p><b>CGI Problem</b></p> <ul style="list-style-type: none"> <li>• Lesson 1 – Post-assessment</li> <li>• Lesson 2 – Join Change Unknown</li> <li>• Lesson 3 – <b>Compare, Difference Unknown</b></li> </ul> <hr style="border-top: 1px dashed black;"/> <p><b>OPTIONAL:</b> <i>These activities, although not assessed, are fundamental skills that should be included in those sites providing five to six weeks of instruction.</i></p> <p><b>Calendar</b> – Continue activity <b>Straws</b> – Continue activity <b>Pennies</b> – Continue activity <b>Money Matters</b> <b>Vocabulary Building</b></p>
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## Literature Selection

*Engineering the ABC's: How Engineers Shape Our World*  
by Patty O'Brien Novak

### Materials

#### Language Materials

- BLM Word Cards
- BLM Improvement Checklist
- Teacher's camera for taking shots of students in action (still or movie)
- EiE Engineering Design Poster(s) in the room.

#### Materials for Transition to Math Lesson

- Teacher's camera for taking shots of students in action (still or movie)
- Glue stick
- EiE Engineering Design Poster(s) in the room
- BLMs Improvement Checklist already completed.
- Chart paper and marker
- TEACHER RESOURCE VIDEOS in assembling the book. The cover needs to be completed before class.
  - <http://www.youtube.com/watch?v=686DHL5kCC4>  
*how to glue pages together and put on a simple cover for 10 or less pages*
  - <http://www.youtube.com/watch?v=vk9f4QtiAtg>  
*how to create a cover from cardboard with a wider spine for books of more than 10 pages.*

#### Literature Vocabulary

technology  
engineer  
engineered  
recycling  
mold  
deckle  
pulp  
slurry

#### Math Vocabulary (repeat vocabulary)

regroup  
exchange  
compare  
fewer than  
less than  
more than

## Unit 6, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson



*Every day teachers must post the objectives on the board, read them to the students, and have students read them together with the teacher. You must also talk about what the objectives mean, giving examples where appropriate. At the end of the lesson, teacher and students should review to see if they have accomplished both math and language objectives.*

#### Math Objectives:

- Use math to solve real world problems.
- Explain your strategies.
- Explain your observations.
- Use logical reasoning to justify your thinking.

#### Language Objectives:

- Listen: Listen to the teacher to learn and use new words.
- Speak: Discuss your thoughts about the popup project.
- Read: Read about more technology that is part of the pop-up book.

#### Science Objectives:

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

#### Building Background, Vocabulary

*(Display the students' individual pages at the front of the room.)*

This is a great project, boy and girls! As Junior Engineers, you have done a super job of following the Engineering Design Process to engineer this technology. During our Transition to Math lesson we will assemble our book. I know that Alex will be pleased! *(10 pages is the optimum for this type of book. If you have more than 10 pages, you will need to construct the cover so that it is made of TWO pieces of construction paper that are overlapped on the spine as needed to accommodate the additional width.)*

#### Practice and Application, Vocabulary

Let's see if we can remember the words that we have used in making our book. *(Work through the vocabulary, having students tell you what the word means and how the word was used in our unit.)*

## Unit 6, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



Let's go back now and see how many simple technologies we used to make our book. Remember, everything that is manmade which was created to solve a problem is considered an engineered technology. (*Following is a list – see how many students can name. Make a list on the board or a chart. Add to the list when the students stop responding which might jog their memory.*)

Let's start with the actual book. What did we use to make this book?

- Pencil and paper
- Crayons, markers, water colors, paint brushes
- Magazines, pictures, photographs
- Paperclips
- Glue, scissors, rulers
- The Internet for the videos

What about making the homemade paper?

- Wooden frames
- Screen
- Scissors
- Duct tape
- Tubs
- Felt
- Newspaper
- Sponges
- Construction paper, other paper, (*also add-ins that were not natural*)
- Blender
- Internet for the video

This simple little pop-up book is made up of many technologies that were engineered by Engineers over the years to make a job easier for people to solve problems.

