



## Topic A

## Comparison of Length and Height

## K.MD.1, K.MD.2

<b>Focus Standards:</b>	K.MD.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
	K.MD.2	Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. <i>For example, directly compare the heights of two children and describe one child as taller/shorter.</i>
<b>Instructional Days:</b>	3	
<b>Coherence</b>	<b>-Links from:</b> GPK–M4	Comparison of Length, Weight, Capacity, and Numbers to 5
	<b>-Links to:</b> G1–M3	Ordering and Comparing Length Measurements as Numbers

In Module 2, students observed, analyzed, and categorized geometric shapes by focusing on their attributes; they now launch into the process of recognizing and comparing these attributes. In Module 3, comparisons of length, weight, and volume transition into comparisons of numbers: longer *than*, shorter *than*, as long as; heavier *than*, lighter *than*, as heavy as; *more than*, *less than*, *the same as*. For example, “8 is *more than* 5. 5 is *less than* 8. 5 is *the same as* 5.”

In Topic A, students begin by identifying the attribute of length by determining that a book and a ribbon can be compared in different ways: as longer than, heavier than, or taking up more space. This occurs within the natural context of the lesson, which then proceeds to comparing length and height when endpoints are aligned and not aligned. Jan is shorter than Pat when they are standing next to each other with one of their endpoints automatically aligned. But, what if Jan is standing on a stepladder? Now, the endpoints are not aligned, and students, faced with this complexity, understand that Jan is still shorter than Pat though her head may be higher because she is standing on a stepladder.

In Lesson 2, students compare the length of their strings to the length of various objects within the classroom. “My string is longer than the marker.” “My string is shorter than my friend’s shoe.” They know to line up the endpoints or the comparison is not valid.

In Lesson 3, students make a series of comparisons: the pencil is longer than the marker; the eraser is shorter than the marker. They directly compare only two objects but in doing so, potentially see more relationships. Then, they engage in drawing a magical world where, for example, a flower is taller than a house.

**A Teaching Sequence Toward Mastery of Comparison of Length and Height**

**Objective 1:** Compare lengths using *taller than* and *shorter than* with aligned and non-aligned endpoints.  
(Lesson 1)

**Objective 2:** Compare length measurements with string.  
(Lesson 2)

**Objective 3:** Make a series of *longer than* and *shorter than* comparisons.  
(Lesson 3)