Area

Determine the area using LEGO bricks

ENGAGE

Find a rectangle in the room. Explain to students that they will be calculating area today. Area is the amount of space covered by a flat shape or surface. In order to figure out the area of something, you must calculate the length times the width. **Length** is describing how long something is while **width** is describing how wide an object is. In geometry, **length** pertains to the longest side of the rectangle while **width** is the shorter side. Explain to students that the rectangle has a length and a width. If the length was 2 feet and the width was 3 feet, the area of the room would be 2 x 3 = 6 square feet. Area is measured in square feet.

EXPLORE

Use your LEGO bricks to create a rectangle.
Recommendation: Limit the number of bricks you provide to students for this activity. Try using 8 LEGO bricks of the same size to start (suggested size of 2x2 square or 2x3 rectangle).

EXPLAIN

Ask students to calculate the area of their rectangle using the studs on the LEGO bricks.
- How many studs long is the rectangle?
- How many studs wide is the rectangle?
- What is the area?

ELABORATE

Make the largest rectangle you can. What is the area?
Make a the smallest rectangle you can. What is the area?

EXTEND

When you made the different size rectangles, were any of the studs hidden or covered? Was the smallest rectangle you could make taller than the largest rectangle? Why or why not? Explain your thinking.