

MASS

A DEFINITION

Definition Weight

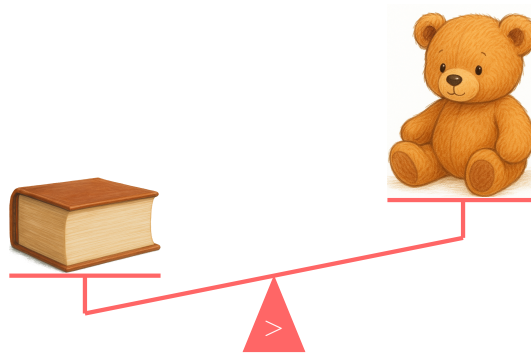
Weight tells us how heavy something is. Imagine you have a teddy bear and a big book. The teddy bear feels light when you pick it up, but the book feels heavy. That's because the book has more weight than the teddy bear!

Definition Mass

Mass is the amount of matter in an object. It tells us how much "stuff" an object is made of, and it stays the same no matter where the object is, even on the Moon!

Definition Balance Scale

A **balance scale** is a tool we use to compare the weight of two things. It has two sides that go up or down. If one thing is heavier, its side goes down, and the lighter side goes up.



B MASS UNITS

Discover: We can measure mass using different objects like marbles or candies. But these objects are not the same for everyone. Your friend might have bigger marbles than yours, making it hard to compare. To solve this, mathematicians created universal units like tonnes, kilograms, grams, and milligrams, so everyone can measure and compare masses the same way, from very big things like cars to very tiny things like a drop of water.

Definition Units of Mass

- **Tonne (t):** A very big unit of mass, about the mass of a car.



- **Kilogram (kg):** A big unit of mass, about the mass of a big book.



- **Gram (g):** A small unit of mass, about the mass of a small candy.



- **Milligram (mg):** A very tiny unit of mass, about the mass of a drop of water.



C CONVERSION OF MASS UNITS

Definition Conversion of Mass Units

- $1 \text{ t} = 1000 \text{ kg}$
- $1 \text{ kg} = 1000 \text{ g}$
- $1 \text{ g} = 1000 \text{ mg}$

Method Converting Using Multiplication or Division

- Use **multiplication** to go from a bigger unit to a smaller one (like tonnes to kilograms, kilograms to grams, or grams to milligrams).
- Use **division** to go from a smaller unit to a bigger one (like milligrams to grams, grams to kilograms, or kilograms to tonnes).

