LESSON MAKER PRO

Measure the Difference

Convert units and solve measurement problems.

GRADE 4 · MT.4.MD.2

MT.4.MD.2 "Use the four operations to solve problems in context using distances, intervals of time, liquid volumes, masses of objects, and money..."

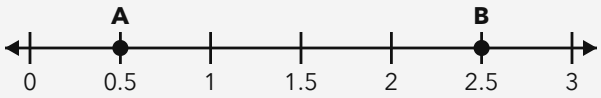
NAME _____ DATE _____

USE ONE UNIT

Convert to the same unit before adding or subtracting measurements. A kilometer is 1,000 meters, a liter is 1,000 milliliters, and a kilogram is 1,000 grams. On a distance scale, subtract the start mark from the end mark.

WORKED EXAMPLE

A walk starts at A and ends at B. How many meters long is the walk?



1. 2.5 - 0.5 = 2 km
2. 1 km = 1,000 m
3. 2 x 1,000 = 2,000 m

Answer: 2,000 m

PRACTICE 4 problems

1 You hike 4 km, then 700 m more. How many meters do you hike in all?

ANSWER _____

2 A club has 3 L of water and uses 750 mL. How many milliliters remain?

ANSWER _____

3 A garden harvests 2.4 kg of potatoes and 1.3 kg of carrots. What is the total mass?

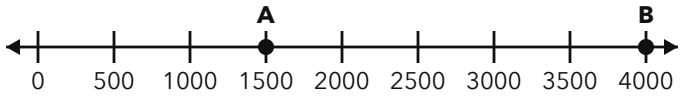
ANSWER _____

4 A craft kit costs $6.75. You pay $10. How much change do you get?

ANSWER _____

APPLY IT Show your work

1 At a walk hosted by a Montana tribal community, your class reaches A. The walk ends at B. How many meters remain?



ANSWER _____

2 Students in Browning pack 6 boxes of books for a community book swap. Each box holds 750 g. How many kilograms of books is that?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Students harvest 3 kg of carrots. They pack 4 bags with 650 g in each bag. How many grams are left? Explain with an equation.

WORK SPACE AND ANSWER

ANSWER KEY

Measure the Difference

GRADE 4 · MT.4.MD.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	You hike 4 km, then 700 m more. How many meters do you hike in all?	**4,700 m**
2	A club has 3 L of water and uses 750 mL. How many milliliters remain?	**2,250 mL**
3	A garden harvests 2.4 kg of potatoes and 1.3 kg of carrots. What is the total mass?	**3.7 kg**
4	A craft kit costs $6.75. You pay $10. How much change do you get?	**$3.25**

PART 2 · APPLY IT

1. **2,500 m** Subtract the distance at A from the distance at B: 4,000 - 1,500 = 2,500 m.
2. **4.5 kg** Six boxes hold 6 x 750 = 4,500 g. Convert 4,500 g to 4.5 kg.

CHALLENGE

3 kg = 3,000 g; 3,000 - 4 x 650 = 400 g left.

Accept equivalent equations for the challenge. Final answers should use the units requested.