

CHAPTER 14

Surface areas and Volumes (Cube and Cuboid)

Introduction:

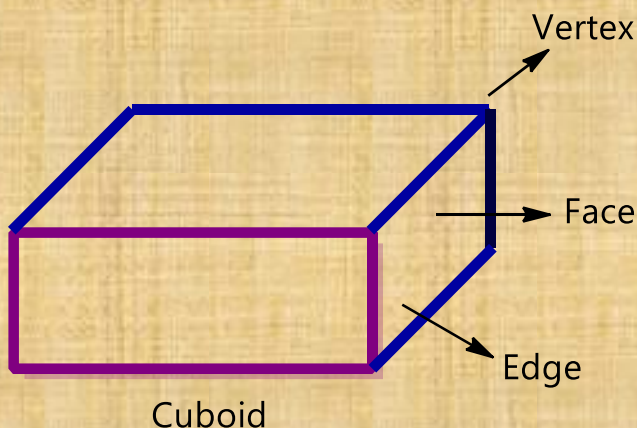
For suppose we want to wrap up any gift box. How would we know that how much paper we have to buy? It is obvious that size of the paper requires depends on the surface area of the gift box. In order to help ourselves in such situations, let us find the ways calculating the surface areas of different solid objects.

Solid shapes:

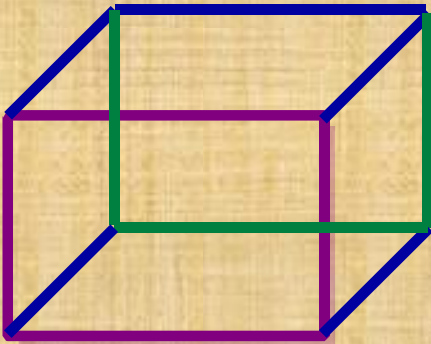
A solid shape is a shape, which occupies space.

Example:

Cuboid, Cube and Cylinder.

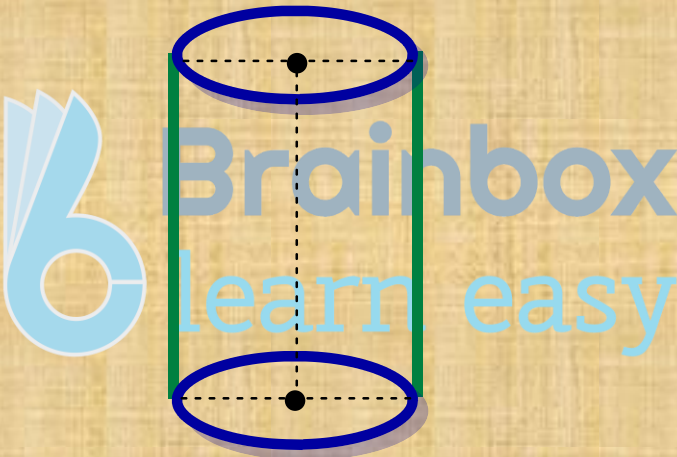


- Cuboid has three pair of identical faces.



Cube

- Cube has all six faces identical.



Cylinder

Faces of solids:

The flat surfaces of a solid figure are called its faces.

Edges of solids:

The line segments where two faces of the solid meet are called its edges.

Surface areas of solids:

The sum of the areas of all the faces of a solid (Plane and Curved) is called the 'Surface area' and of the solid. The units of surface area are square units.

Lateral surface area of solids:

The sum of the areas of the faces except top and bottom faces of a solid (Plane and Curved) is called the 'Lateral surface area of solids'.

