## 3D Shapes

Every 3-dimensional shape has three measurements to describe it: height, length and width.


# 3D Shapes 

## Faces

A face is one of the flat sides of a three-dimensional shape.


A cuboid has 6 flat faces.
This cuboid has 2 square faces and 4 rectangular faces.

## 3D Shapes

## Edges

An edge is the line where two faces touch.


A square-based pyramid has 8 edges.

## 3D Shapes

## Vertices

Vertices are the corners of $a$ 3D shape, where three or more edges meet.
A single corner is called a vertex.


A triangular prism has 6 vertices.


The two opposite faces are the same shape.


If you cut a prism anywhere along its length, the two opposite faces will remain the same shape and size as the original.

# 3D Shapes 

## Prisms



A prism always has the same shape at either end.

A prism will always have rectangular faces on the sides.


## 3D Shapes <br> Polyhedrons

Polyhedron is a 3D shape with flat faces and straight edges.


A regular polyhedron is a 3D shape with all the faces the same shape.

## 3D Shapes

## Tetrahedrons

## This is a tetrahedron.

## It is a regular polyhedron.



Its 4 faces are all equilateral triangles.

## 3D Shapes Octahedrons

## This is an octahedron.

## It is a regular polyhedron.



Its 8 faces are all equilateral triangles.

## 3D Shapes <br> Dodecahedrons

This is a dodecahedron. It is a regular polyhedron.


Its 12 faces are all
regular pentagons.

## 3D Shapes

## Icosahedrons

## This is an icosahedron.

 It is a regular polyhedron.

Its 20 faces are all
equilateral triangles.

## 3D Shapes

## Shape facts



What type of shape is this?
Which 2D shape is at its ends? How many vertices does it have? How many faces does it have?

# 3D Shapes <br> Shape facts <br>  

What type of polyhedron is this?
Which 2D shapes make up its faces? How many vertices does it have? How many faces does it have?

## 3D Shapes

## Shape facts



What type of polyhedron is this? Which 2D shapes make up its faces? How many vertices does it have? How many faces does it have?

## 3D Shapes <br> Shape facts <br> 

What is this shape's name?
Which 2D shape is at its end? How many vertices does it have? How many faces does it have?

## 3D Shapes

## Shape facts



What type of shape is this?
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## 3D Shapes

## Shape facts



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\begin{aligned}
& \text { 3D Shapes } \\
& \text { Shape facts }
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## 3D Shapes

Shape facts


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## 3D Shapes <br> Shape facts



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## 3D Shapes

## Shape facts



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