

Convert metric measures

1 How many centimetre cubes can you fit along a metre stick?



What does this tell you?

2 Complete the sentences.

a) There are grams in 1 kilogram.

There are kilograms in 1 tonne.

b) There are millilitres in 1 litre.

c) There are millimetres in 1 centimetre.

There are centimetres in 1 metre.

There are metres in 1 kilometre.



3 Complete the bar models.

a)

1 km	1 km	1 km	1 km
1,000 m	1,000 m		

There are m in 4 km.

b)

1 kg	1 kg	1 kg	1 kg	1 kg	1 kg	$\frac{1}{2}$ kg
1,000 g	1,000 g	1,000 g				

There are g in $6\frac{1}{2}$ kg.

4 Complete the conversions.

a) $2 \text{ kg} = \text{ } \text{ g}$

$5 \text{ kg} = \text{ } \text{ g}$

$10 \text{ kg} = \text{ } \text{ g}$

$12 \text{ kg} = \text{ } \text{ g}$

b) $1 \text{ l} = \text{ } \text{ ml}$

$5 \text{ l} = \text{ } \text{ ml}$

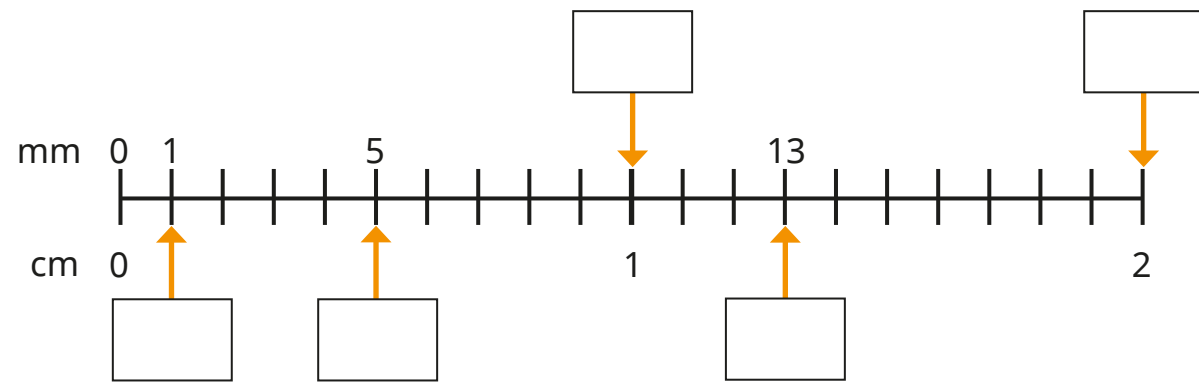
$11 \text{ l} = \text{ } \text{ ml}$

$0.5 \text{ l} = \text{ } \text{ ml}$

5 The mass of a bag of dog food is 2.5 kg.
Write this mass in grams.



- 6 What measurements are the arrows pointing to?
Label them on the number line.



- 7 Complete the conversions.

a) $10 \text{ mm} = \square \text{ cm}$ $\square \text{ mm} = 11 \text{ cm}$
 $11 \text{ mm} = \square \text{ cm}$ $\square \text{ mm} = 1.1 \text{ cm}$

b) $2.1 \text{ km} = \square \text{ m}$ $2.01 \text{ km} = \square \text{ m}$
 $2.001 \text{ km} = \square \text{ m}$ $2.011 \text{ km} = \square \text{ m}$

- 8 Write $<$, $>$ or $=$ to complete the statements.

a) $100 \text{ m} \bigcirc 1 \text{ km}$ b) $5.1 \text{ l} \bigcirc 5,100 \text{ ml}$
 $10 \text{ m} \bigcirc 10 \text{ cm}$ $607 \text{ l} \bigcirc 0.607 \text{ ml}$
 $10.1 \text{ mm} \bigcirc 101 \text{ cm}$ $0.05 \text{ l} \bigcirc 5 \text{ ml}$

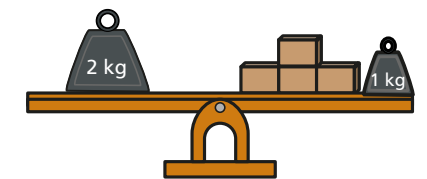
- 9 Dora and Amir are trying to convert 1.05 metres into millimetres.

Dora: You can multiply 1.05 by 100 to convert it into centimetres, then multiply the product by 10 to convert it into millimetres.

Amir: You can just multiply 1.05 by 1,000!

Who do you agree with?
Explain your thinking.

- 10 What is the mass of one of the boxes?
Give your answer in grams.



- 11 There are 1,000 kg in one tonne.
a) How many grams are there in one tonne?

- b) The mass of a car is 1.3 tonnes.
Write the mass of the car in grams.