Number

Definitions

product The answer when two or more numbers are multiplied together.

square number the product of a number multiplied by itself

$1^2 = 1 \times 1 = 1$
$2^2 = 2 \times 2 = 4$
$3^2 = 3 \times 3 = 9$
$4^2 = 4 \times 4 = 16$
$5^2 = 5 \times 5 = 25$
$6^2 = 6 \times 6 = 36$
$7^2 = 7 \times 7 = 49$
$8^2 = 8 \times 8 = 64$
$9^2 = 9 \times 9 = 81$
$10^2 = 10 \times 10 = 100$
$11^2 = 11 \times 11 = 121$
$12^2 = 12 \times 12 = 144$

cube number the product of a number multiplied by itself twice

Example: 3 × 3 × 3 = 27, so 27 is a cube number.

$1^3 = 1 \times 1 \times 1 = 1$
$2^3 = 2 \times 2 \times 2 = 8$

$3^3 = 3 \times 3 \times 3 = 27$
$4^3 = 4 \times 4 \times 4 = 64$

prime number a number that is divisible only by itself and 1

Factors - they fit!

factor Factors are numbers we can multiply together to get another number. They can be divided exactly into other whole numbers

common factor factors that are common to more than one number

highest common factor the highest factor that is common to more than one number

lowest common factor the lowest factor that is common to more than one number

Multiples - they multiply!

multiple a number that may be divided by another a certain number of times without a remainder.

common multiple multiples that are common to more than one times table

lowest common multiple the lowest multiple that is common to more than one times table

highest common multiple the highest multiple that is common to more than one times table

Roman numerals

Symbol	Value
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

I

Value

Xylophones

Like

Cows

Do

Milk

Always follow these rules:

1. If a smaller numeral comes after a larger numeral, add the smaller number to the larger number

2. If a smaller numeral comes before a larger numeral, subtract the smaller number from the larger number

3. Do not use the same symbol more than three times in a row.

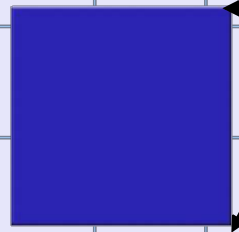
Shape vocabulary

Key vocabulary

2D shapes

sides

vertices/corners



parallel

lines which stay the same distance apart

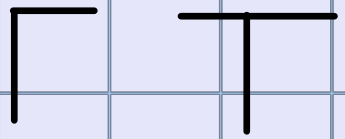
// = ||

symmetrical

when two or more parts are identical after a flip, slide or turn.

perpendicular

lines which meet at right angles



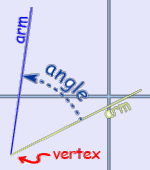
irregular

all sides and angles not equal

regular

all sides and angles equal

angle



The amount of turn between two lines around their common point (the vertex).

Triangles

2D shapes

Properties

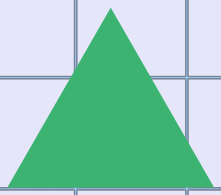
3 sides

3 vertices

3 angles

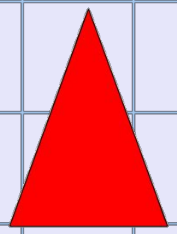
all angles add up to 180°

Types



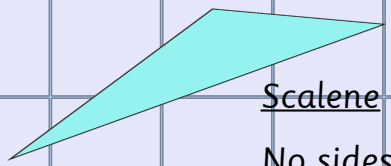
Equilateral

all sides and angles equal



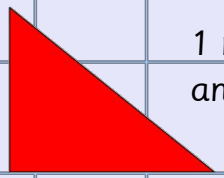
Isosceles

2 sides equal, 2 angles equal



Scalene

No sides or angles equal



Right angle

1 right angle

2D shapes

Quadrilaterals

Properties

4 sides

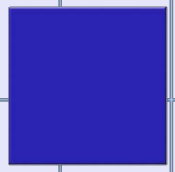
4 vertices

4 angles

all angles add up to 360°

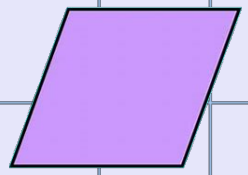
Types

square



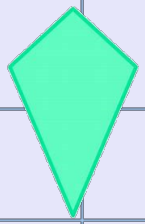
4 equal sides
4 right angles
opposite sides are parallel
4 perpendicular lines

