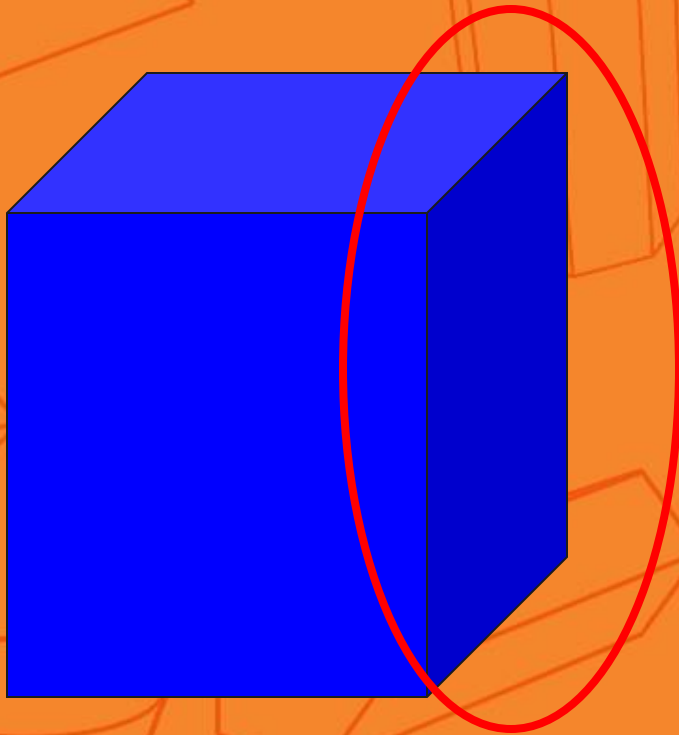


3D Shape Properties

**WALT: Recognise the properties
of 3D shapes**

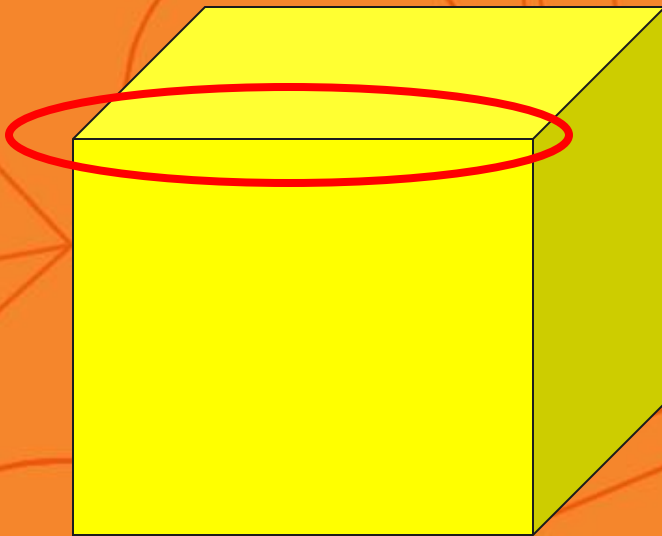


Face



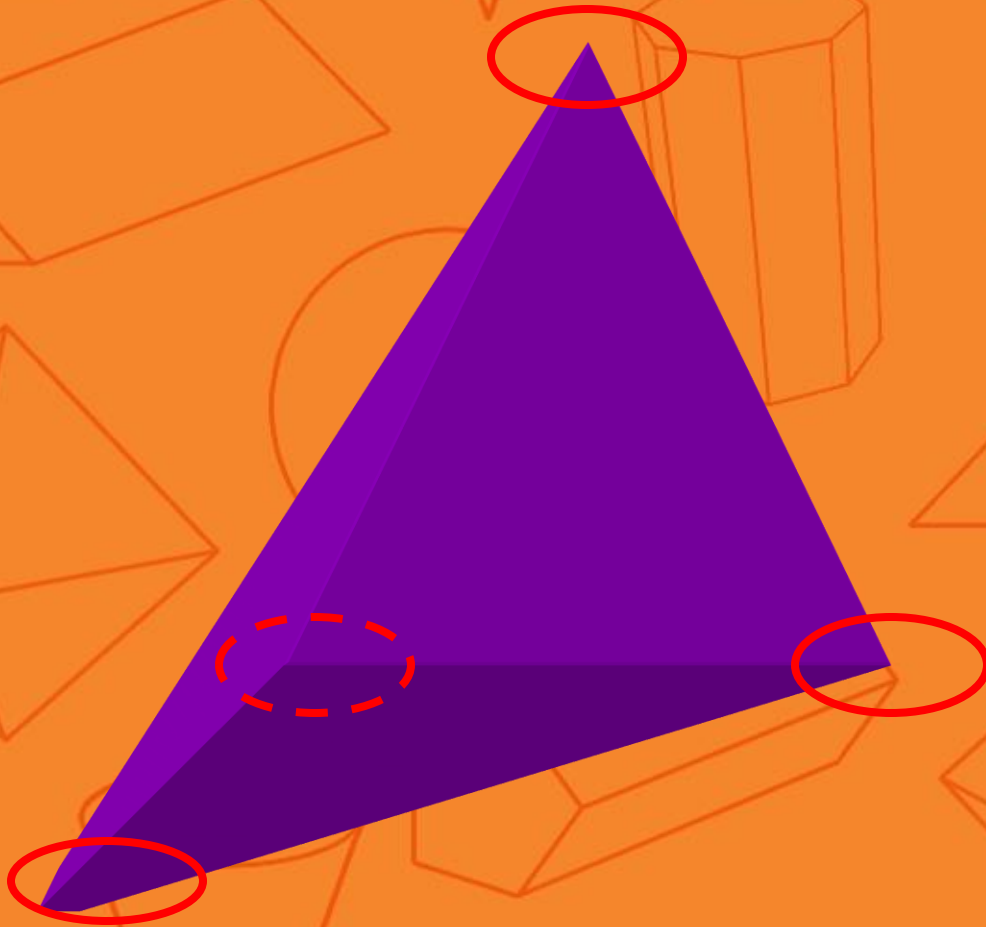
- Part of a shape that is flat. (Or curved)
