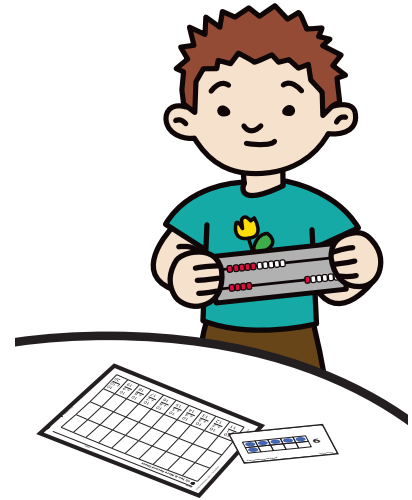


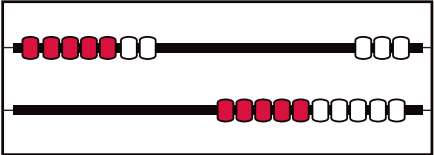
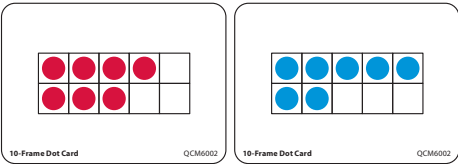
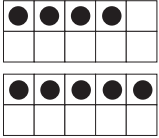

Numbers All Around Us

In this unit, your student will:

- Recognize how many objects are in a collection (up to 10), without counting from 1
- Identify 1 more and 1 less than a given number
- Explore number combinations that add up to 5 and 10
- Count by 1s, 2s, 5s, and 10s
- Make and read simple graphs
- Work with their classmates to build a math community of thinkers and learners



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

PROBLEM	COMMENTS
<p>Use the number rack to show 7.</p>  <p><i>I used 5 red beads and 2 white beads. That makes 7.</i></p>	<p>The lessons in Unit 1 are designed to help students develop number sense. Students initially use number racks to represent numbers and, later, to add and subtract. The number rack is a math tool made up of two strings of 10 beads; each string is broken into a group of 5 red beads and a group of 5 white beads. This arrangement invites students to think in groups of 2, 5, and 10 rather than counting by 1s.</p>
<p>How many dots do you see? How many more dots are needed to make 10?</p>  <p>Ten-frame cards show two ways to represent the number 7.</p>	<p>The 10-frame, like the number rack, helps children make mental pictures of numbers in various ways. On the first card, students might see that 7 is made up of 4 and 3. Or they might see 6 and 1 more. On the next card they might see that 7 is made up of 5 and 2 or 4 and 3. Students begin to understand how two parts make a whole (the sum). By counting the empty squares on the 10-frame, students can also see how many more are needed to make 10.</p>
 <p>$4 + 1 = \underline{\quad} 5$</p> <p>What number comes before 15? What number comes after 15?</p> 	<p>Students use 10-frames and the number path for counting and seeing number relationships. Counting forward by 1s adds 1. Counting backward by 1s subtracts 1. Understanding this relationships helps students see that they can count on to add (4 + 2 is 4... 5, 6) and count back to subtract (8 - 2 is 8... 7, 6). Learning to add and subtract 1 or 2 from a number is a foundational understanding developed in first grade.</p>

Frequently Asked Questions About Unit 1

Q: Why do some of these activities look like what my student did in kindergarten?

A: This unit reviews mathematical concepts explored in kindergarten. Such review helps teachers assess students' skill level and plan future sessions. During the unit, teachers also introduce and establish routines that will be used during first grade. Spending time on learning expectations and procedures is essential to ensuring a cooperative community of learners where students work together to build mathematical concepts.

Q: How can I support my student's learning?

A: Asking questions, giving your student time to process their ideas, and showing an interest in their work builds their confidence as a mathematician. In Unit 1, students discuss how they are helpers at home and at school. Students work together to make a Helping Hands quilt. When finished, they discuss the patterns and shapes they see in it. Ask your student how they are helpers at school. Invite them to look for shapes and patterns in your community. Have them describe the patterns and shapes they find.

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: Set 1 together. These activities complement the learning that takes place in the classroom during Unit 1 and provide fun ways to engage in mathematical thinking. This set also includes digital versions of games that your student has learned at school, such as Ten & More and Which Coin Will Win?
- Choose activities in which you and your student work together. Making something or cooking a favorite recipe provide opportunities to think about how we use math regularly. As you work together, count the items you're using, compare the sizes and lengths of different objects, measure ingredients, and identify numbers on containers or in a recipe.
- Visit apps.mathlearningcenter.org and invite your student to explore the Pattern Blocks, Geoboard, Number Rack, and Number Frames apps. Throughout Unit 1, students explore these tools in their physical forms in the classroom.
- Bring math into reading time. As you read picture books with your student, invite them to count the items in pictures, make up math stories, and look for shapes and patterns. Some suggestions include:
 - » *Zonia's Rain Forest* by Juana Martinez-Neal
 - » *A Song of Frutas* by Margarita Engle, illustrated by Sara Palacios
 - » *La Princesa and the Pea* by Susan Middleton Elya, illustrated by Juana Martinez-Neal
 - » *Bracelets for Bina's Brothers* by Rajani LaRocca, illustrated by Chaaya Prabhat
 - » *The Arabic Quilt: An Immigrant Story* by Aya Khalil, illustrated by Anait Semirdzhyan
 - » *Eight Hands Round: A Patchwork Alphabet* by Ann Whitford Paul, illustrated by Jeanette Winter