#### **Comprehensible Input, Literature**

In fact, our book mentions two of these technologies. We have already read about the paper and about the movie when we talked about the camera. Would you and your partner stroll through the book and see if you can find one of the technologies we used in our book? Be sure you can tell us where it was used.

## Unit 6, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Classroom Lesson - continued



*(You may have used materials not mentioned in the unit – that is great if the students can relate to them. The technologies referred to here are:*

- Plastic mentioned with dolls, p. 8 – bet your tub was plastic for the paper making.
- Electricity, p. 8 – had to use electricity to use the blender.
- Movie, p. 16 – already mentioned when you talked about the camera for taking action shots of students at work.
- Paper, p. 19 – obvious
- Television, p. 23 – the videos might have been run on your TV through your computer. A computer is much like today's TV.
- Water, p. 26 – how did the water get to your room for the paper making?
- Yarn, p. 28 – if it was an add-in

*But feel free to include any other technologies that are appropriate to your project.)*

*Read and discuss the pages as you did for previous readings:  
Letter, Word, Question, Answer, info rectangle, Let's Discover*

It is amazing how many little technologies there are that make our world a little easier to live in.

*(If you have not taken the Enrichment Math Walk, now might be a great time if the students are a little antsy. Otherwise, work in centers, particularly the math centers for double digit addition and subtraction, and any other skills in which your students need additional practice.)*

### Math Objectives:

- Apply mathematics to real life problems.
- Explain your thinking.

### Materials for Transition to Math Lesson

- Teacher's camera for taking shots of students in action (still or movie)
- Glue stick
- EiE Engineering Design Poster(s) in the room
- **BLMs** Improvement Checklist already completed.
- Chart paper and marker
- TEACHER RESOURCE VIDEOS in assembling the book. The cover needs to be completed before class.
  - <http://www.youtube.com/watch?v=686DHL5kCC4> how to glue pages together and put on a simple cover for 10 or less pages
  - <http://www.youtube.com/watch?v=vk9f4QtiAtg> how to create a cover from cardboard with a wider spine for books of more than 10 pages.

Teachers, for gluing instructions, this is a TEACHER RESOURCE to show you how. Start around 4:20 to see gluing instructions. (Not good for students to watch

## Unit 6, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### TRANSITION to Math Building Background, Math

This is our last opportunity to make improvements to our technology to help my friend. Before we make our improvements and test again, though, I would like to look at our EiE Engineering Design Process Poster one more time. (*show poster*)

Let's look at each step and talk about what we did to accomplish it.

The first step is to Ask Questions. What did we do in that step?

- *Found the problem.*
- *Asked questions so we would know what to research to find a solution.*
- *Researched kites to help us understand fishing kites.*

The second step is to Imagine. What did we imagine?

- *Brainstormed all sorts of possible solutions. We made lists of them.*

What did we do after we Imagined many possible solutions?

- *Made a list of needs for the project (show needs list) then checked each of our imagined solutions to see if they fit all of the needs on the list. We could forget about many of our solutions.*
- *Took one of the best ideas and began to plan how to build it.*
- *Made a plan that included a sentence stem for our words and selection of pop-up pictures.*

What were the last two steps?

- *We made our technology and today we will test it to make improvements so it would be the best possible solution.*

And today is our last testing. We have our list of improvements that Azulito and the TV Teacher needed to make. Let's look at our suggestions to see if we need to make any improvements on our book.

First, though, let's assemble. We will check each page before we glue it in. (*Do so – Check each page individually as a class. Do not embarrass any student. This is a class project, and the class can help improve as needed. Re-test and modify as needed. When the students believe they have made the final improvement, test it one more time; using the Improvement Checklist to see how the technology improved.*)

Are there any other questions or details you want to change? (*do so if possible*)

We believe that the pieces are all improved to our satisfaction. We now need to put our pages together in the book form.

