

FAMILY MATH

Foundations for Understanding Area

Dear Family,

Your student is exploring area concepts. They use inch and centimeter tiles to fill in shapes without gaps or overlaps. They count each tile or skip-count to find the area. They see that polygons that are the same shape can have different areas, and they see that polygons that are different shapes can have the same area. Students learn that the size of the unit of measurement (centimeters or inches) affects the area. They transition from using tiles to representing area on grid paper. They measure the side lengths of rectangles with a ruler to discover that the number of tiles along one side of a rectangle is the same as the rectangle's side length. Students draw a grid inside a rectangle by using their measurements and then determine the area of the rectangle.

Key Terms

area

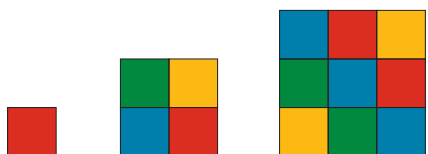
side length

square centimeter

square inch

square units

same shape, different area



The amount of flat space a shape takes up is its area.

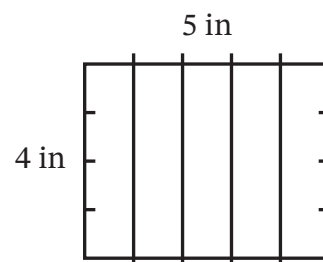


The area is
10 square inches.



The area is
10 square centimeters.

When the side length is measured in inches, the area is measured in square inches. When the side length is measured in centimeters, the area is measured in square centimeters.



Students use a ruler to measure the sides of a rectangle to find their lengths. Instead of using tiles to draw a rectangle on grid paper, they use a ruler to draw a grid inside the rectangle.

At-Home Activity

How Much Space?

Give your student a pad of square sticky notes or 30 to 40 square pieces of paper cut to the same size. Ask your student to tile the areas of objects in your home, such as the front cover of a book, the side of a cereal box, and the top of a rectangular table, by using the notes or paper. Then count the paper tiles to find the area.

The sticky notes or paper may not entirely cover the object. Encourage your student to get as close as possible and check to make sure there are no gaps or overlaps. Consider asking your student to compare the area of the objects by saying statements such as,

- “The area of the _____ is larger than the area of the _____.”
- “The area of the _____ is smaller than the area of the _____.”