

Measuring Rectangles

In this activity students order a set of rectangles and learn about different ways to think about size.

Materials

Square tiles (1 inch tiles—color tiles or paper tiles)

Rectangle handouts

Directions

1. With a partner cut out the rectangles on the two handouts.
2. Discuss the name of the shapes (rectangles). Discuss why they are rectangles.
3. With your partner place the shapes in order, biggest to smallest. Students decide on an attribute (height, width, area) for ordering the set of rectangles. They record the order.
4. Things for the teacher to observe:
 - a. Do the partners agree on the attribute they are using to compare the rectangles?
 - b. Do they apply the same attribute to all the rectangles?
 - c. Do they realize that they can order the rectangles differently if they are using different attributes? For example, if they are ordering by width the order biggest to smallest will be different if they then order by height.
5. After partners have ordered their rectangles, discuss as a class how the rectangles were ordered.
6. Have each pair share their order. Ask, "Why did you order the rectangles this way?"
7. Most 2nd graders will arrange the rectangles by height.

Covering Rectangles

1. Ask students to imagine that each rectangle is a chocolate bar. Which would have the most chocolate?
2. Talk about what this means.
3. Provide color tiles (or one inch paper squares). Demonstrate how to cover a rectangle with tiles. This attribute is area.
4. Have the students determine the area of each rectangle. Order the rectangles from biggest to smallest.
5. Things for the teacher to observe:
 - a. Do the students cover the rectangles without gaps or overlaps?
 - b. Can they order the rectangles by area?
 - c. Do they count each tile or do they have a system for counting?

Extension: Using color tiles can you build different rectangles that have the same area?

G

E

F

A

B

D

C