

Robin Hood Primary School



Number

Array

Items arranged in rows and columns



Brackets

Symbols () used to group numbers or letters, in algebra, to show that these operations need doing first

Factors/Common factors

Factors are numbers we can multiply together to get another number.

When you find the factors of 2 or more numbers, and find that some are the same (common) these are common factors

Multiples/common multiples

The result of multiplying 2 whole numbers (your times tables)

When you find multiples of 2 or more numbers, and find the ones that are the same (common) these are common multiples

Consecutive numbers

Numbers which follow each other in order. E.g. 21, 22, 23, 24

Cubed number

The result of multiplying the same number 3 times. This is written as 3^3 . $2 \times 2 \times 2 = 8$

Digit

The symbol used to show a single number. The position of the digit in a number shows its value

Double

To multiply by 2.

A number that is twice the size of another

Division

Division is splitting into equal parts or groups

Efficient methods

A quick and easy way to get the correct answer.

Equal

Shown by the symbol = 'is equal to' or 'equals' means having the same value as. This can be used in the middle of a calculation to show both

sides are equal in value.e.g. $12 = 3 \times 4$, $3 + 5 = 2 \times 4$

Estimate

To find an answer close enough to the correct answer

Even number

A whole number that is divisible by 2.

A number in the 2 times tables.

A number that ends with the digits 0, 2, 4, 6 or 8

Exchange

To swap a number for another of equal value.

Integer

Any positive or negative whole number

Inverse

The opposite calculation.e.g. $2 + 3 = 5$, the inverse would be $5 - 3 = 2$

Minus

A name for the symbol $-$. Take away, subtract, decrease by

Negative number

A number less than zero. On a number line they are the numbers to the left of the zero (-1 , -2). Said as minus or negative one, two etc

Number bond

A pair or group of numbers with a particular total. A number bond to 10 = $4 + 6$.

Odd numbers

Numbers that have a remainder of 1 when divided by 2.

A number that ends with the digits 1, 3, 5, 7 or 9

Partition

To split a number into different parts e.g. 38 can be partitioned into $30 + 8$ or $19 + 19$

Prime number

A whole number greater than 1 that has 2 factors, itself and 1. E.g 2, 3, 5

Prime factor

Factors of a number that are prime.
E.g. 2 and 3 are prime factors of 12
($12 = 2 \times 2 \times 3$)

Product

The result of multiplying numbers.
E.g. 10 is the **product** of multiplying
2 and 5

Remainder

The amount left over after division.
This is shown using a small r E.g.
 $17 \div 3 = 5 \text{ r}2$

Square numbers

A square number is the number you
get when you multiply a number by
itself. It can be shown using the ²
symbol. E.g $5^2 = 25$

Sum

The total of 2 or more numbers

Algebra

Algebra uses letters or symbols to
replace numbers

Mean

The mean is the total of all the
values in a set of data, divided by
the number of values.

Fractions, decimals and percentages

Percentage

A **percentage** is a number or ratio
expressed as a fraction of 100. When

we talk about percentages, we imagine that 'a whole' has been divided into 100 equal parts. We use the % symbol to show percentages

Decimal

A **decimal** is a number expressed in the scale of tens. Commonly speaking we talk about decimals when numbers include a decimal point to represent a whole number plus a fraction of a whole number (tenths, hundredths, etc.). The decimal point is placed at the right of the ones column. Each column after the decimal point is a decimal place.

Numerator

The numerator is the top number of a fraction

Denominator

The denominator is the bottom number in a fraction showing how many parts there are in total.

Mixed number fraction

A mixed number fraction is made up of a whole number and a fraction

Improper fraction

An improper fraction has a numerator that is greater than the denominator

Equivalent fractions

When two fractions are **equivalent**, this means they are the same in terms of shape and size, but are shown using different numbers

Simplifying a fraction

Simplifying a fraction means finding an equivalent fraction where the numbers are reduced as much as possible.

Measures

Area

The measure of the amount of space inside a shape measured in square units (cm^2 or m^2)



Capacity

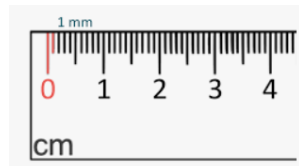
The total amount of a material (liquid/air) held in a vessel or container

Centi-

Prefix meaning one hundredth of

Centimetre

A measure of length. It is shown as cm



Convert

Changing from one quantity of measure to another

Cubic centimetre

A unit of volume that is made by a cube that is 1cm on each side.

Shown using cm^3

Gram

A metric measure of mass. Shown using g.

Hour

A unit of time equivalent to one twenty-fourth of a day.

Imperial unit

A unit of measurement used in the past in our country. e.g. pounds, ounces, miles

Kilo-

Prefix meaning thousand

Kilogram

A metric measure of mass. Shown using kg.

Kilometre

A metric measure of length. Shown using km.

Length

The distance from end to end of an object or from one point to another.

