

Bridges in Mathematics

Kindergarten Unit 1

Numbers to Five & Ten

In this unit your child will:

- Count to 20
- Recognize and build sets to 10 using fingers, five-frames and ten-frames, and objects
- Count, order, and compare numbers to 10
- Write numerals to 10



Your child will practice these skills by solving problems like those shown below.

PROBLEM	COMMENTS
How many shoes in each group? How many shoes in all?	The Sorting Shoes activities in Unit 1 offer students many opportunities to count as they discuss the different features of their shoes and sort them by attributes. Imagine the giggles when the discussion turns to “What’s inside each shoe?” Five toes, of course!
Look at the dots on the five-frame. Use your fingers to show how many you see. How many dots do you see on the ten-frame? Build the number with cubes on your counting mat.	Pictures help students understand how many. The five- and ten-frames (shown below) help students learn how many more they need to make 5 and 10. As students become familiar with the arrangement of the dots, they begin to quickly recognize them without having to count from 1. Fingers also help young children represent numbers.
Spill 5 beans. Count the beans that land red side up. Trace the number.	Games offer students opportunities to practice counting, recognizing, and writing numbers. A variety of activities engage children in math thinking and talking—a way of making sense of their world. These Work Places games and activities provide time to practice skills and also allow teachers time to meet the needs of individual students, providing challenge and support as needed.

FREQUENTLY ASKED QUESTIONS ABOUT UNIT 1

Q: My child can count to 100. How will you keep her engaged?

A: Rote counting is one of many skills that help develop number sense in kindergarten. Along with counting come skills such as identifying the symbol for each number, building sets of objects that are equal to that number, and naming the number that comes immediately before and after a given number. While many lessons in this unit are centered on counting, the Bridges and Work Place sessions have suggestions to challenge and support students at all ability levels. Along with counting, the five- and ten-frame structures entice students to add, subtract, and compare numbers. During these first weeks, teachers get to know students and assess their skill levels. This helps them pose questions and plan future lessons in the days and months to come to meet the needs of all learners.

Q: Why do children count on their fingers?

A: Young children naturally use their fingers when they are developing beginning number concepts. When children are asked, "How old are you?" they often answer by showing their fingers. Fingers support children in exploring numbers and counting to 10. They also help students understand that numbers can be made in different ways. For example, they can show 7 as 5 fingers on one hand and 2 on the other, or as 4 on one hand and 3 on the other. Fingers may also be used to show how many more are needed to make a number.

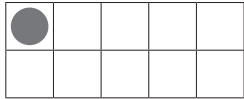
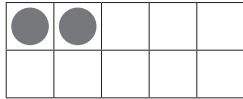
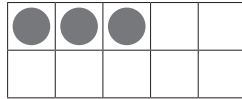
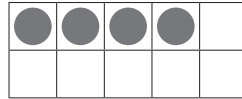
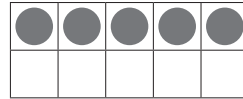
Show 7.	Show 3.	How many more to make 5?
  or  		

Fingers serve as math tools just like cubes and other counting objects. At first, students count from 1 as they build groups on their fingers. Later, they pop their fingers up confidently, without having to count each one. Watch for this shift in finger use. As children learn other strategies and commit facts to memory, their reliance on fingers diminishes.

Q: How can I help my child with mathematics?

A: Kindergarteners enjoy showing their families what they are learning in school. Asking questions, giving encouragement, and showing interest in their work builds your child's confidence as a mathematician.

This chart shows how number writing is taught at school for numerals 1–5. You may want to refer to it when helping your child write numbers at home.

Number 1 is like a stick, a straight line down that's very quick!  	For number 2 go right around, Then make a line across the ground!  	Go right around. What will it be? Go round again to make a 3!  	Down and over and down some more. That's the way to make a 4!  	Go down and around, then you stop. Finish the 5 with a line on top!  
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