

Chapter 8: Length in Customary Units

Content Area: **Mathematics**
Course(s): **Math 2**
Time Period: **March**
Length: **17 Days**
Status: **Published**

Unit Summary

In this unit, some of the methods and tools that can be used to estimate and measure length using customary units are addressed.

Standards

MA.2.MD.A	Measure and estimate lengths in standard units.
MA.2.MD.A.1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
MA.2.MD.A.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
MA.2.MD.A.3	Estimate lengths using units of inches, feet, centimeters, and meters.
MA.2.MD.B.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
MA.2.MD.B.6	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.
MA.2.MD.D.9	Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

Student Learning Objectives

Students will learn to...

- Use concrete models to measure the lengths of objects in inches.
- Make an inch ruler and use it to measure the lengths of objects.
- Estimate the lengths of objects by mentally partitioning the lengths into inches.
- Measure the lengths of objects to the nearest inch using an inch ruler.
- Solve addition and subtraction problems involving the lengths of objects by using the strategy draw a diagram.
- Measure the lengths of objects in both inches and feet to explore the inverse relationship between size and number of units.
- Estimate the lengths of objects in feet.
- Select appropriate tools for measuring different lengths.
- Measure the lengths of objects and use a line plot to display the measurement data.

Essential Questions

- What are some of the methods and tools that can be used to estimate and measure length?
- How can you use inch models to measure length?
- Why is using a ruler similar to using a row of color tiles to measure length?
- How do you estimate the lengths of objects in inches?
- How do you use an inch ruler to measure lengths?
- How can drawing a diagram help when solving problems about length?
- Why is measuring in feet different from measuring in inches?
- Estimate the lengths of objects in feet.
- Select appropriate tools for measuring different lengths.
- Measure the lengths of objects and use a line plot to display the measurement data.

Enduring Understandings

Students will understand that...

- various methods and tools can be used to estimate and measure length using customary units.

Application

Students will be able to independently use their learning to...

- implement the use of various methods and tools to estimate and measure length using customary units.

Skills

Students will be skilled at...

- Measuring with inch models
- Making and using a ruler
- Estimating lengths in inches
- Measuring with an inch ruler
- Adding and subtracting in inches
- Measuring in inches and feet
- Estimating lengths in feet
- Choosing a tool
- Displaying measurement data

