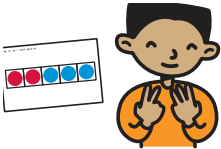
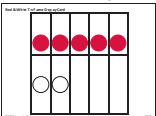
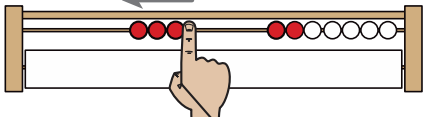

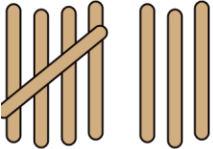
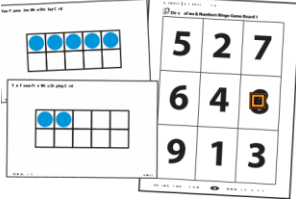



Counting and Matching Numerals 6-10



We are beginning Unit 3: Counting and Matching Numerals 6-10 with Comparing. The purpose of this unit is to develop an understanding of quantity and number. Students will work with a variety of math manipulatives to count and match numbers through 10 and to compare sets of objects. Tools and models introduced in this unit will build on the five structure to develop an understanding of the ten structure in our number system. Students will build and write equations and tell stories based on equations. They will explore equivalence and think about numbers being represented in a variety of ways ($8 = 3 + 5$ and also $4 + 4$). Students will practice writing numbers 7-10 and develop strategies to determine more, less, and same.

Problem	Comments
<p>How many red dots? Show me on your fingers. How many blue dots? Show me with the fingers on your other hand. How many in all?</p>  <p>How many dots do you see? How do you see it?</p> 	<p>Five- and ten-frames help students develop number sense. The frames help them make mental pictures of numbers in various ways. On the first card, students see that 5 is made up of 2 red dots and 3 blue dots. Many children can recognize 2 and 3 without having to count each dot. They might also know that when the whole row is filled, we have 5. On the ten-frame card, they see 7 is made up of 5 red dots and 2 white dots. They may notice that 7 is 3 less than 10. Seeing the “parts” of numbers is foundational for adding and subtracting.</p>
<p>Use the number rack to show 3 in one push.</p> 	<p>The number rack is a math tool made up of 10 beads broken into a group of 5 red beads and a group of 5 white beads. Like the ten frame, it helps students see numbers in relation to 5 and 10. In later units, students will use the number rack for more formal practice with addition and subtraction</p>
<p>How many ways can you arrange eight children at a sleepover party?</p> 	<p>Students will recognize that a number can be composed (numbers put together) in a variety of ways. Example: $4+3=7$ and $5+2=7$ Students will begin to explore the idea of conservation of number which means the number of objects in a set remains the same regardless of the arrangement of the set.</p>

Problem	Comments
<p>Show 8 with tally marks.</p> <p><i>"I can make 8. It's 1, 2, 3, 4, and 5 makes the gate. I have 5 and 3 more. So, 5 ... 6, 7, 8."</i></p> <p>How many do you see on the ten-frame?</p> <p>Put a marker on the number that shows 8.</p>  	<p>The frames, number rack, and tally mark models in this unit help students think about numbers between 5 and 10 as "5 and some more." For example, 6 can be seen as a group of 5 and 1 more.</p>  <p>Students also match quantities with numbers.</p>

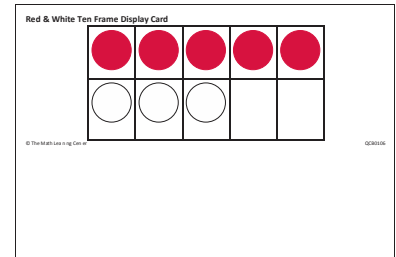
Frequently asked questions about unit 3

Q: Why is there an emphasis on seeing groups instead of counting by 1s?

A: The ability to quickly recognize groups less than 5 helps students develop an understanding of quantity. First we build the model with counters they can hold in their hands, then we use cards to illustrate the model they made, and finally we ask children to picture it in their minds.

This progression from the concrete to the abstract helps develop efficient strategies for computation, such as counting on to add ("5 + 3 is 5 ... 6, 7, 8").











Some kindergarteners will continue to count by 1s as they develop their counting skills early in the year.



Q: Why are games used for homework?

A: Children enjoy playing games, which give them the repeated practice they need to master new skills. Games offer a positive experience with math. In most cases, the Home Connection games, or similar ones, have been played in class. Ask your child to explain how to play the game. This will not only make him feel important, but it will also give you an idea of his understanding of the concepts. If your child seems hesitant or confused, spend a little time reviewing the written directions provided before playing the game. Most important, have fun together as you help your child develop important math vocabulary and skills.

This chart shows how number writing is taught at school for numerals 6–10. You may want to refer to it when helping your child write numbers at home.

<p>Down around in a circle you go. That's a 6 just as you know!</p>  	<p>Slide to the right. Then slant the line. That makes 7 every time!</p>  	<p>Make an "S" but do not wait. Slant back up to make an 8!</p>  	<p>Loop to the left and add a line. Now you've made number 9!</p>  	<p>Make a 1 and then 0. That makes 10! Now you know.</p>  
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Here is how you can help your child while our class is working on this unit:

- Count objects and items around the house, at the park, and in your yard. For example, ask your child to tell you how many bushes are in front of your house or how many cups are on the table for dinner. After your child counts, it is important to follow-up with the question, “So, how many do you count?” Your child may need to count again starting from one. This is perfectly normal development.
- Have your child help you do tasks like set the table to practice counting but also to see that there is one plate per person. Ask how many plates we need. Then ask your child to count out the plates. After the plates are set ask how many are on the table.
- Make graphs together with objects around the house. For example, you could put some pears and apples on the counter. Put them next to each other and ask are there the same amount of pears as apples? If not, how many more pears or fewer apples?
- Provide opportunities for your child to sort a collection of objects and then count how many are in each set. This can be done in a natural setting like cleaning up and putting toys away in bins, containers, drawers and the like.
- Read counting books with your child or make a game out of counting how many characters are on a page.
- Any games, board games or invented games that involve counting are a good way to practice counting.