# **POP! TEACHER RESOURCE**



## Make a Shape

Lesson Plan for *Measuring Area*Grade 3

### Objective

To help students understand the concepts of plane figures and area, and use unit squares to measure area.

#### **Things Needed**

- Measuring Area book
- Grid worksheet (attached)
- White paper
- Construction paper in various colors
- Scissors
- Glue sticks
- Pencils
- Tape
- Whiteboard

#### **Before the Activity**

Print several copies of the Grid worksheet on white paper. Cut out the squares, following the lines on the grid. Hold on to these squares for now. Pass out the construction paper, glue sticks, and pencils. Each student should get their own sheet of construction paper, but students can share the glue sticks and pencils.

#### **Activity**

Read *Measuring Area* out loud to students. Page 4 says, "Area is the amount of space in a flat shape." Flat shapes include circles, triangles, squares, and rectangles. These shapes are also known as plane figures. People can measure the area of a shape by using unit squares. All squares have four sides that are an equal length. Unit squares have a side length of 1 unit.



To find the area of a shape, first cover the shape with unit squares. There should not be any gaps between the unit squares, and none of the unit squares should overlap. Then, count the number of unit squares that it took to cover the shape. That number is the shape's area.

Students will practice measuring the area of a shape by creating their own shapes out of unit squares. First, work through an example on the whiteboard. Take a handful of the white squares you cut before class. Explain to students that these white squares will be your unit squares. Make a shape out of the squares on the whiteboard, using tape to hold the squares in place. Make sure to place the squares side by side so their edges touch but do not overlap. Ask for a volunteer to come forward and count the number of unit squares in the shape. Explain that this number is the area of the shape.

Then, pass out a handful of white squares to each student. It does not matter if students get the same number of white squares, and students do not need to use all of the squares they have been given. Students will use their white squares to design a shape on their colored construction paper. Students can use the glue sticks to glue the squares in place. Remind students that the squares should not overlap and that there should be no gaps between the squares. After creating their shapes, students will count the number of squares they used to make their shapes. At the bottom of their papers, they should write their names and the areas of their shapes, using the following format:

Area = \_\_\_ unit squares

#### **Evaluation**

Did students glue the unit squares without gaps and without the squares overlapping? Did they count out the number of squares in their shapes correctly?

#### **Standards**

This lesson plan may be used to address the Common Core State Standards' math standards, grade 3 (3.MD.C.5, 3.MD.C.6).



# Grid

