

◆ 1. Length

Units: millimetres (mm), centimetres (cm), metres (m), kilometres (km)

✓ Conversions:

- $10 \text{ mm} = 1 \text{ cm}$
- $100 \text{ cm} = 1 \text{ m}$
- $1000 \text{ m} = 1 \text{ km}$

🧠 Example:

Convert 3500 mm to m:

$$3500 \text{ mm} \div 1000 = 3.5 \text{ m}$$

◆ 2. Area

Units: mm^2 , cm^2 , m^2 , km^2

✓ Conversions:

- $1 \text{ cm}^2 = 100 \text{ mm}^2$
- $1 \text{ m}^2 = 10,000 \text{ cm}^2$
- $1 \text{ km}^2 = 1,000,000 \text{ m}^2$

⚠ Area scales by **squares** of the length conversion factor.

🧠 Example:

Convert 2 m^2 to cm^2 :

$$2 \times 10,000 = 20,000 \text{ cm}^2$$

◆ 3. Volume

Units: mm^3 , cm^3 , m^3

✓ Conversions:

- $1 \text{ cm}^3 = 1000 \text{ mm}^3$
- $1 \text{ m}^3 = 1,000,000 \text{ cm}^3$

| ⚠ Volume scales by **cubes** of the length conversion factor.

🧠 Example:

Convert 3 m^3 to cm^3 :

$$3 \times 1,000,000 = 3,000,000 \text{ cm}^3$$

◆ 4. Capacity

Units: millilitres (ml), litres (l)

✓ Conversions:

- $1000 \text{ ml} = 1 \text{ l}$
- $1 \text{ cm}^3 = 1 \text{ ml}$
- $1000 \text{ cm}^3 = 1 \text{ l}$
- $1 \text{ m}^3 = 1000 \text{ l}$

🧠 Example:

Convert 2.5 m^3 to litres:

$$2.5 \times 1000 = 2500 \text{ litres}$$

◆ 5. Mass

Units: grams (g), kilograms (kg)

✓ Conversions:

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

🧠 Example:

Convert 4500 g to kg:

$$4500 \div 1000 = 4.5 \text{ kg}$$

 Summary Table

Quantity	Base Unit	Common Units & Conversions
Length	m	10 mm = 1 cm, 100 cm = 1 m, 1000 m = 1 km
Area	m ²	1 m ² = 10,000 cm ² , 1 km ² = 1,000,000 m ²
Volume	m ³	1 m ³ = 1,000,000 cm ³ , 1 cm ³ = 1000 mm ³
Capacity	l	1 l = 1000 ml, 1 m ³ = 1000 l
Mass	kg	1 kg = 1000 g