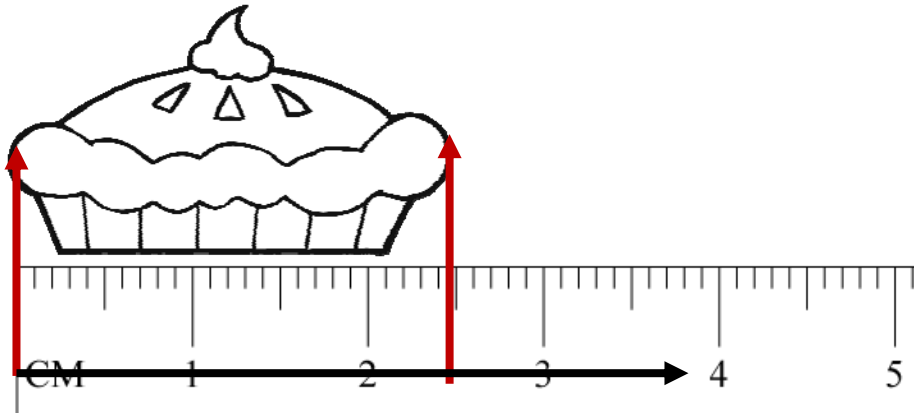


## Working with Metric Units of Length Guided Lesson Explanation

1. Step 1) Mark the ends of the pie.



Step 2) The pie starts at 0 cm and travels to 2.5 cm. Therefore the length of the pie is 2.5 cm.

2. Step 1) The first thing we need to ask ourselves is how many millimeters are there in a meter. There are 1,000 millimeters in 1 meter.

Step 2) This means that if we have our value in millimeters, we can convert the value to meters, if we move the decimal place 3 places to the left.

$$1,000 \text{ mm} = 1 \text{ m} \quad \text{therefore} \quad 4,238 \text{ mm} = 4.238 \text{ m}$$

3. Step 1) The first thing that we notice is that the length in the problem was in units of meters. The problem is looking for the final value in kilometers.

Step 2) Let's figure out how many meters Alvin will run in an hour. There are 60 minutes in one hour. If Alvin travel 1,500 meters in 10 minutes, in 60 minutes he will travel 6 times that distance ( $60 \text{ minutes} \div 10 \text{ minutes} = 6$ ).

$$1,500 \text{ meters} \times 6 = 9,000 \text{ meters}$$

Step 3) It is finally time to determine how many kilometers Alvin the Apple runs in an hour. We know he travels 9,000 meters. There are 1,000 meters in 1 kilometer. If we divide the number of meters he travelled by 1,000 that will tell us how many kilometers he travelled.

$$9,000 \text{ meters} \div 1,000 \text{ meters} = 9 \text{ kilometers}$$