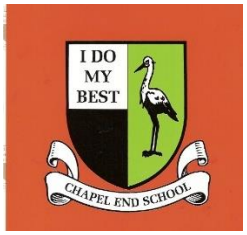
Mathematical Vocabulary

Year 5



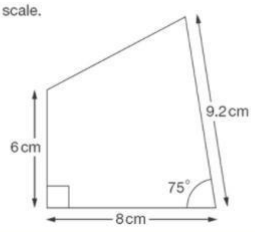
Mathematics vocabulary list Year 5

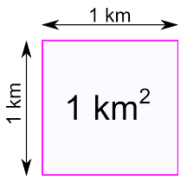
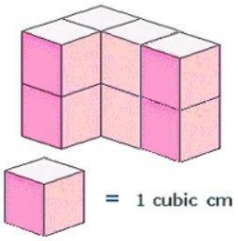
Maths is its own language. Sometimes that language looks like written word and sometimes it looks like symbols, but it is a language and it must be learned for math fluency and competency. If a child does not have a good understanding of key mathematical vocabulary, it can hinder them in making good progress in maths and in other areas of the curriculum.

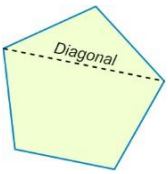
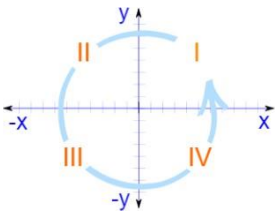
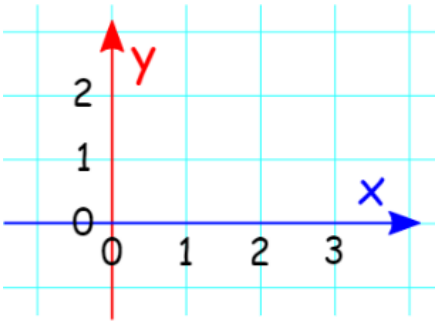
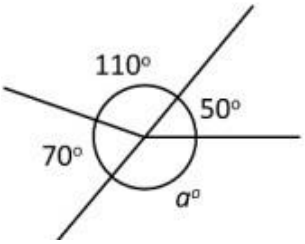
At Chapel End, we explicitly teach maths vocabulary, giving it a context and allowing children to apply it in a variety of problems.

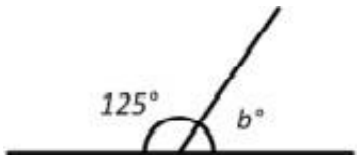
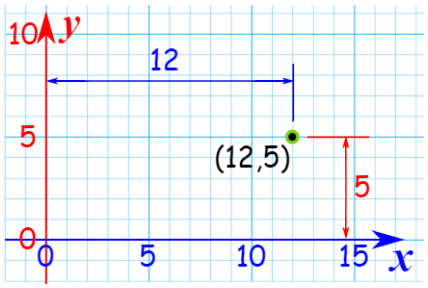
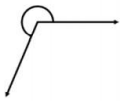
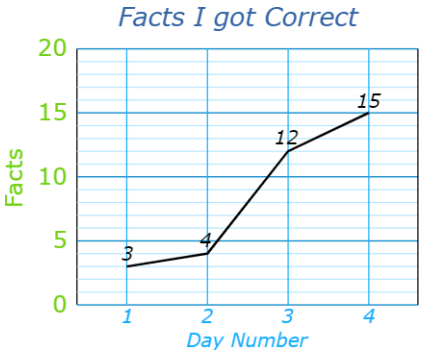
Listed below are the key mathematical terms a child will learn in Year 5. This is the minimum we expect children to learn; however, we know children are curious and will undoubtedly want to learn more and we encourage this.

