



STEPPING STONE
SCHOOL (HIGH)

CLASS: 6

Subject: Physics

Date: 20/05/2020

Topic: Measurements

Time Limit: 30 min.

Worksheet No. :6

*[Copy the questions following the notes and solve them on a sheet of paper date wise.
Keep the worksheets ready in a file to be submitted on the opening day.]*

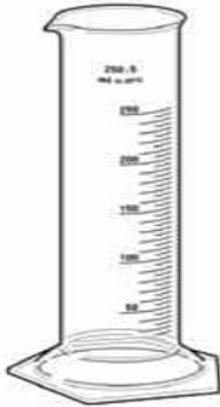
Volume of Regular Solids

We measure the volume of a regular solid by measuring their linear dimensions like length, breadth, and height .Calculating the volume using appropriate formulae. The formulae used to find the volume of some regular solids are given below:

- **Volume of a cube = length³**
- **Volume of a cuboid = Length x Breadth x Height**

Volume of Liquids

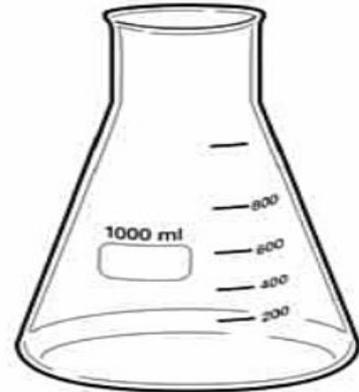
- **To measure the volume of a liquid, it is poured into a graduated measuring cylinder, beaker, flask and the volume of the liquid is read from the level of the liquid in the cylinder.**
- **The curved surface formed by a liquid is known as a meniscus. For a concave surface, we take the lower meniscus reading. For a convex surface, we take the upper meniscus reading.**
- **Containers of known capacity are used to measure the volume of liquids. The 'litre' is used to measure the volume of liquids. The millilitre is used to measure smaller volumes.**
 - **1 litre = 1000 cm³**
 - **1 millilitre (ml) = 1 cm³**



Graduated cylinder



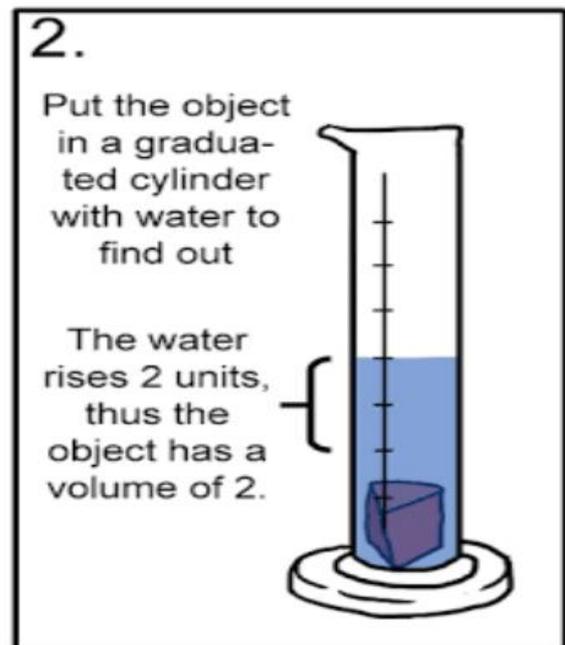
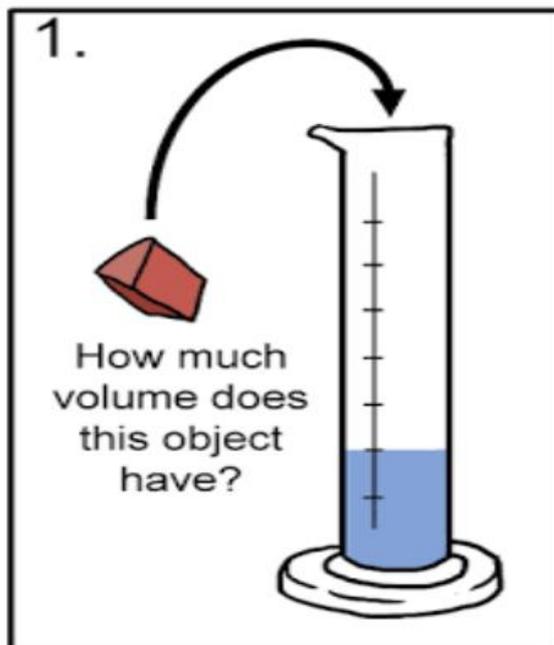
Beaker



Erlenmeyer flask

Volume of Irregular Solids by Measuring Cylinder **(Displacement Method)**

- **Pour water into a measuring cylinder and keep it on a table.**
- **Note the reading of the water level.**
- **Tie a string to the irregular solid, say a stone, and lower it slowly into the cylinder till it is completely immersed in water.**
- **Note the new water level. The difference between the two readings of the water level gives the volume of the water displaced by the stone. This gives the volume of the stone.**



Fill in the blanks

- (i) **Volume of a cuboid** _____.
- (ii) **Volume of a cube** _____.
- (iii) **1 litre =** _____ **cm³.**
- (iv) **The capacity of a container is known its** _____.
- (v) **Volume of irregular solid is measured by** _____ **method.**

Answer the following questions

1. Describe a method by which we can determine volume of irregular solid.
2. Describe a method by which we can determine volume of regular solid.
3. How will you measure volume of liquid?

[Click here for you tube video on measurement of volume](#)