– a little distracting.) Watch this ahead of times on your own until you are comfortable with the process.

<http://www.youtube.com/watch?v=686DHL5kCC4>

If you have more than 10 pages to your book and you want a cardboard cover with a wider spine, you might want to use the following directions – again, this is teacher resource, not for students to view. (be more creative with the cover, though, please)

<http://www.youtube.com/watch?v=vk9f4QtiAtg>

## Unit 6, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>



### Classroom Lesson - continued

#### TRANSITION to Math

I'm going to give each of you your individual page back. We will assemble the pages. I'm going to start with the FIRST page. We will follow our sentence stem order that is on the board. (*Call students up one at a time to see their pages glued into the book. Have whatever cover you have decided upon completed ahead of time and ready to complete the book. Go through the assembled book to ooohh and ahhh!*)

And now, Junior Engineers, we have our technology solution imagined, built, tested and ready. In our follow-up lesson we will decide on how to present our technology. Let's see how we accomplished our objectives for this lesson, then we will get ready for the TV lesson.

**Objectives:** Review the math and language objectives to see how they were accomplished.

#### Distribute the TV Materials

**Literature Vocabulary**

technology  
 engineer  
 engineered  
 recycling  
 mold  
 deckle  
 pulp  
 slurry

**Math Vocabulary  
(repeat vocabulary)**

regroup  
 exchange  
 compare  
 fewer than  
 less than  
 more than

**Materials**

- EiE Engineering Design Process Poster(s)  
<http://www.eiestore.com/posters.html>
- **BLM** Azulito's Math Problems
- **BLM** Improvement Checklist – 1 per student\
- Base ten sets available in the room if students wish to use them.

**Unit 6, Lesson 3**1<sup>st</sup> – 2<sup>nd</sup>**TV Lesson**

*Read objectives while pointing to the words in the math lesson objectives. After each math objective, show children what that means.*

**Math Objectives:**

- Explain your observations.
- Use logical reasoning to justify your thinking.

**Language Objectives:**

- Listen: Listen to the TV Teacher and Azulito, and your Classroom Teacher and classmates.
- Speak: Explain what you are seeing to your classmates.
- Read: Read the Improvement Checklist and make judgments on the TV Teacher's and Azulito's project.
- Write: Share-Write what you learned from this lesson that can help you test your project.

**Science Objectives:**

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

**Building Background, Math**

Today is the big day, Azulito. Today we are ready to present our technology for its review to make sure that it is ready. We made all of the improvements on your Improvement Checklist from Lesson 2.

**AZULITO:** Yes, I know we did. Here is what we did. (*Show Azulito's Lesson 2 checklist and go over the items marked for improvement and tell how you improved them.*) Are we going to present it now?

**TEACHER:** Yes we are, Azulito. Boys and Girls, please use the Improvement Checklist that you started for our project in Lesson 2. Even though you might have seen improvement needs that we didn't, we hope that we corrected yours as well when we made our improvements.

## Unit 6, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### TV Lesson



Remember that our goals for this technology are:

- Book must contain a page from each team member.
- Book must tell a story of the team and include where you live.
- Book must contain at least one piece of homemade paper made from recycled paper on each page.

And we added the following to make sure the project was neat and tidy:

- Pop-ups fit neatly inside the book.
- Words are written neatly and carefully

**AZULITO:** Oh, this is exciting!

**TEACHER:** Yes it is, Azulito! OK, girls and boys (*camera to the technology*), here is our new and improved pop-up book. (*Turn through the book, pointing out the improvements made as you go.*)

### Comprehensible Input, Math

Now Azulito, I want the girls and boys to think about all of the math that we used to make this kite to solve Alex's problem.

