

Mathematics Family Letter Unit: 9
Measurement

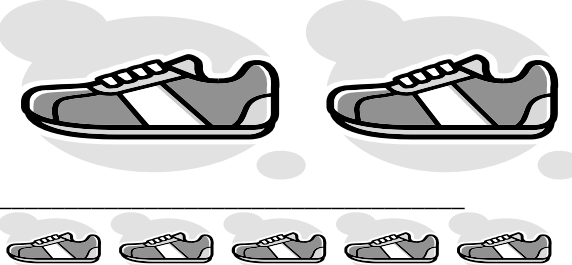


Dear Family,

Our class will be working on a unit focused on measurement. Your child will measure with a variety of non-standard units such as cubes, inch tiles, paper clips, and/ or paper cutouts. We will investigate the idea that different-sized units result in different measurements. We will also work on several story problems.

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

BENCHMARKS/GOALS	EXAMPLES
<p>Demonstrate accurate techniques when measuring a distance with nonstandard or standard units. These techniques include starting at the beginning, ending at the end, leaving no gaps or overlaps, measuring in a straight line and keeping track of the number of units.</p>	
<p>Know at least one way of describing a measurement that falls between two whole numbers.</p>	
<p>Understand that the same result should be obtained when the same object is measured twice or when two different people measure the same object (using the same unit).</p>	<p>Dave measured a book. He found it was 12 paper clips long. Then Carla measured the same book and found that it was 15 paper clips long. Can both answers be right? What could have happened?</p>

<p>Understand that measuring with different-sized units will result in different numbers.</p>	<p>How far is this distance in big feet and in little feet? Why are the counts different? Throughout this unit, students are learning to use consistent units to measure.</p>  <p>The illustration shows two large sneakers side-by-side. Below them, a horizontal line is drawn. Underneath the line, five small sneakers are arranged in a row, demonstrating how they can be used as units to measure the length of the line.</p>
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Throughout this unit, students are learning to use consistent units to measure accurately and to understand the underlying mathematics of measuring. This kind of experience will improve their sense of what measuring is all about. In the coming weeks, we look forward to sharing more of our work in measurement with you.

Related Activities to Try at Home

The activities suggested below are related to the mathematics of measurement that we are currently working on in school. Doing them together can enrich your child's mathematical learning.

Estimating Lengths Ask your child to help you estimate lengths in practical terms. For example, how many chairs can fit along one side of a table? How many steps does it take to walk from the kitchen to the front door.

Shorter Than My Arm Have your child estimate which objects around the house are shorter than your child's arm. Then have your child measure them to make sure. As an extension, choose a different body part or compare two lengths. For example, can you find something that is shorter than your leg but longer than your arm?

Measuring with Hands and Feet Have your child choose an object or distance and measure it with his or her hands (wrist to fingertip) and feet (heel-to-toe steps). Then your child can record each object as a specific number of hands or feet. As an extension, your child can compare the measurements that other members of your family get when using their hands or feet.

Marking Heights If you mark your child's changing heights regularly on the wall, this is a good time either to look at that height chart with your child and talk about it or perhaps to start a chart if you haven't been keeping one. You could also help your child put things in order by height—a group of boxes, some pieces of ribbon, or the child's stuffed animals. Ask your child to talk about which is the shortest and which is the longest. If your child has difficulty putting several things in order, you could sort the objects into three groups—short, medium, and tall.

Math and Literature

Here are some children's books that involve measurement. You can find them in your local library or bookstore and read them with your child.

Briggs, Raymond. Jim and the Beanstalk

Lionni, Leo. Inch by Inch

McBratney, Sam. Guess How Much I Love You

Murphy, Stuart J. Super Sand Castle Saturday

Peterson, John. The Littles

Pluckrose, Henry. Math Counts: Length

Russo, Marisabina. The Line Up Book

Schwartz, David. If You Hopped Like a Frog

Sincerely,

The First Grade Team