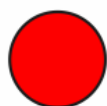


Names of Shapes

2D Shape Word Mat



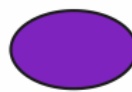
circle



rectangle



triangle



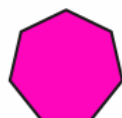
oval



octagon



square



heptagon



rhombus



pentagon



hexagon



kite

A quick
recap!

3D Shapes



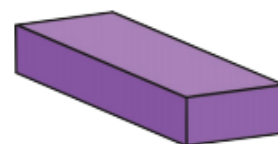
square-based pyramid



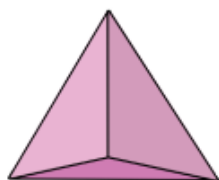
triangular prism



cone



cuboid



tetrahedron



cube



cylinder



sphere

Symmetry

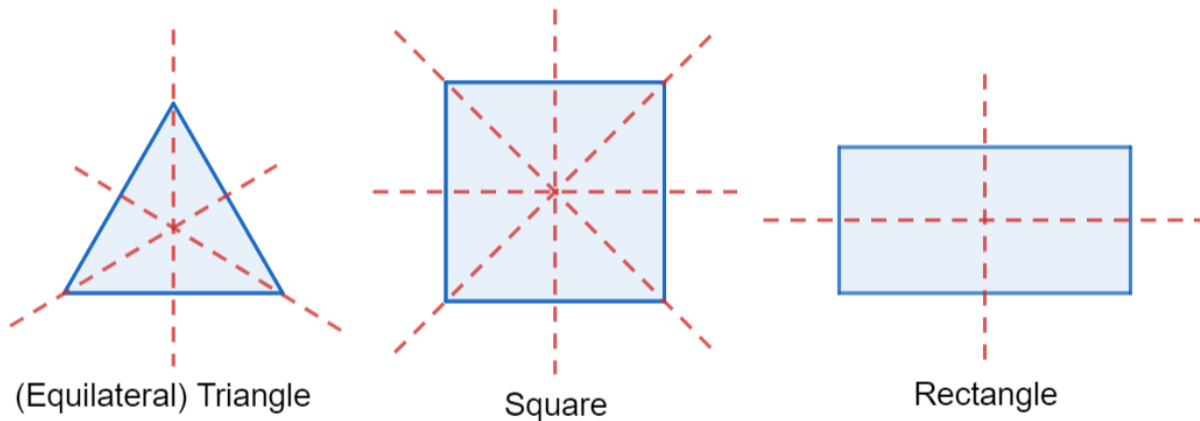
<https://www.bbc.co.uk/bitesize/topics/zrhp34j/articles/z8t72p3>

A 2D shape is symmetrical if a line can be drawn through it so that either side of the line looks exactly the same.

The line is called a line of symmetry.

This is sometimes called a 'mirror line' or 'mirror symmetry', because if you put a mirror on the line, the reflection would show the whole shape.

- An isosceles triangle has 1 line of symmetry.
- A square has 4 lines of symmetry.
- A circle has unlimited lines of symmetry!



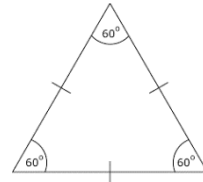
Types of Triangles

<https://www.bbc.co.uk/bitesize/topics/zwckjxs/articles/ztf9h39>

The sum of angles in a triangle is always 180 degrees.

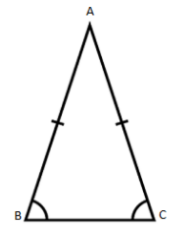
Equilateral

An equilateral triangle has **three equal sides and angles**. It will always have angles of 60° in each corner.



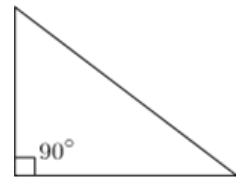
Isosceles

An isosceles triangle can be drawn in many different ways. It can be drawn to have **two equal sides and two equal angles** or with **two acute angles and one obtuse angle**. It is easy to work out the missing angles of an isosceles triangle by looking for the angles that should be equal.



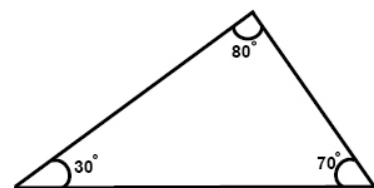
Right-angled triangle

A right-angled triangle has **one 90° angle**. The 90° angle is shown as a small square where two sides of the triangle join. It is possible for a triangle to be a right-angled triangle and an isosceles triangle at the same time. In this case the angles would be 90° , 45° and 45° .



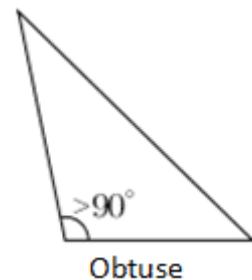
Scalene

A scalene triangle has **three different angles** and **none** of its sides are equal in length.



