

Changes, Changes



In this unit, your student will:

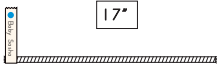
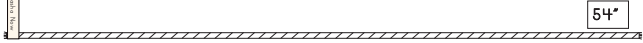
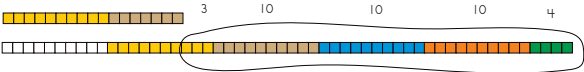
- Develop a sense of time by experiencing activities that last a second, minute, hour, and day
- Solve word problems that involve comparing



- Add and subtract within 100
- Measure, order, compare, and find differences in length
- Collect and analyze data by making simple charts and graphs using pictures, numbers, and tally marks

Your student will practice these skills by solving problems such as these:

PROBLEM	COMMENTS
<p>What do you know about an hour?</p> <div data-bbox="277 1058 711 1241"> <p>How long is an hour?</p> <ul style="list-style-type: none"> It's a really long time. We have math for an hour every day. We have reading for 2 hours every day. I play outside with my friend after school for 1 hour each day. It takes me an hour to get ready for school. In one hour, my family can drive to my grandma's. </div>	

PROBLEM	COMMENTS
<p>We used our measuring strips to help cut pieces of string to show how long Sasha was at birth and how tall he is now. How many inches has Sasha grown? How did you figure it out?</p>   <p><i>"We hopped on the classroom number line. We started counting at 17 and then counted the hops to 54. It's 37 hops. Sasha grew 37 inches."</i></p>	<p>In the last few sessions of the year, students investigate some of the ways they've changed and grown since birth. They measure their own height, head circumference, foot length, and arm length, as well as those of three fictional first graders and a baby. Students devise and share various strategies to find differences between pairs of lengths. Some count on from the shorter length to the longer. Others use linking cubes to help.</p>  <p><i>"We made a cube train for each length and then counted how many extras the longer train had. It was 10, 20, 30, plus 3 more is 33. Then 4 more makes 37."</i></p>

Frequently Asked Questions About Unit 8

Q: Why end the year with a unit on change?

A: Scientists use mathematics to make sense of the data they collect through studies and experiments. In this unit, students use time, measurement, and computation to find patterns and make comparisons, focusing on their own activities, interests, and lives. By integrating math and science in a purposeful way, this unit helps students see that mathematics is not a collection of disconnected skills and topics, but a way of thinking and a set of tools they can use to make sense of the world around them.

Q: What can I do over summer break to help my student continue to grow mathematically?

A: Summer is a perfect time to help your child understand how math is used in everyday life. Travel brings many opportunities: Road games with license plates are always a favorite. Try assigning all letters a value of 5 or 10, and then adding the numbers to find the total. For example, if letters are worth 10, SGR 725 would be $10 + 10 + 10 + 7 + 2 + 5$, or 44. While driving or waiting in lines, practice counting forward and backward, starting and stopping on different numbers.

There are plenty of everyday ways to enjoy math too. Practicing math facts with cards, spinners, and dice is fun when an adult and child take turns using strategies without pressure. The grocery store is a great place to find numbers and make comparisons. Your student will enjoy making real or pretend purchases when they count out the change to pay. A warm day outside with water and measuring cups provides lots of learning fun. Look for two- or three-dimensional shapes during a neighborhood walk or trip to the park. Plant something together; then measure and record its growth over time. Race toy cars or make your own paper gliders, and measure the distances they travel. Most important, have fun using math with your child.

To further support your student in learning mathematics, you can:

- Visit mathathome.mathlearningcenter.org and work through some or all of the activities in Grade 1 Summer Medley— Explore & Extend together. These activities complement the learning that takes place in the classroom during Unit 8 and provide fun ways to engage in mathematical thinking.
- Visit apps.mathlearningcenter.org and invite your student to explore the Math Clock, Number Frames, Number Chart, and Number Line apps. Throughout Unit 8 students use these tools in their physical forms in the classroom.
- Read books with your student that feature growth, change, and measurement. Some book suggestions for this unit include:
 - » *Inch by Inch* by Leo Lionni
 - » *The Growing Story* by Ruth Krauss, illustrated by Helen Oxenbury
 - » *The Carpenter* by Bruna Barros
 - » *Up to My Knees!* by Grace Lin
 - » *Kids Who Are Changing the World* by Sheila Sweeny Higginson, illustrated by Alyssa Petersen
 - » *Measuring Penny* by Loreen Leedy