Geometry and Attributes

In Unit 7, children will work with 2-dimensional shapes. First, children will classify blocks by their shape, color, and size. Then they will learn to recognize attributes such as number of sides and square corners. Later they will build their own shapes out of straws and twist-ties, identifying the differences among shapes that are polygons and shapes that are not.

Children will work with 3-dimensional shapes they encounter every day. They will be asked to bring objects from home, which will be organized and labeled to create a “Shapes Museum” for the classroom. For example, a soup can would be labeled “cylinder”; a tennis ball, “sphere.” In examining the shapes brought to class, children will begin to identify similarities and differences among five kinds of 3-dimensional shapes: prisms, pyramids, spheres, cylinders, and cones. They will learn to identify characteristics, using terms such as flat and round. We will use the names of the shapes in class, but children will not be expected to memorize their definitions.

In the last lesson of this unit, children will explore symmetry. They will find symmetrical shapes in real life, including butterflies, bells, guitars, vases, and double dominoes. Then they will create their own symmetrical shapes, using paper and scissors.

Please keep this Family Letter for reference as your child works through Unit 7.
Vocabulary

2-Dimensional Shapes

- rhombus
- triangle
- square
- rhombus
- trapezoid
- hexagon

3-Dimensional Shapes

- prism
- pyramid
- sphere
- cone
- cylinder
Do-Anytime Activities

To work with your child on the concepts taught in this unit and in previous units, try these interesting and rewarding activities:

1. Draw a name-collection box with a number on the tag. Ask your child to write at least 10 equivalent names for the given number.

2. Occasionally ask questions about time: What time is it? What time will it be in five minutes? In ten minutes? In one hour?

3. Continue to work on addition and subtraction facts using Fact Triangles, short drill sessions, and any of the games introduced at school.

4. If a calculator is available, ask your child to show you how to count with it. See how high your child can count on the calculator.

5. Look for geometric shapes around the house, at the supermarket, as part of architectural features, and on street signs. Begin to call these shapes by their geometric names.
Building Skills through Games
In this unit, your child will practice classification and place-value skills by playing the following games:

**Attribute Train Game**
One player puts down a block. The next player finds a block that differs in only one attribute—shape, size, or color—from the first block and puts it next to the first block. Each player continues to add to the “train” of blocks.

**Tens-and-Ones Trading Game**
Players take turns putting base-10 blocks on their Tens-and-Ones Mat according to the roll of a die. Whenever possible, they exchange 10 cubes for 1 long. The first player to get 10 longs wins!

As You Help Your Child with Homework
As your child brings assignments home, you may want to go over the instructions together, clarifying them as necessary. The answers listed below will guide you through the Home Links in this unit.

**Home Link 7•1**
Check that your child answers facts correctly as he or she practices with the Fact Triangles.

**Home Link 7•2**
1.–4. Answers vary.
5. Kente; 5¢

**Home Link 7•3**
1. square, rhombus, hexagon;
trapezoid, triangle, rhombus
2. $6 + 1 = 7; 7 - 1 = 6; 1 + 6 = 7; 7 - 6 = 1$

**Home Link 7•4**
1.

**Home Link 7•5**
Check that your child answers facts correctly as he or she practices with the Fact Triangles.

**Home Link 7•6**
1. Answers vary.
2. 71; 72; 74

**Home Link 7•7**
1. Answers vary.
2. 11