Definition of a circle
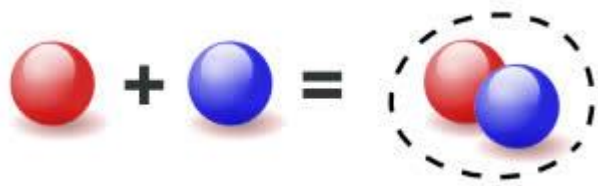
A 2-dimensional shape made by drawing a curve that is always the same distance from a center.

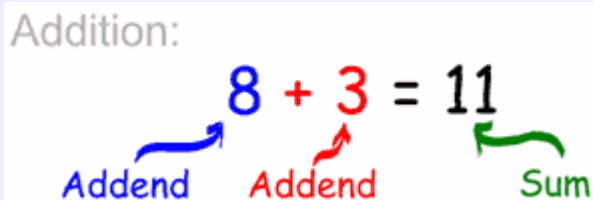http://www.mathsisfun.com/definitions/circle.html .

Add

To bring two or more numbers (or things) together to make a new total.

Here 1 ball is added to 1 ball to make 2 balls.

If you add 2 and 3 you get 5.

Addition

Addition is finding the total, or sum, by combining two or more numbers.

Average

A calculated "central" value of a set of numbers.

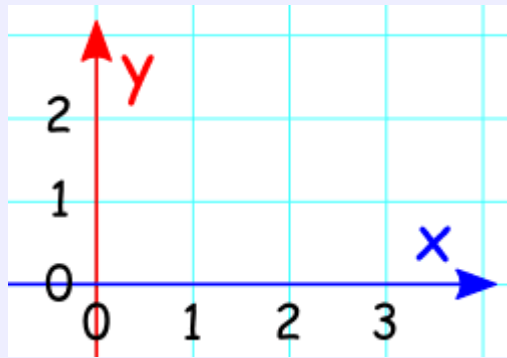To calculate: add up all the numbers, then divide by how many numbers there are.

Example: what is the average of 2, 7 and 9?
Add the numbers: 2 + 7 + 9 = 18
Divide by how many numbers (i.e. we added 3 numbers): 18 ÷ 3 = 6
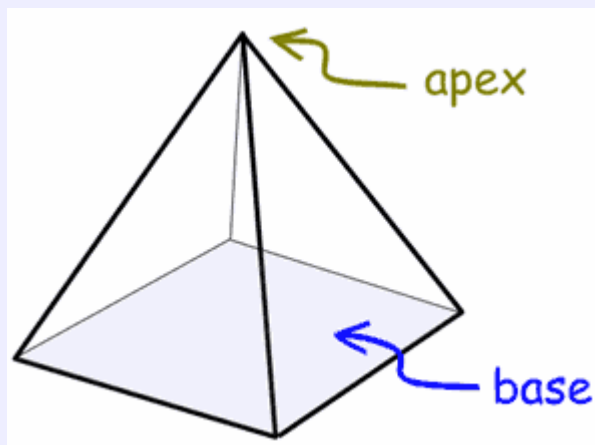So the average is 6

Axis (graph)

A reference line drawn on a graph (you can measure from it to find values).

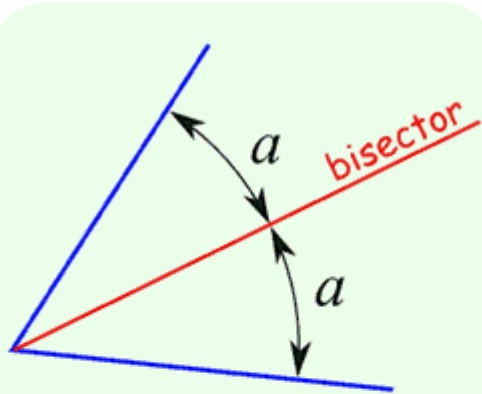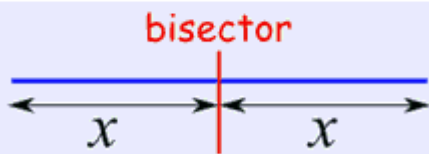Here is a graph with an X Axis and a Y Axis.

Base (geometry)

The lowest part.

The surface that a solid object stands on, or the bottom line of a shape such as a triangle or rectangle.

