## About the Mathematics in This Unit

Dear Family,
We are beginning a new unit in mathematics called Build a Block, Build a Wall. This geometry unit focuses on three-dimensional shapes. In this unit, students look for and identify three-dimensional shapes in the realworld as they go on Shape Hunts in school and at home. They create, identify, describe, compare, represent, and build with 3-D shapes. They also explore the relationship between 2-D and 3-D shapes as they match the faces of Geoblocks-a set of related three-dimensional wooden blocksto corresponding 2-D shapes.

Throughout this unit, students will be working toward these goals:

Benchmarks/Goals
Examples

| Understand words that describe relative position. | - above <br> - on top of <br> - below <br> - beneath <br> - beside <br> - next to <br> - in front of <br> - behind |
| :---: | :---: |
| Identify and describe the overall size, shape, and features of familiar 3-D shapes. | "It has a triangleon one side." "It's big.""It would  <br> make a  <br> good ramp." "It looks like a <br> piece of pie."  |
| Make 3-D shapes. |  |
| Combine shapes to make 3-D shapes. |  |

## About the Mathematics in This Unit

In our math class, students engage in math problems and activities and discuss the underlying concepts. They are asked to share their reasoning and solutions. It is important that children solve math problems accurately in ways that make sense to them. At home, encourage your child to explain his or her math thinking to you.

In the coming weeks, you will receive more information about this unit as well as suggestions for activities to do at home.

## Related Activities to Try at Home

Dear Family,
The activities below are related to the mathematics in the geometry unit, Build a Block, Build a Wall. Doing them at home together with your child can enrich your child's mathematical learning.

3-D Shape Hunt Shapes are everywhere. Talk with your child about the shapes you see every day. Together, you can look at everything from the shapes of buildings in your neighborhood, to the shapes of boxes and cans in the supermarket. Sometimes you can include descriptions of shapes in what you say. For example, "Look at that part of the building that is shaped like a cylinder." At other times, you can ask your child to look for specific shapes: "See how many things you can find that are shaped like a cube while we walk down the street."

Making Shapes Making shapes is a great way to learn about them. At home, your child might use clay, building blocks, drinking straws and clay, or other types of construction toys or materials to make different shapes.


Ask your child, "Can you make a cube? How many faces (sides) does it have?" "Can you make a shape that looks like this shoebox?" Or, you can make different shapes and ask your child to describe and copy them.

## Related Activities to Try at Home

Drawing Shapes While it is difficult to draw 3-D shapes, some students enjoy the challenge. Talk together about ways to draw a shape so that it "looks 3-D" and practice.

Math and Literature Here are some suggestions of children's books that contain relevant ideas about geometry. Read them together and talk about the shapes you find.

Hoban, Tana. Cubes, Cones, Cylinders and Spheres.
Murphy, Stuart J. Captain Invincible and the Space Shapes.
Nagel, Karen. Shapes that Roll.
Onyefulu, Ifeoma. A Triangle for Adaora: An African Book of Shapes.

Thong, Rosanne. Round is a Mooncake: A Book of Shapes.

