

MATHEMATICS CURRICULUM OVERVIEW – 2022/23

					FOUNDATION		HIGHER		
		YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 10	YEAR 11	
AUTUMN		<ul style="list-style-type: none"> Place value Addition and subtraction Perimeter of 2D shapes Multiplication and division Area of 2D shapes Averages and spread Problem-solving skills 	<ul style="list-style-type: none"> Core number recall Advanced substitution Solving challenging linear equations Inequalities Multiplying and dividing with fractions Perimeters and areas of circles and composite shapes 	<ul style="list-style-type: none"> Core number recall Core algebra recall Ratio and probability recall Constructions and loci Scale drawings Congruency and similarity Transformations 	<ul style="list-style-type: none"> Place value Four operations Factors and multiples Rounding and estimation Algebraic notation Expanding and factorising Probability from diagrams Angle rules Plans and elevations Percentages Fractions 	<ul style="list-style-type: none"> Index laws Standard form Scatter graphs Frequency diagrams Time series and real life graphs Averages Direct and inverse proportion Venn diagrams Transformations 	<ul style="list-style-type: none"> Presenting data Types of number Percentages Expanding and factorising Forming and solving equations Inequalities Compound measures Angle rules Ratio and proportion recall Converting recurring decimals Index laws Product rule for counting 	<ul style="list-style-type: none"> Iteration Rates of change Functions Algebraic proof Bearings Graphs of circles and tangents Further trigonometry Circle geometry 	
	SPRING		<ul style="list-style-type: none"> Sequences Algebraic notation Forming expressions Substitution Solving linear equations Types of data Tally charts and two way tables Bar charts, pictograms and line graphs Properties of 2D shapes Measuring and drawing angles Key angle rules Angle sums for 2D shapes 	<ul style="list-style-type: none"> Calculating with percentages Simplifying and manipulating algebra Expanding brackets Laws of indices Rearranging basic formulae 	<ul style="list-style-type: none"> Co-ordinates Straight line graphs Quadratic graphs Scatter graphs Frequency polygons Averages from a table Complex rearranging Direct and inverse proportion 	<ul style="list-style-type: none"> Ratio problems Proportion calculations Solving equations including simultaneous equations Inequalities Compound measures Circles, arcs and sectors Surface area and volume Vectors Sampling Pie charts Probability trees 	<ul style="list-style-type: none"> Similar and congruent shapes Pythagoras' theorem Basic trigonometry Constructions Bearings Linear graphs Substitution recall Forming and solving equations Fractions, decimals, percentages Scatter graphs Pie charts 	<ul style="list-style-type: none"> Direct and inverse proportion Rearranging equations Sequences Solving quadratics Simultaneous equations Cubic and quadratic graphs Algebraic fractions Plans and elevations Transformations Surface area and volume Probability trees 	<ul style="list-style-type: none"> Circle theorems Congruency Vectors Set theory Index laws Bounds and accuracy Geometric and quadratic sequences
		SUMMER		<ul style="list-style-type: none"> Simplifying, converting and adding/subtracting fractions Understanding and calculating probabilities Collecting and presenting data 	<ul style="list-style-type: none"> Converting units Ratio Proportion problems Compound units Pie charts Standard form Estimation and error intervals Properties of 3D shapes Volume and surface area of prisms Plans and elevations 	<ul style="list-style-type: none"> Angle rules Pythagoras' theorem Exact trigonometric values Basic trigonometry 	<ul style="list-style-type: none"> Sequences Rearranging formulae Straight line graphs Quadratic and cubic graphs Co-ordinate geometry 	<ul style="list-style-type: none"> Ratio problems Proportion problems Conversion graphs Area and perimeter of 2D shapes Volume and surface area Simple vectors 	<ul style="list-style-type: none"> Sampling Cumulative frequency and box plots Histograms Estimation and bounds Surds