

Shapes Around Us

Notes



Geometrical Shapes

CUBOID

Observe the shapes of the given objects :



Each object shown above has rectangular shape.

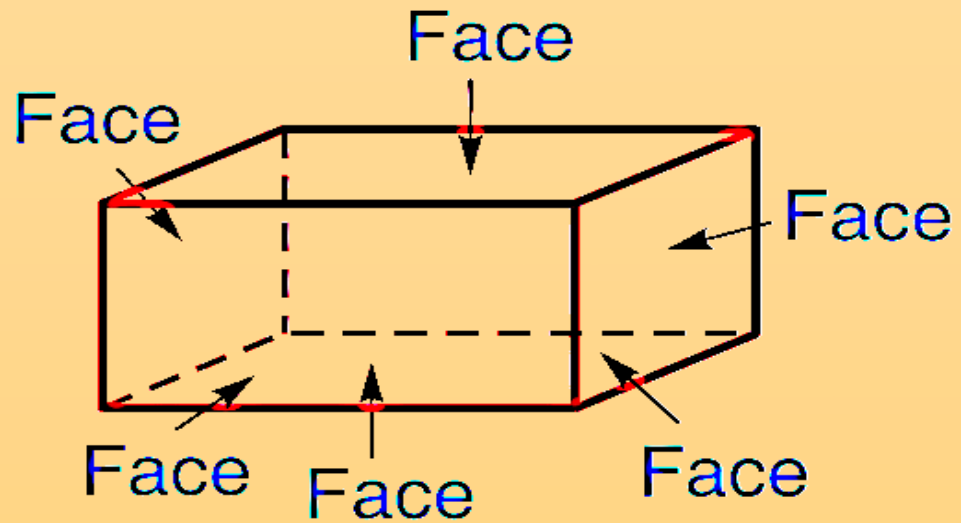
Such objects are called **cuboids** .

We also call them **cuboidal objects** .

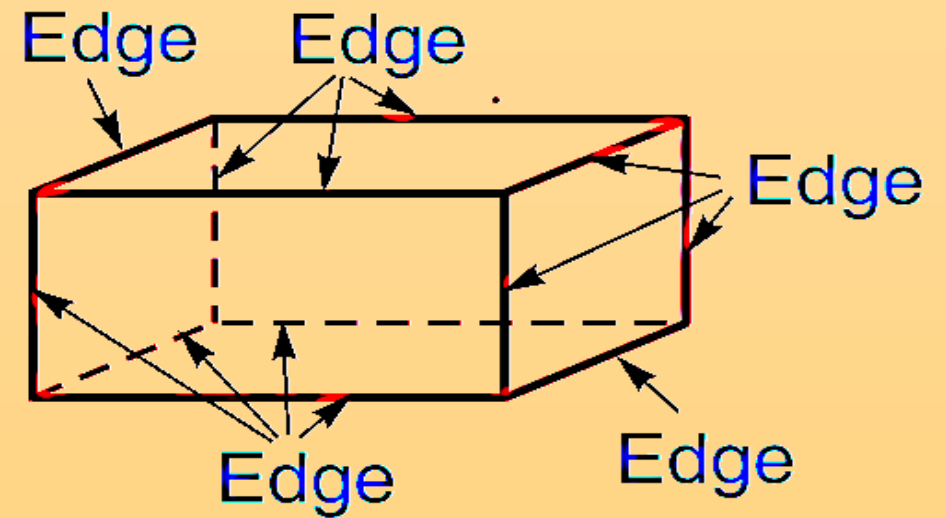




A cuboid has **6** faces, **12** edges and **8** vertices (or corners).



