# Illustrative Mathematics

**Grade 4 Unit 5** Lesson 10 CC BY 2021 Illustrative Mathematics®

## Unit 5 Lesson 10: Multi-step Measurement Problems

### WU Notice and Wonder: Distances Traveled (Warm up)

#### Student Task Statement

What do you notice? What do you wonder?











#### 1 Long Hikes, Short Hikes

#### Student Task Statement

Here are estimates of the farthest distances that some animals would move in one day.

animal	distance traveled in a day
three-toed sloth	30 meters
snail	2,500 centimeters
dromedary	40 kilometers
giant tortoise	500 meters

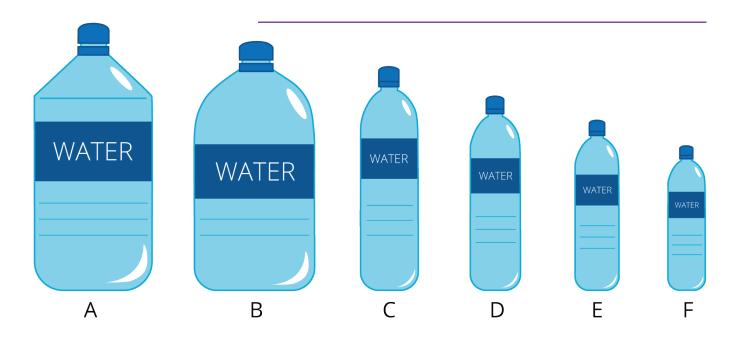


- 1. Put the animals and their travel distances in order, from the shortest to the longest. Explain or show your reasoning.
- 2. Do you agree with each statement? Explain your reasoning.
  - a. A giant tortoise can move 2 times as far as a snail can move in a day.
  - b. A dromedary can move 80 times as far as a giant tortoise can move in a day.

#### 2 Big Bottles, Little Bottles

#### Student Task Statement

Here are six water bottle sizes and four clues about the amount of water they each hold.



- One bottle holds 350 mL.
- A bottle in size B holds 5 times as much water as the bottle that holds 1 L.
- The largest bottle holds 20 times the amount of water in the smallest bottle.
- One bottle holds 1,500 mL, which is 3 times as much water as a bottle in size E.

Use the clues to find out the amount of water, in mL, that each bottle size holds. Be prepared to explain or show your reasoning.

- A: \_\_\_\_\_ mL
- B: \_\_\_\_\_ mL
- C: \_\_\_\_\_\_mL
- D:\_\_\_\_\_mL
- E: \_\_\_\_\_ mL
- F: \_\_\_\_\_ mL