

7/5/20

Physical Quantities

Density

→ Find the mass of the liquid

→ find the volume of the liquid by using a measuring cylinder

$$\rho = m/v$$

Density bottle

A → The density of bottle is a specially designed bottle used to determine the density of a liquid.

→ It is a small glass bottle having a glass stopper at its neck.

Relative density

→ The relative density of a substance is defined as the ratio of the density

Of a substance to the density of water.

→ $RD = \frac{\text{Density of the substance}}{\text{Density of water}}$ -

→ Relative density of iron = $\frac{\text{Density of iron}}{\text{Density of water}}$

⇒ Unit of Relative density

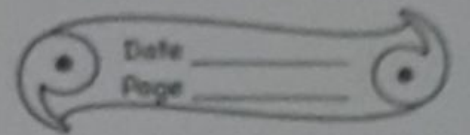
→ Relative density is just a number.

→ It has no unit.

Principle of flotation

→ When a body is immersed in a liquid the following two forces act on it.

→ The weight of the body which act vertically downwards.



→ The buoyant force which act vertically upwards.