Ordering and Comparing Length Measurements as Numbers

In this 13-day module, students will use non-standard units to measure objects, and will compare and order objects by length. They will build conceptual understanding of the need for standard measurement units, beginning with centimeters.

Grade Level Standards
1.OA.1, 1.MD.1 ,1.MD.2, 1.MD.4

Student Report Card
Understands measurements of data, length and time.

Key Vocabulary

- Centimeter: standard length unit within the metric measurement system
- Centimeter Cube: Students will use centimeter cubes laid end to end to measure various objects.
- Length Unit: the smaller units or objects used to measure a longer object
- Familiar Terms from past Modules: less than, more than, longer than, shorter than
- Students will use these phrases to compare up to three objects or amounts.
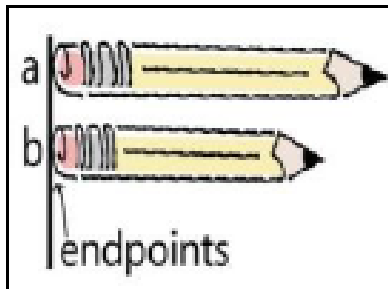
How you can help at home:

- Continue to practice adding and subtracting within 20.
- Give your student many opportunities to measure objects using other, smaller objects, e.g., "How many Lego pieces long is your book? How many blueberries long is this notebook?" etc.
- Keep track of your child's growth each month by measuring his/her height using standard and non-standard units of measurement.
- Talk about graphs in newspapers and magazines.
- Take a family survey and make a graph based on the data.
- Use toothpicks or Popsicle sticks to show tally marks.
- Create a bar graph based on the amount of time your child reads, plays outside, or watches television.
- Create a pictograph to show the number of hours of sleep or exercise your family gets each day.
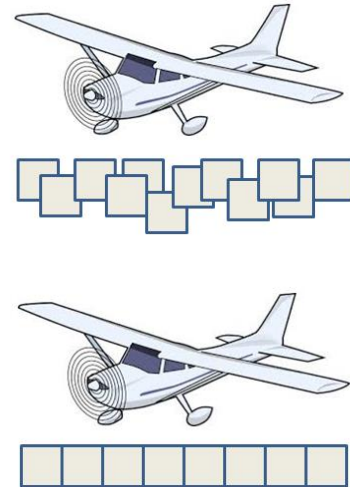
Models and Representations

Measuring Musts

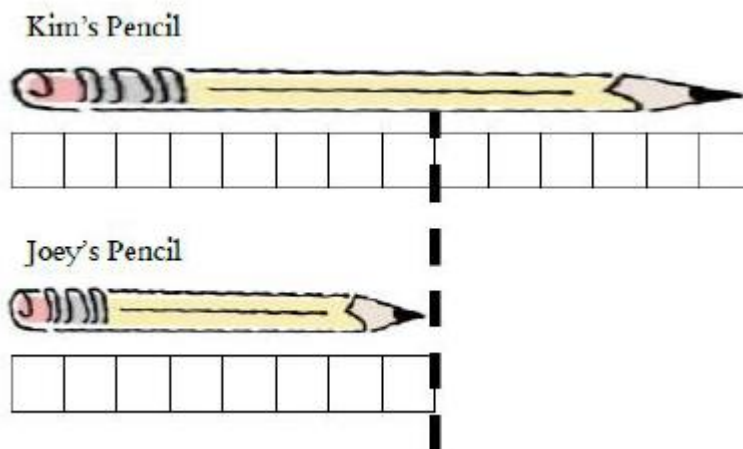It is important to line up the end points when comparing lengths.

Pencil a is longer than Pencil b.
Pencil b is shorter than Pencil a.

It is important that the cubes do not overlap.

The airplane is 8 centimeter cubes long.

Use the same form of measuring tool when comparing objects.

Kim's Pencil

Joey's Pencil

Students will be using the sentence frame: _____ is longer/shorter than _____.

Kim has 6 more centimeter cubes than Joey, so Joey's pencil is 6 centimeters shorter than Kim's pencil.