Vocabulary	**Definition**	**Example**
Number and Place Value		
Ascending order	Arranged from smallest to largest. Increasing.	*'3, 9, 12, 55 are in **ascending order**.'*
Descending order	Arranged from largest to smallest. Decreasing.	*'100, 45, 22, 18, 2 are in **descending order.**'*
≥ Greater than or equal to	Something is either greater than or equal to another thing.	*'Marbles **≥** 1'*
≤ Less than or equal to	Something is either less than or equal to another thing.	*'Dogs **≤** 3'*
Addition and subtraction		
Multiplication and division		
Common factor	A factor of two (or more) given numbers.	*'A **common factor** of 12 and 9 is 3 because 3 × 4 = 12 and 3 × 3 = 12.'*
Common multiple	A multiple of two (or more) given numbers.	*'A **common multiple** of 3 and 6 is 12 because 3 × 4 = 12 and 6 × 2 = 12.'*
Cube number	The result of multiplying a whole number by itself twice.	*'3 × 3 × 3 = 27, so 27 is a **cube number**.'*
Divisible	A number is said to be divisible by another if it can be divided by that number without a remainder.	*'24 is **divisible** by 8. When divided by 8 it gives a quotient of 3, with no remainder.'*
Factor pair	A factor pair is a pair of numbers that, when multiplied will result in a given product.	*'The **factor pairs** of 10 are shown below:* *1 and 10* *2 and 5'*

Long division	The formal written algorithm that can be used to divide by a number with two or more digits.	34 12 | 408 36 48 48 0
Long multiplication	The formal written algorithm that can be used to multiply a number by a number with two or more digits.	34 × 12 68 340 408
Prime factor	A factor that is a prime number.	*'3 and 2 are **prime factors** of 6.'*
Prime number	A whole number with only two factors, one and the number itself.	*'2, 3, 5, 7, 11, 13, 17 and 19 are the **prime numbers** less than 20.'*
Square number	The product of two equal factors.	*'9 is a **square number** because 9 = 3 × 3.'*
Fractions		
Percentage	The number of parts per hundred which is written using the % symbol.	***'30%** means for every 100 there are 30.'*
Thousandths	The third decimal digit from the decimal point is the thousandths digit.	*'The **thousandths** digit below is 6.* *4.426'*
Length		
Scale	The ratio of lengths, in a drawing, are in proportion to the measurements of the real object. The lengths are not in proportion when not to scale.	*'The diagram was not drawn to **scale**. That means I can't use a ruler to measure the sides, because they are not in proportion to the real object.'* Here is a sketch of a quadrilateral. It is not drawn to scale. 

Square millimetre (mm^2)	The area equal to a square that is 1mm on each side'	*'The area of that square is **1mm²**'.*
Square metre (m^2)	The area equal to a square that is 1m on each side.	*'The area of that square is **1km²**'.* 
Weight		
Pounds	A measure of mass in the Imperial measurement systems.	*'An average adult male weighs 180 **lb**'*
Capacity and volume		
Cubic centimetre	A unit used to measure volume. The space taken up by a cube with edges of length 1 cm or which measures 1 cm × 1 cm × 1 cm.	*'The volume of this multilink cube model is eight **cubic centimetres**.'* 
Cubic metre	A unit used to measure volume. The space taken up by a cube with edges of length 1 metre.	*'The volume of this fridge is two **cubic metres**.'*
Temperature		
Time		
Money		

2d shape		
Decagon	A polygon with ten sides and ten angles.	
Diagonal	A line segment that goes from one corner to another, but is not an edge.	
Nonagon	A polygon with nine sides and nine angles.	
Quadrant	Any of the 4 areas made when we divide up a plane by an x and y axis.	
X-axis	The line on a graph that runs horizontally (left-right) through zero. It is used as a reference line so you can measure from it.	
Y-axis	The line on a graph that runs vertically (up-down) through zero. It is used as a reference line so you can measure from it.	
3d shape		
Position and direction		
Angle at a point	Angles that meet at a point that sum to 360°.	

Angle on a line	Angles formed on a straight line that sum to 180°.	*'Angle b below is equal to 55 degrees because **angles on a line** add to 180 degrees.'* 
Coordinate	A set of values that show an exact position. On graphs it is usually a pair of numbers: the first number shows the distance along, and the second number shows the distance up or down.	
Reflex angle	An angle that is greater than 180°.	
Transformation	A collective term for the ways that shapes can be changed, resulting in congruent or similar shapes, i.e. translation, reflection, rotation or enlargement.	*'Translations and reflections are types of **transformations**.'*
Statistics		
Line graph	A graph with points connected by lines to show how something changes in value: • as time goes by, • or as something else changes.