6 faces

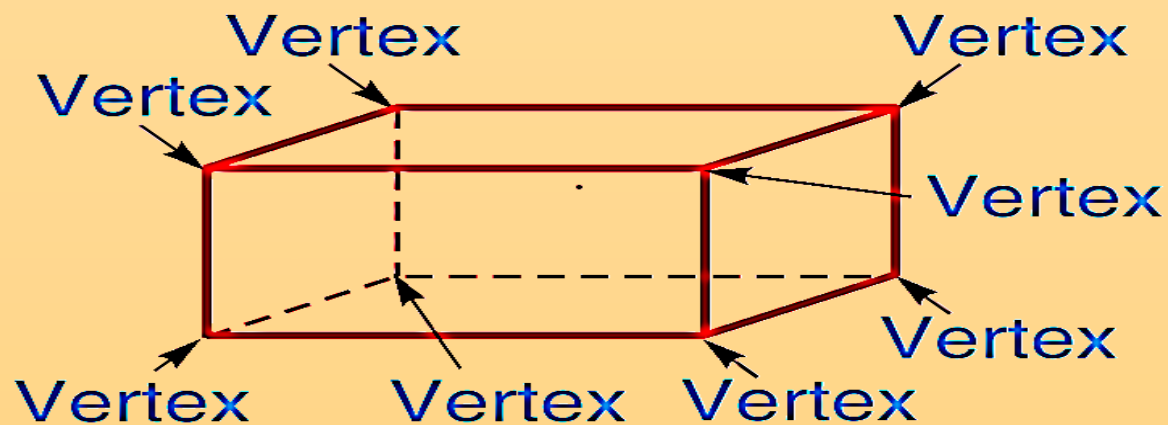


12 edges





A cuboid has **6** faces, **12** edges and **8** vertices (or corners).



8 vertices

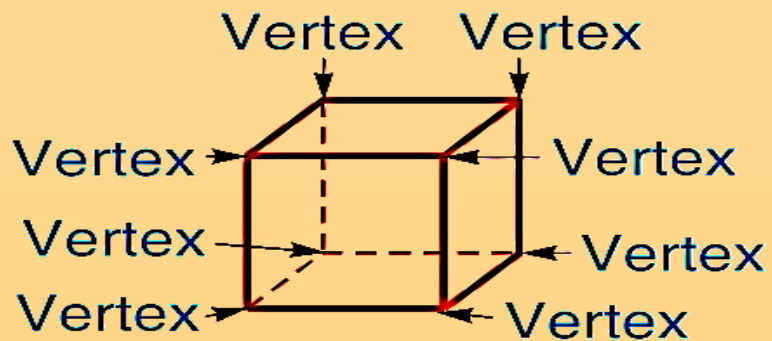
Each face of a cuboid is rectangular in shape.



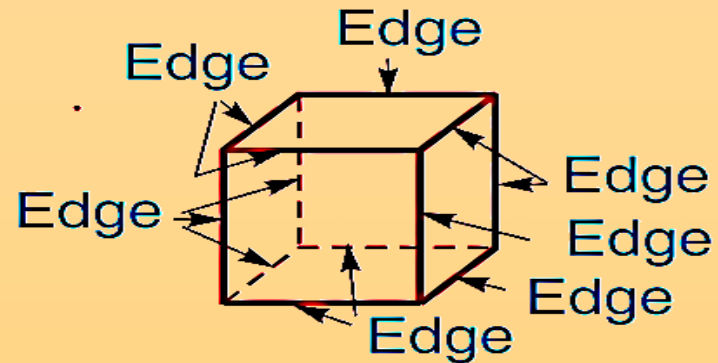


CUBE

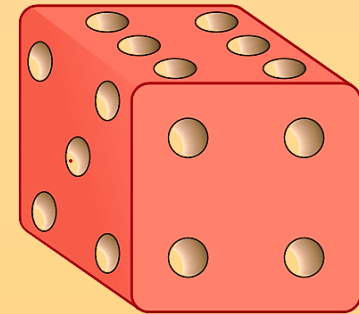
The figure given alongside shows a die, which is a **cube** .
A cube has **8** vertices (or corners), **12** edges and **6** faces.



8 vertices

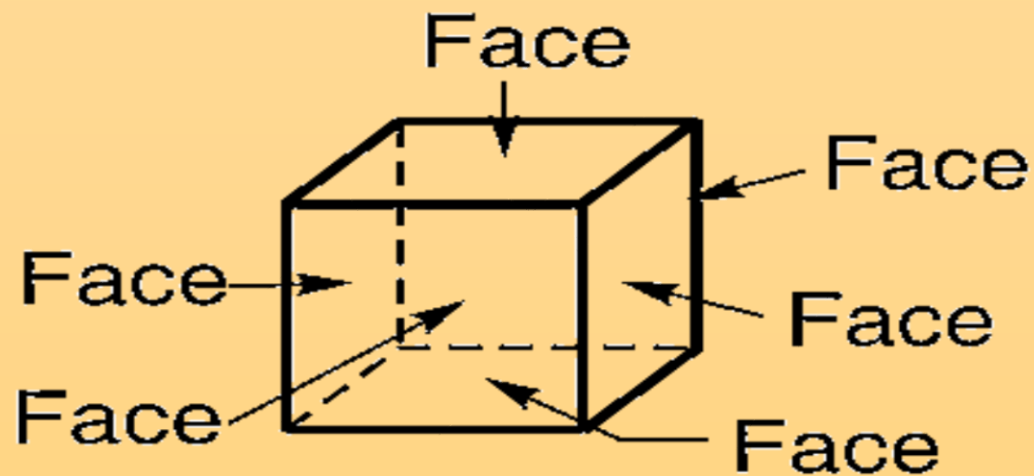


12 vertices





The figure given alongside shows a die, which is a **cube** .
A cube has **8** vertices (or corners), **12** edges and **6** faces.