rhombus



4 equal sides
opposite angles are equal
opposite sides are parallel

kite



2 sets of equal sides
no parallel lines

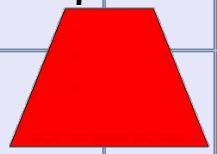
rectangle

opposite sides are equal
4 right angles
opposite sides are parallel
4 perpendicular lines

parallelogram

opposite sides are equal
opposite sides are parallel

trapezium



1 set of parallel lines
1 set of equal sides

2D shapes

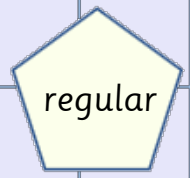
Other polygons

pentagon

5

5 sides

5 angles

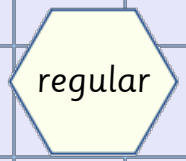


hexagon

six

6 sides

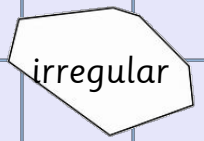
6 angles



heptagon

7 sides

7 angles



octagon

8

octopus

8 sides

8 angles

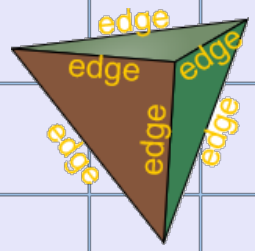
3D shapes

Key vocabulary

Edge

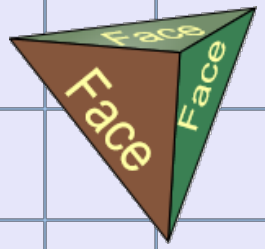
An edge is a line segment that joins one vertex to another:

- where two faces meet on a 3D shape



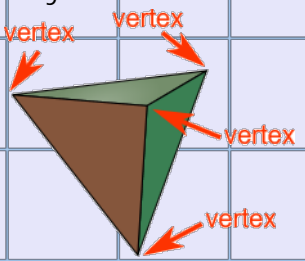
Face

Any of the individual surfaces of a solid object.



Vertices/vertex

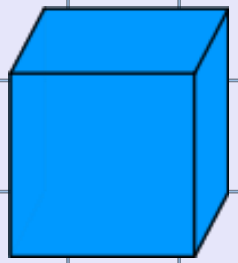
A point where two or more line segments meet. A corner.



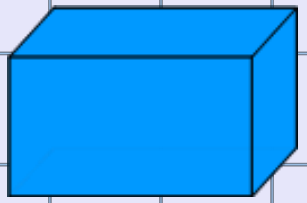
Names

3D shapes

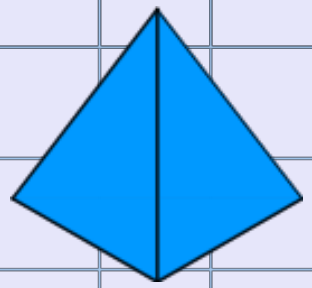
Cone
1 edge
2 faces
1 vertex



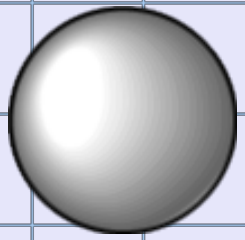
Cube
6 faces
12 edges
8 vertices



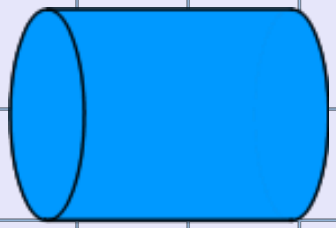
Cuboid
6 faces
12 edges
8 vertices



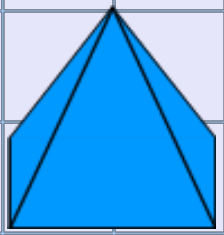
Triangular based pyramid
6 edges
4faces
4 vertices



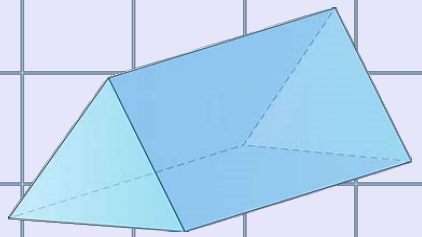
Sphere
1 face
no edges
no vertices



Cylinder
3 faces
no vertices
2 edges



Square based pyramid
5 faces
8 edges
5 vertices



Triangular prism
5 faces
9 edges
6 vertices