

2024/ 2025	AUTUMN		SPRING		SUMMER		
	HT1	HT2	HT3	HT4	HT5	HT6	
Y7	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <ul style="list-style-type: none"> Types of Numbers Primes / Multiples / Factors Place Value Whole Numbers (+/-/x/÷) Decimal Calculations (+/-/x/÷) Order of Operations Rounding to the nearest 10, 100, 1000 and integer Rounding to a given number of decimal places <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra / Graphs <p>Key concepts</p> <ul style="list-style-type: none"> Simplifying Introduction to rearranging & substitution Expand (single) Factorise linear expressions Solving Equations using a function machine Solve one step and two step equations Construct a formula from a worded problem Introduction to Sequences Finding the rule for the nth term of a linear sequence <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Fractions / Percentages / Ratio <p>Key concepts</p> <ul style="list-style-type: none"> Fraction Basics (equivalent, simplify, convert) F/D/P Conversions Ordering fractions, decimals and percentages Addition and Subtraction with Fractions Multiplication and Division with fractions Ratio Calculations (simplify, share, recipes) <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Geometry <p>Key concepts</p> <ul style="list-style-type: none"> Coordinates (x, y) - four quadrants Plotting a linear graph from a table of values Properties of 2D / 3D Shapes Perimeter & Area (Square, rectangle, triangle, parallelogram, trapezium) Compound Shapes Nets Surface Area of cubes and cuboids Volume of cubes and cuboids <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Angles & Transformations <p>Key concepts</p> <ul style="list-style-type: none"> Angle Facts (line, point, triangle) Measuring & Drawing Angles Constructions (perpendicular bisector, angle bisector, midpoint of a line, perpendicular from point to a line) Reflection, Rotation, Translation <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Probability & Data <p>Key concepts</p> <ul style="list-style-type: none"> Probability Tally Charts/Pictograms/Bar Charts/Frequency Tables Mean, Mode, Median, Range Best average to use Time and Money <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Year Exam 	
	Y8	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <ul style="list-style-type: none"> Revision of Four Operations (whole/decimal) Rounding (decimals places/significant figures) Accuracy & Estimating Basic Power Rules/Square Root/Cube root Revision of Prime Factor Trees/LCM/HCF Introduction to Standard Form <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra / Graphs <p>Key concepts</p> <ul style="list-style-type: none"> Expand (double)/Factorise (quadratic) Rearranging Formulae involving powers, roots and brackets Solving Equations (brackets/unknown on both sides) Introduction to Geometric sequences Introduction to Inequalities <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Fractions / Percentages / Ratio <p>Key concepts</p> <ul style="list-style-type: none"> Fractions/Percentages of Amounts Increase /decrease an amount by a given fraction or percentage, including the use of a multiplier Best Buy/Recipes/Reading Timetables Unit Conversions/Scale Drawings <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Geometry <p>Key concepts</p> <ul style="list-style-type: none"> Conversion Graphs / Real Life Graphs Finding the equation of a straight-line graph Area and circumference of a circle Perimeter & Area of Compound Shapes involving circles Surface Area & Volume (triangular prism, cylinder) <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Angles & Transformations <p>Key concepts</p> <ul style="list-style-type: none"> Parallel Lines Angles in Polygons Positive and fractional Enlargement Congruent Triangles Similar Shapes <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Probability & Data <p>Key concepts</p> <ul style="list-style-type: none"> Two-Way Tables & Sample Space diagrams Time Series & Line graphs Pie charts Scatter graphs Averages from tables including grouped frequency tables <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Year Exam
		Y9	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <ul style="list-style-type: none"> Recap of Number Prime factorisation, HCF and LCM Powers and Roots (recap of basic extending to negative and fractional) Manipulating Surds (simplify and rationalise) <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra / Graphs <p>Key concepts</p> <ul style="list-style-type: none"> Rearranging involving factorising Geometric and other sequences Plotting a quadratic graph Solving quadratics by factorising/Difference of two squares Solving quadratics by using the quadratic formula Solving quadratics by completing the square and identifying turning points <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Percentages <p>Key concepts</p> <ul style="list-style-type: none"> Problem solving with fractions Percentage change and reverse percentages Repeated percentage change and depreciation Simple and compound interest Bank Statements and Financial Maths <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Geometry <p>Key concepts</p> <ul style="list-style-type: none"> Pythagoras' Theorem Trigonometry Exact trigonometric values Arc length and area of a sector Transformations recap Negative Enlargements <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Constructions & Transformations <p>Key concepts</p> <ul style="list-style-type: none"> Triangle constructions Loci Bearings, Scale Drawings & Maps Plans and Elevations <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test

Y 10	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <p>Revision of Prime Factor Trees/LCM/HCF</p> <p>Manipulating Surds (calculations & rationalise)</p> <p>Fractions & Recurring Decimals</p> <p>Rounding/Estimation/Iteration</p> <p>Upper & Lower Bounds</p> <p>Recap Linear sequences</p> <p>Find the nth term of a quadratic sequence</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra / Graphs <p>Key concepts</p> <p>Sequences (linear / quadratic)</p> <p>Coordinates/Midpoints/Straight Line Graphs (gradient / intercept)</p> <p>Parallel Lines / Perpendicular Lines</p> <p>Simultaneous Equations (linear/quadratic/graphically)</p> <p>Inequalities (linear/quadratic)</p> <p>Graphical Inequalities / Proof</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Percentages, Proportion & Algebraic Fractions <p>Key concepts</p> <p>Fractions recap</p> <p>Percentages Recap</p> <p>Direct/Inverse Proportion</p> <p>Algebraic Fractions</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Graphs <p>Key concepts</p> <p>Mock Exams</p> <p>Harder graphs</p> <p>Circle graphs</p> <p>Distance – time graphs</p> <p>Velocity – time graphs</p> <p>Real – life graphs and their gradients</p> <p>Compound measures (speed, density, pressure)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Statistics & Probability <p>Key concepts</p> <p>Cumulative frequency graphs</p> <p>Box plots</p> <p>Histograms</p> <p>Tree diagrams</p> <p>Venn diagrams and set notation</p> <p>Work Experience</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Geometry <p>Key concepts</p> <p>Similarity (Length, Area, Volume)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Year Exam
	Y 11	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Geometry <p>Key concepts</p> <p>Pythagoras in 3D</p> <p>Trigonometry in 3D</p> <p>Sine rule and cosine rule</p> <p>Area of triangle ($\frac{1}{2} ab \sin c$)</p> <p>Volume and Surface Area of pyramids, cones and frustums</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ AQA assessment 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Geometry <p>Key concepts</p> <p>Mock Exams</p> <p>Vectors</p> <p>Circle theorems</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ AQA assessment 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Functions, graphs and algebra <p>Key concepts</p> <p>Functions (composite, Inverse, Algebraic)</p> <p>Graph transformations</p> <p>Transformations and Invariance</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ AQA assessment 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Exam preparation <p>Key concepts</p> <p>Algebraic Proof</p> <p>Revision</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ AQA assessment 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Past Papers and revision <p>Key concepts</p> <p>Exam technique</p> <p>Combining different areas of Maths for exam-style questions</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ Past exam Papers

NOTES	SKILLS FOR LIFE/FUTURE LEARNING AND EMPLOYMENT					
	<ul style="list-style-type: none"> • Become fluent in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately • Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language • Solve problems by applying mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions • Critical thinking, analytical and problem solving skills. 					