

First Grade Math Parent Letter - Module 3

In this module, students explore ordering and comparing length measurements. The concepts students will learn include:

- Indirect length comparison
- Introducing centimeters
- Understanding the need for standard units of measure
- Collecting, sorting, and graphing data about classmates

At the beginning of the module, students learn to use the length of one object to compare the lengths of two other objects (see below).



The module continues by taking *longer than* and *shorter than* to a new level of precision by introducing the idea of a *length unit*, the centimeter. Students will use centimeter cubes to measure objects. They will be able to have more abstract understandings of measurements, such as "The pencil measures 10 centimeters. The crayon measures 6 centimeters. The book measures 20 centimeters. These are ordered from shortest to longest: the crayon, the pencil, the book. The book is longer than the pencil, and the pencil is longer than the crayon, so the book is longer than the crayon."

From that point, students learn about the need to use standard units of measure. They measure the same objects using two different non-standard units together, toothpicks and small paper clips, to measure one object and answer the question, "Why do we measure with same-sized length units?" Activities like this help students realize that using iterations of the *same* unit will yield consistent measurement results.

The module closes as students represent and interpret data. They collect data about their classmates, and sort that information into three categories (such as the picture to the right). Then, students represent this sorted data on same-sized pictures so that they can easily compare the results. They use the pictures to create graphs, which they then interpret by first determining the number of data points in a given category (e.g., "How many students like carrots the best?"), and then combining categories (e.g., "How many total students like carrots or broccoli the best?").

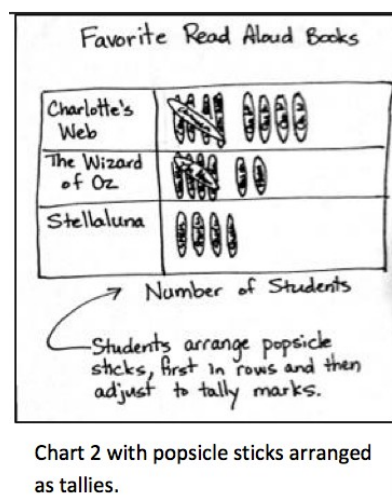


Chart 2 with popsicle sticks arranged as tallies.