Unit 5, Lesson 8

Meters and Kilometers

Let's explore measurements in meters and in kilometers.

Warm-up

Number Talk: Times Hundreds and Thousands

Find the value of each expression mentally.

- 3×100

- 40×100

- 43×100

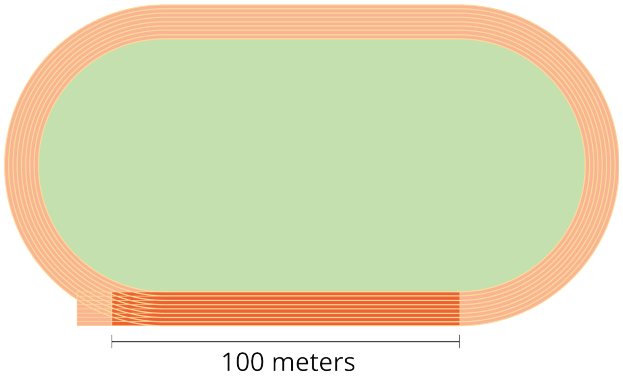
- $43 \times 1{,}000$

Activity 1

How Long Is 1 Kilometer?

There are 1,000 meters in 1 kilometer.

1. The 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 a height measured in meters.

   About how many of the items in the handout 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. Decide if your length is "about" or "exactly" 1 kilometer, and circle the correct word.

   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.

Activity 2

Meters and Kilometers

1. Complete the table with the unknown lengths in meters or in 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?
   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