



## Topic A

# Understand Concepts About the Ruler

**2.9A, 2.9D, 2.9B**

<b>Focus Standards:</b>	2.9A	Find the length of objects using concrete models for standard units of length.
	2.9D	Determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes.
<b>Instructional Days:</b>	3	
<b>Coherence -Links from:</b>	G1–M3	Ordering and Comparing Length Measurements as Numbers
<b>-Links to:</b>	G3–M4	Multiplication and Area

Topic A begins with an exploration of concepts about the ruler. In Lesson 1, students relate length to physical units by measuring various objects with multiple centimeter cubes, creating a mental benchmark for the centimeter. In Lesson 2, they apply their knowledge of using centimeter cubes to measure by moving from repeated physical units to the iteration of one physical unit. This enables them to internalize their understanding of a length unit as the amount of space between one end of the cube and the other (or space between hash marks). Thus, they begin moving from the concrete to the conceptual. Finally, in Lesson 3, students apply knowledge of known measurements to create unit rulers using one centimeter cube. This deepens the understanding of distance on a ruler and the ruler as a number line.

**A Teaching Sequence Toward Mastery of Understanding Concepts About the Ruler**

**Objective 1: Connect measurement with physical units by using multiple copies of the same physical unit to measure.**  
(Lesson 1)

**Objective 2: Use iteration with one physical unit to measure.**  
(Lesson 2)

**Objective 3: Apply concepts to create unit rulers and measure lengths using unit rulers.**  
(Lesson 3)