< and >

These symbols are referred to as the 'greater than' (>) and 'less than' (<) symbols. These symbols are used to show whether a number is bigger or smaller than another number

Example: 56 > 34   or   34 < 56
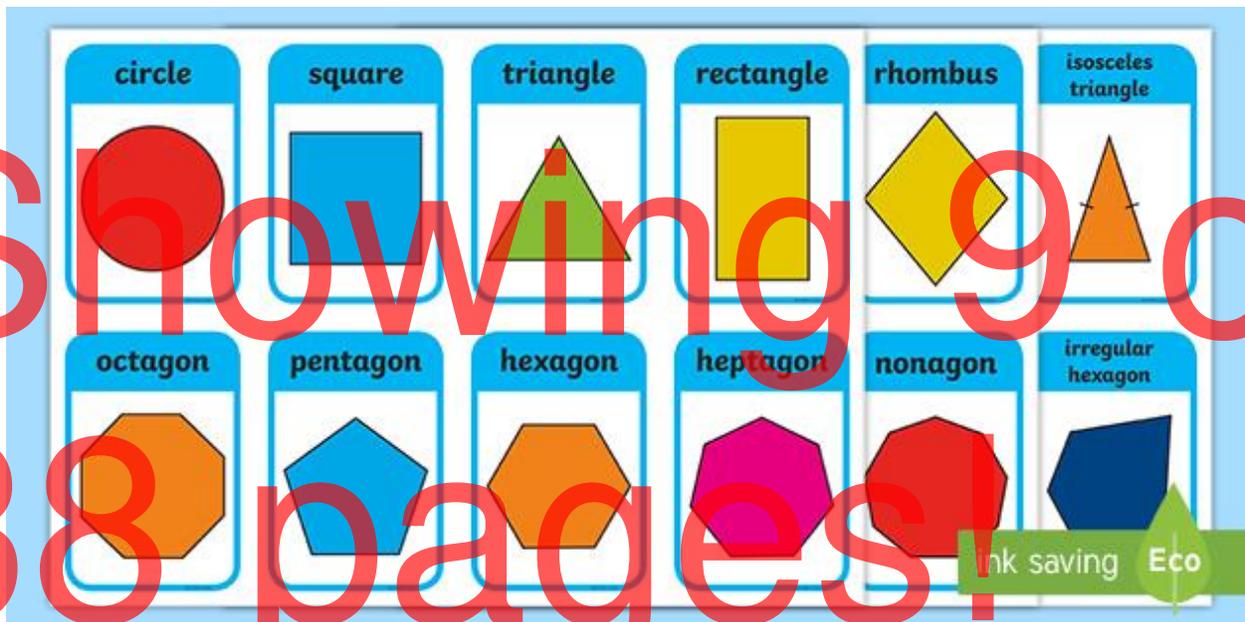
12-hour and 24-hour clock

The 12-hour clock runs from 1am to 12 noon and then from 1pm to 12 midnight. The 24-hour clock uses the numbers 00:00 to 23:59 (midnight is 00:00).

2D shapes

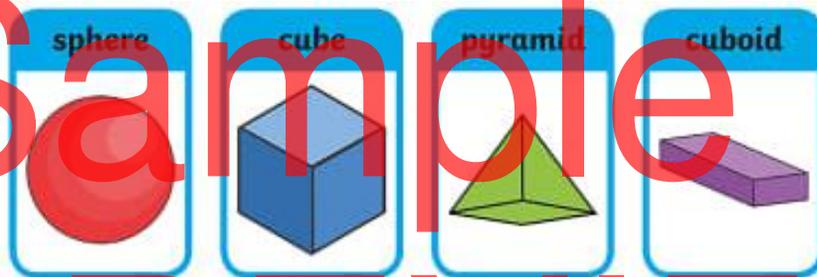2D shapes are two-dimensional, or 'flat'.

Examples of 2D shapes are ....

3D shapes
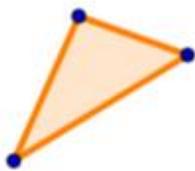
3D shapes are three-dimensional and have a volume.

Examples of 3D shapes are ...

Acute angle

An acute angle is one that measures less than 90°.