*Begin by showing the finished technology.*


**First, let's talk about the math in the planning stage and creating stages:**

- *Measuring the slit for the pop-up*
- *Seeing the patterns in folding the pop-up.*
- *Making a plan from the data you had collected*
- *Explaining your observations and strategies to one another*
- *Sequencing the pages to arrange them in an organized order.*
- *Using logical reasoning to make adjustments to the plan to improve it.*

**Now, let's talk about the math in the improvement stage :**

- *Using logical reasoning to*
  - *recognize problem areas*
  - *make adjustments to the book to improve it.*
- *Using communication skills to explain your observations and strategies to one another.*



<p><b>Azulito's Corner</b>  <b>Lesson 3</b>  Describe how you will present your Engineering project.</p>	<p><b>Unit 6, Lesson 3</b> <span style="float: right;">1<sup>st</sup> – 2<sup>nd</sup></span>  <b>TV Lesson</b> </p>
	<p><b>TEACHER:</b> Well, girls and boys, what do you think of our technology?</p> <ul style="list-style-type: none"> <li>• How is what we built similar to your technology?</li> <li>• How is it different?</li> <li>• Take a little time to talk to your classmates and Classroom Teacher about how our technologies are alike and different. (<i>generous pause</i>)</li> </ul> <p>Before we go, I would like to show you a few math problems that Azulito and I had to work through to make this project. Please look at your <b>BLM</b> Azulito's Project Math.</p> <p><i>(Read problem #1)</i></p> <ul style="list-style-type: none"> <li>• What math movie do you see when I read that problem boys and girls? Tell your Classroom Teacher. (<i>pause</i>)</li> <li>• Talk to your elbow partner about strategies you might use to solve the problem. (<i>pause</i>)</li> <li>• What number sentence describes what Azulito modeled? Tell your Classroom Teacher. (<i>pause</i>) <i>Students will solve on their own during the Follow-up – you are merely having the students talk about the problems in class.</i></li> </ul> <p><i>Continue the process as long as you have time.</i></p> <p><b>AZULITO:</b> <i>(Describe the Corner task – talk about some things we have learned.)</i></p> <p><b>TEACHER:</b> Thank you, Azulito. This has been a great experience! I hope that you have an opportunity to have your parents see your beautiful class book!</p> <p><b>Objectives:</b> Read through the language and math objectives for this portion of the lesson, and have students tell you how they accomplished each.</p>





One sheet per student



We had to make sure that our pop-up did not stick out of the book. The tallest a pop-up could be was 14 centimeters. One pop-up stuck out by 7 centimeters. How tall was it?

We found that we needed 21 cups of pulp to make enough pieces of homemade paper so that each of our team members had a full piece of paper. We only had 15 cups of pulp our first try. How many more cups of pulp did we need?



It took us 35 minutes to make our first piece of homemade paper. By the time we had made all 7 pieces, we had trimmed the time down to 19 minutes. How many minutes did we save on the last piece of paper?



### Literature Vocabulary

technology  
engineer  
engineered  
recycling  
mold  
deckle  
pulp  
slurry

### Math Vocabulary (repeat vocabulary)

regroup  
exchange  
compare  
fewer than  
less than  
more than

### Materials

- Base ten sets available in the room
- Scissors – 1 per student
- Glue stick – 1 per student
- Primary ruler – 1 per student
- **BLM** Azulito's Project Math (D in TV Lesson)
- **BLM** Constructing My Card
- **BLM** Summer Family Letter – half sheet per student
- **BLM** Summer Pop-ups – half sheet per student

### ELPS (English Language Proficiency Standard)



### Technology (repeat practice)

[http://www.learn4good.com/games/kids/double\\_digits.htm](http://www.learn4good.com/games/kids/double_digits.htm)  
Add/Subt. double digits

<http://resources.oswego.org/games/SpeedGrid/Addition/urikares.html> two-digit center game for one person OR you could set up teams.



### Technology

Either of the two suggested sites could be a self-checking center activity.

