

Key maths facts and terms for Y6

Please make sure that your children know these!

Edges, Faces and Vertices

Shape

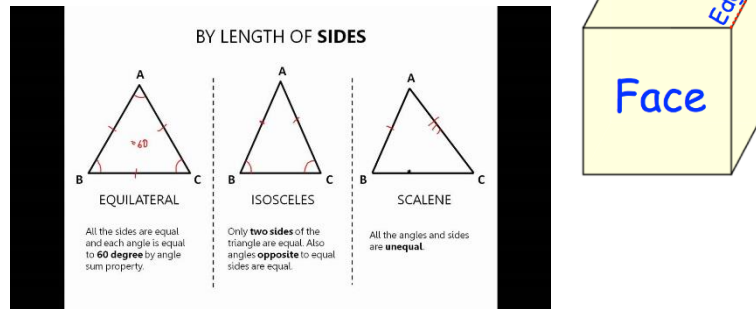
Polygon – a many sided shape

Pentagon – a shape with 5 sides

Hexagon – a shape with 6 sides

Heptagon – a shape with 7 sides

Octagon – a shape with 8 sides



Perimeter – the distance around the outside of a shape

Area – the amount of 'floor' space taken up by a 2d shape – eg the amount of carpet for a bedroom

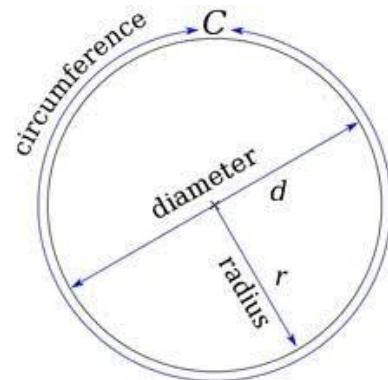
Volume – the amount of space taken up by a 3d shape – eg the amount of water in a swimming pool

Circumference – the perimeter of a circle

Radius – the distance from the centre of a circle to the circumference

Diameter – the distance from one side of a circle to the other

So – $2 \times \text{radius} = \text{diameter}$



Finding area

Triangle – $\text{base} \times \text{height} \div 2$

Parallelogram - $\text{base} \times \text{height}$

Square / rectangle – $\text{length} \times \text{width}$

Challenge

Area of a circle – πr^2

Circumference of a circle - πd

Number

Prime number – a number that only has two factors – itself and 1 eg 13

Square number – the answer when you multiply a number by itself eg $16 = 4 \times 4$

$$4^2 = 4 \times 4$$

$$4^3 = 4 \times 4 \times 4 \quad \text{etc}$$

Statistics

A line graph is used to show changing data. A bar graph is used to show data that does not change.

Mode – the number that appears most frequently (there may be more than one, or even no mode). The mode does not have to be a number eg it could be a colour.

Mean – Add up all of the numbers and then divide by the amount of numbers there are.

Median – Put the numbers in order from smallest to largest, then find the number in the middle. If there is an even amount of numbers, take the two numbers in the middle, add them together and divide by 2.

Range – Take the smallest number away from the largest number to find the difference.

Lines and Angles

Parallel lines are an equal distance apart and never get closer together or further apart – think train tracks.

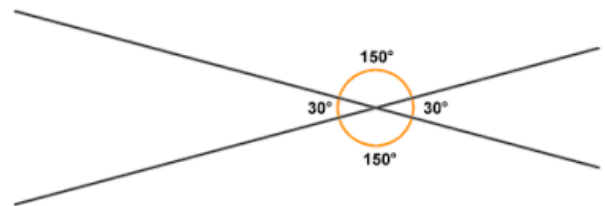
Perpendicular lines meet at a right angle – think about two sides of a square.

The internal angles of a triangle add up to 180° .

When two straight lines cross, the opposite angles are equal.

Angles around a point are 360° - eg a full circle or a full turn.

Right angles are 90° .



Measurements

10 mm = 1 cm

100cm = 1m

1000m = 1km

1000g = 1kg

1000ml = 1 litre

Challenge facts

To convert from km to miles
divide by 8 then multiply by 5,

So 40 km = 25 miles

There are 2.5 cm in an inch