YEAR 6 MATHS 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

Roman numerals

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

Measurement conversions

Month	Days	1 **cent**imetre 10mm
January	31	1 metre 100cm
February	28 (29 in leap year)	1 **kilo**metre 1,000 m
March	31	
April	30	1 mile 1.6 km

Co-ordinates

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

Angles

full turn	360°
half turn	180°
right angle	90°
acute angle	< 90°
obtuse angle	> 90°
reflex angle	>180°

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

3D shapes

square-based pyramid

triangular-based pyramid

triangular prism

faces (the flat sides) 5 4 **5**

edges 8 6 **9**

vertices (the points where the edges meet) 5

Volume D
shape ta n
cm^3 or m^3

Volume of a cuboid = length x width x

Shape vocabulary

perimeter = measure around the edge (**circumference** = perimeter of a circle)

horizontal line

parallel lines

vertical line

perpendicular lin
(at right angles

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.