YR5 Knowledge Organiser - Converting Units

Key Concepts

- Convert between different units of metric measures: kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints

Key Vocabulary

- metric / imperial
- length / mass / volume / capacity
- millimetres / centimetres / metres / kilometres
- inches
- grams / kilograms
- pounds
- litres / millilitres
- pints
- estimate / approximate
- convert

Metric Measures

There are 1,000g in 1kg. To convert from kg to g, we need to multiply by 1,000. To convert from g to kg, we need to divide by 1,000.

$8.109kg × 1,000 = 8,109g$

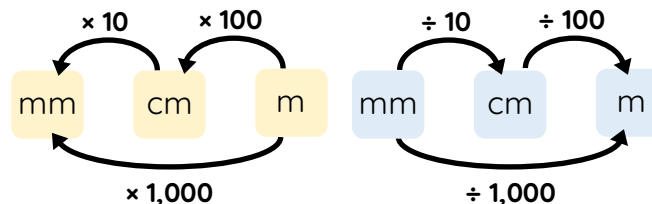| 1,000s	100s	10s	1s	•	0.1s	0.01s	0.001s
			8		1	0	9
8	**1**	**0**	**9**				

There are 1,000ml in 1l. To convert from l to ml, we need to multiply by 1,000. To convert from ml to l, we need to divide by 1,000

$5,072ml ÷ 1,000 = 5.072l$

1,000s	100s	10s	1s	•	0.1s	0.01s	0.001s
5	0	7	2				
			5		**0**	**7**	**2**

The conversion diagrams below demonstrate how to convert between mm, cm and m.

× 10   × 100

mm → cm → m

× 1,000

÷ 10   ÷ 100

mm → cm → m

÷ 1,000
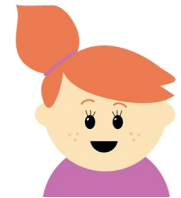
Imperial Measures

Imperial measures can be used to calculate weight and height.

$2.5cm ≈ 1 inch$

"My cat Lulu is 16 inches long. 2.5 × 16 = 40 therefore she is approximately 40cm long."

$1kg ≈ 2lbs$

"I weigh 72lbs. 70 ÷ 2 = 35 so I weigh approximately 36kg."
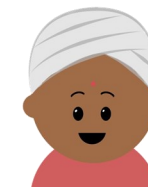
We can also use imperial measures to calculate capacities

$568ml = 1 pint$

A cup for the soft drinks machine at the cinema holds 2 pints.

$568 × 2 = 1,136ml$

Each cup holds 1,136ml or 1.136l.