- E.g. A cube has 6 of these.

Edge



- The line where two faces meet.
- E.g. A cube has 12 of these.

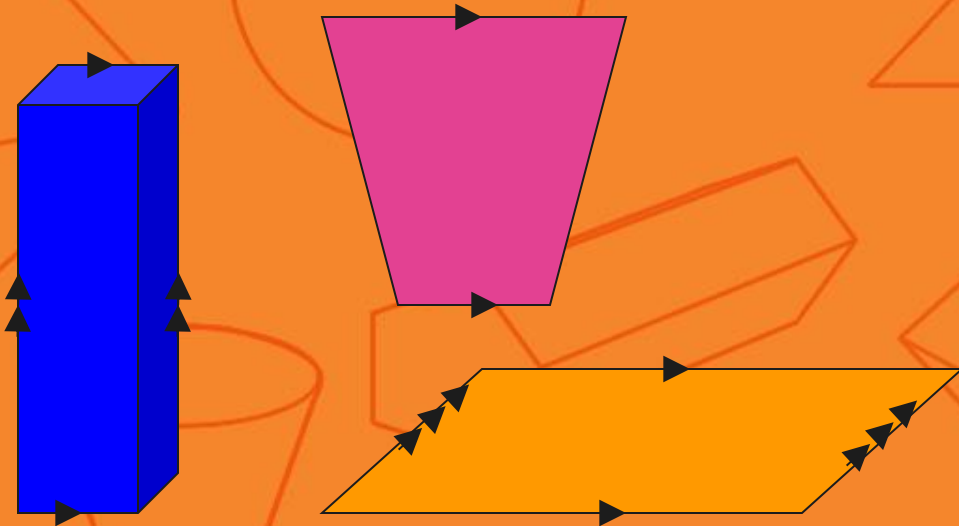
Vertex (Vertices)



- The place where three or more edges meet.
- This pyramid has 4 of these.