6 vertices





SPHERE

Observe the shapes of these objects.

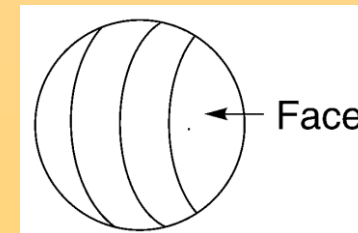


Each of these objects has the shape of a **sphere** .

So, these are called **spherical objects** .

A sphere has only one face.

It does not have any vertex or edge.





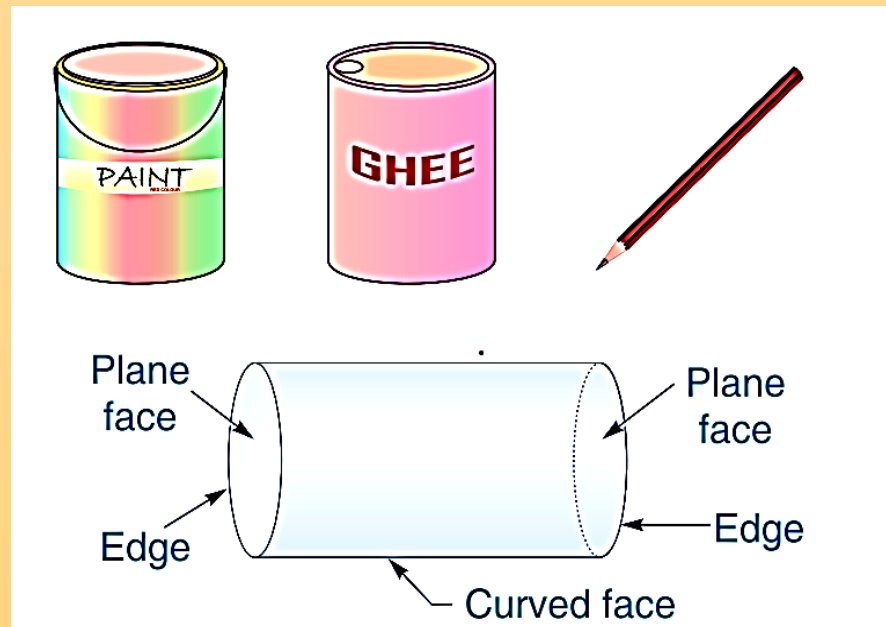
CYLINDER

Each of these objects given alongside has the shape of a cylinder .

So, they are called cylindrical objects.

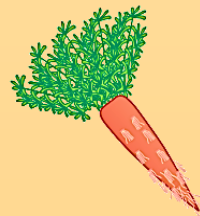
A cylinder has 3 faces. It has 2 edges.

It does not have any vertex.





CONE

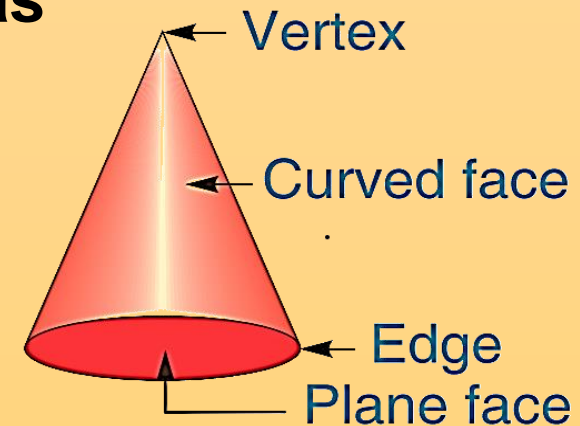


Each of these objects given above has the shape of a **cone** .

So, they are called **conical objects** .

