Dear Family,

The next unit in your child's mathematics class this year is ***Filling and Wrapping: Three-Dimensional Measurement***. Its focus is volume (filling) and surface area (wrapping) of objects, especially rectangular prisms, cylinders, cones, and spheres. In addition, students extend their understanding of similarity and scale factors to three-dimensional figures.

UNIT GOALS

Students develop strategies for measuring the surface area and volume. Their strategies are discussed and used to formulate rules for finding the surface area and volume of rectangular prisms and cylinders. They also investigate other solids—including cones and spheres—to develop volume relationships.

Ideas from previous units will be revisited and extended in this unit. For example, from the *Stretching and Shrinking* unit, the connection of how changing the scale of a box affects its surface area and volume will be studied.

HELPING WITH HOMEWORK

You can help with homework and encourage sound mathematical habits as your child studies this unit by asking questions such as:

- Which measures of an object are involved—volume or surface area?
- What method should I use to determine these measures?
- What strategies or formulas might help?

In your child's notebook, you can find worked-out examples from problems done in class, notes on the mathematics of the unit, and descriptions of the vocabulary words.

HAVING CONVERSATIONS ABOUT THE MATHEMATICS IN *FILLING AND WRAPPING*

You can help your child with his or her work for this unit in several ways:

- Ask your child about the different ways the class has explored to find the surface area and volume of various shapes.
- Look at your child's mathematics notebook. You may want to review the section where your child is recording definitions for new words that he or she is encountering in the unit.
- Have your child pick a question that was interesting to him or her and explain it to you.

A few important mathematical ideas that your child will learn in *Filling and Wrapping* are given on the back. As always, if you have any questions or concerns about this unit or your child's progress in class, please feel free to call.

Sincerely,