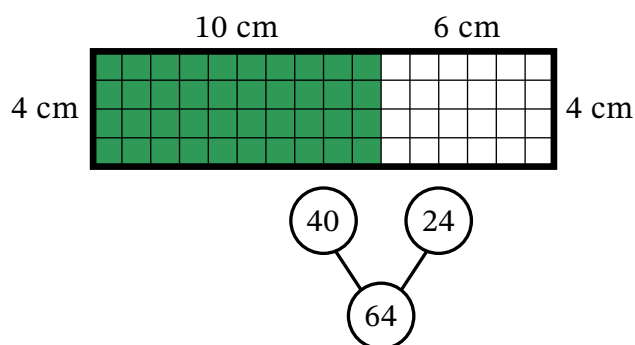


FAMILY MATH

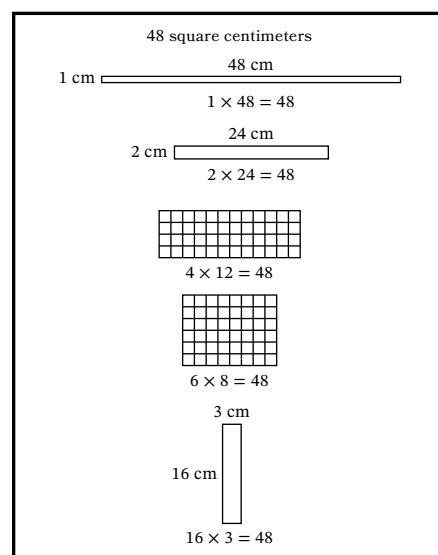
Applying Properties of Operations to Area

Dear Family,

Your student recently learned to use multiplication to find the area of a rectangle. Now, they are learning to use smaller rectangles to find the area of a larger rectangle. They can put smaller rectangles together to make a larger rectangle or break apart a large rectangle into smaller rectangles. Your student continues to work with square tiles and drawings of arrays to find side lengths and multiply to find the area. Your student also learns to find all possible side lengths of rectangles with a specified area, such as 48 square centimeters.



When your student composes a rectangle from smaller rectangles, they can find the total area by adding the areas of the smaller rectangles. Number bonds help your student keep track of the area of the parts.



Rectangles with different side lengths can have the same area. For an area of 48 square centimeters, there are five possible rectangles with whole-number side lengths.

At-Home Activity

Play with Your Food

Encourage your student to think about how rectangles with different side lengths can have the same area. Provide your student with 24 square crackers. If you do not have square crackers available, use square sticky notes or pieces of paper. Challenge your student to create as many rectangles as they can by using all the crackers. Your student may want to make a sketch of each rectangle or write the dimensions to keep track. Ask your student to say a multiplication equation for each rectangle they make. For example, if they make 4 rows of 6 crackers, they would say, “ $4 \times 6 = 24$.”