

FROM THE DESK OF MRS. KUUSELA... Expanding Opportunities for High Cap Students



Cap intervention time of 30 minutes, we are now offering a “walk to” curriculum for two third graders attending 4th grade math instruction. We began with small numbers to test the new model and to ease the student’s anxiety about attending classes that are a year in advance. The new intervention has been in session for 3 weeks and the boys have adapted very well.

intervention time when they “walk to” an upper grade classroom. Students must be at least a year advanced in content knowledge to attend. The 6th grade has this option for the middle school/high school, as well, but no takers as yet. Students must maintain 6th grade level work with “A’s, and keep up with all class work. In order for the secondary teachers to accept elementary age students, they must be reliable and accountable for all their class work in 6th grade.

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With the beginning of a new year our program has increased by 6 students. (3–2nd graders, 2-3rd graders and 1-4th grader). At this time we serve 22 students within and out of the district on a daily basis.

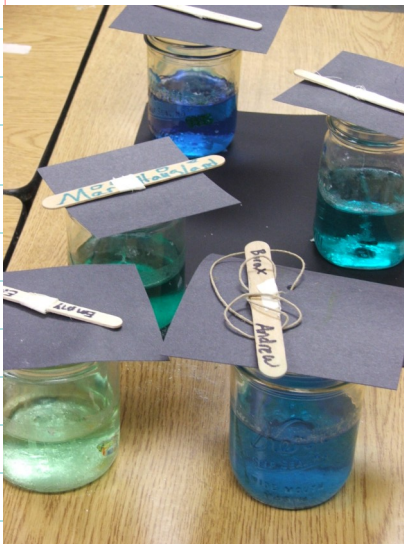
In addition to our normal High

Students who qualify for this option stay in their permanent classroom for most of the day except for the math or reading

Special points of interest:

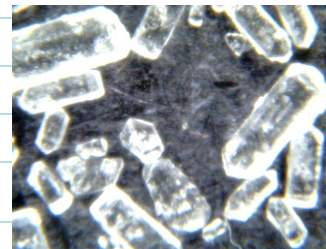
- ✓ High Cap Program Growing
- ✓ A Closer Look at Crystallization
- ✓ Scientific Illustration
- ✓ Simple Machine Concepts
- ✓ Student programs at the University of Washington

A Scientific Study



Soda and Sugars. Evaporation from a petrie dish was the first method using a saturated solution of 250ml water. Crystal structures, time to crystallize and the variety of shapes were compared as the weeks went by. Out of the box minerals looked very different from the evaporated crystals as the pictures show on the right.

The second method of crystallization used a string suspended in a saturated solution. Food coloring was added and some jars were sent home to watch over several weeks time. We were able to observe many things from these simple experiments: Borax crystallizes the fastest, sugars are the slowest, seed crystals do not work



Epsom Salts pre-post evaporation taken in class with a digital ZPix microscope.



on any of these minerals, germs can grow in the saturated solutions if contaminated and the favorite crystal shape was Epsom Salts. The jagged crystals looked like a sugar plum fairy land.

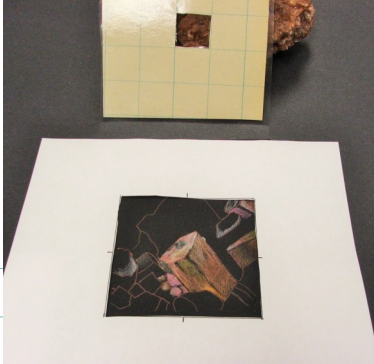
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The giant Gypsum crystals of Naica, Mexico were a part of the Ripley’s exhibit, so we extended our learning with experimentation of crystal growth.

Two different methods of crystal growth were used on a variety of common household minerals like Epsom Salts, Salt, Borax, Baking

Scientific Illustration: Crystal Structure



Drawing in proportion is a difficult skill in and of itself. Enlarging adds one more variable to the task. Drawing on black paper is confounding for it is contrary to normal drawing. So with all the above in mind, the students spent 2 days drawing crystals to scale. It was the first time the 6th graders remained silent for 20 minutes without interruption while concentrating on accurate details. The completed drawings were placed in a matted frame and the students were amazed at their professional results.



Observations are so important in learning and visual observations are not practiced enough in school. After winter break, a beautiful variety of rock crystals were shared from Mrs. Kay's collection. The rocks provided excellent models for scientific crystal drawings. Each sample had a very distinctive pattern and the students were asked to focus on a 1" square of the crystal and enlarge what they saw to a 6" square on black paper.

Emersen Wagner- R
Bogdan P.- Far R



Engineering Design Basics: Simple Machines and... Lego Technic Construction



When I tell the students they are going to build simple machines with Legos, I know they envision a card that tells them step by

step directions to complete an exact duplicate of the Lego kit they have at home. Copying other designs is not our goal in High Cap. Creating projects that solve human problems is our target. In order to do this, students will construct simple machines using levers, gears, and pulleys from Lego Technic parts. (Technic parts are designed to teach engineering concepts.) Each idea is constructed as a sample and eventually multiple concepts are placed together in a cohesive whole to represent

something that helps people perform tasks in an easier way. Chain reaction machines ala "Mousetrap" and Rube Goldberg will also be explored. In conjunction with the legos, we will be conducting engineering design challenges using straws and tape to build shapes which are stress tested with tension and compression. The process of building, testing, and rebuilding in order to make the product better is an important lesson to learn from this unit.

Classic Vocabulary Changes in Upcoming Weeks

For four weeks, we have collected Classic Vocabulary from our reading of famous literature and it is now time to commit some of these terms to memory for grades 3-6. Twenty or more words will be chosen for a written spelling/definition test to be given in two weeks. The words have been discussed with everyone during our Friday sharing time, so they are not new to the students that didn't read a specific book. A spelling list will be sent home next week to study.

