# Unit 1 Lesson 2: Finding Area by Decomposing and Rearranging

1 What is Area? (Warm up)

Student Task Statement

You may recall that the term **area** tells us something about the number of squares inside a two-dimensional shape.

1. Here are four drawings that each show squares inside a shape. Select **all** drawings whose squares could be used to find the area of the shape. Be prepared to explain your reasoning.

A

B

C

D
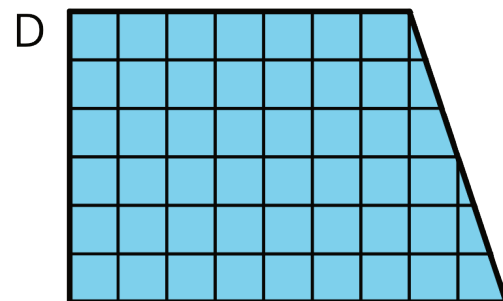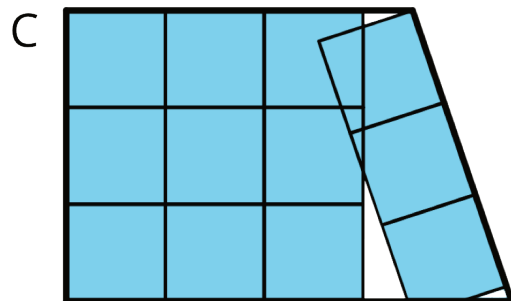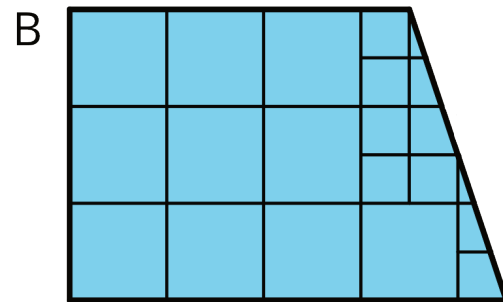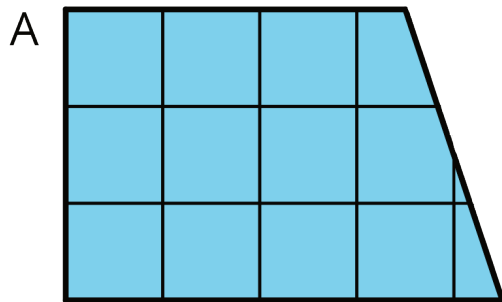
2. Write a definition of area that includes all the information that you think is important.

2 Composing Shapes

Student Task Statement

Your teacher will give you one square and some small, medium, and large right triangles. The area of the square is 1 square unit.

1. Notice that you can put together two small triangles to make a square. What is the area of the square composed of two small triangles? Be prepared to explain your reasoning.

2. Use your shapes to create a new shape with an area of 1 square unit that is not a square. Trace your shape.

3. Use your shapes to create a new shape with an area of 2 square units. Trace your shape.

4. Use your shapes to create a *different* shape with an area of 2 square units. Trace your shape.

5. Use your shapes to create a new shape with an area of 4 square units. Trace your shape.

Activity Synthesis

small

small

small small
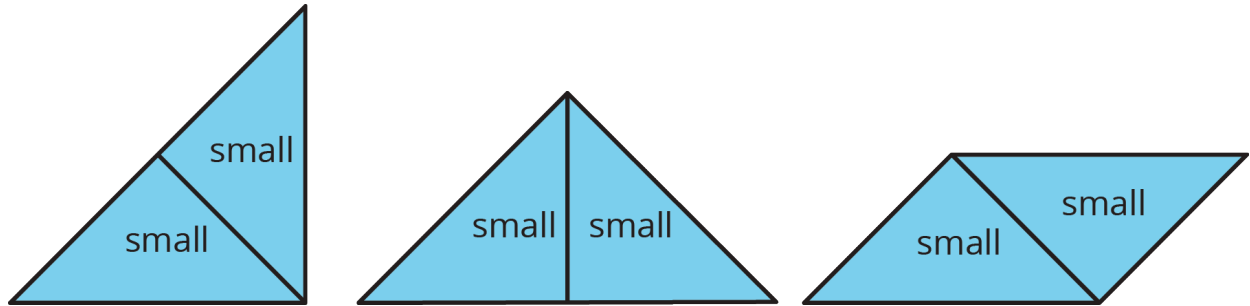
small

small

3 Tangram Triangles (Optional)

Student Task Statement

Recall that the area of the square you saw earlier is 1 square unit. Complete each statement and explain your reasoning.

1. The area of the small triangle is _____ square units. I know this because . . .

2. The area of the medium triangle is _____ square units. I know this because . . .

3. The area of the large triangle is _____ square units. I know this because . . .

Images for Activity Synthesis