## Unit 6, Lesson 3

1<sup>st</sup> – 2<sup>nd</sup>

### Follow-up



### Math Objectives:

- Subtract 2-digit numbers.
- Explain your strategies.
- Explain your observations.
- Use logical reasoning to justify your thinking.

### Language Objectives:

- Listen: Listen to your teacher and your classmates.
- Speak: Explain your observations from the TV Lesson answers to questions.
- Speak: Be able to explain why you believe as you do.
- Read: Read Azulito's Project Math
- Write: Write your letters to your families.

### Science Objectives:

- Identify and demonstrate safe practices including wearing safety goggles, washing hands, and using materials appropriately.
- Collect, record and compare information using tools.
- Provide reasons for explanations using student-generated data from simple descriptive investigations.
- Identify and explain a problem and propose a solution in his/her own words.

### Practice and Application, Math

Student now work the three problems on the TV BLM, following the same format as they have followed all summer:

- Read the problem once for the math movie.
- Read the problem a second time for them to model.
- Build or draw a model that describes the math movie.
- Write a number sentence that describes the model.

When you have finished the problems, use part of the time to prepare the presentation for your All-School Unit Project. Be sure that students include descriptions in their presentation as per the science objectives.

Finish the day by letting students create a pop-up card to take home as their final Family Fun Letter. There is a BLM of summer designs from which students might choose, and directions to remind everyone of how to cut the cards.

**Unit 6, Lesson 3**

1<sup>st</sup> – 2<sup>nd</sup>

**Follow-up** - continued



**Shared or Interactive Writing Topic**

**How have we used math in our engineering project?**

**Objectives:** Review the math, language and science objectives, having students tell you how they accomplished each.

**BLM-TM Unit 6, Lessons 3**

**Constructing My Card** 

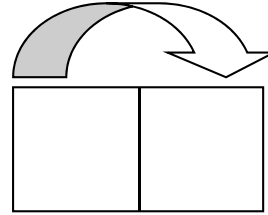
One per student

**Materials per student**

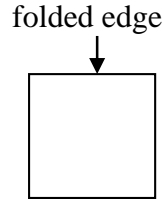
- 1 sheet of white cardstock (sturdy paper) 8.5 x 11 inches
- ruler
- scissors
- pencil

**Process**

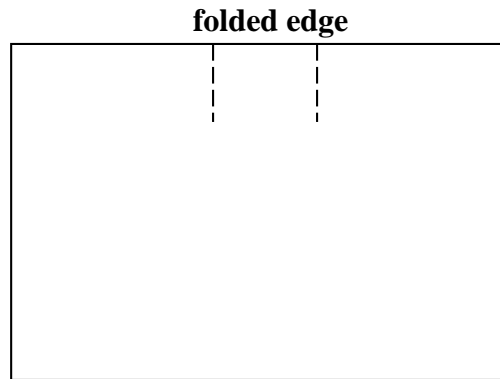
- Take your sheet of sturdy paper and fold in half.



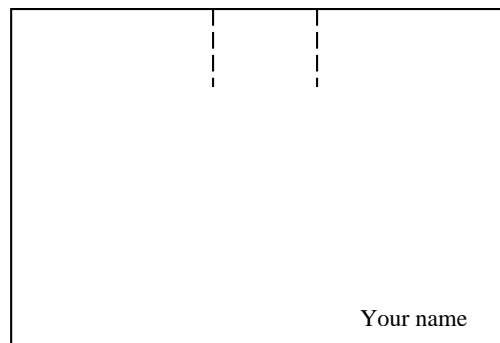
- Place it fold UP on your desk.



- Use your ruler to cut two slits in the folded edge – 1 inch apart, 2 inches down.



- Write your name in the lower right hand corner of the card. Your teacher will pick up the card to give you when it is time to make your page.







Half sheet per student – it will save time to have these cut out for the students ahead of time.

This is our last day of our summer program.

My favorite thing about math is \_\_\_\_\_  
\_\_\_\_\_.

I will use this when I \_\_\_\_\_  
\_\_\_\_\_.

