

Measurement of Mass (Weight)

Understanding the Topic

- Mass or weight tells us how heavy or light an object is.
- It is measured using standard units.

Standard Units of Mass

- Milligram (mg) – Used to measure very light things like medicine.
- Gram (g) – Used to measure light objects like fruits or vegetables.
- Kilogram (kg) – Used to measure heavier things like bags of rice or a person's weight.

Conversions of Units

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

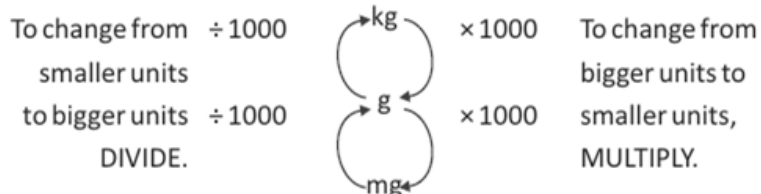
To convert smaller units to bigger units, divide.

To convert bigger units to smaller units, multiply.

Relation between different units of mass

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
kilogram (kg)	hectogram (hg)	decagram (dag)	gram (g)	decigram (dg)	centigram (cg)	milligram (mg)

This chart will help you to convert bigger units into smaller units and smaller units into bigger units.



Examples with Solutions

1. Conversion (Easy)

Question: Convert 3000 g into kilograms

Solution: $3000 \div 1000 = 3 \text{ kg}$



2. Addition (Moderate)

Question: A packet of sugar weighs 2 kg and another packet weighs 1.5 kg What is the total weight.

Solution: $2 + 1.5 = 3.5$ kg

3. Subtraction (Easy)

Question: A watermelon weighs 5 kg and a melon weighs 3 kg What is the difference in their weights.

Solution: $5 - 3 = 2$ kg

4. Real-life Problem (Moderate)

Question: A shopkeeper sold 3 bags of wheat each weighing 25 kg What is the total weight.

Solution: $25 \times 3 = 75$ kg

5. Mixed Units (Moderate)

Question: A watermelon weighs 2 kg 300 g What is its weight in grams

Solution: $2 \text{ kg} = 2000 \text{ g}$

$2000 + 300 = 2300 \text{ g}$

Summary Points

- Mass means how heavy or light an object is.
- Main units are mg g and kg.
- $1000 \text{ mg} = 1 \text{ g}$ and $1000 \text{ g} = 1 \text{ kg}$.
- Multiply to convert bigger to smaller units.
- Divide to convert smaller to bigger units.
- Always convert units before adding or subtracting.
- Use kg for heavy items and g for lighter ones.
- Useful in everyday life like shopping, cooking, weighing luggage.
- Practice helps understand unit conversion quickly.
- Always write the correct unit with your final answer.