

What should I already know?

- That converting measurement means to change its unit of measure.
- That objects can be measured in different units of measure, e.g. the same object's length could be measured in mm, cm, m and km.
- How to add and subtract measures (length, mass, and volume and capacity)

Key Vocabulary and definitions

Volume	The space that a 3D object occupies or contains
Capacity	How much fluid fits inside a container
Cube	3d shape, all of its 6 faces are square
Prism	A type of 3d shape with flat sides. It has two ends that are the same shape and size. It has the same cross-section all along the shape from end to end.
Face	The 2d part of a 3d shape
Cross-section	A view into the inside of something made by cutting through it.
Scale	A number track which you need to read to measure something
Interval	How numbers are spaced equally along a scale
Millimetre, centimetre, metre	Standard units of measure for length
Gram, kilogram	Standard units of measure for mass
Millilitre, litre	Standard units of measure for capacity/volume
Convert	Change from one unit of measure to another

Key Knowledge

Converting Units

Volume

(draw attention to link to cubed numbers)

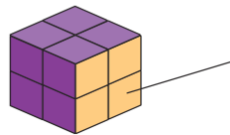
Volume is measured in cubed units. For example, **cm³**, **m³** and **km³**.

To calculate the volume of cubes and cuboids:

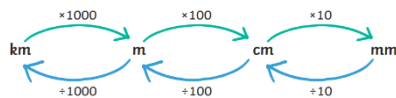
1. Calculate the area of the cross-section (one face).
2. Multiply the area of the cross-section (one face) by its depth.

Area of cross section (face) = $2\text{cm} \times 2\text{cm} = 4\text{cm}^2$

$4\text{cm}^2 \times 2\text{cm} = \text{Volume of } 8\text{cm}^3$

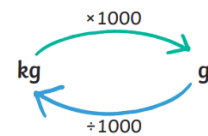
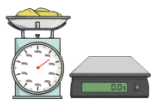


Length



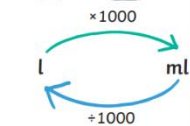
1000 metres = 1 kilometre
 $\frac{1}{1000}\text{ km} = 0.25\text{km} = 250\text{m}$
 100cm = 1m
 $\frac{1}{100}\text{ km} = 0.5\text{km} = 500\text{m}$
 10mm = 1cm
 $\frac{1}{10}\text{ km} = 0.75\text{km} = 750\text{m}$
 $\frac{1}{1000}\text{ km} = 0.1\text{km} = 100\text{m}$

Mass



1000g = 1kg
 $\frac{1}{10}\text{ kg} = 0.1\text{kg} = 100\text{g}$
 $\frac{1}{4}\text{ kg} = 0.25\text{kg} = 250\text{g}$
 $\frac{1}{2}\text{ kg} = 0.5\text{kg} = 500\text{g}$
 $\frac{3}{4}\text{ kg} = 0.75\text{kg} = 750\text{g}$

Volume & Capacity



1000ml = 1 litre
 $\frac{1}{10}\text{ l} = 0.1\text{l} = 100\text{ml}$
 $\frac{1}{4}\text{ l} = 0.25\text{l} = 250\text{ml}$
 $\frac{1}{2}\text{ l} = 0.5\text{l} = 500\text{ml}$
 $\frac{3}{4}\text{ l} = 0.75\text{l} = 750\text{ml}$
 $\frac{1}{100}\text{ l} = 0.01\text{l} = 10\text{ml}$