

## Angles

1	Angle	The figure formed by two straight lines meeting
2	Polygon	a 2D shape with straight lines
3	Regular polygon	All the sides are equal and all angles are equal
4	Parallel	Straight lines that never meet
5	Transversal	A line that cuts across two or more other lines
6	Isosceles	Two equal size lengths and angles – in a triangle or trapezium
7	Sum	Addition – the total of all interior angles added together
8	Interior angle	Angles inside the shape
9	Protractor	Equipment used to measure angles
10	Compass	Equipment used to draw arcs and circles

## Expanding & Factorising

1	Expand – single bracket	Every term inside the bracket is multiplied by term outside the bracket
2	Expand – double brackets	Every term is one bracket is multiplied by every term in the other bracket
3	Simplify	Collect like terms after an expansion
4	Factorise	Putting an expression into brackets
5	HCF	Highest common factor
6	Subject	The variable that is on its own on one side of the equals sign
7	Rearrange	Change the order in which terms appear in an equation or formula

## Inequalities

1	Inequality	Compares values showing if one is greater, less than or equal to
2	>	Greater than
3	<	Less than
4	≥	Greater than or equal to
5	≤	Less than or equal to

## Algebraic Notation

1	Function	A relationship that instructs how to get from an input to an output
2	Input	The number/symbol put into a function
3	Output	The number/expression that comes out of a function
4	Operation	A mathematical process
5	Inverse	The operation that undoes what was done by the previous operation
6	Substitute	Replace one variable with a number or new variable
7	Expression	A maths sentence with a minimum of two numbers and at least one operation
8	Evaluate	Work out
9	Linear	The difference between terms increases or decreases by the same value each time
10	Sequence	Items or numbers put in a pre-decided order

# Year 8 Mathematics | Term 2 | Knowledge Organiser

Solving Equations			Sequences			Algebraic Graphs		
1	Equality	Two expressions that have the same value	1	Sequence	Items or numbers put in a pre-decided order	1	Co-ordinate	A set of values that show an exact position on a graph
2	Equation	A mathematical statement that two things are equal	2	Position	The place something is located	2	Gradient	The steepness of a line
3	Equals	Represented by '=' symbol – means the same	3	Rule	Instructions that relate two variables	3	Intercept	Where two lines cross. The y-intercept – where the line meets the y-axis
4	Solution	The set or value that satisfies the equation	4	Linear	The difference between terms increases or decreases by the same value each time	4	Linear	Straight lines where there is a common difference between points
5	Solve	To find the solution	5	Non-linear	The difference between the terms increases or decreases by different amounts	5	Parallel	Two lines that have the same gradient
6	Inverse	The operation that undoes what was done by the previous operation	6	Difference	The gap between two terms	6	Asymptote	A straight line that a graph will never meet
7	Term	A single number or variable	7	Arithmetic	A sequence where the difference between the terms is constant	7	Reciprocal	A pair of numbers that multiply together to give 1
8	Like	Variables that are the same are 'like'	8	Geometric	A sequence where each term is found by multiplying the previous one by a fixed non-zero number	8	Perpendicular	Two lines that meet at a right-angle
9	Coefficient	A multiplicative factor in front of a variable	Substitution			9	Quadratic	A curved graph (parabola) with the highest power being 2
10	Expression	A maths sentence with a minimum of two numbers and at least one operation	1	Formula	A rule written using symbols that describe a relationship between different quantities	10	Parabola	A 'U' shaped graph that has a line of symmetry at its turning point
			2	Expression	A maths sentence with a minimum of two numbers and at least one operation			
			3	Substitute	Replace one variable with a number or new variable			