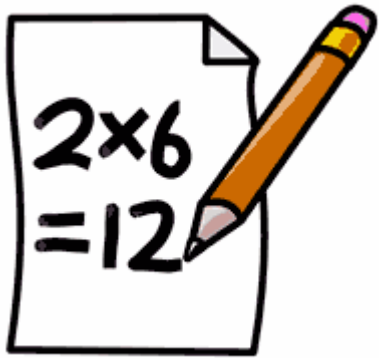## Bisector

Blue Angle is Bisected

Blue Line is Bisected

The line that divides something into two equal parts.
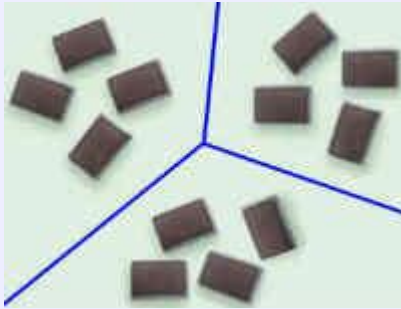
You can bisect lines, angles, and more.

Calculate

To work out an answer, usually by adding, multiplying etc.

Example: Calculate the cost of 10 apples when each apple costs 0.50.
Answer: 10 x 0.50 = 5.00

Divide

To divide is to split into equal parts or groups. It is "fair sharing".

Example: there are 12 chocolates, and 3 friends want to share them, how do they divide the chocolates?
Answer: They should get 4 each.

We use the ÷ symbol, or sometimes the / symbol to mean divide:

12 / 3 = 4
12 ÷ 3 = 4

Equal

Exactly the same amount or value

Examples:
3 + 4 is equal to 7
1 Dollar is equal to 100 Cents
60 seconds is equal to 1 minute

Equal Sign

The symbol =

Shows that what is on the left of the sign is equal in value or amount to what is on the right of the sign

Examples:
3 + 4 = 7 means that 3 + 4 is equal to 7
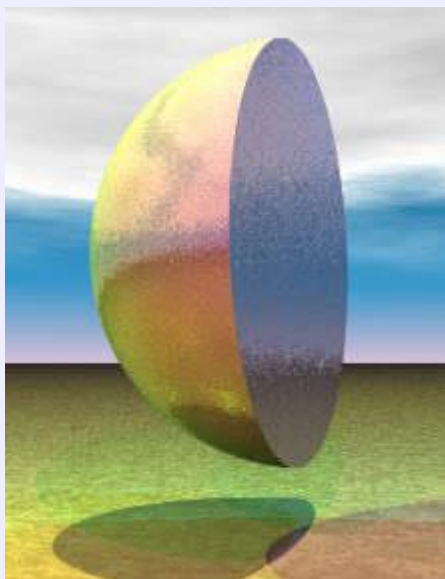60 seconds = 1 minute means that 60 seconds is equal to 1 minute

Geometry

The area of mathematics that deals with points, lines, shapes and space.

Plane Geometry is about flat shapes like lines, circles and triangles.

Solid Geometry is about solid (3-dimensional) shapes like spheres and cubes.
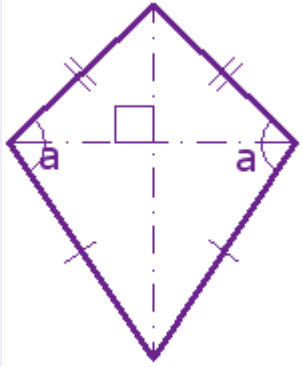
Hemisphere

In geometry it is an exact half of a sphere.

It also refers to half of the Earth, such as the "Northern

Hemisphere" (that part of the Earth north of the equator), or "Western Hemisphere" (the half of the Earth west of a line running from the North Pole through England to the South Pole, includes the Americas)

Kite

A 4-sided flat shape with straight sides that:

* has two pairs of sides.
* each pair is adjacent sides (they meet) that are equal in length.

Also, the angles are equal where the pairs meet.

Diagonals (dashed lines) meet at a right angle, and one of the diagonal bisects (cuts equally in half) the other.

Length

Distance. How far from end to end.