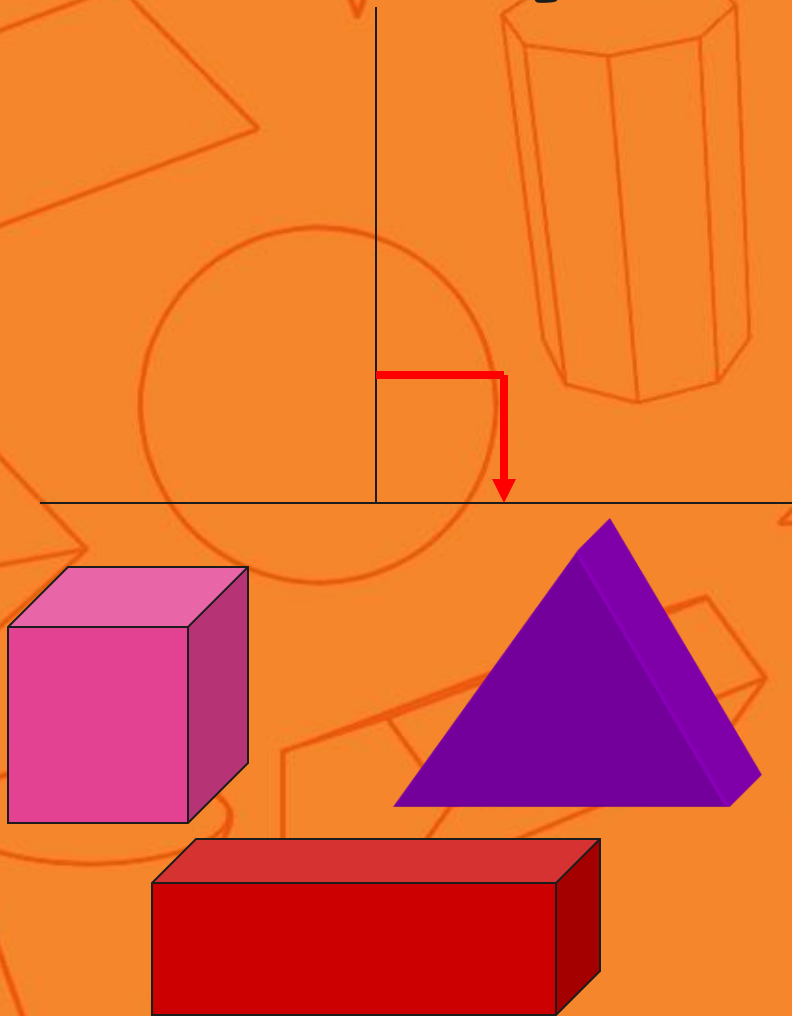
Parallel

- These type of lines stay the same distance apart for their whole length. They do not need to be straight or the same length.



Perpendicular

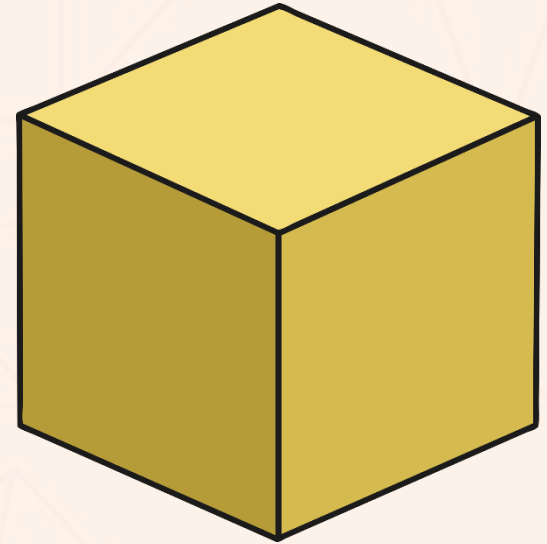
- A line that is drawn in a right angle to another line .
- In solid shapes edges could be at a right angle to one another.
- Faces could also be at right angles to one another.



