

## Introduction to units of measurement

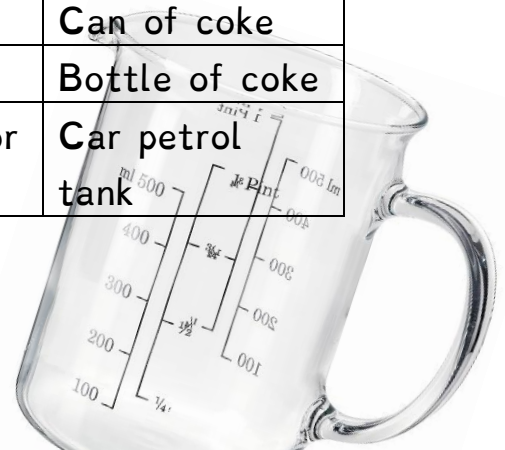


<b>Length</b>			
Name	Symbol	Equivalent	What would I measure?
Millimetres	mm		Ant
Centimetres	cm	1cm = 10mm	Length of a book
Meters	M	1M= 100cm	Size of a swimming pool
Kilometres	km	1km = 1000m	Distance from your house to school



<b>Weight</b>			
Name	Symbol	Equivalent	What would I measure?
Grams	g		A pencil
Kilograms	Kg	1Kg = 1000g	Your weight
Tonne	tonne	1 tonne = 1000Kg	An elephant!

<b>Capacity</b>			
Name	Symbol	Equivalent	What would I measure?
Millilitre	ml		Can of coke
Centilitre	cl	1cl = 10ml	Bottle of coke
Litre	L	1L = 1000ml or 100cl	Car petrol tank



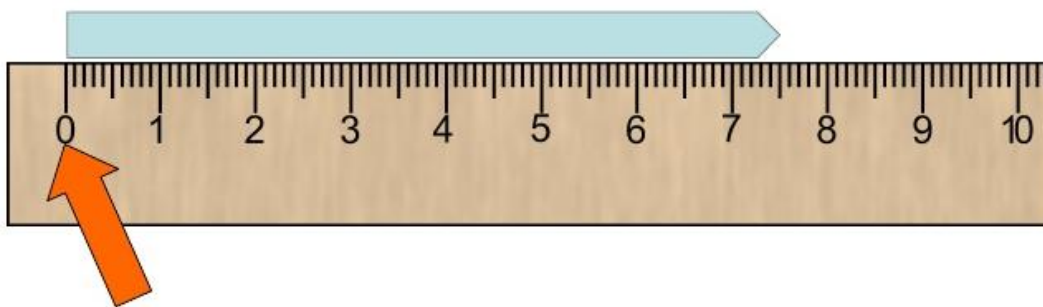
Length is used to measure the size of something.

Weight or mass is used to measure how heavy something is.

Capacity is used to measure how much liquid something can hold.

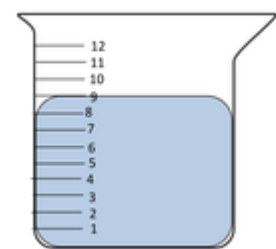
## Top tips:

When measuring something using a ruler, it is important to always start at 0 to ensure your measuring is accurate.

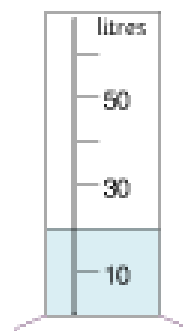


When measuring, it is also important to read the scale accurately.

For example, the first jug uses a simple scale going up 1 each time. Although the second goes up in your 10x table.



**ALWAYS** work out the scale for each measurement.



## Converting between units of measurement.

It is important to know and understand the table on pg. 1, because you will sometimes have to convert between units of measurement.

For example, if you are asked 24cm in mm, you must know that there are 10mm in 1cm to be able to convert this accurately.

$$24\text{cm} = 240\text{mm}.$$

Before you begin your task, have a go at converting these and use the table above to check your answers:

$$2000\text{g} = \quad \text{kg}$$

$$84\text{cm} = \quad \text{mm}$$

$$3\text{M } 49\text{cm} = \quad \text{cm}$$

$$6.5\text{kg} = \quad \text{g}$$

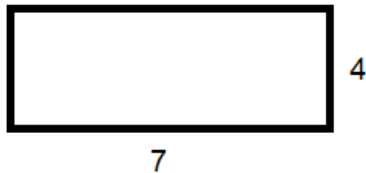
This website has some great clips to help you understand measurement and units of measurement.

<https://www.bbc.co.uk/bitesize/topics/zcpnb9q>

## Using measurements to calculate perimeter

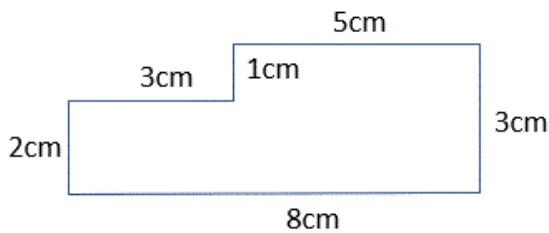
The perimeter of a shape is the measurement of the **OUTSIDE** of the shape – this distance all the way round the outside.

<https://www.bbc.co.uk/bitesize/topics/zvmxsbk/articles/zsr4k7h>

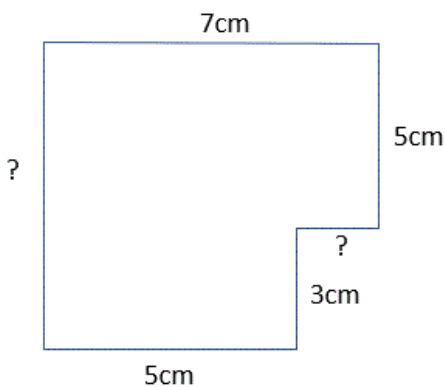


If it is a simple shape, such as a rectangle, you just need to add the sides together. If the bottom of this shape is 7, we know the top will also be 7.

$$7 + 7 + 4 + 4 = 22\text{cm}$$



This also applies to more complicated shapes. If you know the length of each side, you simply add these together to find your perimeter.



Sometimes you will have to find the length of missing sides. On this shape we need to find the total height. We can do this by using the information we have.  $5\text{cm} + 3\text{cm} = 8\text{cm}$ .

Always use the information that you already have to help you find the missing sides.

