

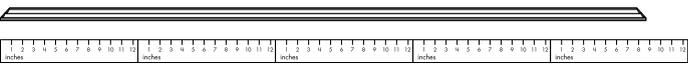


## About the Mathematics in This Unit (page 1 of 2)

Dear Family,

Our class is starting a new mathematics unit about geometry and measurement called *Size, Shape, and Symmetry*. During this unit, students practice making accurate measures of length using U.S. standard units (inches, feet, yards) and metric units (centimeters, meters). They investigate characteristics of quadrilaterals and other polygons. They use right angles as a reference to identify the size of other angles. Students also solve problems about area, the two-dimensional measure of the size of a surface.

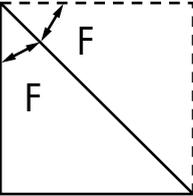
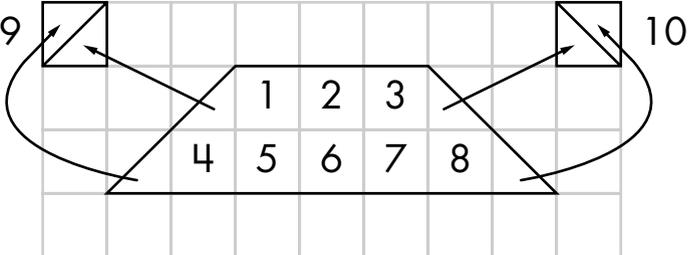
Throughout the unit, students work toward these goals:

BENCHMARK/ GOAL	EXAMPLES
Use appropriate measurement tools to measure distance.	<p>How long is the chalk tray?</p>  <p>"I lined up rulers to the left side of the chalk tray. My rulers lined up exactly with no overlaps or gaps. The chalk tray is <math>4\frac{1}{2}</math> feet long."</p>
Identify quadrilaterals as any four-sided closed figure.	<p>Which of these figures are quadrilaterals? Explain how you decided.</p>  <p>"A and D are quadrilaterals. They have 4 sides, 4 angles, and 4 corners/vertices. There are no gaps (like B). C has six sides."</p>

(continued)



## About the Mathematics in This Unit (page 2 of 2)

BENCHMARK/ GOAL	EXAMPLES
Know that a right angle measures 90 degrees, and use this as a landmark to find angles of 30, 45, and 60 degrees.	<p>"I can use two of these triangles to make a square."</p> <p><math>45 + 45 =</math></p>  <p>"These two angles together make <math>90^\circ</math>, and they are equal, so each angle measures <math>45^\circ</math>."</p>
Find the area of polygons using a square unit of measure.	<p>What is the area of this trapezoid?</p>  <p>"I counted 8 square units plus four <math>\frac{1}{2}</math> square triangles, so the total area is 10 square units."</p>

In our math class, students spend time discussing problems in depth and are asked to share their reasoning and solutions. It is important that children solve math problems in ways that make sense to them. At home, encourage your child to explain the math thinking that supports those solutions.

Please look for more information and activities about *Size, Shape, and Symmetry* that will be sent home in the coming weeks.