

# Lesson 15: Length Measurements

## Standards Alignments

Building On 4.MD.A.1  
Addressing 4.MD.A.2, 4.NF.B.4.c, 4.OA.A.2

## Teacher-facing Learning Goals

- Use multiplicative comparison and unit conversion to solve multi-step problems about length (in yards, feet, inches).

## Student-facing Learning Goals

- Let's solve problems about distances and lengths.

## Lesson Purpose

The purpose of this lesson is for students to apply their understanding of multiplicative comparison and unit conversion to solve multi-step problems about distances and lengths.

Previously, students reasoned multiplicatively about measurements and performed unit conversions to solve problems in the context of mass and capacity. In this lesson, they do the same in the context of length measurements, using familiar customary units from earlier grades (yards, feet, and inches).

## Access for:

### Students with Disabilities

- Action and Expression (Activity 2)

### English Learners

- MLR7 (Activity 1)

## Instructional Routines

MLR5 Co-craft Questions (Activity 2), Which One Doesn't Belong? (Warm-up)

## Materials to Gather

- Rulers: Activity 1
- Yardsticks: Activity 1

## Lesson Timeline

Warm-up	10 min
Activity 1	15 min

## Teacher Reflection Question

What misconceptions came to light in today's lesson? What strategies do you have for showing students that misconceptions are

Activity 2	20 min
------------	--------

Lesson Synthesis	10 min
------------------	--------

Cool-down	5 min
-----------	-------

valued as a way to further everyone's understanding?

---

## Cool-down (to be completed at the end of the lesson)

 5 min

### A Sculptor and a Tower

#### Standards Alignments

Addressing 4.MD.A.2, 4.OA.A.2

#### Student-facing Task Statement

A sculptor is 5 feet 8 inches tall. Her height is 4 times the height of a stone tower she built.

How tall is her tower in inches? Explain or show your reasoning.

#### Student Responses

17 inches. Sample reasoning: 5 feet is  $5 \times 12$  or 60 inches and 8 inches more makes 68 inches.  
 $4 \times 17 = 68$ .