Obtuse

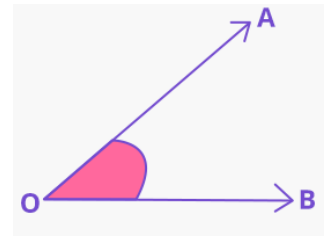
An obtuse triangle has **three different angles**, with one angle **greater than 90°** . **None** of its sides are equal in length.



Angles

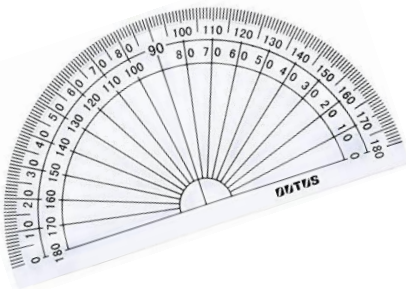
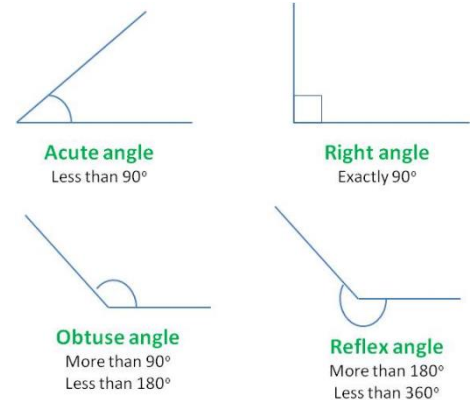
<https://www.bbc.co.uk/bitesize/topics/zb6tyrd/articles/zg68k7h>

- An angle is a way of describing the space between 2 lines that begin at the **same point**.
- An angle is measured in **degrees (°)** using a protractor.
- Angles can be measured anywhere from **0° to 360°**. It is possible to estimate angles.



An angle is how much one line is turned or rotated from another. The lines do not have to be the same length and it doesn't matter which way they are turned, but they must start at the same point. Angles are given different names according to how big they are:

- **less than $\frac{1}{4}$ turn is an acute angle**
- **between $\frac{1}{4}$ and $\frac{1}{2}$ turn is an obtuse angle**
- **more than $\frac{1}{2}$ turn is a reflex angle.**



Angles are measured in degrees using a **protractor**. There are some special angles that are useful to remember...

A $\frac{1}{4}$ turn or right angle = 90°

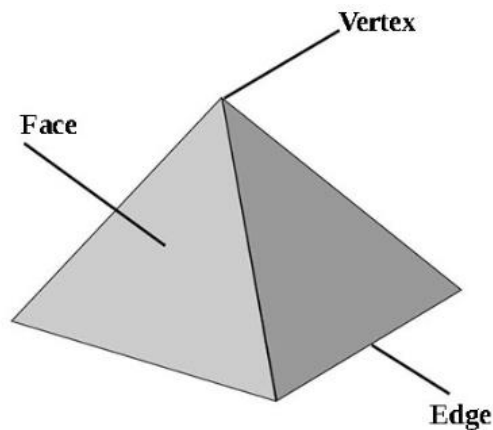
A $\frac{1}{2}$ turn or straight line = 180°

1 full turn = 360°

(There are 360° degrees in a circle.)

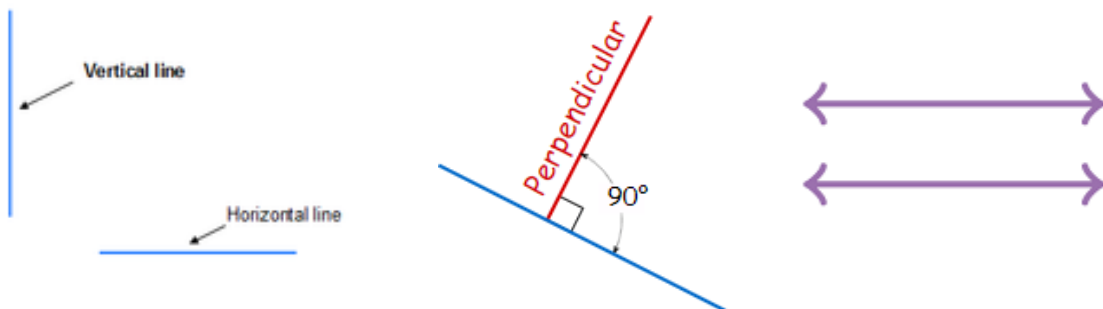
Key vocabulary

Edges	An edge is where two faces meet. For example a cube has 12 edges.
Vertex / 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.
Faces	A face is a flat or curved surface on a 3D shape. For example a cube has six faces.



<https://www.bbc.co.uk/bitesize/topics/zjv39j6/articles/zgqpk2p>

Vertical	Line that rises straight up
Horizontal	Lines that go across the page from left to right
Perpendicular	Lines that meet at a 90 degree angle
Parallel	Two lines side by side with the same distance between them



<https://www.bbc.co.uk/bitesize/topics/zb6tyrd/articles/zp327hv>