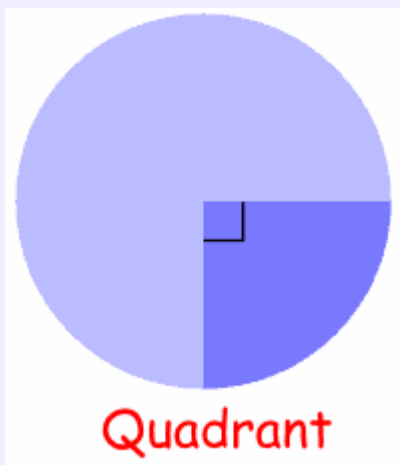Example: the length of this guitar is about 1 meter

Measure

To find a number that shows the size or amount of something.

Usually the number is in reference to some standard measurement, such as a meter or kilogram.

Here some scales are used to measure weight.
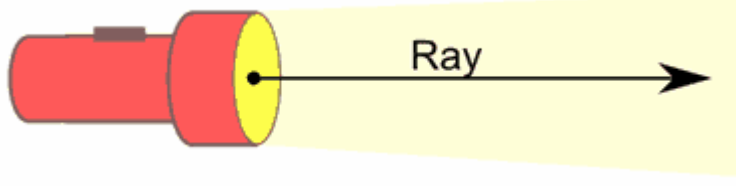
Quadrant (circle)

A quarter of a circle (made by two radiuses at right angles and the connecting arc)

Radian

The angle made by taking the radius and wrapping it along the edge of the circle.
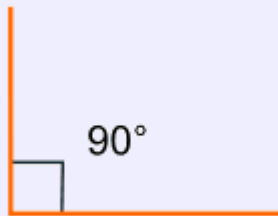
One Radian is (180/π) degrees, or about 57.296°
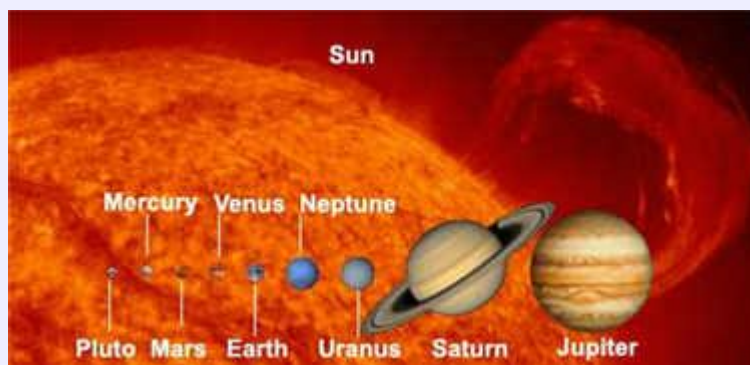
Ray

A line with a start point but no end point
(it goes to infinity)

Right Angle

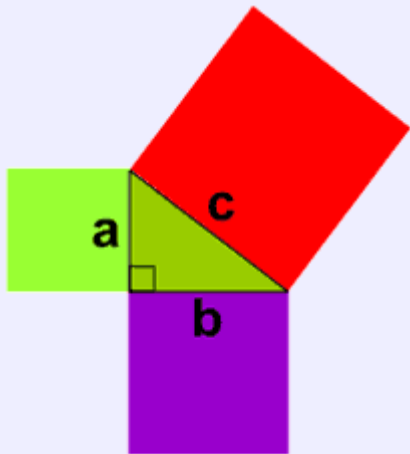An angle which is equal to 90°, one quarter of a full revolution.

Size

How big something is.

This is an illustration of the Sun and planets showing their sizes in relation to each other (but not their positions).
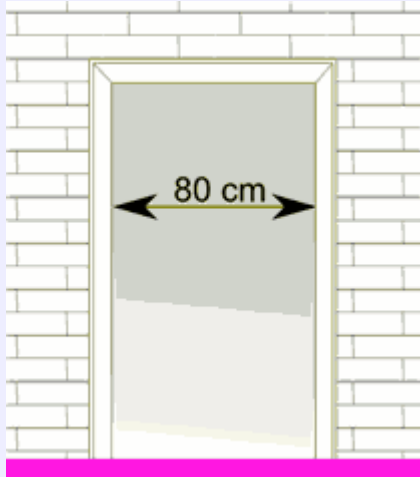
Theorem

A result that has been proved to be true (using facts that were already known).

Example: The "Pythagoras Theorem" proved that for a right angled triangle $a^2 + b^2 = c^2$

A Theorem is a major result (if it is just a minor result it is called a "Lemma")

Width

The distance from side to side.

Example: the width of this door is 80 cm.