

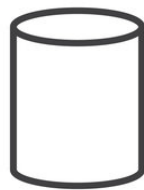
## Solid Shapes



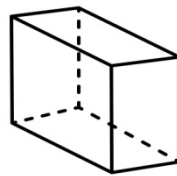
They have three dimensions like length, breadth and height or depth. They are also called three dimensional figures(3-D).

A solid shape is a shape that occupies space. A solid is a three-dimensional figure.

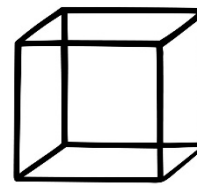
**Example:** Cone, Shapes, Cube, Cylinders, etc.



CYLINDER



CUBOID



CUBE

### Faces:

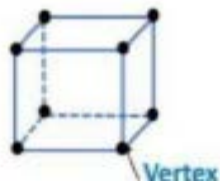
Polygons forming a polyhedron are known as their faces. The flat surfaces of any solid called faces.

### Edges:

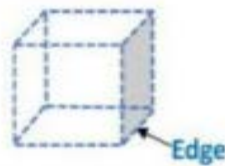
Line segments common to intersecting faces of a polyhedron are known as its edges. Line segments that form the solid are called edges.

### Vertices:

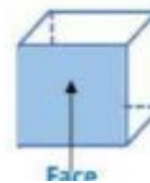
Points of intersection of edges of a polyhedron are known as its vertices. Corners of the solid are its vertices.



1



2



3



1. The 8 corners of the cube are its vertices
2. The 12-line segments that form the cube are its edges.
3. The 6 flat square surfaces are its faces.

### Cube:

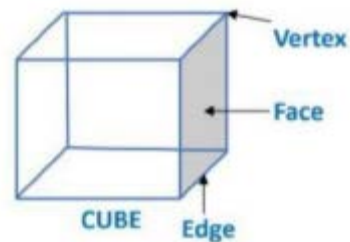
A cube whose length, breadth and height are all equal is called a cube.

For example, ice cubes, dice, sugar, cubes.

**F** = Number of Faces = 6

**E** = Number of Edges = 12

**V** = Number of Vertices = 8



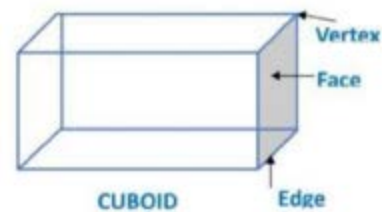
### Cuboid:

A solid bounded by six rectangular plane faces with opposite identical faces is called a cuboid. Example a chalk box, a match box, a book.

**F** = Number of Faces = 6

**E** = Number of Edges = 12

**V** = Number of Vertices = 8



### Cylinder:

The cylinders have congruent circular faces that are parallel to each other. The line segment joining the center of circular faces is perpendicular to the circular faces, Such

Cylinder are known as Right

Circular cylinder.



**Base:** Each of the circular ends on which the cylinder rests is called its base.

**Axis:** The line segment joining the centers of two circular bases is called the axis of the cylinder.

The axis is always perpendicular to the bases of a right circular cylinder.

**Radius:** The radius of the circular bases of a right circular cylinder.

**Height:** The length of the axis of the cylinder is called the height of the cylinder. In other words, the perpendicular distance between the two parallel circular ends or the altitude to either base from a point on the height of the cylinder.

**Note:** The cylinder has congruent circular faces that are parallel to each other. The line segment joining the center of circular faces is perpendicular to the circular faces. Such cylinders are called right circular cylinders.