

MATTER

CHAPTER NO.2 SUB: PHYSICS

CHANGING YOUR TOMORROW

LEARNING OUTCOMES

- Students will be able to
- Determine density of liquid using density bottle.
- Define relative density.
- Solve numerical problems on relative density.

CHANGING YOUR TOMORROW

POINTS TO BE COVERED

- Determination of density of an irregular solid,
Density of a liquid, density bottle.

CHANGING YOUR TOMORROW

INTRODUCTION

- Arrange the following substances in order of their increasing density:
- Iron, Cork, Brass, Water, Mercury.
- What is density bottle?

Density

Demonstrate how to find out mass of a solid.

Demonstrate how to find out volume by using displacement method.

Explain how to calculate density.

<https://youtu.be/s5u5cmA9Dp0>

DENSITY

- Find the mass of the liquid.
- Find the volume of the liquid by using a measuring cylinder.
- $D = m/v$

DENSITY BOTTLE

- A density bottle is a specially designed bottle used to determine the density of a liquid.
- It is a small glass bottle having 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.
- $RD = \text{Density of the substance} / \text{Density of water}$.
- Relative density of iron = $\text{Density of iron} / \text{Density of water}$.

Unit of relative density

- Relative density is just a number.
- It has no unit.
- <https://youtu.be/G6XQnllwtt8>

HOME ASSIGNMENT

➤ Exercise: B-10,11,12.

THANKING YOU
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