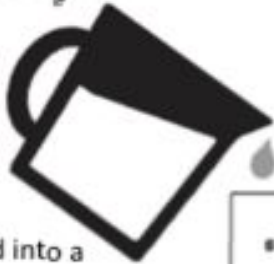


Notes

VOLUME - (definition)

1) Liquids

Volume of a Liquid



1. Pour the liquid into a graduated cylinder or beaker.
2. Read the measurement carefully from the bottom of the meniscus (curve in liquid).
3. Write your answer in **Liters (L)** or **Milliliters (mL)**.

OR

Unmarked Container

- This process also works for finding the volume of an unmarked container such as a coffee mug.
1. Fill the mug to the top with water.
 2. Pour the water into a graduated cylinder.
 3. Read and record your measurement in **mL or L or cm^3**

Formula/Method

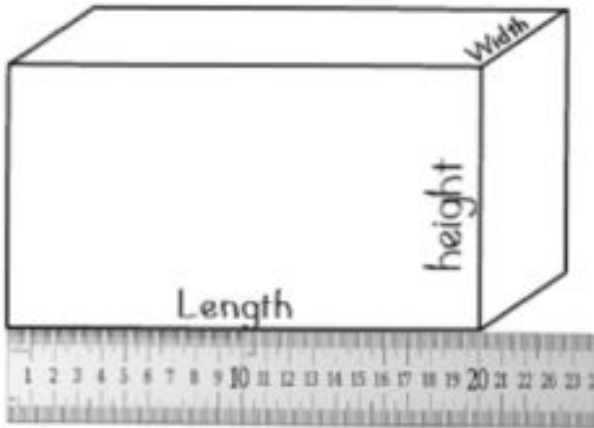
Tool

Unit



2) Rectangular Solids (prisms)

Volume of a Rectangular Prism



1. Use a metric ruler to measure the 3 dimensions (length, width and height) of the rectangular prism to the nearest 0.1 cm.
2. Use the math formula:

$$\text{Volume} = \text{length} \times \text{width} \times \text{height}$$

3. Multiply and check your work to ensure your math calculations are correct.

4. Label your answer in CUBIC UNITS such as:
 mm^3 cm^3 m^3

Formula

Tool

Unit

3) Irregular Solids

Volume of an Irregular Shape

1. Fill a graduated cylinder with enough water to sink your irregular object. Record the initial reading.

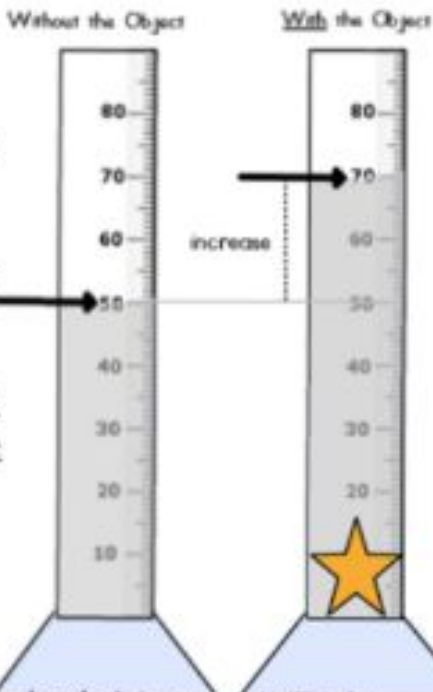
2. Submerge the object in the cylinder and observe the level of water increase as the object displaces the liquid.

3. Record the new level of the water WITH the object still in the water. **Example: 70 mL**

4. Subtract the two readings to determine the amount of space the irregular shape is taking up in the cylinder. **70 mL - 50 mL = 20 mL**

5. Convert from mL (liquid unit) to cm^3 (solid).

$$1\text{ mL} = 1\text{ cm}^3 \text{ so } 20\text{ mL} = 20\text{ cm}^3$$



Method

Tool

Unit