

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 2 times	8 ($2^3 = 2 \times 2 \times 2$) 27 ($3^3 = 3 \times 3 \times 3$)

Fractions, decimals & percentages

1/100	0.01	1%	÷ 100
1/20	0.05	5%	÷ 20
1/10	0.1	10%	÷ 10
1/5	0.2	20%	÷ 5
¼	0.25	25%	÷ 4
½	0.5	50%	÷ 2
¾	0.75	75%	÷ 4, x3
1	1	100%	÷ 1

Roman numerals

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

Numerator: The top number of a fraction.

Denominator: The bottom number of a fraction.

Unit fraction: A fraction where the numerator is one and the denominator is a positive integer.

Mixed number: contains an integer and a proper fraction.

Improper fraction: The numerator is larger than the denominator

Position and Direction

Reflection- A transformation where each point in a shape appears at an equal distance on the opposite side of a given line - the line of reflection.

Translation- Moving an object to a new location with no other changes.

Shape vocabulary

Horizontal line



Vertical line



parallel lines



Perpendicular lines



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°

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



scalene equilateral isosceles

Types of quadrilateral



parallelogram trapezium rhombus

AREA

is the amount of space inside a 2D shape usually measured in cm² or m².

Area of a rectangle (including squares) = base x height

(Height = perpendicular height)

perimeter = measure around the edge

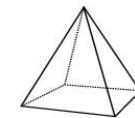
Year 5 Knowledge Organiser

Measurement conversions

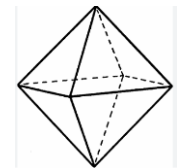
Month	Days	1 centimetre	10mm
January	31	1 metre	100cm
February	28 (29 in leap year)	1 kilometre	1,000 m
March	31	1 mile	1.6 km
April	30	1 kilogram	1,000 grams
May	31	1 litre	1,000 millilitres
June	30	1kg	2.2 lbs
July	31	1 inch	2.5 cm
August	31	1 litre	1.75 pints
September	30	1 minute	60 seconds
October	31	1 hour	60 minutes
November	30	1 day	24 hours
December	31	1 week	7 days
		1 year	365 days (366 in a leap year) 52 weeks

Millions			Thousands			Ones			Decimals		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones	1 10 Tenth	1 100 Hundredth	1 1000 Thousandth

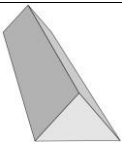
3D shapes



square-based pyramid



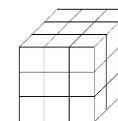
Octahedron



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 cm³ or m³ (**cubes**)



Co-ordinates

Read co-ordinates along the x axis (horizontal) first, then the y axis (vertical). E.g. (3, -4) = go right 3, down 4.

