Unit Map 2012-2013

Monroe #2 - Orleans BOCES (Regional Collaboration)

Collaboration / Math 2* / Grade 2 (Math Regional Curriculum)

Wednesday, October 31, 2012, 4:05PM

Standard/Module: Proficiency with Shapes 2.G.2 (Week 24, 9 Weeks)

Stage 1: Desired Results

Standards Focus

- Supporting (20%) connects with 2.OA.4, 2.G.1,3

Gr. 2 Proficiency Map

Standards

NYS: CCLS:Mathematics, NYS: 2nd Grade , Geometry

2.G Reason with shapes and their attributes.

- 2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

Enduring Understandings	Essential Questions
1. There are different representations of fair shares 2. Rectangles can be partitioned into equal squares 3. We can count the number of columns and rows to find the total size.	1. How do you know when a rectangle is partitioned into fair shares? 2. How can you find the size of a rectangle?

Critical Content

1. Fair shares

   a. partition rectangles into equal squares

   b. partition rectangles into rows and columns of equal squares

2. How the size of the rectangle is found

Skills	Vocabulary
1. recognize fair shares 2. partition a rectangle into equal squares 3. find the size of a rectangle by counting the	Tier two: fair share, column, row, horizontal, vertical Tier three: partition,

number of partitions of equal squares (keeping track of what has been counted and not recounting squares)	

Stage 2: Assessment Evidence

Assessments

Splitting the Rectangle
Formative: Test: Written

Students are given a rectangle and asked to partition it into rows and columns of the same "square" size units and count to find the total number of them. The unit can be specified with grid paper or a square tile.

Stage 3: Learning Plan

Learning Activities	Resources
Students partition a rectangle into squares (to the best of their ability) and then determine the total number of squares. This relates to the standard 2.OA.4 where students are arranging objects in an array of rows and columns. Modeling multiplication with partitioned rectangles promotes students' understanding of multiplication. Tell students that they will be drawing a square on grid paper. The length of each side is equal to 2 units. Ask them to guess how many 1 unit by 1 unit squares will be inside this 2 unit by 2 unit square. Students now draw this square and count the 1 by 1 unit squares inside it. They compare this number to their guess. Next, students draw a 2 unit by 3 unit rectangle and count how many 1 unit by 1 unit squares are inside. Now they choose the two dimensions for a rectangle, predict the number of 1 unit by 1 unit squares inside, draw the rectangle, count the number of 1 unit by 1 unit squares inside and compare this number to their guess. Students repeat this process for different-size rectangles. Finally, ask them to what they observed as they worked on the task. **Example** "Split the rectangle into 2 rows and 4 columns. How	www.illuminations.nctm.org www.illustrativemathematics.org

many small squares did you make?" Teach students that rows are horizontal and columns are vertical.	

Differentiation Opportunities

This standard is a precursor to learning about the area of a rectangle and using arrays for multiplication. An interactive whiteboard or manipulatives such as square tiles or other square shaped objects can be used to help students partition rectangles.

<< Previous Year

Last Updated: Wednesday, October 24, 2012, 2:11PM

Atlas Version 7.2.6
© Rubicon International 2012. All rights reserved