Cube

Cubes have:

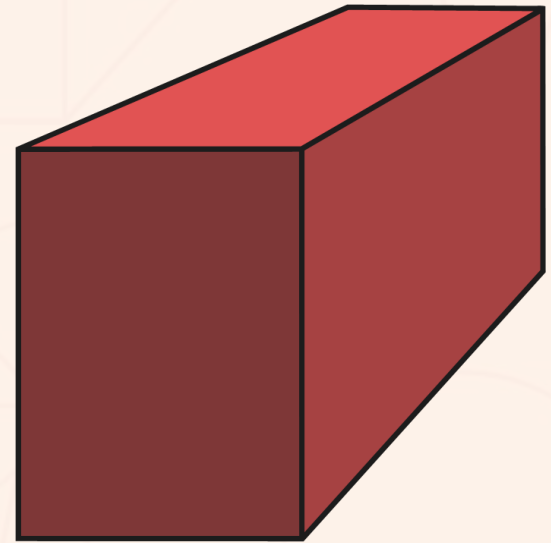
- 6 faces;
- 12 edges
- 8 vertices;
- edges that are all the same length.



Cuboid

Cuboids have:

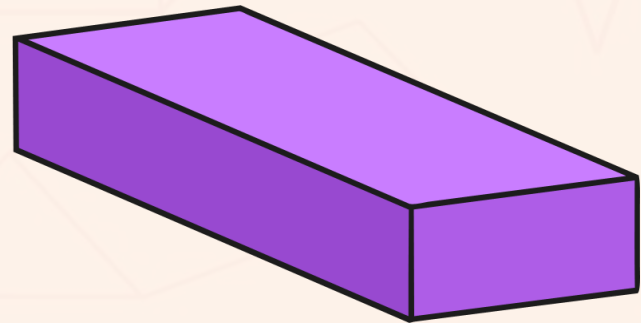
- 6 faces;
- 12 edges
- 8 vertices;
- edges that are **not** all the same length.



Rectangular Prism

Rectangular prisms have:

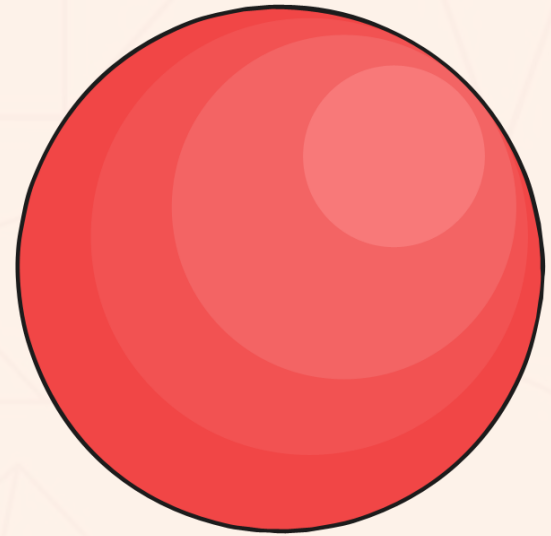
- 6 faces;
- 12 edges
- 8 vertices;
- edges that are **not** all the same length.



Sphere

Spheres:

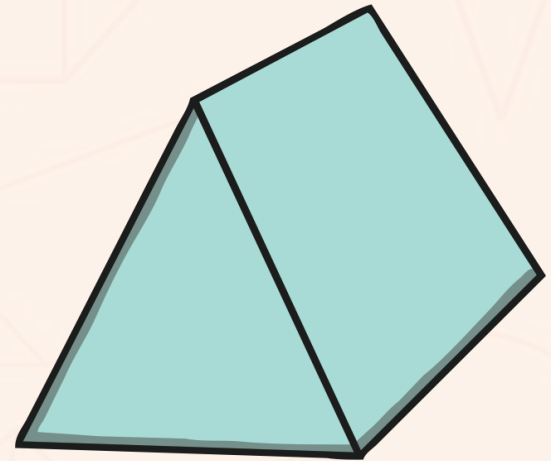
- are perfectly round;
- have no edges;
- have no vertices.
- 1 curved surface



Triangular Prism

Triangular prisms have:

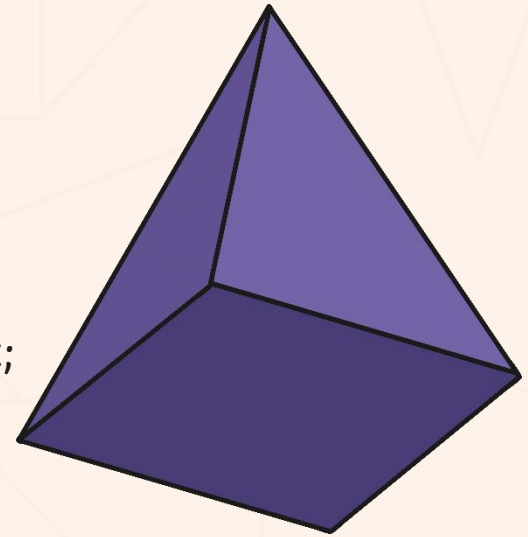
- 5 faces;
- 2 triangular faces;
- 3 rectangular faces;



