

WEIGHT

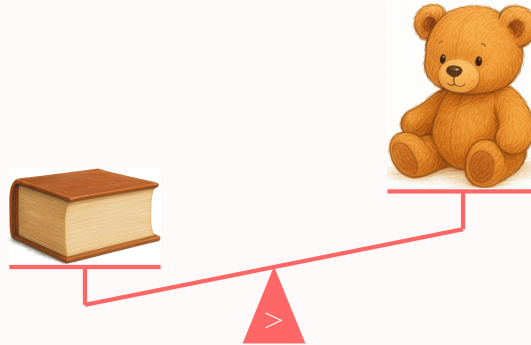
A WHAT IS A WEIGHT?

Definition Weight

Weight tells us how heavy something is. When we compare two objects, the **heavier** one has more weight and the **lighter** one has less weight. For example, a big book is heavier than a teddy bear.

Definition Balance Scale

A **balance scale** is a tool used to compare or measure the weight of two objects. It has two sides. The heavier side goes **down** and the lighter side goes **up**. If both sides are level, the two objects have the same weight.



B WEIGHT UNITS

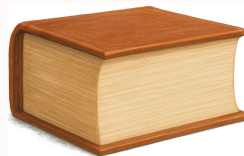
Discover: We could use marbles to measure weight, but what if your marbles are bigger than your friend's marbles? You would get different answers! To make sure everyone's measurements are the same, we use **standard units**. The standard units for weight are the **gram** and the **kilogram**.

Definition Units of Weight

- **Gram (g)** — A small unit of weight. We use grams to weigh light objects, like a small candy or a paper clip.



- **Kilogram (kg)** — A bigger unit of weight. We use kilograms to weigh heavier objects, like a big book or a school bag.



C CONVERSION OF WEIGHT UNITS

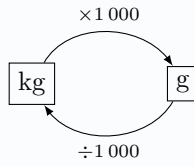
Definition Conversion of Weight Units

One kilogram is equal to **1 000 grams**. This means kilograms are a bigger unit and grams are a smaller unit.

- **1 kg = 1 000 g**

Method Converting with Multiplication or Division

- To convert from a **bigger** unit to a **smaller** one (kg → g), you **multiply** by 1 000.
Example: $3 \text{ kg} = 3 \times 1\,000 \text{ g} = 3\,000 \text{ g}$.
- To convert from a **smaller** unit to a **bigger** one (g → kg), you **divide** by 1 000.
Example: $2\,500 \text{ g} = 2\,500 \div 1\,000 = 2.5 \text{ kg}$.



Method Converting Using a Place Value Table

Convert 2 kilograms to grams.

1. **Draw the metric place value table.** Each unit has its own column.

kg			g

2. **Place the ones digit** of your number in the starting unit's column. Here, place the **2** in the **kg** column.

kg			g
2			

3. **Fill with zeros** in each column until you reach the column of the target unit. We want to convert to **grams (g)**.

kg			g
2	0	0	0

4. **Read the number** to find the converted value.

$$2 \text{ kg} = 2000 \text{ g.}$$