Thank you for seeing that I came to summer reading and math!  
Sincerely,  
\_\_\_\_\_

This is our last day of our summer program.

My favorite thing about math is \_\_\_\_\_  
\_\_\_\_\_.

I will use this when I \_\_\_\_\_  
\_\_\_\_\_.

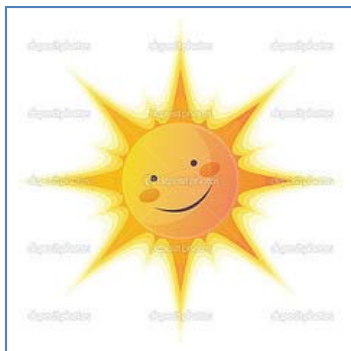
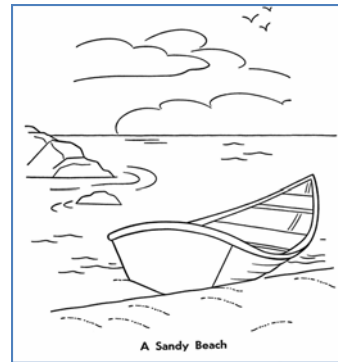
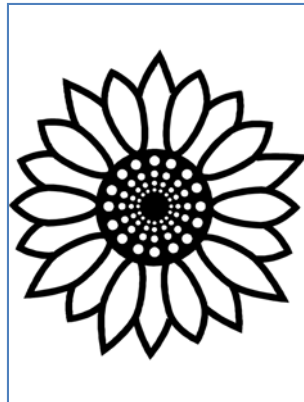
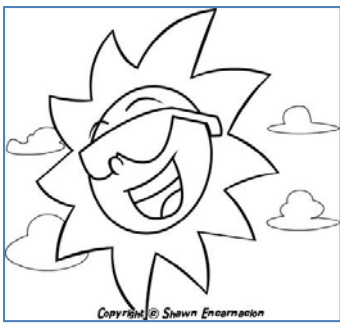
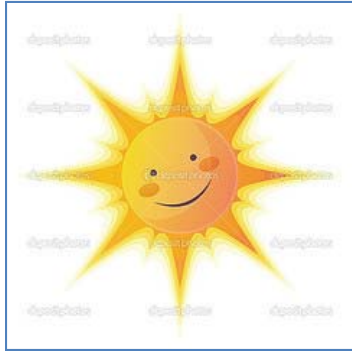
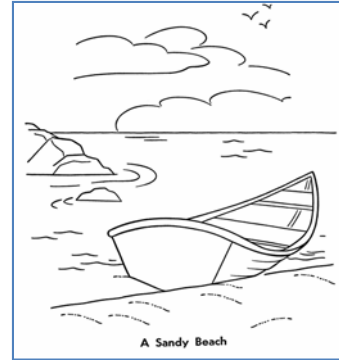
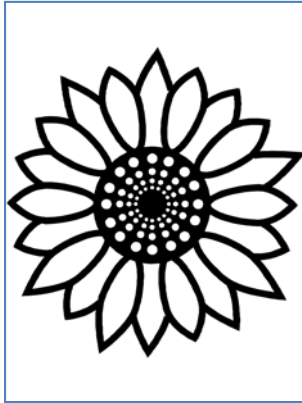
Thank you for seeing that I came to summer reading and math!  
Sincerely,  
\_\_\_\_\_




**BLM-TM Unit 6, Lessons 3**

Half sheet per student – Student selects one for the pop-up.

