# Illustrative Mathematics

**Grade 4 Unit 5** Lesson 8 CC BY 2021 Illustrative Mathematics®

# **Unit 5 Lesson 8: Meters and Kilometers**

## WU Number Talk: Times Hundreds and Thousands (Warm up)

Student Task Statement

Find the value of each expression mentally.

- 3 × 100
- 40 × 100
- 43 × 100
- 43 × 1,000

## 1 How Long is One Kilometer?

Student Task Statement

There are 1,000 meters in 1 kilometer.

1. The darkly shaded section of the track is the length of a 100-meter race. How many 100-meter races does it take to travel 1 kilometer?



2. Your teacher will give you images of something with a length or height measured in meters.

About how many of the items given to you are needed to make 1 kilometer? Explain or show how you know.

- 3. Work with your group to write a number in the blank so that each statement is true.
  - a. One kilometer is the length of (about, exactly) \_\_\_\_\_\_ soccer fields.
  - b. One kilometer is the length of (about, exactly) \_\_\_\_\_ Statues of Liberty.
  - c. One kilometer is the length of (about, exactly) \_\_\_\_\_ Olympic-size swimming pools.
  - d. One kilometer is the length of (about, exactly) \_\_\_\_\_ basketball courts.
- 4. Estimate where you might end up if you travel 1 kilometer from your school's front door.

#### 2 Meters and Kilometers

#### Student Task Statement

1. Complete the table with the missing lengths in meters or kilometers.

kilometers (km)	meters (m)
$\frac{1}{2}$	
1	1,000
5	
	6,000
$8\frac{1}{2}$	
10	
	12,000
27	

- 2. Andre says 100 meters is longer than 10 kilometers. Do you agree or disagree? Explain or show your reasoning.
- 3. Which is greater? Be prepared to explain how you know.
  - a. 2,000 meters or 3 kilometers
  - b. 500 meters or 1 kilometer
  - c. 14 kilometers or 14,000 meters
  - d. 8 kilometers or 80,000 meters