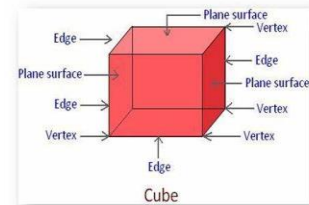# Three Dimensional Shapes

☞ Solid figures are three-dimensional objects. An object or shape that has measurements for length, width, and height is three-dimensional and therefore is a solid figure.

Cube:

A cube is a box made of six squares of the same size that all meet at ninety-degree angles. Since all squares are rectangles and a cube is made of six squares, all cubes are also rectangular prisms.
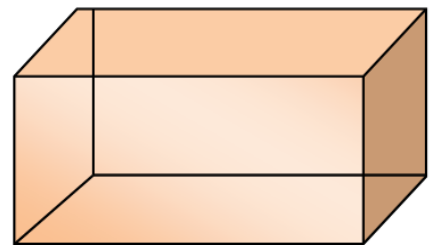

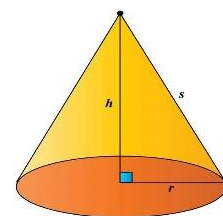**Examples of Cube:**

☞ Cuboid :

A cuboid is a three-dimensional geometric shape that has six faces, all of which are rectangles, and all its angles are right angles (90 degrees). It also has 12 edges and 8 vertices. The faces opposite to each other in a cuboid are always identical. It is also referred to as a rectangular prism or a rectangular solid.

☞ Cone:

A cone is a solid figure consisting of a round base and a curved side that points towards the top and converges in a single point called the apex. The round base can be a circle or an oval. If the apex is centered above the base, a right cone is formed. If the apex is off-center above the base, an oblique cone is formed.
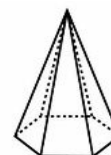

⇨ Examples of Cone:

☞ Pyramid:

A triangular pyramid consists of a triangle base with three additional triangular faces extending upwards and meeting at a single point called an apex. A triangular pyramid has four faces and is therefore classified as a tetrahedron. A rectangular pyramid consists of a rectangular base (often a square) with four triangular faces extending upwards from each edge of the base and meeting in an apex. A pyramid can also be formed with a hexagon, pentagon, or any regular polygon as the base.
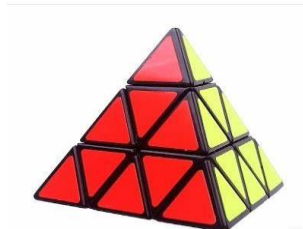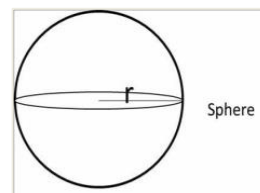

rectangular pyramid   hexagonal pyramid

⇨ Examples of Pyramid:

👉 Sphere:

A sphere is a ball that is perfectly round. This means that the centre point is the same distance from any and every point on the surface. Spheres are unique solid figures because they have only one surface, no faces, no edges, and no vertices.
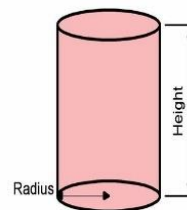
⇨ **Example of Sphere**

👉 Cylinder:

A cylinder is a tube shape with circle or oval bases on each end. A cylinder has only two faces: the ends. However, a cylinder has three surfaces since the curved side is a surface, but not a face. A cylinder has two edges and no vertices. The bases of a cylinder must be identical and parallel.
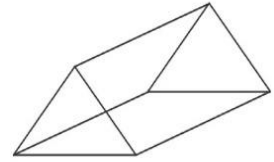
⇨ **Examples of Cylinder**

☞ Prism

Prism is a three-dimensional solid object in which the two ends are identical. It is the combination of the flat faces, identical bases and equal cross-sections. The faces of the prism are parallelograms or rectangles without the bases.

⇨ Examples of Prism