**Summer Pop-ups** 





<p><b>Math Objectives</b></p> <ul style="list-style-type: none"> <li>• Share a snack in half.</li> <li>• Explain why each portion is half.</li> </ul> <p><b>Language Objectives</b></p> <ul style="list-style-type: none"> <li>• Explain why each portion is half.</li> <li>• Share-write what is a half.</li> </ul> <p><b>Vocabulary</b> half fair shares equal pieces</p> <p><b>Materials</b> <b>Per partner:</b></p> <ul style="list-style-type: none"> <li>• 1 personal pan pizza</li> <li>• 2 individual servings fruit juice</li> <li>• 2 paper plates</li> <li>• 2 paper towels</li> <li>• 2 plastic knives</li> <li>• Chart paper with question: <b>How do you know you each have half of the snack?</b></li> </ul> <p>Snack Fractions will be simple during this unit because of the extensive project design in the main unit. Students simply share and answer orally administered questions.</p>	<p style="text-align: right;"><b>1<sup>st</sup> – 2<sup>nd</sup></b></p> <p style="text-align: right;"></p> <p><b>Unit 6, Lesson 3</b></p> <p><b>Snack Fractions</b></p> <p><i>Children should wash their hands before this activity if using food items.</i></p> <p><b>Snack Fractions</b></p> <p>As part of each math day, please include a quick “Snack Fraction” activity. If your district/school does not allow any snacks to be given to students, please alter the activity by providing the paper shape to be divided into fractional parts.</p> <p><b>Objective:</b> Today, I just want you to share your snack with a friend. Look at your snack.</p> <ul style="list-style-type: none"> <li>• What fractional part will each of you receive of the pizza?</li> <li>• What fractional part will each of you receive of the juice?</li> </ul> <p><b>Writing:</b></p> <ul style="list-style-type: none"> <li>• Share-write the student answers to: <b>How do you know you each have half of the snack?</b></li> </ul> <p><b>Objectives:</b> Read the objectives. How did we accomplish these in our snack fraction lesson?</p>
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## **FAMILY FUN Involvement**

1<sup>st</sup> – 2<sup>nd</sup>

Overview for Unit 6, *Engineering the ABC's*

This overview will provide a one-page view of the suggested Family Fun Activities for this unit, as well as other opportunities provided for Family Involvement.

### **Lesson 1**

- Vocabulary Cards so students can practice language and math vocabulary at home
- Family Fun Unit 6 Lesson 1 Letter with ideas for involving the family in STEM unit.

### **Lesson 2**

- Family Fun Unit 6 Lesson 2 Letter inviting parents to do something at home that their child has learned.

### **Lesson 3**

- Family Fun Unit 6, Lesson 3 end of the summer closing letter.

### **Enrichment Suggestions**

- Science Activity: make paper at home with plantable seeds in them.
- Art Activity: make pop-up cards at home.

*This portion of the curriculum, although NOT required, should be used as needed to supplement and enrich the Unit's activities.*

**Family Fun Suggestions:**

- Science Connection – perhaps families could make plantable seeded paper.
- Health/Physical Ed – send home directions for Spud from the link.
- Art – pop-up card

**Possible Center Suggestions:**

- Online Math Games
- Art Projects – paint chip skylines

**MATH WALK**

Once you have worked in the unit enough for students to understand what an Engineer is and does, take a walk around the campus and look for the technology engineered to solve a problem. These can be as simple as hand tools or as complex as heating systems. Take a BIG notebook to write them all.

**Technology Connections**

**Math Practice**

- [http://www.learn4good.com/games/kids/double\\_digits.htm](http://www.learn4good.com/games/kids/double_digits.htm)  
Add/Subt. double digits
- <http://resources.oswego.org/games/SpeedGrid/Addition/urikares.html>  
Two-digit center game for one person OR you could set up teams.
- <http://www.amblesideprimary.com/ambleweb/mentalmaths/pyramid.html>  
Fun once you understand how the pyramid builds. Level 1 great place to gain the understanding of the game. Level 2 is probably where your 1<sup>st</sup> graders will be. Level 3 is great for stretching 2<sup>nd</sup> graders.

**Science Connection**

- <http://rubberstamping.about.com/od/projects/ss/HandmadeSeedPaper.htm>  
Making paper that contains plantable seeds.
- [http://www.tappi.org/paperu/all\\_about\\_paper/faq.htm](http://www.tappi.org/paperu/all_about_paper/faq.htm)  
Frequently asked questions about Paper manufacturing.

