

Convert Units of Measurement: Mass

Convert: Change one thing into another.

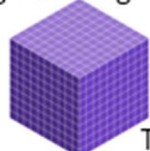


Unit of measurement: A word or label we use to say *how much* of something there is.



Mass: How much matter is inside something. Different units are used to measure different things. Grams (g) measure small items like paperclips, kilograms (kg) larger things like bags of flour.

Big box = 1kg



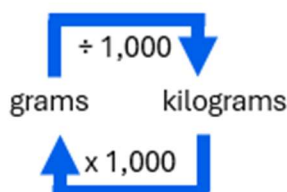
Tiny cube = 1g

1 kilogram = 1,000g

Imagine 1 kilogram is a big box and 1 gram is a tiny cube. It takes 1,000 tiny cubes to fill the big box. Converting units of mass is like working out how many big boxes you need, or how many cubes you can put into the big box.

Converting grams to kilograms

How many big boxes will I need when I put my tiny cubes into groups of 1,000?



Converting kilograms to grams

How many tiny cubes are in each of the big boxes when I unpack them?

÷ 1,000	
Grams	Kilograms
250g	0.25kg
500g	0.5kg
750g	0.75kg
1,000g	1kg
2,000g	2kg
5,000g	5kg
x 1,000	

Base-10 blocks, place value chart, and everyday items that weigh 1 kilogram and 1 gram.

Convert 1,500g to kg

$$1500 \div 1000 = 1.5\text{kg}$$

Th	H	T	U	$\frac{1}{10}$
1	5	0	0	
			1	5

Convert 2.5kg to g

$$2.5 \times 1000 = 2500\text{g}$$

Th	H	T	U	$\frac{1}{10}$
			2	5
2	5	0	0	

Look out for word problems where amounts are given in both grams and kilograms. To answer these questions, you may need to convert all the values to the same form — either all grams or all kilograms.

Calculator skills

÷ 1 0 0 0

x 1 0 0 0