



## Math Talks 3: I See

Use with *Counting Card 3: Rote Counting Forward 1–10*.

### Math Background for Rote Counting Forward

Children extend their rote counting from 1 to 5 to rote counting from 1 to 10. They may say the numbers in sequence without understanding the meaning associated with the numbers. Children recite the numbers from memory, so learning how to rote count requires a great deal of repetition. Children should be familiar with rote counting to 5 before extending their rote memorization of counting to 10.

### What to Do

**Before:** Display *I See* on p. 3 of Math Talks. Read the title of the poem.

**What do you see in the pictures? Where are the animals? Can you tell me the names of the animals in the pictures?** Have children share what they know about the pictured animals. Encourage discussion about animal habitat, such as where the animals can find shelter, food, and water.

**During:** Read the poem aloud. **What happened to the number of animals as I read the poem?** (e.g., *The number went up.* OR *It went from 1 to 10.*)

Read the first verse again. **Who is by the river? How many eagles are there?** Read the line again if children do not answer. **What is the eagle doing? How many bears are there? What are they doing?** Read the line again as necessary to help children answer. **How many salmon are there? What are the salmon doing?**

Read the second verse, asking similar questions as for the first. Do the same for the third verse.

Read the number sequence from 1 to 10 at the end of the poem. Have children repeat the sequence. Have them repeat the counting in a variety of ways, for example, loud voice, soft voice, quickly, slowly, or clapping after each number word. To help children memorize the sequence, it is key to have them repeat it as many times as possible in fun and interactive ways.

**After:** Have children pick their favourite animal from the poem. They can make a picture or painting of the animal. Encourage them to include aspects of the habitat, such as where the animal can find shelter, food, and water.



## Math Talk 18: Representing 9

Use with *Place Value and Representing Numbers Card 8: Representing Concretely and Pictorially 1–10*.

### Math Background for Representing Numbers Concretely, Pictorially, and Symbolically

Numbers can be represented concretely, pictorially, and symbolically. Children need opportunities to represent numbers in many ways, using concrete materials, drawing pictures, using models such as 5- and 10-frames, and writing numerals. They should learn that a numeral is another way to represent a quantity. Representing numbers in different ways helps children understand the meaning of number and helps them see that quantity is not related to the attributes of the objects, such as size, shape, or material.



### What to Do

**Before:** Have children count from 1 to 10. Then encourage them to count to 10 starting at different numbers, such as 3 and 5. Have them represent numbers from 1 to 8 using their fingers. **What comes after 8?**

**During:** Display *Representing 9* on p. 18 of Math Talks. **What do you see?** Have children elaborate on what they see. **Is there anything else on the page that shows 9?** (*the numeral 9*)

Point to the puzzle pieces. **You said that you saw 9 puzzle pieces. Show me how you saw 9. Does everyone agree?** (e.g., *No. I saw 1.*) **Show us how you saw 1.** (e.g., *I saw 1 whole puzzle put together.*) **How many puzzle pieces are there?**

Point to the birds. **You saw 3 birds, 3 birds, and 3 birds. Show me. Are there still 9 birds altogether?**

Point to the wooden blocks. **You saw 9 blocks of wood. How do you know there are 9 blocks? How did you make sure you didn't lose count? Show me.** Point to a different starting point. **Now start at this block. How many blocks are there now?**

Point to the rocks. **You saw big rocks on the bottom and small rocks on the top. What do you think would happen if the smallest rock was on the bottom? Would there still be the same number of rocks?**

Ask children to identify what is the same about the photos. **In which different ways do the photos show 9? How would you show 9 if you took photos?**

**After:** Have children represent numbers with cubes. Show a cube train with 5 cubes. **How many cubes are in my cube train? How do you know? How can I make my cube train have 7 cubes?** (*add 2 cubes*) **How do you know I have 7 cubes? How can you use the cube train to build a train with 9 cubes?**

