

# Chapter 9: Length in Metric Unit

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

## Unit Summary

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In this unit, students will learn some of the methods and tools that can be used to estimate and measure metric length. Students also use line plots to display measurement data.

## Standards

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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.A.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
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.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.8.1.2.A.CS2	Select and use applications effectively and productively.

## Student Learning Objectives

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Students will learn to...

- Use a concrete model to measure the lengths of objects in centimeters.
- Estimate lengths of objects in centimeters by comparing them to known lengths.
- Measure lengths of objects to the nearest centimeter using a centimeter ruler.
- Solve problems involving adding and subtracting lengths by using the strategy draw a diagram.
- Measure the lengths of objects in both centimeters and meters to explore the inverse relationship between size and number of units.
- Estimate the lengths of objects in meters.
- Measure and then find the difference in the lengths of two objects.

## Essential Questions

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- What are some of the methods and tools that can be used to estimate and measure length in metric units?
- How do you use a centimeter model to measure the lengths of objects?
- How do you use known lengths to estimate unknown lengths?
- How do you use a centimeter ruler to measure lengths?
- How can drawing a diagram help when solving problems about lengths?
- How is measuring in meters different from measuring in centimeters?
- How do you estimate the lengths of objects in meters?
- How do you find the difference between the lengths of two objects?

## Enduring Understandings

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Students understand that...

- some of the methods and tools that can be used to estimate and measure metric length.
- how to use a line plot to display measurement data.

## Application

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

- apply some of the methods and tools that can be used to estimate and measure metric length.
- use a line plot to display measurement data.

## Skills

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Students will be skilled at...

- Measuring with centimeter ruler
- Estimating lengths in centimeters
- Adding and subtracting lengths
- Estimating lengths in meters
- Measuring and comparing lengths in meters

