

# Metric Units and Measurement

## Length

10 (mm) millimetres = 1 centimetre  
 100 (cm) centimetres = 1 metre  
 1000 (m) metres = 1 (km) kilometre

**Did you know!**  
 A new pencil is about 185mm long.  
**Did you know!**  
 A 2p coin is 2mm thick and 26mm in diameter.



**Did you know!**  
 The dimensions of this poster are around 40.5cm by 59.4cm.

## Volume

10 (ml) millilitres = 1 (cl) centilitre  
 100 (l) centilitres = 1 (l) litre

**Did you know!**  
 A cow can produce up to 35 litres of milk per day.

**Did you know!**  
 One teaspoon equals about 5 millilitres.

**Did you know!**

You use 80 litres of water in a bath but only 35 litres in a shower.

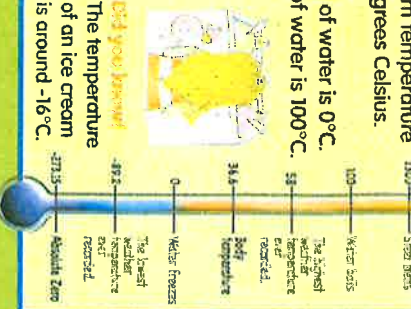
## Temperature

In the metric system temperature is expressed in degrees Celsius. At sea level: The **freezing point** of water is 0°C. The **boiling point** of water is 100°C.

**Did you know!**  
 A nice hot summer's day is between 20°C to 30°C.

**Did you know!**  
 Normal body temperature is around 36.6°C.

**Did you know!**  
 The temperature of an ice cream is around -16°C.



## Time

60 seconds = 1 minute  
 60 minutes = 1 hour  
 24 hours = 1 day  
 7 days = 1 week  
 52 weeks = 1 year



1 minute = 60 seconds  
 1 hour = 3600 seconds  
 1 day = 86400 seconds  
 1 week = 604800 seconds  
 1 year = 31449600 seconds  
 1 leap year = 31536000 seconds

**Did you know!**  
 A year is actually 365.25 days long. This is the time it takes for the Earth to travel once around the Sun. Every 4th year is a leap year where an extra day is added to make up for the extra quarter (0.25) days over 4 years.

## MASS

1000 (mg) milligram = 1 gram  
 1000 (g) grams = 1 (kg) kilogram  
 1000 (kg) kilograms = 1 (t) tonne

**Did you know!**  
 A paperclip weighs about 1 gram.  
**Did you know!**  
 A litre of water weighs 1 kilogram.

**Did you know!**  
 A field mouse weighs between 16 and 27 grammes.



**Did you know!**  
 An elephant can weigh up to 5 tonnes (or 5 million paperclips!)

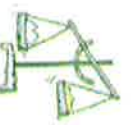
## Prefixes

**Did you know!**  
 milli = 1000th therefore a millimetre is 1 thousandth of a metre.  
 centi = 100th therefore a centimetre is 1 hundredth of a metre.  
 kilo = 1000 therefore a kilometre is 1 thousand metres



Metric Conversion Chart:

- 1000 mm = 1 m
- 100 cm = 1 m
- 1000 g = 1 kg
- 1000 ml = 1 L
- 1000 m = 1 km



$\times 10$   
 $\times 100$   
 $\times 1000$

## Converting Measures

$1,000 \text{ ml} = 1 \text{ L}$   
 $1,000 \text{ g} = 1 \text{ kg}$   
 $1,000 \text{ m} = 1 \text{ km}$

Begin measuring here



seconds in one minute	60	minutes in one hour	60	hours in one day	24	days in one week	7
weeks in one year	52	days in one year	365	months in one year	12	years in a decade	10