Square-Based Pyramid

Square-based pyramids have:

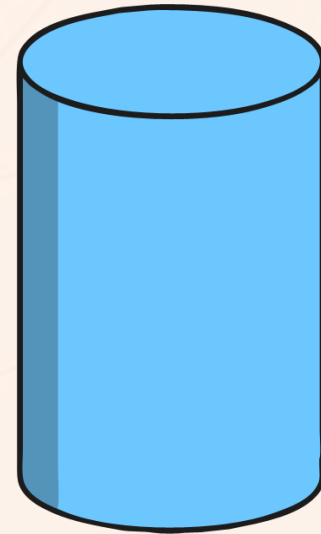
- a square base;
- 4 triangular faces that make a sharp point;
- 5 faces.



Cylinder

Cylinders have:

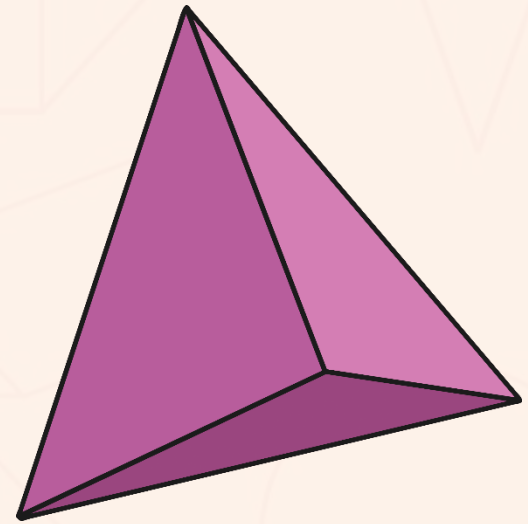
- 2 flat and circular faces;
- 1 curved surface;
- **no** vertices.



Tetrahedron

Tetrahedra have:

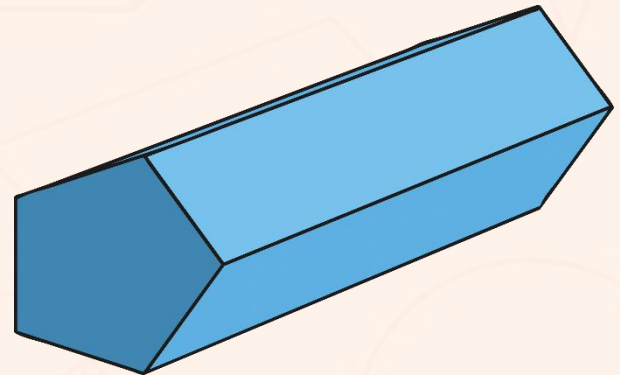
- 4 flat and triangular faces;
- 4 vertices;
- 6 edges.



Pentagonal Prism

Pentagonal prisms have:

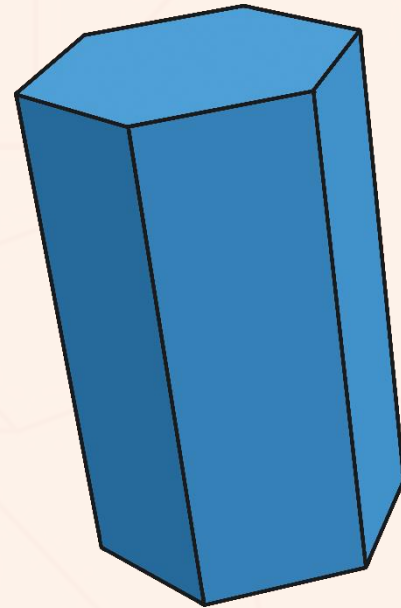
- 7 faces;
- 2 pentagonal faces;
- 5 rectangular faces;
- 15 edges;
- 10 vertices



