

Volume :-

Volume can be defined as the 3-dimensional space enclosed or occupied by an object.

The unit of volume is always cubic unit.

Formula :-

Volume of cube = (Side $\times$ Side $\times$ Side) cubic unit

Volume of cuboid = (Length $\times$ breadth $\times$ Height) cubic unit.

HOMEWORK

1) Find the volume of the following cubes:-

a) Side= 8.5 mm

b) Side= 90 inches

c) Side= 16.5 meter

2) Find the volume of the following cuboid:-

a) Length= 6 cm, Breadth= 4 cm,
Height= 4 cm

b) Length= 4.5 mm, Breadth= 3
mm, Height= 2 mm

c) Length= 11 inches, Breadth= 8
inches, Height= 7 inches

CLASS WORK

- 1) A cuboidal tank is 1.5 m long 50 cm wide and 50 cm high. Find its volume.
- 2) Roshan got an empty box of dimensions 30cm x 25cm x 10cm to pack a gift that he bought for his grandmother. Find the volume of the largest size gift he can pack in the box.
- 3) Find the volume of a cube which is 6 mm long from each side.
- 4) Shagun bought a box full of oats. The box measures 24.5 cm x 10 cm X 5.5 cm. What is the greatest amount of oats in cubic cm, the box holds?

1. The dimensions of a match box are $6\text{ cm} \times 3.5\text{ cm} \times 2.5\text{ cm}$.

Find the volume of a packet containing 12 such match boxes.

2. The length, breadth and depth of a pond are 20.5 m , 16 m and 8 m respectively. Find the capacity of the pond in litres.

3. The dimensions of a brick are $24\text{ cm} \times 12\text{ cm} \times 8\text{ cm}$. How many such bricks will be required to build a wall of 20 m length, 48 cm breadth and 6 m height?

CLASSWORK

- 1) Find the volume of earth dug out from a cubical pit whose edge is 2.4 Meter.
- 2) A metal cuboid is of dimensions 50 cm, 10 cm and 20 cm. If the weight of one cubic centimetre of the metal is 8 g, find the weight of the metal cuboid in kilograms.
- 3) A block of wood in the shape of a cuboid has length = 2.5 m, breadth = 1.5 m and height = 2 metre. How many cubical blocks each of edge 50 cm can be cut from it?