



## Topic A

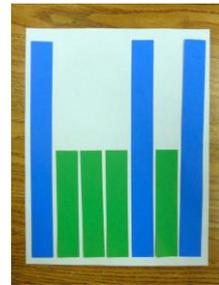
# Comparison of Length

## PK.MD.1

<b>Focus Standard:</b>	PK.MD.1	Identify measurable attributes of objects, such as length, and weight. Describe them using correct vocabulary (e.g., small, big, short, tall, empty, full, heavy, and light).
<b>Instructional Days:</b>	5	
<b>Coherence -Links to:</b>	GK–M3	Comparison of Length, Weight, Capacity, and Numbers to 10.

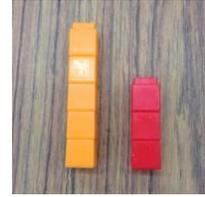
In the first half of Module 4, students describe and compare measurable attributes of length, weight, and volume (**PK.MD.1**). To begin, students use correct vocabulary, *tall* or *short*, to describe length. Because Pre-Kindergarten students entering school might describe most objects as *big* or *small*, Lesson 1 helps students refine their descriptors using examples of tall things (buildings, trees, a flagpole) and short things (scissors, a used crayon or pencil, a puppet). Children practice using their new vocabulary as they build tall and short buildings with blocks and then move to the pictorial using strips of paper to create a city with tall and short buildings.

Discussing *tall* and *short* naturally leads children to compare their height to someone else's. Lesson 2 uses this context to demonstrate the importance of aligning endpoints when measuring. Students see that David isn't taller than the teacher when he is standing on a chair. They practice comparing classroom objects (pen and marker) by aligning endpoints to a line drawn on a piece of paper and then stating which object is *taller*, *longer*, or *shorter than* another object (**PK.MD.1**). Students learn to differentiate between *tall* and *long*. When something is standing up, it is usually described as *tall*; whereas, when something is lying flat, it is usually described as *long*.



In Lesson 3, students explore the classroom, comparing and aligning endpoints to find objects that are *longer than*, *shorter than*, or *about the same length as* a simple, straight object (strip of paper, straw, chopstick). Then, students practice making clay *snakes* that are *longer than*, *shorter than*, or *about the same length as* their straight object. Using a straight object, and later a linking cube tower, helps students to see indirectly that they are iterating a unit and that units of measure can be divided to make comparisons more precise.

Lessons 4 and 5 transition into comparing length with linking cube trains and towers. In both lessons, students are given differing amounts of linking cubes (3 to 10 cubes) that they count and connect. Once they have built their train in Lesson 4, students compare it to a friend's train by making *longer than*, *shorter than*, or *the same as* statements. They record their comparison by drawing both trains. In Lesson 5, students take their towers/trains and go on a classroom search for a *museum piece* that is *about the same length/height as* their cubes. They record their discoveries by drawing their tower/train and their object to be displayed in The About the Same Museum.



In Topic A Fluency Practice, students practice new vocabulary (*long*, *short*, *tall*) by playfully acting out the words to a chant. They continue to count with one-to-one correspondence and practice rote counting to 15 by means of movement (the Number Cha-Cha) and sound (Counting Drumbeats). In addition, students play Say Ten basketball, counting to 15 (ten 5) the *Say Ten Way*. This facilitates rote counting to 20 by the end of the year.

### A Teaching Sequence Toward Mastery of Comparison of Length

- Objective 1:** Identify the attribute of length by describing objects as *tall* or *short*.  
(Lesson 1)
- Objective 2:** Compare length using *taller than* and *shorter than* with aligned and non-aligned endpoints.  
(Lesson 2)
- Objective 3:** Compare length using *longer than*, *shorter than*, and *about the same as* with a simple straight object.  
(Lesson 3)
- Objective 4:** Compare length using *longer than*, *shorter than*, and *the same as* with a stick of linking cubes.  
(Lesson 4)
- Objective 5:** Compare length using *about the same as* with a stick of linking cubes.  
(Lesson 5)