Year 5 Knowledge organiser

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 in another number's times table	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 = 5x5) 49 (7^2 = 7x7)
cube numbers	the result when a number has been multiplied by itself 2 times	8 (2^3 = 2x2x2) 27 (3^3 = 3x3x3)

Roman numerals

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

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 **cent**imetre	10mm
1 metre	100cm
1 **kilo**metre	1,000 m
1 mile	1.6 km
1 **kilo**gram	1,000 grams
1 litre	1,000 **milli**litres
1kg	2.2 lbs
1 inch	2.5 cm
1 litre	1.75 pints
1 minute	60 seconds
1 hour	60 minutes
1 day	24 hours
1 week	7 days
1 year	365 days (366 in a leap year) 52 weeks

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 cm^2 or m^2.

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

(Height = perpendicular height)

perimeter = measure around the edge

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

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°

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

parallel lines

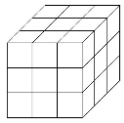
Vertical line

Perpendicular lines

3D shapes

	square-based pyramid	Cube	triangular prism
faces (the flat sides)	**5**	**6**	**5**
edges	**8**	**12**	**9**
vertices (the points where the edges meet)	**5**	**8**	**6**

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