

Notes & Steps



Key idea

Weight is measured in grams (g) and kilograms (kg). $1000\text{ g} = 1\text{ kg}$. Everyday items have typical weights you can use as benchmarks.

Steps

1. Think about similar everyday items. A paperclip $\approx 1\text{ g}$. An apple $\approx 200\text{ g}$. A bag of sugar $\approx 1\text{ kg}$.
2. Decide: is the item lighter or heavier than a bag of sugar (1 kg)?
3. Choose the unit: grams for small items (under 1 kg), kilograms for heavy items.
4. Check your estimate: does your answer make physical sense?

Weight benchmarks

- ▶ **1 g:** a paperclip, a staple, a grain of rice
- ▶ **100 g:** a chocolate bar, a small apple
- ▶ **200 g:** a cup of flour, a sliced bread loaf
- ▶ **500 g:** a block of butter, a small pillow
- ▶ **1 kg:** a bag of sugar, a litre of water
- ▶ **5 kg:** a school bag full of books
- ▶ **10–30 kg:** a large dog, a small child
- ▶ **50–100 kg:** an adult, a fridge, a sofa

Common mistake

Thinking everything light uses grams. A TV weighs about 5 kg — not 5000 g or 5 g. Always imagine the item compared to a bag of sugar (1 kg).

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Example 1: a book

A paperback book: is it measured in grams or kilograms? A book feels lighter than a bag of sugar (1 kg) but heavier than an apple (200 g). It weighs about **300–500 g**.

Example 2: a fridge

A fridge: grams or kilograms? Much heavier than 1 kg. Compare to an adult (50–80 kg). A fridge weighs about **50–80 kg**.

Example 3: choosing the right unit

A feather: 2 grams or 2 kilograms? A feather is lighter than a paperclip (1 g). **2 g** is correct. 2 kg would be heavier than a bag of sugar — no feather weighs that much.

Example 4: comparing weights

A cat weighs 4 kg. An apple weighs 200 g. How many apples equal one cat? Convert: $4 \text{ kg} = 4000 \text{ g}$. $4000 \div 200 = 20$ apples.