

Math & Science Collaborative Lesson Plan



Northwest Educational
Service District 189

Together We Can

Lesson Title: Constructing a graph from a data table

Unit Learning Target (Standard/Performance Expectation(s))		5.5.C	
Construct and interpret line graphs.			CCSSM 5.MD.2
Building Block or Lesson Learning Target: Construct a graph from a given table of data, and explain what the data represents		Student Success Criteria: Students accurately graph data from a table	
Previous Lesson Learning Target: Locate and identify points on a coordinate graph with the corresponding values in a table			
Target Introduction/ Thinking Question * What patterns do you see in this table? What do you notice about how the total number of tiles (or perimeter) changes as you add on additional rows? (Investigations 5 Unit 8)			
Lesson Progression (Flow) with Talk-Structures (Student Discourse) Review previous lesson, "What patterns did you see when 3 tiles across stayed the same?" (Pull numbered sticks to call on students) Assign students a number – either 4, 5, or 6 - to complete their math journals. What would the rule be for 4 tiles across? 5 tiles across? 6 tiles across? Complete the table on p. 30, answer the questions on p. 31, and use the data to complete the graph on p. 32 with your partner. (Investigations) Partners return to their groups and discuss their graphs and patterns with the other team members.		Key terms for this lesson T-table Rule Perimeter Area Arithmetic expression	Formative Task or Question* <i>Designed to elicit student misconception(s)</i> Review previously taught lesson using tables and graphing
		Forms of Student Discourse to include: Student to teacher Student to small group Groups to groups Large Group discussion	
Lesson Closure Whole group – How is the pattern you introduced in your table seen on the graph? How does the graph show the perimeter going up by 2 each time? How does it show the number of tiles increasing by 4, 5, or 6 each time?		Exit Task* Exit Slip – A graph of the table data	

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Do the Math for the Thinking Question
From Investigations 5 Unit 8 Session 2.3

Number of Rows	Perimeter (cm)	Arithmetic Expression
1		
2		
3		
4		
5		
6		
10		
15		
20		
100		
n		

Make a row of tiles with the number assigned to your group. Add rows until you have a clear idea about how the perimeter increases.

Lesson Anticipated Misconceptions:

Mixing up understandings of perimeter and area

Incorrectly transferring data from the table to the graph

Lesson Instructional Adjustment(s) (if needed)
Tied to common misconception(s)

Manipulatives and materials to include and have ready to support the lesson *

Color tiles
Graph paper

* Opportunity for formative assessment