**Social Studies Connection**

- <http://inventors.about.com/od/pstartinventions/a/papermaking.htm> -  
Teacher resource of history of making paper. Students could make a timeline.
- <http://www.paperonline.org/history-of-paper>  
Another teacher resource for the history of paper timeline.
- [https://www.google.com/search?q=history+of+making+paper&client=firefox-a&hs=PaL&rls=org.mozilla:en-US:official&channel=sb&tbn=isch&tbo=u&source=univ&sa=X&ei=xuwNU7\\_tNOmu2QX6iYAg&ved=0CFIQsAQ&biw=1280&bih=643](https://www.google.com/search?q=history+of+making+paper&client=firefox-a&hs=PaL&rls=org.mozilla:en-US:official&channel=sb&tbn=isch&tbo=u&source=univ&sa=X&ei=xuwNU7_tNOmu2QX6iYAg&ved=0CFIQsAQ&biw=1280&bih=643)  
Pictures and photographs for the timeline.

**Health/Physical Ed Connection**

- [http://www.ehow.com/list\\_5980457\\_physical-education-outdoor-games.html](http://www.ehow.com/list_5980457_physical-education-outdoor-games.html)  
Five games to play outside with minimal (beach ball, softball, playground ball) to no equipment.

**Art Connection**

- <http://www.pinterest.com/origamitwist/clever-paper-crafts/> -  
Many ideas for paper crafting – here are samples of a few from the page:
  - <http://www.pinterest.com/pin/340655159285897277/> pretty cards, heart theme
  - <http://www.pinterest.com/pin/340655159286228973/> owl templates
  - <http://www.pinterest.com/pin/340655159286192327/> paint chip (gather from local paint store) skylines.



<p><b>Math Objectives</b>  <b>Post-assessment</b>          Because of the unique presentation of the STEM Unit 6, we are suggesting that for all of the grade bands you select ONE simple machine investigation from the Kinder selection, <i>Simple Machines</i> for all of the students in the house. Bring the materials for that project and let the family work together to experience it and learn a little physics.</p>	<p><b>Materials</b>  <b>• BLM Post-assessment</b>          Materials for the activity of your choice from the Simple Machines book for Kinder.</p>
<p><b>Differentiate</b></p>	<p><b>Family Fun</b>          Use previous cards and materials.</p>
<p><b>Snack Fraction Notice</b>          All snack fractions are common throughout the grade bands. All grade bands have daily snack fraction activities provided. All snack fractions for a unit in a specific grade band will practice the same set of skills. Therefore, you may choose from any of the three activities. <b>Lesson 3</b> has been suggested for its ease of delivery.</p> <p><b>NOTE:</b> Students are not asked to complete a BLM this time. They are just asked to enjoy the snack, having shared it with one other person.</p>	<p><b>Snack Fractions – TV lesson 3</b>  <b>Materials per partner:</b></p> <ul style="list-style-type: none"> <li>• Personal Pan Pizza (1 per pair)</li> <li>• Fruit juice (2 individual serving containers per pair)</li> <li>• 2 paper plates</li> <li>• 2 paper towels</li> <li>• 2 plastic knives</li> <li>• Chart paper with question: <b>How do you know you each have half of the snack?</b></li> </ul>

### QUESTIONING

- What did you enjoy about this summer reading and math session?
- What do you feel very comfortable with now after having come to the sessions?

### Math Vocabulary

(repeat vocabulary) regroup, exchange, compare, , fewer than, less than, more than

### CGI Problem – no additional problems today – Post-assessment

### Journal Writing

Explain what a math movie is.

**Family Fun** – No new game cards this Unit. Feel free to have families use any of the previous unit cards.

**Snack Fractions** - Lesson 3

**Assessment: Post-assessment Today.**