Acute triangle
has three angles < 90°

Analog and digital clocks / time

An analog clock is a circular-faced clock with the numbers one to twelve around the outside and two hands, a shorter one to measure hours and a longer one to measure minutes. A digital clock is a clock which simply shows numbers to denote the time.
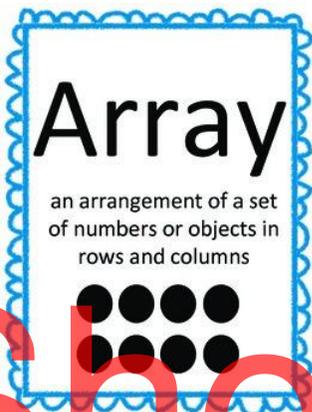
Analog

Digital

Area

Area is the term used to define the amount of space taken up by a 2D shape or surface. We measure area in square units: cm² or m².
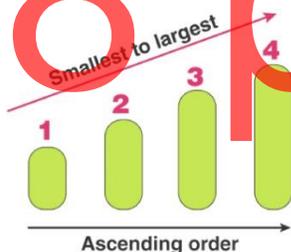
Array

An arrangement of objects, pictures, or numbers in columns and rows is called an array. Arrays are useful representations of multiplication concepts.

Ascending order

When a group of numbers are given in ascending order, this means they are given in order from *smallest* **to largest** (ascending means 'going up'). The opposite is descending order.

Associative property

The associative property states that when we add or multiply numbers it doesn't matter how we group them.
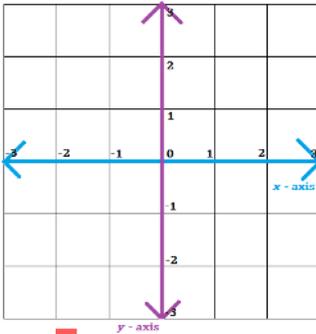
We express this as $(a + b) + c = a + (b + c)$ and $(a \times b) \times c = a \times (b \times c)$

Average

In math, the average value in a set of numbers is the middle value, calculated by dividing the total of all the values by the number of values.
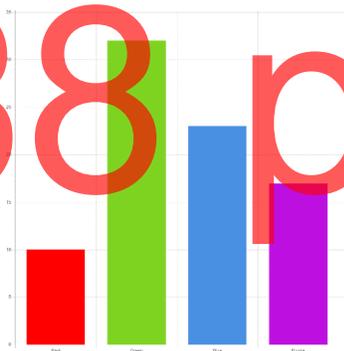
Axis

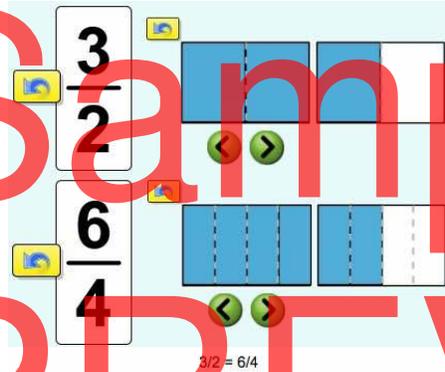Axes are the horizontal and vertical lines used to frame a graph or chart.

Bar chart

A bar chart is a chart that displays information (data) by using rectangular bars of different heights, arranged on a vertical axis and a horizontal axis.
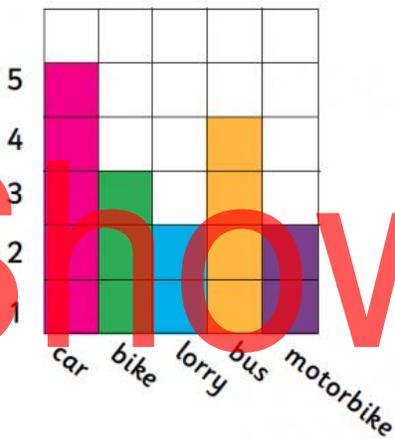
Bar model

A pictorial representation of a problem or concept where bars or boxes are used to represent the known and unknown quantities.

Block graph

A block graph (or block diagram) is a simple chart which shows numbers on the vertical axis and labels on the horizontal axis. Each unit is represented by one block.

BODMAS

BODMAS is an acronym used to help pupils remember the correct order to complete mathematical calculations in: Brackets, Orders, Division, Multiplication, Addition, Subtraction.

The "bridging through ten" method is a mental math technique used to add numbers when the answer is larger than 10.

