Switch It! Converting Units

From tiny millimeters to mighty miles



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Today we will...



WE ARE LEARNING TO

- Convert metric units for length, mass, capacity
- Convert customary units for length and weight
- Use conversions to solve real-world problems

SUCCESS LOOKS LIKE

- ✓ I can pick multiply or divide correctly
- ✓ I can convert with decimals like 5 cm = 0.05 m

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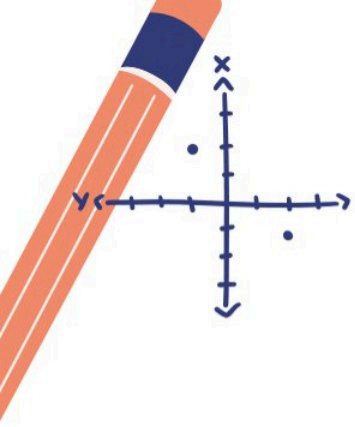
BIG IDEA

Bigger unit means fewer; smaller unit means more.



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Units We Use

Measure It

- Length metric: mm, cm, m, km
- Mass and weight: g, kg, oz, lb
- Rule: multiply or divide
- Length US: in, ft, yd, mi
- Capacity: mL, L, cups, gallons

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What could this be?

It shows inches on one edge and centimeters on the other. What tool is it?



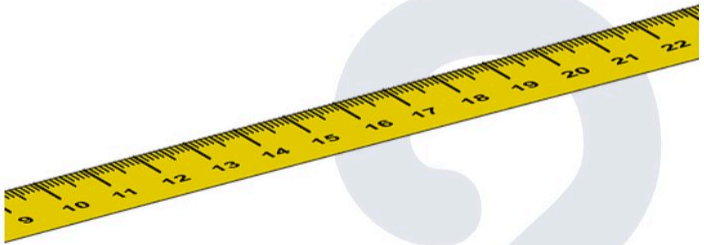
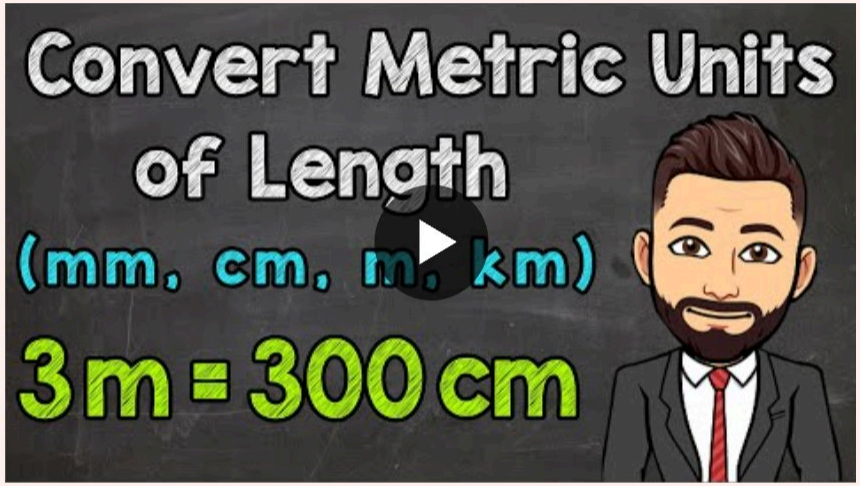


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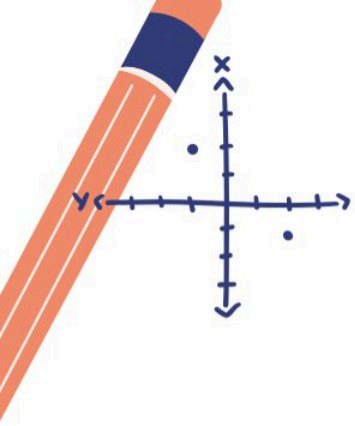
Metric Moves: mm, cm, m, km



▶ 0:00 – 5:00

- Spot when to multiply by 10, 100, 1000
- Spot when to divide and get decimals

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How Do I Choose?

- Large to small: multiply for more units
- Small to large: divide for fewer units
- Conversion factor is an equal pair: 100 cm = 1 m

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Customary Lengths: in, ft, yd, mi



▶ 0:00 – 5:00

- Listen for 12 in = 1 ft
- Notice when the answer gets bigger

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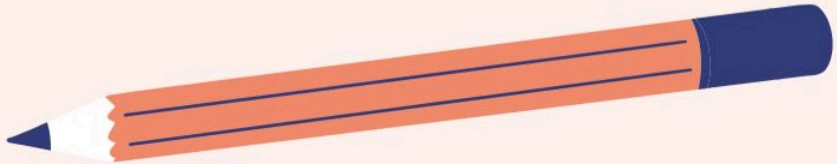
Your task

Solve two real-life totals. Convert to one unit first, then add.

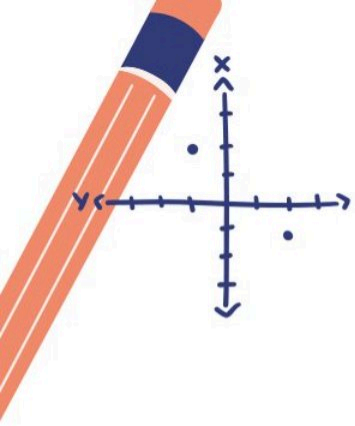
1. Drink: 1.5 L + 750 mL = ? mL
2. Rope: 4 ft + 18 in = ? in
3. Show multiply or divide each time.

10 min

In pairs



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Which Way?

Large to Small

- Multiply
- Number gets bigger
- Ex: 2 m = 200 cm

Small to Large

- Divide
- Number gets smaller
- Ex: 5 cm = 0.05 m

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What Helps You Most?

Which trick will you use first on problems?

A Think: more pieces or fewer?

B Move decimal with 10s, 100s, 1000s

C Estimate, then check my math



Vote with your hands, then explain why.

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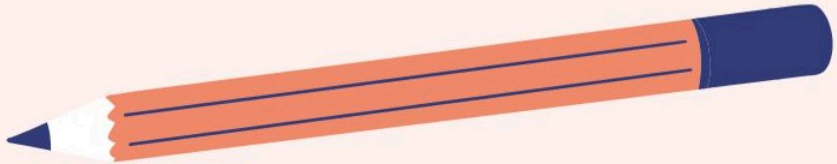
True or false?

1 kg = 1,000 g

36 in = 3 ft

1.2 m = 12 cm

80 oz = 5 lb



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