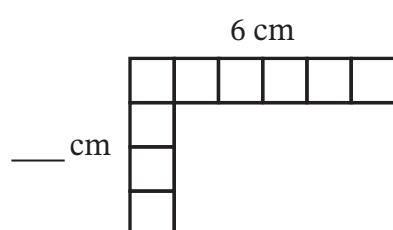


FAMILY MATH

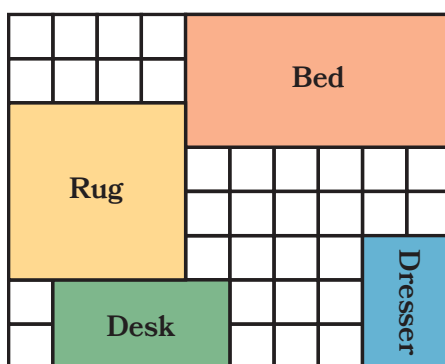
Concepts of Area Measurement

Dear Family,

Previously, your student found the area of a rectangle by filling the shape with tiles and counting. Now, they are learning there is a more efficient way to find the area of rectangles. They start by completing a partially finished array. They realize they can find the area of a rectangle by multiplying the side lengths or the lengths of any one of the rectangle's rows and any one of its columns. Students write multiplication equations to find area and transition to working on area models without grids. Your student uses multiplication as an efficient strategy for finding the area of a rectangle. They understand that area models are useful because they require less drawing than arrays do and because they can represent rectangles measured in large units that cannot easily be drawn to size.

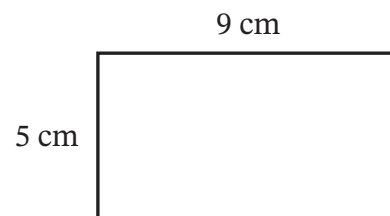


Students realize they can find the area of a partially completed grid if they know the number of squares on each side length.



Students can find the area of a rectangle when a grid is partially hidden. They can look at the surrounding grid squares to identify the length and width.

$9 \times 5 = 45$
The area is
45 square centimeters.



With an area model, students multiply the length and width of a rectangle to find the area. Students may imagine filling in the rectangle with all the square units needed to cover it.

At-Home Activity

Complete the Rectangle

Help your student practice finding the area of a partially tiled rectangle. Arrange square crackers, square sticky notes, or small pieces of paper cut into squares to show only the length and width of a rectangle. Ask your student to predict the area by using multiplication. Then ask your student to fill in the rest of the area with the crackers or paper. Ask them to verify the area they predicted. Repeat, having your student use the crackers or squares to build a different partially tiled rectangle and explain how they could find the area.