Litre

A metric unit of volume or capacity.
Shown using l

Mass

A measure of how much matter is in
an object

Measure

The size or amount of something.
Verb- find the size of something

Metre

A metric unit of measure of length.
Shown using m.

Milli-

Prefix meaning one thousandth

Millilitre

A metric unit of volume. Shown
using ml

Millimetre

A metric unit of length. Shown using
mm

Minute

A unit of time equal to 60 seconds

Square centimetre

A unit of area that is equivalent to a
square that is 1cm on each side.
Shown using cm²

Square metre

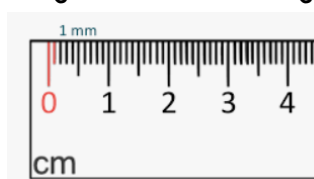
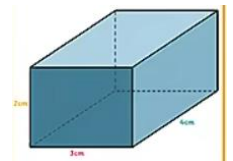
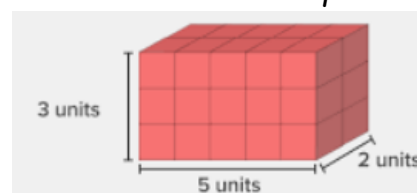
A unit of area that is equivalent to a
square that is 1 metre on each side.
Shown using m²

Square millimetre

A unit of area that is equivalent to a
square that is 1 millimetre on each
side, Shown using mm²

Volume

The amount of 3D space something
takes up.



Shape

2D & 3D shapes

Short for 2 dimensional and 3 dimensional

A shape is 2D if it is flat

A solid is a 3D shape as it takes up space



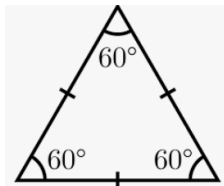
heptagon

2D shape

3D shape

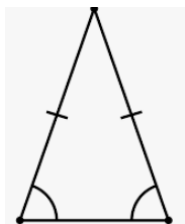
Equilateral triangle

A triangle with equal sides and angles. All angles will be 60°



Isosceles triangle

A triangle where 2 sides, and therefore 2 angles are the same



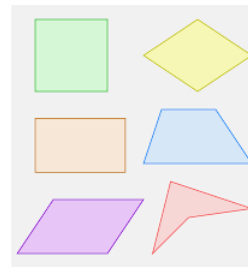
Scalene triangle

A triangle where all 3 sides, and therefore all angles are different.



Quadrilateral

A polygon with 4 sides



Square

A quadrilateral with 4 equal sides and 4 angles of 90° degrees.

Rectangle

A quadrilateral where opposite lines are equal. Interior angles are 90° degrees

Kite

A quadrilateral with 2 pairs of equal sides.



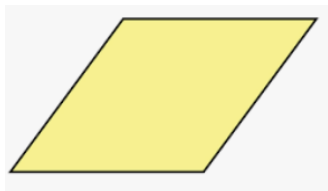
Parallelogram

A parallelogram is a quadrilateral where opposite sides are parallel and equal in length



Rhombus

A parallelogram with all 4 sides equal



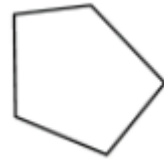
Trapezium

A quadrilateral with one pair of parallel sides



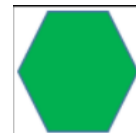
Pentagon

A polygon with 5 sides and 5 angles.



Hexagon

A polygon with 6 sides and 6 angles. A way to remember is hexagon has an x in it and so does the word six



Heptagon

A polygon with 7 sides and seven angles



Octagon

A polygon with 8 sides and 8 angles. If something is octagonal, it has the shape of an octagon



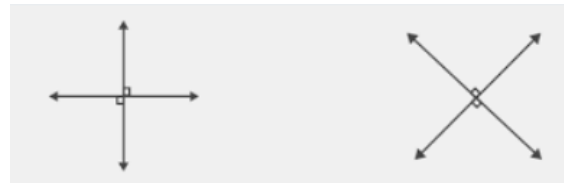
Perimeter

The distance around the outside of a 2D shape



Perpendicular lines

Perpendicular lines cross or meet at a right angle (90 degrees)



Composite/compound shape

A shape formed by combining 2 or more shapes

Polygon

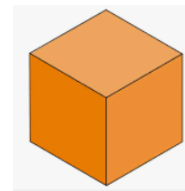
A closed shape that is made of straight lines. If the sides, and angles, are the same they are called regular polygons. If the sides are not all the same the angles will be different and these are called irregular polygons

Parallel lines

Parallel lines are a pair of lines that can be curved or straight lines that stay the same distance apart. They will never meet no matter how far they are extended.

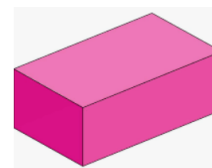
Cube

A 3D shape with 6 identical square faces.



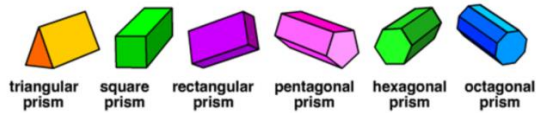
Cuboid

A 3D shape with 4 rectangular faces and 2 square faces.