Hexagonal Prism

Hexagonal prisms have:

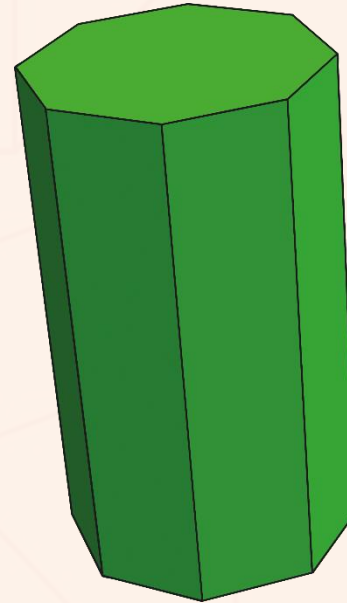
- 8 faces;
- 2 hexagonal faces;
- 6 rectangular faces;
- 18 edges;
- 12 vertices



Octagonal Prism

Octagonal prisms have:

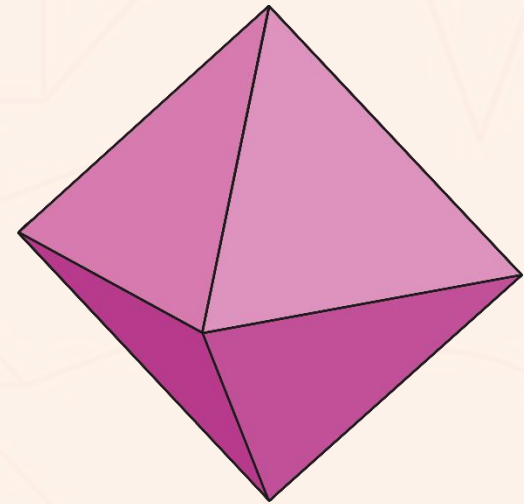
- 10 faces;
- 2 octagonal faces;
- 8 rectangular faces;
- 24 edges;
- 16 vertices



Octahedron

Octahedra have:

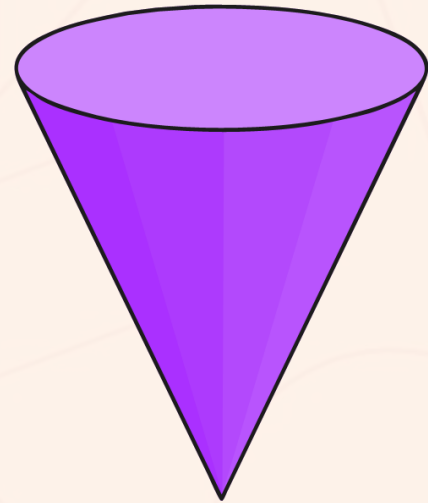
- 8 triangular faces;
- 12 edges;
- 6 vertices.



Cone

Cones have:

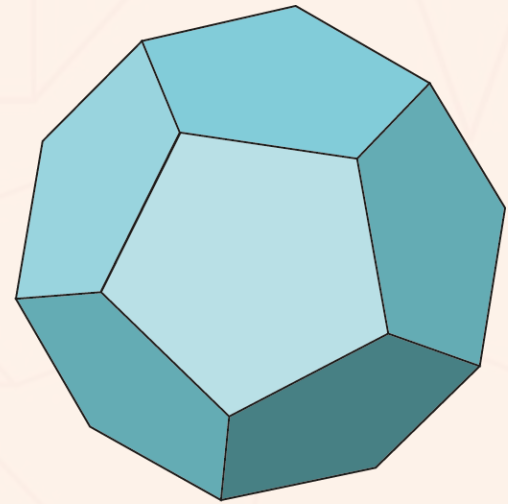
- 1 flat face which is a circle;
- 1 vertex;
- 1 edge;
- 1 curved surface.



Dodecahedron

Dodecahedra have:

- 12 faces;
- 30 edges;
- 20 vertices.



The background is a solid orange color with a repeating pattern of various 3D geometric shapes outlined in a lighter orange. These shapes include rectangular prisms, triangular prisms, cylinders, cones, spheres, and pyramids, scattered across the page.

twinkl