



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 *Moving Between Solids and Silhouettes*. During this unit, students work with 3-dimensional objects (such as prisms, pyramids, and buildings made of cubes) and develop their spatial visualization skills. Students draw 2-D pictures of 3-D objects from different perspectives and they consider the silhouettes, or shadows, made by 3-D objects. Students also work with cubes and paper boxes to build an understanding of measuring the volume of rectangular prisms.

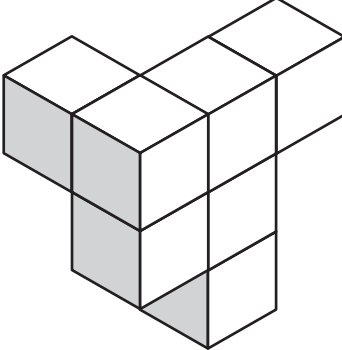
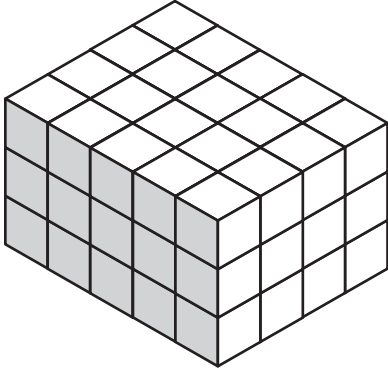
Throughout the unit, students work toward these goals:

BENCHMARKS/GOALS	EXAMPLES
Identify 2-dimensional silhouettes of 3-dimensional solids (e.g., a cone can project a triangular silhouette).	What silhouettes can this cone make?

(continued)



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BENCHMARKS/GOALS	EXAMPLES
Draw 2-dimensional representations showing different perspectives of a 3-dimensional object.	Draw a view of this cube building as seen from the right side. 
Find the volume of cube buildings and rectangular prisms.	What is the volume of this cube building?  <p>The bottom layer is 4 units by 5 units, so 20 cubes will fit on the first layer. The building is 3 layers high, so the volume is 3×20 or 60 cubes.</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 his or her math thinking to you.

Please look for more information and activities about *Moving Between Solids and Silhouettes*, which will be sent home in the coming weeks.