## Number Talks: Measurement Conversion

7.5 L =

5000 m =\_\_\_\_km

## Number Talks: Measurement Conversion

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## Number Talks: Measurement Conversion

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## \_\_\_mm = 15 cm



kg = 320 g



mL

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#### Specific prompts include:

- What is the known unit in this problem? What unit do we want to know? What is the relationship between these two units? How do you know?
- What are some ways to determine the solution? How can you prove this to be true?
- What are some ways to show this conversion using a model? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write a word problem that reflects this conversion. Share it with a partner. How does your problem reflect the conversion?

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(Answer: 7500 mL)

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(Answer: 0.32kg)

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(Answer: 5 km)

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(Answer: 150 mm)

#### What is the perimeter in metres?



# Number Talks: Measurement Conversion

#### What is the area in metres?



## Number Talks: Measurement Conversion

#### What is the perimeter in kilometres?



### Number Talks: Measurement Conversion What is the area in centimetres?



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(Answer: 0.044 km)

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(Answer: 7 200 000 cm)

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- What are some ways to show this conversion using a model? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write a word problem that reflects this conversion. Share it with a partner. How does your problem reflect the conversion?

(Answer: 1.12 m)

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#### Number Talks: Measurement Conversion Specific prompts include:

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- What are some ways to show this conversion using a model? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write a word problem that reflects this conversion. Share it with a partner. How does your problem reflect the conversion?

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## Number Talks: Measurement Conversion

## Which is smaller? 2.5 km or 3000 cm

Which is larger? 45 mL or 0.5 L

Number Talks: Measurement Conversion

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Number Talks: Measurement Conversion

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# Which is smaller? 81 mm or 0.9 m

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## Which is larger? **15 000 mg** or **500 g**

teachstarte

#### Specific prompts include:

- What is the relationship between these two units? How do you know?
- What are some ways to determine the solution? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What could we be measuring with these units?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write a word problem that reflects this comparison. Share it with a partner. How does your problem reflect the comparison?

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(Answer: 0.5 L)

# Number Talks: Measurement Conversion

#### Specific prompts include:

- What is the relationship between these two units? How do you know?
- What are some ways to determine the solution? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What could we be measuring with these units?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write a word problem that reflects this comparison. Share it with a partner. How does your problem reflect the comparison?

(Answer: 500 g)

## Number Talks: Measurement Conversion

#### Specific prompts include:

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- What are some ways to determine the solution? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What could we be measuring with these units?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write a word problem that reflects this comparison. Share it with a partner. How does your problem reflect the comparison?

(Answer: 3000 cm)

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#### **Number Talks:** Measurement Conversion Specific prompts include:

- What is the relationship between these two units? How do you know?
- What are some ways to determine the solution? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What could we be measuring with these units?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
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- Write a word problem that reflects this comparison. Share it with a partner. How does your problem reflect the comparison?

<sup>(</sup>Answer: 81 mm)

Ms Sanders brought 52 L of water to the excursion to share with her students. She divided the water equally between 4 coolers. How many millilitres of water did Ms Sanders put in each cooler?



## Number Talks: Measurement Conversion

The doctor ordered her patient to take 275 mg of medicine two times a day for 7 days. How many grams of medicine did the patient take at the end of 7 days?

## Number Talks: Measurement Conversion

During a science experiment, a group of students added 750 mL of water to 9 beakers. How many total litres of water did the students use in the science experiment?

## Number Talks: Measurement Conversion

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Damian lives 12 km from school. If his mum drives him to and from school each day for one week, how many metres do they drive in all?



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- What are some ways to solve this problem? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way? (Answer: 6.75 L)

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- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way?
   (Answer: 120 000 m)

# Number Talks: Measurement Conversion

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- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way?
   (Answer: 13 000 mL)

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#### Number Talks: Measurement Conversion Specific prompts include:

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- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way? (Answer: 3.85 g)

Hanna packed 4 identical books into a box. The total weight of the box when she was finished was 3.1 kg. If the empty box had a weight of 100 g, how many grams did each book weigh?



## Number Talks: Measurement Conversion

Samantha bought a 6 kg bag of apples at the market on Saturday. She used 750 g to make a cake for her best friend and gave her neighbour 500 g to use. How many kilograms of apples does Samantha have left?

## Number Talks: Measurement Conversion

Tina went to the store to buy 5 L of juice for a party at school. The store only sold it in 250 mL cartons. How many cartons did Tina need to buy to have enough juice for the party?

## Number Talks: Measurement Conversion

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Cheryl bought 10 plums at the market. Each plum weighed 50 g. If the price for plums was \$8 per kilogram, how much did Cheryl pay?

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- What are some ways to solve this problem? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way?
   (Answer: 20 cartons)

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**Number Talks:** Measurement Conversion Specific prompts include:

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- What are some ways to solve this problem? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way? (Answer: \$4)

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- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way? (Answer: 750 g)

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- What are some ways to solve this problem? How can you prove this to be true?
- How can we use a model to help determine the solution? Why did you choose to model it in this way?
- What are some measurements equivalent to the solution? How do you know they are equivalent?
- What are some measurements smaller/larger than the solution? How do you know they are smaller/larger?
- Write an expression that represents this problem. Share your expression with a partner. Why did you choose to represent it in this way? (Answer: 4.75 kg)