



Informal Measurement

Curriculum connections

Australian:

Foundation

- Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language (ACMMG006)

Year 1

- Measure and compare the lengths and capacities of pairs of objects using uniform informal units (ACMMG019)

Year 2

- Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units (ACMMG037)
 - comparing lengths using finger length, hand span or a piece of string

USA Common Core:

Kindergarten

- CCSS.MATH.CONTENT.K.MD.A.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.

Grade 1

- CCSS.MATH.CONTENT.1.MD.A.1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.

Lesson Overview

Students are presented with a series of pairs of lines or shapes, presented in varying contexts and rotations. Students guess which is longer (or, as an example, in the case of a circle, which has a larger diameter), and then compare each using a third object (a shape edge or a line).

Lesson Objectives

1. Connect the iPad to a Smart Board or other monitor if available.
2. Using the example provided, demonstrate how you can compare lengths by using a straight line or the straight edge of a shape.
 - Draw a line along the length of one object and then use that line to determine whether the second line (or object) is longer or shorter.
3. Ask students to open the worksheet on their iPads.
 - Students estimate which line or object they think is longer.
 - Students compare the lengths to determine which is actually longer.
 - Use the opportunity as they are working to observe the methods and language students are using to describe their experiences.
 - Encourage language such as: length, longer than, shorter than and compared to.

Resources

- iPad with Shape Lap installed (enough for half the class).
- Cable to connect teacher's iPad to screen (or Apple TV and wifi for a wireless connection).
- *Informal Measurement* worksheet (to be distributed to iPads for use in Shape Lab).