



Overview	<p>The purpose of the Maths curriculum is to equip students with uniquely powerful ways to describe, analyse and solve problems and to make them more prepared for the real world.</p> <p>We do this by providing a secure understanding of mathematical concepts, from basic principles of mathematics to complex topics that combine several areas of study into a single question.</p> <p>In Year 10 we continue to concentrate on retention of knowledge and depth of learning. In doing this, all our students have the opportunity to master key skills that might be required in their future development.</p>
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	Half Term 1	Half Term 2	Assessment
Autumn Term	<p>Solving Equations and Rearranging Formulae</p> <ul style="list-style-type: none"> ■ Solving equations with one step (U755) ■ Solving equations with two or more steps (U325) ■ Solving equations with the variable in the denominator (U505) ■ Solving equations with the variable on both sides (U870) ■ Changing the subjects of formulae (U556) <p>Linear Graphs</p> <ul style="list-style-type: none"> ■ Plotting straight line graphs (U741) ■ Reading and plotting coordinates (U789) ■ Plotting straight line graphs (U741) ■ Calculating midpoints (U933) ■ Solving shape problems involving coordinates (U889) ■ Using and interpreting linear real-life graphs (U638) <p>y = mx + c</p> <ul style="list-style-type: none"> ■ Finding equations of straight-line graphs (U315) ■ Equations of parallel lines (U377) ■ Finding the equation of a straight line from its gradient and a point (U477) ■ Finding the equation of a straight line from two points on the line (U848) ■ Finding equations of linear real-life graphs (U862) <p>Linear Simultaneous</p> <ul style="list-style-type: none"> ■ Solving simultaneous equations using elimination (U760) ■ Solving simultaneous equations using substitution (U757) 	<p>Compound Measures</p> <ul style="list-style-type: none"> ■ Interpreting distance-time graphs (U914) ■ Calculating speed from distance-time graphs (U462) ■ Sketch graphs of water flows (U896) ■ Reading, converting and calculating with time (U902) ■ Converting units of length, mass and capacity (U388) ■ Converting units of area (U248) ■ Converting units of volume (U468) ■ Calculating with speed (U151) ■ Calculating with rates (U256) ■ Plotting distance-time graphs (U403) <p>Quadratics - graphical</p> <ul style="list-style-type: none"> ■ Plotting graphs of quadratic functions (U989) ■ Interpreting graphs of quadratic functions (U667) ■ Solving quadratic equations graphically (U601) <p>Quadratics – algebraic</p> <ul style="list-style-type: none"> ■ Factorising quadratic expressions of the form $ax^2 + bx + c$ (U178) ■ Factorising to solve quadratic equations of the form $ax^2 + bx + c$ (U228) <p>Further Graphs</p> <ul style="list-style-type: none"> ■ Graphs of cubic functions (U980) ■ Graphs of reciprocal functions (U593) ■ Graphs of direct and inverse proportion (U238) 	<p>Half Term 1. The week before half term break, we have our 1st Foundation GCSE Paper.</p> <p>Half Term 2. Just before Christmas Break. Covering content from Autumn Term</p>

Spring Term	<ul style="list-style-type: none"> ■ Solving simultaneous equations graphically (U836) ■ Constructing and solving simultaneous equations (U137) <p>Volume 2</p> <ul style="list-style-type: none"> ■ Finding the volume of cubes and cuboids (U786) ■ Finding the volume of prisms (U174) ■ Finding the volume of cylinders (U915) 		
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	Half Term 3	Half Term 4	Assessment
Spring Term	<p>Probability</p> <ul style="list-style-type: none"> ■ Using probability phrases (U803) ■ Writing probabilities as fractions (U408) ■ Writing probabilities as fractions, decimals and percentages (U510) ■ Frequency trees (U280) ■ Expected results from repeated experiments (U166) ■ Probabilities of mutually exclusive events (U683) ■ Experimental probabilities (U580) ■ Venn diagrams (U476) ■ Venn diagrams with set notation (U748) ■ Sample space diagrams (U104) <p>Statistics</p> <ul style="list-style-type: none"> ■ Interpreting frequency tables and two-way tables (U981) ■ Drawing bar charts (U363) ■ Interpreting bar charts (U557) ■ Drawing pie charts (U508) ■ Interpreting pie charts (U172) ■ Drawing and interpreting tally charts (U653) ■ Drawing and interpreting pictograms (U506) ■ Drawing stem-and-leaf diagrams (U200) ■ Interpreting stem-and-leaf diagrams (U909) ■ Calculating the mean (U291) ■ Finding the mode (U260) ■ Calculating the median (U456) ■ Calculating the range (U526) ■ Finding averages from frequency tables (U569) ■ Finding averages from diagrams (U854) ■ Finding averages from grouped data (U877) ■ Choosing suitable averages and solving problems (U717) ■ Types of data (U322) ■ Selecting sampling techniques (U162) 	<p>Standard Form</p> <ul style="list-style-type: none"> ■ Using standard form with positive indices (U330) ■ Using standard form with negative indices (U534) ■ Adding and subtracting numbers in standard form (U290) ■ Multiplying and dividing numbers in standard form (U264) ■ Standard form with a calculator (U161) <p>Ratio 2 (further)</p> <ul style="list-style-type: none"> ■ Writing and simplifying ratios (U687) ■ Sharing amounts in a given ratio (U577) ■ Converting between ratios, fractions and percentages (U176) ■ Using equivalent ratios to find unknown amounts (U753) <p>Growth & Decay</p> <ul style="list-style-type: none"> ■ Compound interest calculations (U332) ■ Growth and decay (U988) 	<p>Half Term 3</p> <p>The week before half term break, we have our 2nd Foundation GCSE Paper.</p> <p>Half Term 4</p> <p>Just before Easter Break. Covering content from Autumn Term and Spring Term</p>

	Half Term 5	Half Term 6	Assessment
Summer Term	<p>Pythagoras Review & Trig</p> <ul style="list-style-type: none"> ■ Drawing and interpreting scale diagrams (U257) ■ Measuring and drawing bearings (U525) ■ Calculating bearings (U107) <p>Bearings and Scale Drawings</p> <ul style="list-style-type: none"> ■ Drawing and interpreting scale diagrams (U257) ■ Measuring and drawing bearings (U525) ■ Calculating bearings (U107) 	<p>Half Term 6 is used for revision and catch up of Year 10 Curriculum.</p>	<p>Half Term 6. Summer Exam these exams cover all the topics learnt in year 9 in equal measures.</p>

Useful Resources for Supporting Your Child at Home:	Homework:
<p>https://whgs-academy.sparxmaths.uk/ https://padlet.com/andrewharrison6/ks4-student-resources-e799bycdpno4nmmb</p>	<p>Sparx Homework is set automatically weekly, and students have 7 days to achieve 100%</p>