

KEY FACTS:

By the end of Key Stage I, children are expected to recognise, name and describe the properties of 3 Dimensional shapes (3D) including: a cube, a cuboid, a cylinder, a sphere, a square based pyramid, a triangular pyramid and prisms.

The main properties the children should be able to name are the faces, amount of edges (sides) and the number of vertices (corners).

- 3D shapes have faces (sides), edges and vertices (corners).
- The exception is the sphere which has no edges or vertices.
- Vertices are the points where two or more edges meet.
- The net of a 3D shape is what it looks like if it is opened out flat. A net can be folded up to make a 3D shape.
- There may be several possible nets for one 3D shape.

Name of Shape	Faces	Edges	Vertices	Shape Image
Cube	6 Square faces	12	8	
Cuboid	6 Rectangular faces	12	8	
Sphere	l Curved face	0	0	
Cylinder	l Curved face 2 Circular faces	2 curved edges	0	
Triangular—Based Pyramid (Tetrahedron)	4 Triangular faces	6	4	
Square-Based Pyramid	4 Triangular faces I Square face	8	5	



Prisms

Prisms are 3D shapes whose ends have the same 2D shape and whose other faces are rectangular.

Name of Shape	Faces	Edges	Vertices	Shape Image
Triangular Prism	2 Triangular faces 3 Rectangular faces	9	6	
Hexagonal Prism	2 Hexagonal faces 6 Rectangular faces	18	12	