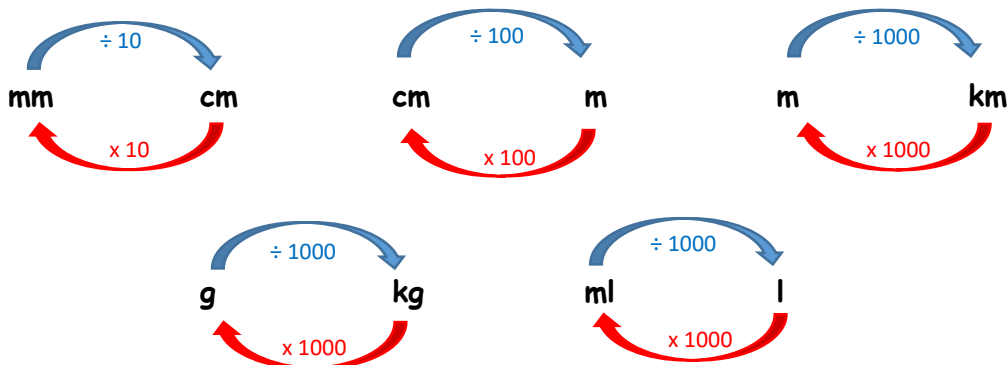


Can I convert between metric measures?

Units of Length	Units of Mass	Units of capacity
10mm = 1cm 100cm = 1m 1000m = 1km	1000g = 1kg	1000ml = 1l (litre)

Conversion diagrams:



Step 1

Write out the measurements you need, using the conversion diagrams above to help you decide how to convert one to another (remember to follow the arrows).

For example:

Convert 1.23kg into grams

Write down 1.23kg then look at the conversion diagram for mass. You can see that the arrow that points from kg to g tells you to $\times 1000$.

Step 2

Do the calculation:

$$1.23 \times 1000 = 1230$$

You can draw a place value chart to help you divide and multiply by 10, 100 and 1000 if you need to!

thousands	hundreds	tens	ones	.	1/10	1/100	1/1000
1	2	3	1 0	.	2	3	

Step 3

Give your answer separately from your working out and remember to include units (your answer will be incorrect if you forget these!!):

$$1.23\text{kg} = 1230\text{g}$$

Another example

What is 3708cm in m? Look at the conversion diagram - the arrow from cm to m tells you to $\div 100$

$$3708 \div 100 = 37.08 \quad \text{so} \quad 3708\text{cm} = 37.08\text{m}$$

Complete the following:

Three challenge questions at the end.

Question	Answer
What is 3 l in ml?	
What is 4500 g in kg?	
What is 3.4 km in m?	
What is 67 cm in mm?	
What is 380 ml in l?	
What is 2.78 kg in g?	
What is 14 m in cm?	
What is 7mm in cm?	
What is 15.6l in ml?	
What is 837g in kg?	
What is 1.2 m in mm?	
What is 63,000 cm in km?	
What is 2 g in kg?	

Answers

Question	Answer	
What is 3 l in ml?	$3 \times 1000 = 3000$	3l = 3000ml
What is 4500 g in kg?	$4500 \div 1000 = 4.5$	4500g = 4.5kg
What is 3.4 km in m?	$3.4 \times 1000 = 3400$	3.4km = 3400m
What is 67 cm in mm?	$67 \div 10 = 6.7$	67mm = 6.7cm
What is 380 ml in l?	$380 \div 1000 = 0.38$	380ml = 0.38l
What is 2.78 kg in g?	$2.78 \times 1000 = 2780$	2.78kg = 2780g
What is 14 m in cm?	$14 \times 100 = 1400$	14m = 1400cm
What is 7mm in cm?	$7 \div 10 = 0.7$	7mm = 0.7cm
What is 15.6l in ml?	$15.6 \times 1000 = 15600$	15.6l = 15600ml
What is 837g in kg?	$837 \div 100 = 0.837$	837g = 0.837kg
What is 1.2 m in mm?	$1.2 \times 100 = 120 \times 10 = 1200$	1.2m = 1200mm
What is 63,000 cm in km?	$63000 \div 100 = 630 \div 1000 = 0.63$	63,000cm = 0.63km
What is 2 g in kg?	$2 \div 1000 = 0.002$	2g = 0.002kg