## Multiplication and division vocabulary

Term	Definition	Example	
factor	a number that divides exactly	factors of 12 =	
Tactor	into another number	1, 2, 3, 4, 6, 12	
common	factors of two numbers that	common factors of 8 and	
factor	are the same	12 = 1, 2, 4	
prime number	a number with only 2 factors: 1 and itself	2, 3, 5, 7, 11, 13, 17, 19	
composite	a number with more than	12	
number	two factors	(it has 6 factors)	
prime factor	a factor that is prime	prime factors of 12 =	
prime factor	a factor triat is prime	2, 3	
multiple	a number in another	multiples of 9 =	
multiple	number's times table	9, 18, 27, 36	
common	multiples of two numbers	common multiples of 4	
multiple	that are the same	and 6 = 12, 24	
square	the result when a number	$25 (5^2 = 5x5)$	
numbers	has been multiplied by itself	$49 (7^2 = 7x7)$	
cube	the result when a number has	$8(2^3 = 2x2x2)$	
numbers	been multiplied by itself 3 times	$27 (3^3 = 3x3x3)$	

## Fractions, decimals & percentages

1/100	0.01	1%	÷ 100
1/20	0.05	5%	÷ 20
1/10	0.1	10%	÷ 10
<sup>1</sup> / <sub>5</sub>	0.2	20%	÷ 5
1/4	0.25	25%	÷ 4
1/2	0.5	50%	÷ 2
3/4	0.75	75%	÷ 4, x3
1	1	100%	÷ 1

# **Angles**

360°
180°
90°
< 90°
> 90°
>180°
180°
180°
360°

# **Shape vocabulary**

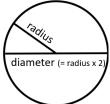
**perimeter** = measure around the edge (**circumference** = perimeter of a circle)

horizontal line

parallel lines

vertical line

perpendicular lines (at right angles)



### **Roman numerals**

1	I	100	С
5	V	500	D
10	Χ	1000	M
50	L		

# YEAR 6 MATHS **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



parallelogram trapezium rhombus

#### **AREA**

is the amount of space inside a 2D shape usually measured in cm<sup>2</sup> or m<sup>2</sup>.

> Area of a triangle = (base x height) ÷ 2 Area of a parallelogram

= base x height (Heiaht = nernendicular heiaht)

#### **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 year = 365 days (≈ 52 weeks)		

1 year = 365 days (≈ 52 weeks)
Leap year = 366 days

1 centimetre	10mm	
1 metre	100cm	
1 <b>kilo</b> metre	1,000 m	
1 mile	1.6 km	
1 kilometre	0.625 ( <sup>5</sup> / <sub>8</sub> ) mile	
1 <b>kilo</b> gram	1,000 grams	
1 litre	1,000 millilitres	

### **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.

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	4	6

**Volume** = the amount of space a 3D shape takes up, usually measured in cm<sup>3</sup> or m<sup>3</sup>



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  $16 \div 4 = 4$ )