

Core Content

Cluster Title: Measure lengths indirectly and by iterating length units.

Standard 1: Order three objects by length; compare the lengths of two objects indirectly by using a third object.

MASTERY Patterns of Reasoning:

Conceptual:

Students will understand the value of a start line to line up objects.

Students will understand typical words in the language of measurement (e.g., *long*, *longer*, *longest*, *tall*, *taller*, *tallest*).

Students will understand that a third object may be used to compare the length of two objects.

Procedural:

Students can use a start line when ordering three objects.

Students can identify the object that is shorter, shortest, longer, longest, taller or tallest, when comparing three objects.

Students can choose a third object to compare two different objects (e.g., using a pencil, compare the size of a water bottle to a cup).

Representational:

Students can record findings with words or pictures.

Supports for Teachers

Critical Background Knowledge

Conceptual:

- Students will understand the concept of “big” and “small” and “bigger” and “smaller.”
- Students will understand that all objects have length.
- Students will understand that the words “long” and “short” describe length.
- Students will understand that various lengths, as well as various heights, can be compared.

Procedural:

- Students can directly compare two objects according to length or height (e.g., directly compare the heights of two children and describe one as taller/shorter).

Representational:

- Given a picture, students can draw an additional object that is longer/taller or shorter than the given object.
- Students can compose a picture and identify objects as longer/taller or shorter than another object in the same picture.

Academic Vocabulary and Notation	
compare, length, height, long, longer, longest, tall, taller, tallest, short, shorter, shortest, start line, unit	
Instructional Strategies Used	Resources Used
<p>Provide a start line using masking tape on desk or floor, a line on a paper, etc. for students to begin comparing objects.</p> <p>Provide a wide variety of manipulatives for students to practice comparing using their start line. Allow students to compare and trade their objects.</p> <p>Pair students, then have them take turns tracing their partner’s shadow with chalk. Use a third object to compare the shadow sizes. Which is longer? Which is shorter? How do you know?</p> <p>Using different sets (a set consists of three pictures with varied length or height), have students label the pictures using words in the language of measurement.</p>	<p>Lesson plans and activities: http://www.hasbro.com/playdoh/en_US/discover/teachers/pdf/7F5A1D7E-D56F-E112-4A26C0F8E454D270.pdf</p> <p>Coffelt, Nancy. <i>Big, Bigger, Biggest</i>. Henry Holt and Co. (BYR), 2009.</p> <p>Murphy, Stuart. <i>Bigger, Better, Best!</i> HarperCollins, 2002.</p> <p>Walton, Rick. <i>Pig, Pigger, Piggest</i>. Gibbs Smith Publishers, 1997.</p>

Assessment Tasks Used	
<p>Skill-Based Task: Given three objects, students will order them from longest/tallest to shortest, or shortest to longest/tallest.</p> <p>Given two objects, students will select a third object to use as a tool for comparing the first two objects.</p>	<p>Problem Task: Here are some sample problem tasks:</p> <p>Johnny, Sally, and Juan are students in first grade. Johnny is taller than Sally. Sally is shorter than Juan. Who is the tallest? Who is not the tallest and not the shortest? How do you know?</p> <p>In order to make more room in our classroom for Grandparents' Day, we are going to put the bookcase in the coat closet. How can we find out if the bookcase will fit in the coat closet without moving it?</p>