Unit 5 Module 4 Session 4

Problems & Investigations- Rainbow Rectangles

Getting Ready-

- SB 183 Rainbow Rectangles
- Colored tiles (at least 80 per student pair)
- Construction paper rectangles (see Preparation)
- Rulers (class set)
- Tape

Vocabulary

Area

Customary System

Dimension

Estimate

measure

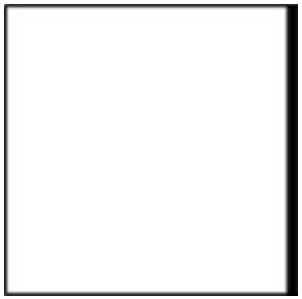
Multiply

Rectangle

Square inch (in)

- Demonstrate that the area of a rectangle with whole-number side lengths can be found by multiplying the side lengths
- Find the area of a rectangle by multiplying its side lengths
- Measure the area of a plane figure by counting the number of square units that cover it
- Find the area of a rectangle with whole-number side lengths by tiling it

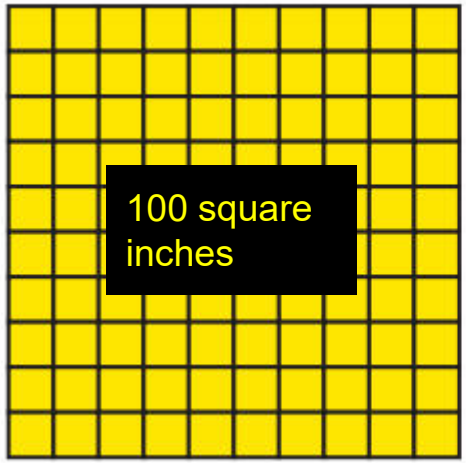
What is the area of 1 tile?



In groups of 4, use your tiles to build a square with an area of exactly 100 square inches.

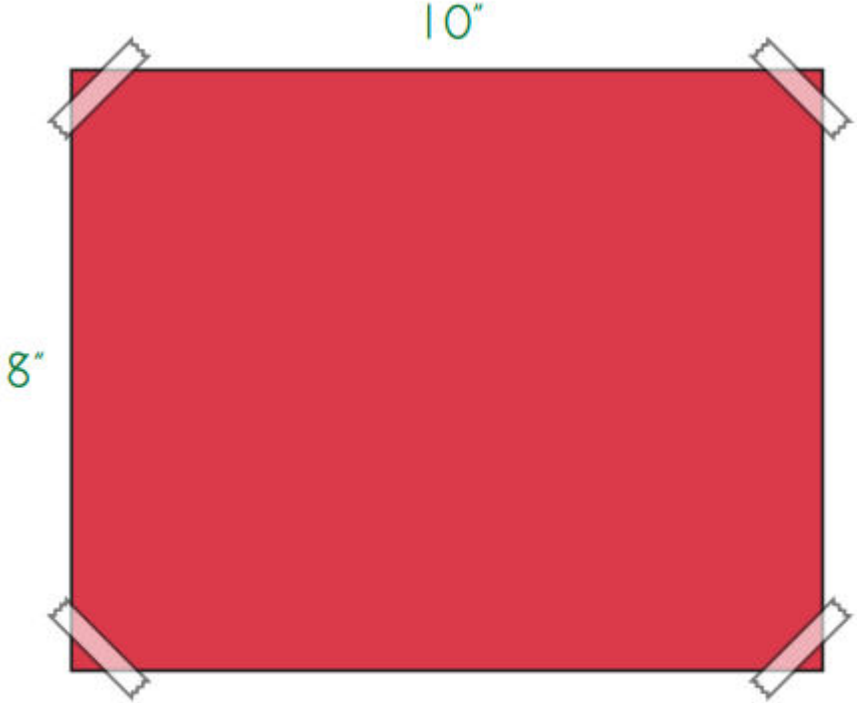
Measure the dimensions of your square.

What can you tell me about your square now?



Estimate the area of the red square in square inches

Find the actual area in square inches of the red square. Find a more efficient way than to cover the whole square.



8" × 10" = 80 square inches

Use your estimation skills to place your 6 paper squares in order, from least to most area.

Page 183 Please

Rainbow Rectangles

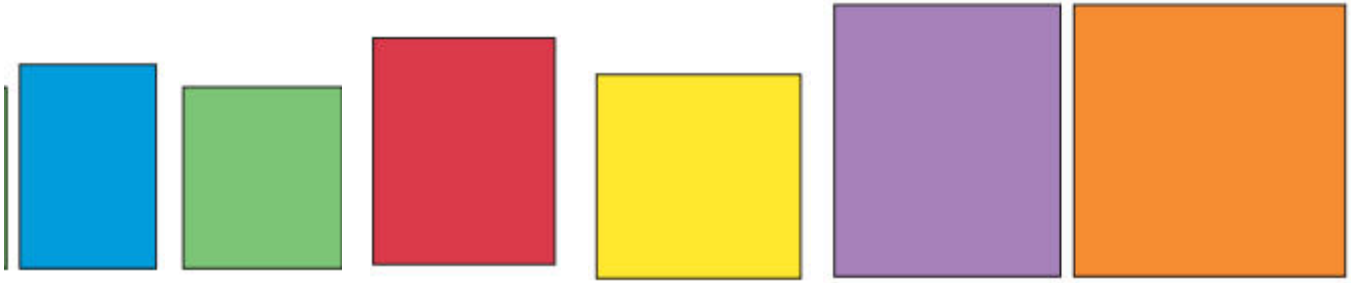
1 Work with the students in your group to put the rectangles in order, from least to most area.

2 After you've agreed on the order, write the colors of the rectangles where you think they belong in the boxes below.

Least Area					Most Area

3 Estimate the area of each rectangle and then measure it in square inches. Remember to label your work with the correct units (square inches). Record your work on the chart below. (Hint: Use the red rectangle as a benchmark to help make your estimates.)

Color Rectangle	Your Estimate in Square Inches (sq. in.)	Actual Area in Square Inches (sq. in.)



SURPRISE!!

Work Places

4C Target One Thousand

4D Hexagon Spin & Fill

5A Solving Game Store Problems

5B Scout them Out

5C Line 'Em Up

5D Division Capture

Daily Practice

SB 184 Estimating & Measuring Area in Square Inches