

Multiplication and division vocabulary

Term	Definition	Example
factor	a number that divides exactly into another number	factors of 12 = 1, 2, 3, 4, 6, 12
common factor	factors of two numbers that are the same	common factors of 8 and 12 = 1, 2, 4
prime number	a number with only 2 factors: 1 and itself	2, 3, 5, 7, 11, 13, 17, 19...
composite number	a number with more than two factors	12 (it has 6 factors)
prime factor	a factor that is prime	prime factors of 12 = 2, 3
multiple	a number that may be divided by another a certain number of times without a remainder.	multiples of 9 = 9, 18, 27, 36...
common multiple	multiples of two numbers that are the same	common multiples of 4 and 6 = 12, 24...
square numbers	the result when a number has been multiplied by itself	25 ($5^2 = 5 \times 5$) 49 ($7^2 = 7 \times 7$)
cube numbers	the result when a number has been multiplied by itself 3 times	8 ($2^3 = 2 \times 2 \times 2$) 27 ($3^3 = 3 \times 3 \times 3$)

Fractions, decimals & percentages

$\frac{1}{100}$	0.01	1%	$\div 100$
$\frac{1}{20}$	0.05	5%	$\div 20$
$\frac{1}{10}$	0.1	10%	$\div 10$
$\frac{1}{5}$	0.2	20%	$\div 5$
$\frac{1}{4}$	0.25	25%	$\div 4$
$\frac{1}{2}$	0.5	50%	$\div 2$
$\frac{3}{4}$	0.75	75%	$\div 4, \times 3$
$\frac{1}{8}$	0.125	12.5%	$\div 8$
1	1	100%	$\div 1$

Angles

full turn	360°
half turn	180°
right angle	90°
acute angle	< 90°
obtuse angle	> 90°
reflex angle	> 180°
angles on a straight line	180°
angles inside a triangle	180°
angles inside a quadrilateral	360°

Shape vocabulary

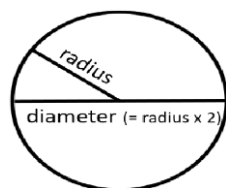
Horizontal line

parallel lines

circumference = perimeter of a circle

Vertical line

Perpendicular lines



Roman numerals

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

Year 6 Knowledge organiser

2D shapes

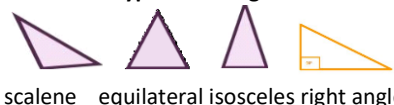
Name	No. of sides
quadrilateral	4
pentagon	5
hexagon	6
heptagon	7
octagon	8
nonagon	9
decagon	10

polygon = shape with straight sides

regular = all sides/angles the same

irregular = sides/angles **not** same

Types of triangle



Types of quadrilateral



Kite

AREA

is the amount of space inside a 2D shape usually measured in cm^2 or m^2 .

Area of a triangle

= (base x height) $\div 2$

Area of a parallelogram

= base x height

Measurement conversions

Month	Days
January	31
February	28 (29 in leap year)
March	31
April	30
May	31
June	30
July	31
August	31
September	30
October	31
November	30
December	31

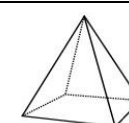
1 centimetre	10mm
1 metre	100cm
1 kilometre	1,000 m
1 mile	1.6 km
1 kilometre	0.625 ($\frac{5}{8}$) mile
1 litre	1,000 millilitres
1 centilitre	100 ml
1 kilogram	1,000 grams
1 tonne	1,000 Kg
milli	1/1000
kilo	1,000
cent	1/100

Co-ordinates

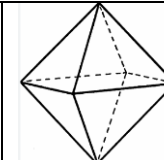
The first number represents the **x** coordinate.

The second number represents the **y** coordinates.
(x,y)

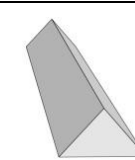
3D shapes



square-based pyramid



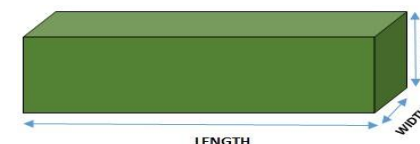
octahedron



triangular prism

faces (the flat sides)	5	8	5
edges	8	12	9
vertices (the points where the edges meet)	5	6	6

Volume = the amount of space a 3D shape takes up, usually measured in cm^3 or m^3



Volume of a cuboid =
length x width x height

The mean

The mean is a type of average. To find the mean, add up all the numbers and divide by how many there are. E.g. the mean of 4, 5, 3, 4 is 4. (Because $4 + 5 + 3 + 4 = 16$, and $16 \div 4 = 4$)