## Lesson 10: Multi-step Measurement Problems

- Let's solve multi-step measurement problems.


## Warm-up: Notice and Wonder: Distances Traveled

What do you notice? What do you wonder?


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

## 10.1: Long Hikes, Short Hikes

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.
$\qquad$
$\qquad$
b. A dromedary can move 80 times as far as a giant tortoise can move in a day.
$\qquad$
$\qquad$

## 10.2: Big Bottles, Little Bottles

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


A


B


C


D


E


F

- 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 $1,500 \mathrm{~mL}$, 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: $\qquad$ mL

B: $\qquad$ mL

C: $\qquad$ mL

D: $\qquad$ mL

E: $\qquad$ mL

F: $\qquad$ mL