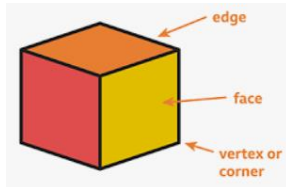
Prism

A prism is a 3D shape with flat sides and 2 identical shaped ends



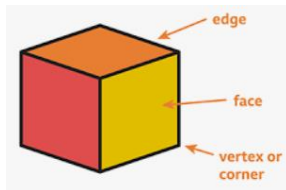
Edge

A line joining 2 vertices



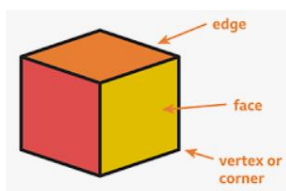
Face

One of the flat surfaces of a 3D shape. The faces of a 3D shape are made up of 2D shapes.



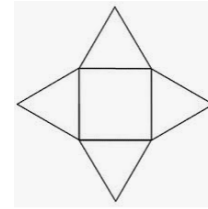
Vertex/vertices

The point at which 2 or more lines meet at a point.

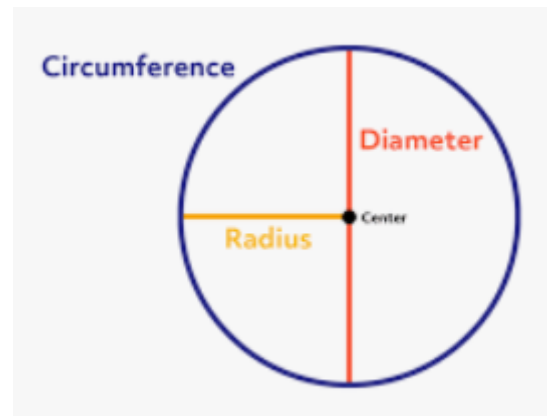


Net

A net is what a 3D shape would look like if it was opened out



Circles



Circumference

The distance around a circle (the perimeter)

Diameter

Any line that passes through the centre of a circle or sphere.

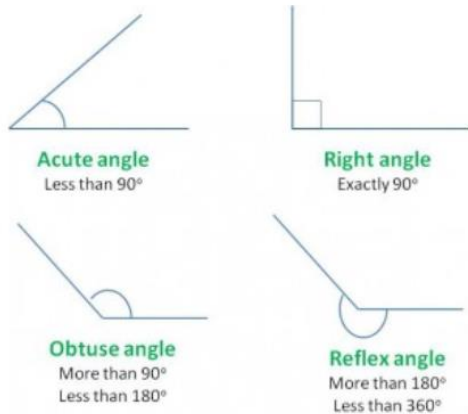
Radius

The distance from the centre to any point on the outside of a circle

Angles/rotations

An angle

An angle is a measure of turn between 2 lines measured in degrees ($^{\circ}$)



Acute angle

An angle measuring less than 90 degrees.

Right angle

An angle measuring exactly 90°

Obtuse angle

An angle greater than 90° but less than 180°

Reflex angle

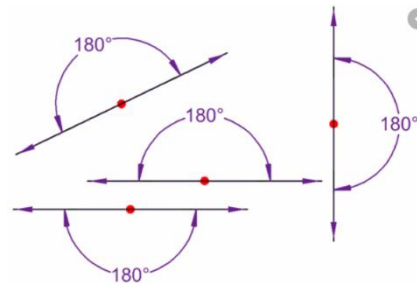
An angle that is greater than 180°

Angles around a point/in a full rotation/in a circle

A full rotation/turn (around a point) totals 360°

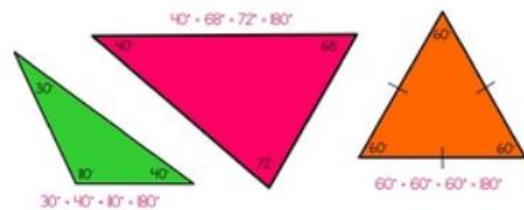
Angles on a straight line

The sum of the angles on a straight line is 180°



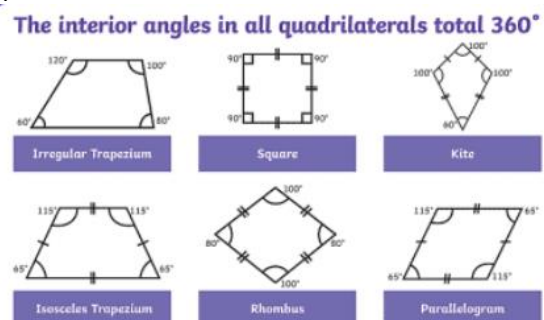
Angles in a triangle

The sum of the interior angles in any triangle is 180°



Angles in a quadrilateral

The sum of the interior angles in any quadrilateral is 360°



Vertically opposite angles

The angles opposite each other when
2 straight lines cross, which are the
same size

Opposite Angles



Are Equal

RULES FOR ROUNDING

CHANGING FRACTIONS

ADDING SUBTRACTING FRACTIONS