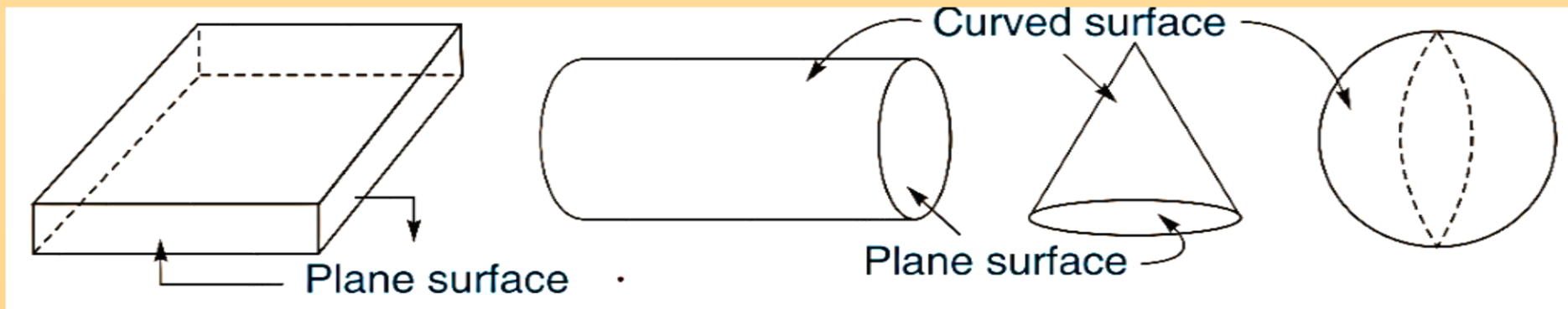
A cone has 2 faces.

It has 1 edge and 1 vertex (Apex).





Plane and Curved Surfaces



All the faces of a cuboid are plane surfaces.

A sphere has a curved surface.

A cylinder has two plain surfaces and one curved surface.

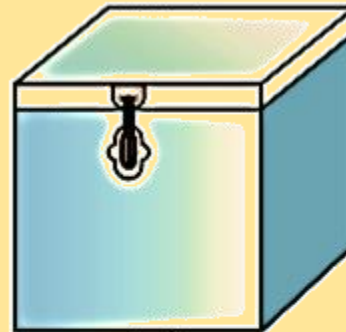
A cone has one plane surface and one curved surface.





Straight and Curved Lines

Look at the following objects :



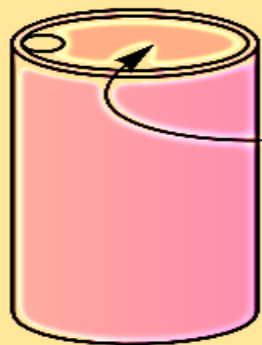
— Straight line (Edge) —



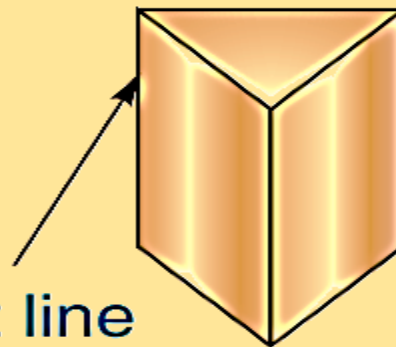


Straight and Curved Lines

Look at the following objects :



Curved line
(Edge)



Straight line
(Edge)





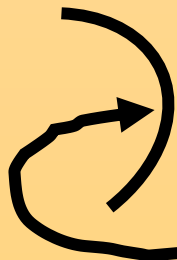
Now, if you move the pencil along their edges, you will get the following types of lines.



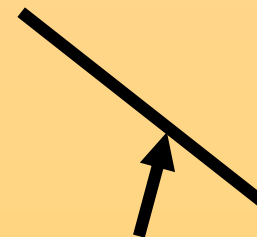
Straight line



Straight line



Curved line



Straight line





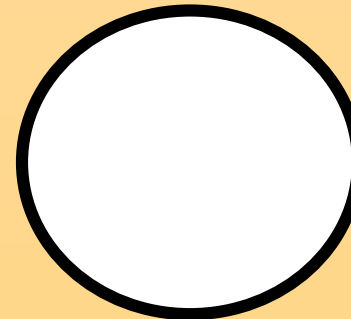
If you continue to move the pencil along the edges of bottom face of the objects, you will get the following figures.



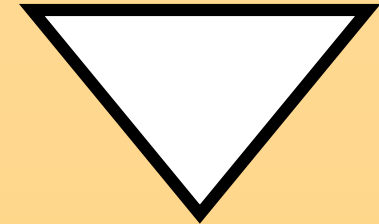
Rectangle



Square



Circle



Triangle

these are called plane figures.





Fill in the boxes :

1. How many faces a cuboid has ?
2. How many edges a cuboid has ?
3. How many corners a cuboid has ?
4. How many faces a cube has ?
5. How many edges a cube has ?
6. How many edges of a cube are equal ?
7. How many sides a rectangle has ?
8. How many sides a square has ?
9. How many sides a triangle has ?

6





COLOUR

Square 

Rectangle 

Triangle 

Circle 

