Lesson 5

Objective: Compare length using *about the same as* with a stick of linking cubes.

Suggested Lesson Structure

- Fluency Practice: (6 minutes)
- Application Problem: (3 minutes)
- Concept Development: (13 minutes)
- Student Debrief: (3 minutes)
- Total Time: (25 minutes)

Fluency Practice (6 minutes)

- Counting Drumbeats **PK.CC.3b**: (3 minutes)
- Number Cha-Cha **PK.CC.1**: (3 minutes)

Counting Drumbeats (3 minutes)

Materials: (T) Toy drum or coffee can with lid and unsharpened pencil to use as a drumstick

Note: This activity challenges students to hone their listening skills and count by sound alone, or use fingers to keep track of the count.

As before, in Lesson 2, play a number of beats, and ask students *how many*. They can keep track on fingers if necessary. Vary the pace, and if available, vary the musical instrument (xylophone, keyboard, drum).

Number Cha-Cha (3 minutes)

Materials: (T) Instrumental music with a cha-cha beat (optional)

Note: This activity extends students’ rote counting skills and challenges them to develop fluidity in the counting sequence. The movements facilitate memorization and get everyone moving.

As before in Lesson 1, students attach the counting sequence to dance steps, extending the count to 15 if ready:

1 (hand out), 2 (other hand out), 3, 4, 5 (stepping in place, rhythmically).
6 (hand out), 7 (other hand out), 8, 9, 10 (stepping in place, rhythmically).
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Application Problem (3 minutes)

Materials: (T) Stuffed animal, small pieces of paper tickets for each student

Help students get into two lines. Make one line five students longer than the other line.

Say, “Pretend you are standing in line to see a movie. Here are your tickets (handing a ticket to each student). Rebecca Rabbit wants to see the movie, too. Which line should she stand in if she wants to get into the theater the fastest?” Acknowledge suggestions, and give Rebecca Rabbit to the student at the end of the line that students suggest (the shorter line). Act out taking tickets from each student, alternating between each line. Have each student sit down after his or her ticket is taken. Ask, “Did Rebecca Rabbit stand in the right line to get her into the theater the fastest? Why?”

Repeat the activity, and put Rebecca Rabbit in the longer line.

Note: This is a playful way to engage students in the comparison of length through movement, and it leads into their work with comparison during the Concept Development.

Concept Development (13 minutes)

Part 1: Concept Introduction

Materials: (S) 3–10 linking cubes per student
(approximately 3 of each tower/train length—3 towers of 4 cubes, 3 towers of 5 cubes, etc.)

Prepare the room for the museum pieces by placing a piece of construction paper (11” × 18”) for each child on the tables.

1. Say, “We are going to take a trip to a math museum today! But first, we have to find things to put in the museum.”
2. Give each student 3–10 loose linking cubes. (Students will have different heights and lengths of their towers and trains.) Say, “Put your cubes together. Your towers and trains will be different. We will use our towers and trains to find things to put in our museum.”
3. Say, “To find things for our museum, walk around the room and find something that is about the same length as your tower or train. Remember, about the same as means it does not have to be exactly the same length or height.”
4. Model by using a tower or train and finding something that is about the same length or about the same height as, demonstrating that the object they find can be a little longer or shorter.
5. Once students have found an object (preferably a portable one like a book, pencil, eraser, paperclip, or paper), direct them to use a museum mat to display their tower or train and museum piece.
Part 2: Practice

Materials: (S) Crayons, a piece of paper, clipboard (optional)

1. Say, “Let’s go on a gallery walk through The About the Same Museum!” Students walk around the room, observing their classmates’ displays.

2. Encourage students to make statements like, “This train and book are about the same length as each other,” “This train is a little bit longer than the eraser, but they are about the same length as each other,” or “Wow, this tower and this water bottle are exactly the same height as each other!”

3. Give students paper and crayons and say, “Choose an about the same as display to draw.”

4. Allow students time to work, reminding them that they need to draw the tower or train and the object next to each other.

5. Circulate and ask students to tell about their drawings, encouraging them to use the sentence starter, “The tower or train is about the same height or length as ______.”

Student Debrief (3 minutes)

Lesson Objective: Compare length using about the same as with a stick of linking cubes.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience. It is also an opportunity for informal assessment. Consider taking anecdotal notes or using a simple checklist to note each child’s progress toward meeting the lesson objective.

As students complete the Practice portion of the Concept Development, listen for misconceptions or misunderstandings that can be addressed in the Debrief.

Any combination of the questions below may be used to help students express ideas, make connections, and use new vocabulary.

- Think about Goldilocks and the Three Bears. She said Baby Bear’s bed was just right for her. Do you think the length of the bed was longer than, shorter than, or about the same size as Goldilocks? Why?
- Lacy, MJ, and Kate each put a paper clip in their museum. What does that tell you about the length or height of their trains or towers?
- Would you want to wear shoes that are longer than, shorter than, or about the same length as your feet? Why?
- (Hold up a marker or similar-length object.) I’m going to name an object. Say, “longer than, shorter than, or about the same length or height as” this marker (e.g., desk, door, crayon, pencil, eraser, or penny).

CENTER CONNECTION:

In the block center, encourage students to build buildings that are the same or about the same as each other. Challenge students to make buildings that are about the same height as each other using different blocks to form each building.