Metric Measurement

Length-

height (h), length (ℓ) , width (w)

Mass-

The amount of matter in an object.

Weight-

The amount of gravitational pull on an object.

Volume-

The amount of space an object takes up.

Measurement	Base Unit	Tools
length (ℓ)	meter (m)	ruler
mass (m)	grams (g)	triple beam balance
volume (v)	Liter (L) cm^3 m^3	water displacement graduated cylinder math equations

Volume of a Rectangular Prism

$\ell \times w \times h = v$

units: cm^3

Water Displacement

A method used to find the volume of solid objects

$V_f - V_i = V_{obj}$

units: mL

V_i initial volume

V_f final volume

V_{obj} object volume

Relationships

$1mL = 1cm^3$

H_2O ONLY: $1mL = 1cm^3 = 1g$

Metric Measurement

% of Sweetener in Gum

$$\frac{\text{mass of sweetener}}{\text{mass of fresh gum}} = \%\text{ of sweeener}$$

steps

1) subtract:

fresh mass — chewed mass

2) divide:

mass of sweetener ÷ mass of fresh gum

3) convert to %

a) take # and round to nearest hundredth

ex) .627492 ⟶ .63

b) move decimal 2 places right

ex) .63 ⟶ 63%