Converting Between Different Units of Measurement

KS2 MATHS KS3 MATHS Ages 10-14 ⏰ 3 min read

What Does Converting Units Mean?

A **unit of measurement** is a standard amount we use to measure things. For example, we measure length in **metres**, **centimetres**, or **kilometres**. We measure weight in **grams** or **kilograms**. Sometimes we need to change from one unit to another—that's called **converting**.

Converting units is really useful in real life. If a recipe says you need **500 grams** of flour but your scales only show **kilograms**, you need to know how to convert. Or if you're **1.5 metres** tall and want to know your height in **centimetres**, you'd convert too.

Think of it like changing money. If you have **5 pounds**, you could change it into **500 pence**. The amount of money stays exactly the same—you've just expressed it in a different unit.

How Do You Convert Units?

The trick to converting is knowing the **conversion factor**—how many of one unit equals another. Here are some common ones:

Length: 1 metre = 100 centimetres, **1 kilometre = 1,000 metres**. **Weight: 1 kilogram = 1,000 grams**. **Volume: 1 litre = 1,000 millilitres**.

Once you know the conversion factor, you either **multiply** or **divide**. If you're converting to a **smaller unit**, you multiply. If you're converting to a **bigger unit**, you divide.

Think of it like cutting a pizza. If you have **3 whole pizzas** and cut each into **8 slices**, you get **24 slices** total (3 × 8). If you have **24 slices** and want to know how many whole pizzas, you divide (24 ÷ 8 = 3).

Real Examples

Let's say you need **2.5 metres** of ribbon but the shop sells it in **centimetres**. Since **1 metre = 100 centimetres**, you multiply: **2.5 × 100 = 250 centimetres**.

Or imagine you have **3,500 grams** of sugar but the recipe asks for **kilograms**. Since **1 kilogram = 1,000 grams**, you divide: **3,500 ÷ 1,000 = 3.5 kilograms**.

Converting units is a super useful skill that helps us understand measurements better and solve problems in cooking, sports, science, and building.

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