Identifying 3-D shapes from 2-D shapes.

Properties of 3D shapes

3D shapes have faces (sides), edges and vertices (corners).

Faces

A face is a flat or curved surface on a 3D shape. For example; a cube has six faces, a cylinder has three and a sphere has just one.

Edges

An edge is where two faces meet. For example; a cube has 12 edges, a cylinder has two and a sphere has none.

Vertices

A vertex is a corner where edges meet. The plural is vertices. For example; a cube has eight vertices, a cone has one vertex and a sphere has none

Curved Edges

All these 3-D shapes have curved edges;

Cone, cylinder, hemisphere (half of a sphere) and sphere.

Straight Edges

A 3-D shape with straight edges is called a polyhedron. The following shapes are some of the polyhedron;

Cube, cuboid, square based pyramid and triangular based pyramid.

Prisms

A prism is a solid object with two identical ends. You can divide a prism along its length and it will look the same.

Distinguishing between regular and irregular polygons.

Regular polygons;

All sides are equal; all angles are equal.

Irregular polygons;

All sides and angles are NOT equal.