Example: When given a sum such as 9 + 7, pupils can use the bridging through ten method as follows:

9 + 1 = 10 which leaves 6 remaining
10 + 6 is the equivalent of 9 + 7
Therefore 9 + 7 = 16

This method relies on pupils knowing their number bonds to 10.

Bus stop method

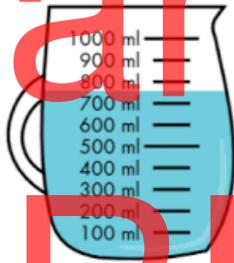The 'bus stop' method (also known as *short-hand division* or *short division*) is a division technique.

- How many 8s are there in 3? Zero, so above the 3, we write a zero.
- As the 3 hasn't been used, we move it over to the 6.
- Now we see how many times 8 goes into 36 - 4 times, so we write this above the 6.
- 8 into 36 leaves a remainder of 4, so now we move this remainder over to the next number, which in this case is zero.
- Finally, we see how many times 8 goes into 40. This gives us 5, which we again write above the zero
- If your problem leaves a remainder at this stage, simply leave it as a remainder in the answer.

Capacity

Capacity (usually means volume) is the total amount of fluid that can be contained in a container. It is the word we use when we are measuring liquids such as milliliters (ml), Liters (l), cups, pints, quarts, gallons.

Cardinal numbers

Cardinal numbers allow us to count a set of objects and tell us about quantity (one, two, three, four, etc.). Cardinal numbers do not have fractions or decimals.

Carroll diagram

A Carroll diagram is used to organize data and group it according to whether it fits a certain criteria. The information is presented in rows and columns.

Chunking

Chunking is a method used for dividing large numbers. It involves using rough estimates of how many times a number will go into another number and then adjusting until the right answer is found (repeated subtraction of the divisor and multiples of the divisor – in other words, working out how many groups of a number fit into another number).

Circle

A circle is a 2D curved shape, every point of which is the same distance from a fixed point in the center.

Circumference

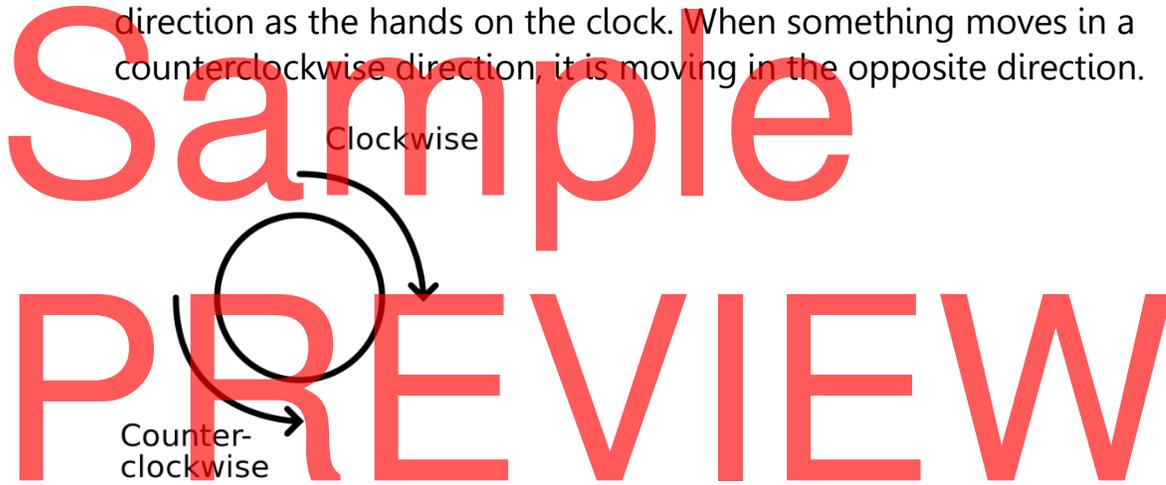The circumference is the measurement all the way around the outside edge of a circle.

Clockwise and counterclockwise

When something moves in a clockwise direction, it is moving in the same direction as the hands on the clock. When something moves in a counterclockwise direction, it is moving in the opposite direction.

Clockwise

Counter-clockwise

Coordinates

Coordinates are numbers which determine the position of a point or a shape in a particular space (a map or a graph). Points are marked by how far along they are on the x axis (the horizontal axis) and how far up they are on the y axis (the vertical axis).