Some students have found their original choice of book was too difficult to understand. This is an excellent time to



exchange the book they are reading and get one that they can read more quickly and enjoy. Students have several options on the bibliography attached to the Classic Reading handout. Although each

student should continue to write the

words they don't understand down on paper to define; I will not be requiring Classic Vocabulary over the next several weeks. Instead, I will give weekly comprehension questions to be written and shared on Fridays to show their understanding of what they read. We will work on summing up the writer's reasons for using specific vocabulary, or character actions that made the tale more vivid. Analyzing the writer's meaning will be a focus now as we dig deeper into reading classic literature.

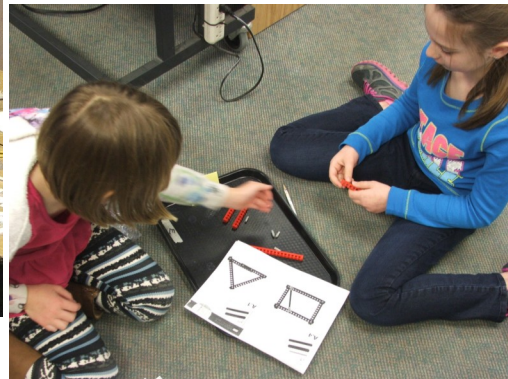
CLASS IN ACTION



Above– 4th grade performing stress tests on triangles
Below– Building triangles from straws and tape



Above– making equivalent weights in grams to use for stress tests
Below– 2nd grade learning rigid structure basics



4th-6th grade Engineering

The Latest Mandates for Highly Capable Education in Washington State

Last Monday and Tuesday I attended a conference at the University of Washington addressing the new state standards for Highly Capable Education in the State. The workshop was put on by Whitworth University and The Robinson Center for Young Scholars. In short, all districts must provide K-12 options for their highly capable students and have the programs up and running within the next two years. Educators statewide attended the conference to find answers to their concerns about the new mandates.

One of the key ideas from the new state regulations was the need to be

able to show student growth as a result of participating in a high cap program. We discovered showing growth can be demonstrated through many measures and not just formal state assessments. Classroom assessments, student portfolios, projects, visual documentation, rubrics, and parent/teacher/student surveys are all acceptable examples of measuring tools. This week students will bring home a pre-test form about Simple Machines in which they share their current knowledge of levers, gears and pully systems without looking things up or asking for adult help. Their answers will provide a

starting point for my curriculum development. The same post test will provide a hard copy for the state and students to appreciate their growth in understanding by unit's end.



Robinson Center for Young Scholars

Enclosed with this newsletter are fliers for High Cap programs sponsored by the **Robinson Center for Young Scholars** based on the UW campus. The first flier is the Saturday Enrichment program which offers a variety of Saturday experiences for grades K-8 and is open to any level student. The second flier explains the Summer Challenge School for grades 5-6 at the same venue. Students must qualify for participation with Challenge School. An MSP score of 95th percentile or higher in Math or Reading is one of the requirements. Both opportunities involve tuition with some financial aid exceptions available. The programs are respected and worth your investigation if you want extracurricular activities for your child.



Looking Forward to the Past: Pompeii

Tuesday, April 7th will be the date of our next field trip to see "Pompeii" at the Pacific Science Center. The cost will be \$15 for chaperones and \$7.50 for students and must be paid one month in advance by March 7th. We will need to limit chaperone numbers to 7 max so as not to exceed our reservation. We cannot add/subtract people once the money has been submitted 30 days in advance. I will send more information home in two weeks and chaperones will be chosen on first come and served basis. Be looking for permission slips in the near future, this is going to be a very popular exhibit and will be extremely crowded.

Central School Calendar

February

Student of the Month trait: Citizenship

Tuesday, 2/3/15	NED Yo-Yo Assembly, Gym, 2:40
Wednesday, 2/4/15	ASB Meeting, Room 3, 12:40 – 1:10 Fudge Bar sales today during lunches
Thursday, 2/5/15	Cookie Dough fundraiser kick-off, 2:45 in gym Strengthening Families, Central hallways & classrooms, 5 – 9:00 p.m., CPG Meeting, Library, 6:30 p.m.
Friday, 2/6/15	3rd ME Lunch today during lunches
Monday, 2/9/15	School Board Meeting, SWHS, 7:00 p.m.
Tuesday, 2/10/15	Early Release for Spring Conferences, 12:30 p.m.
Thursday, 2/12/15	Strengthening Families, Central hallways & classrooms, 5 – 9:00 p.m
Friday, 2/13/15	Possible NO SCHOOL day (if not needed for inclement weather)
Monday, 2/16/15	NO SCHOOL in observance of President's Day
Wednesday, 2/18/15	ASB Meeting, Room 3, 12:40 – 1:10 Fudge Bar sales today during lunches
Thursday, 2/19/15	Cookie Dough fundraiser is finished today Strengthening Families, Central hallways & classrooms, 5 – 9:00 p.m Skate Night @ Skagit Skate in Burlington, 6 – 8 p.m. \$ 5.00 per person
Friday, 2/20/15	Spotlight on the Arts for 6th grades, SWHS Auditorium, 10:00 a.m. (walking over)
Monday, 2/23/15	School Board Meeting, Central, 7:00 p.m.
Thursday, 2/26/15	Strengthening Families, Central hallways & classrooms, 5 – 9:00 p.m
Friday, 2/27/15	ASB Spirit Day – Pajama Day!