



Year 7 Maths Curriculum		
Autumn Term	Spring Term	Summer Term
Autumn 1	Spring 1	Summer 1
<p><u>Statistics</u> Mode, Median, Mean and Range, statistical diagrams, tally charts and frequency tables, pictograms, bar charts, grouped bar charts, pie charts, line graphs, two way tables, using averages to make comparisons.</p> <p><u>Number</u> Four operations, number line, BIDMAS, directed numbers prime numbers, factors, powers and roots, powers of 10, round large numbers, significant figures.</p>	<p><u>Graphs and sequences</u> Coordinates, graphs of simple relationships, graphs with no gradient, $y=x$, $x=y$, real life graphs, missing terms of a sequence, square numbers, triangle numbers, nth term, generate sequences, geometric sequences</p>	<p><u>Factors and multiples</u> BIDMAS Factors, HCF and LCM, multiplication, division, 3,4,6, divisibility rules.</p> <p><u>Direct proportion</u> Ratio, simplifying ratio, Using ratio to find missing quantities, ratios in everyday life, best buy problems, metric to imperial conversions</p>
Autumn 2	Spring 2	Summer 2
<p><u>Algebra</u> Collecting like terms, write formula and use formula, substitution, expand brackets, problem solving, substitution involving powers, factorising.</p>	<p><u>Fractions, decimals and percentages</u> Order fractions, equivalent fractions, simplify, improper fractions conversion, add and subtract, percentages to fractions and decimals, fractions of amounts, percentage of amount, multiply and divide fractions, express numbers as a percentage.</p>	<p><u>Measuring and shape</u> Name and recognise properties of 2D shapes, symmetry, rotational symmetry, perimeter and area of square, rectangle, compound shapes, triangle, parallelogram, trapezium, nets of 3D solids, convert units of volume.</p>



		<p><u>Transformations</u> Reflection, rotation, translation, tessellation, congruence, enlargement.</p> <p><u>Probability</u> Use the 0-1 scale for probability. Record, describe and analyse the frequency of simple probability experiments including randomness, fairness, equally and unequally likely outcomes. Independent and mutually exclusive events.</p>
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Year 8 Maths Curriculum		
Autumn Term	Spring Term	Summer Term
Autumn 1	Spring 1	Summer 1
<p><u>Number</u> Large numbers addition, multiplication, BIDMAS, 4 operations with directed numbers, ratio, equivalent ratios, decimals 4 operations, estimation, squares, roots and cubes, index notation, prime factors, HCF and LCM using prime factor decomposition, laws of indices, powers of 10, standard form.</p> <p><u>Shape</u></p>	<p><u>Ratio and proportion</u> Fractions, FDP, calculate percentages, compare proportions using percentages, reciprocals, division of fractions, ordering fractions, percentage increase/decrease, multipliers, reverse percentages, percentage change, scales and maps.</p>	<p><u>Number</u> 4 operations involving decimals, rounding and ordering decimals, estimate, ratio proportion, bar modelling to represent ration, unit measurements, Shape (L): Enlargement, combinations of transformations, volume after enlargement, Pythagoras</p>



3D solids, faces, edges and vertices, nets, surface area, volume, unit conversions, area of 2D shapes, volume prism, surface area prism, circle parts, area and circumference, vol and surface area of cylinder		
Autumn 2	Spring 2	Summer 2
<p style="text-align: center;"><u>Algebra</u></p> Collect like terms, functions, solve equations, expand brackets, powers, factorise, 2 step equations, identity, problem solving.	<p style="text-align: center;"><u>Angles</u></p> Measure and draw, angle rules, draw triangles and 3D shapes accurately, classify quadrilaterals, angles in parallel lines, angles in polygons, bearings, congruence, and similarity, constructions.	<p style="text-align: center;"><u>Algebra</u></p> Number sequences, term to term rule, different sequences, nth term Extension: Direct proportion, straight line graphs, Interpret graphs, distance time graphs.

Year 9 Maths Curriculum		
Autumn Term	Spring Term	Summer Term
Autumn 1	Spring 1	Summer 1
<p style="text-align: center;"><u>Number</u></p> 4 operations involving decimals, squares and square roots, prime factor decomposition, HCF and LCM, BIDMAS, estimation, index laws, powers of 10, standard form, reciprocals, negative indices, fractional indices, surds, rational and irrational numbers	<p style="text-align: center;"><u>Graphs (N)</u></p> Graphs of simple functions, real life graphs, Multiplicative reasoning: Enlargement, compound measures, percentage change, rates of change, ratio and scale factor problems	<p style="text-align: center;"><u>Statistics</u></p> Averages, frequency diagrams, grouped frequency tables, displaying data, interpreting data.
	<u>Algebra</u>	<p style="text-align: center;"><u>Probability</u></p> Recording outcomes of probability in tables and frequency trees, relative frequency,



<p style="text-align: center;"><u>Algebra</u></p> <p>Simplify expressions, solve equations, sequences and nth term, different sequences, coordinates, plot straight line graphs, $y=x$ and $y=-x$ substitution involving powers, changing subject of the formula, expand double brackets.</p>	<p>Solve equations and inequalities, construct and solve equations, change subject of formula, algebraic fractions.</p>	<p>experimental probability and expected outcomes, use the 0-1 scale to describe probability, exhaustive and mutually exclusive events.</p>
Autumn 2	Spring 2	Summer 2
<p style="text-align: center;"><u>Geometry</u></p> <p>Alternate and corresponding angles, angles in polygons, scales and constructions, Pythagoras, loci, multiplicative reasoning Direct proportion, inverse proportion, length of arc, area of sector.</p>	<p style="text-align: center;"><u>Algebra (N)</u></p> <p>Substitution, calculating the area of 2D shapes, area, and circumference of a circle, construct and solve equations, recurring decimals to fractions, solve and represent inequalities, simultaneous equations, graphs, features of different graphs.</p>	<p style="text-align: center;"><u>Probability continued</u></p> <p>Sets and Venn diagrams, tree diagrams, sample spaces. Independent and dependent events <u>KS3 maths consolidation/ revision</u></p>