Luna's Space Adventure

Name _____

Grade 4 · Converting units · 4.MD.A.1

Date _____

Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

Bigger unit to smaller unit

Multiply by how many small units fit in one big one.

9 km = ☐ m

5 L = ☐ mL

6 yd = ☐ ft

4 lb = ☐ oz

2 kg = ☐ g

6 m = ☐ cm

7 ft = ☐ in

5 hr = ☐ min

Make a table

How many mL in 1 to 4 L?

1 L = _____

2 L = _____

3 L = _____

4 L = _____

Story time

1. Luna's rope is 6 feet long. How many inches is that?

_____ **inches**

2. Orion's rope is 5 feet long. How many inches is that?

_____ **inches**

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ANSWER KEY

Astronaut Luna is exploring a far-off corner of space. Solve each problem to help Luna's mission go smoothly!

Bigger unit to smaller unit

Multiply by how many small units fit in one big one.

9 km = 9000 **m**

5 L = 5000 **mL**

6 yd = 18 **ft**

4 lb = 64 **oz**

2 kg = 2000 **g**

6 m = 600 **cm**

7 ft = 84 **in**

5 hr = 300 **min**

Make a table

How many mL in 1 to 4 L?

1 L = 1000 mL

2 L = 2000 mL

3 L = 3000 mL

4 L = 4000 mL

Story time

1. Luna's rope is 6 feet long. How many inches is that?

   6 × 12 = 72

72 **inches**

2. Orion's rope is 5 feet long. How many inches is that?

   5 × 12 = 60

60 **inches**

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GUIDE

1 What this sheet practises

How units compare in size, and changing a bigger unit into a smaller one: feet to inches, pounds to ounces, liters to milliliters.

2 A problem from the sheet, worked out

Bigger unit to smaller unit

Multiply by how many small units fit in one big one.

9 km = 9000 m

5 L = 5000 mL

6 yd = 18 ft

4 lb = 64 oz

2 kg = 2000 g

6 m = 600 cm

How: Know how many small units fit in one big one, like 16 ounces in a pound. Then multiply by that number: 9 lb = 9 × 16 = 144 oz.

3 Words to know

convert change to a different unit

ounce a small weight: 16 make a pound

inch a small length: 12 make a foot

milliliter a tiny amount: 1,000 make a liter

4 Watch for

- Using the wrong number, like 10 inches in a foot or 100 ounces in a pound.
- Dividing instead of multiplying when changing to a smaller unit.
- An answer smaller than the start, when a smaller unit needs more of them.

5 Where it fits

BEFORE
2.MD.A.2
Measure something twice with different units and compare the numbers.

THIS SHEET
4.MD.A.1
Know how units compare in size and convert within one system.

NEXT
5.MD.A.1
Convert between units in the same measurement system.

6 Helping at home

Measure a table in feet, then in inches, and check that feet × 12 matches. Try a bag of flour in pounds and ounces too.