

Term	Classes	What will students learn?	How are students challenged to become experts?
Autumn Term 1 September	4+ Classes 5+ Classes	In this section, students strengthen the building blocks of mathematics by revisiting prime numbers, highest common factors (HCF) and lowest common multiples (LCM). They also deepen their understanding of fractions, decimals, and percentages — vital skills for everyday life and higher-level maths. Alongside this, students move into more advanced algebra, expanding and factorising expressions, and solving simultaneous equations. They also explore key geometric tools such as Pythagoras' Theorem and trigonometry, which allow them to calculate unknown lengths and angles in right-angled triangles. Together, these topics give students a strong toolkit for tackling both numerical and algebraic problems.	Students are pushed to apply these skills in challenging, non-routine problems where multiple strands of mathematics must be combined. For example, they may need to use factorisation to solve equations, link fractions and percentages to algebraic reasoning, or apply Pythagoras and trigonometry within multi-step contextual problems. With simultaneous equations, they move beyond straightforward substitution and elimination, applying methods to worded and problem-solving contexts. The aim is for students to not only carry out calculations but to reason logically, explain their methods, and select the most efficient approach — developing the confidence and flexibility that marks true mathematical expertise.
	X Classes 6+ Classes 7+ Classes 8+ Classes	In this part of the course, students cover a wide range of mathematical ideas that connect diagrams, geometry, and algebra. They will explore transformations (how shapes move, turn, reflect, or resize), use trigonometry to calculate unknown sides and angles in triangles, and apply this knowledge to real-world contexts such as bearings in navigation and interpreting plans and elevations in design. Alongside this, students begin to study graphical transformations and functions, learning how equations link to graphs and how these graphs can be shifted, stretched, or reflected. This combination of geometry, algebra, and visual reasoning helps them make sense of both abstract and practical problems.	Students are challenged to go beyond recognising and applying methods by explaining the reasoning behind their choices, tackling unfamiliar contexts, and linking topics together. For example, they may use trigonometry within bearings problems, apply transformations to more complex composite shapes, or interpret how real-world plans and elevations connect to 3D visualisation. In functions and graphs, they are pushed to spot patterns, predict outcomes of transformations, and work with increasingly abstract algebra. These challenges encourage students to think flexibly, justify their answers, and approach problems like expert mathematicians who can connect different strands of knowledge with confidence.

Autumn Term 2 October	4+ Classes 5+ Classes	<p>In this section, students develop their proportional reasoning by working with ratio and compound measures such as speed, density, and pressure. They also continue to build their statistical skills, learning to present and interpret data in different ways, while strengthening their understanding of 3D shapes through volume and surface area. Sequences are introduced and extended, allowing students to recognise patterns and link them to algebraic rules, while linear graphs are revisited to consolidate the connections between equations and their graphical representations. Together, these topics help students apply mathematics to both abstract and real-life contexts.</p>	<p>Students are challenged to become experts by applying ratio and compound measures to multi-step worded problems, often requiring them to interpret and convert between different units. With data, they move beyond drawing graphs to critiquing and comparing sets of information, while 3D shape problems push them to solve reverse and contextual tasks. Sequences and linear graphs demand algebraic reasoning, with students expected to generalise patterns, form rules, and make predictions. By linking these areas together, they learn to approach complex problems strategically, strengthening the deep understanding and adaptability needed for higher-level mathematics.</p>
	X Classes 6+ Classes 7+ Classes 8+ Classes	<p>In this unit, students tackle more advanced algebra and data skills. They learn to work confidently with algebraic fractions, simplifying and solving equations that involve both numerators and denominators. Alongside this, they study bounds and inequalities, which develop their understanding of accuracy, estimation and mathematical reasoning, as well as how to represent inequalities on graphs. Students also revisit linear graphs, strengthening their ability to interpret and plot equations in the form $y = mx + c$. Finally, they develop their statistical knowledge by working with data, enabling them to analyse and interpret information in a meaningful way.</p>	<p>Students are challenged to move beyond routine methods and apply these skills flexibly in problem-solving contexts. For example, with algebraic fractions they are pushed to manipulate complex expressions and solve equations that require multiple algebraic steps. In bounds and inequalities, they must justify solutions, explore error intervals and combine different forms of reasoning. When working with graphs, students are expected not just to plot points but to make links between equations, gradients, and real-life contexts. With data, they are encouraged to critique representations and identify patterns. This blend of algebraic, graphical, and statistical reasoning ensures they are thinking critically and developing the precision and adaptability expected of mathematical experts.</p>

Autumn Term 2 November And December	4+ Classes 5+ Classes	<p>As part of their preparation for PPEs, students will again take part in Walking Talking Mocks (WTMs), where teachers model how to approach exam questions and use mark schemes effectively. This guided practice helps students to see what examiners are looking for and how to present their work clearly. Alongside this exam preparation, students will focus on strengthening their skills in linear equations, inequalities, rearranging algebraic expressions, and transformations. At the end of this cycle, students will complete another full set of PPEs, including one non-calculator and two calculator papers, to measure their progress.</p>	<p>Students are challenged to become experts by applying these topics not only in isolation but also in combination within exam-style questions. WTMs give them the chance to reflect on errors and refine their exam technique, while PPEs provide the experience of sitting full papers under timed conditions. Mastery of rearranging, solving equations and inequalities, and describing or performing transformations requires precision and flexibility, which students are pushed to demonstrate in unfamiliar and multi-step problems. This approach ensures they build both the mathematical fluency and exam confidence needed for GCSE success.</p>
	X Classes 6+ Classes 7+ Classes 8+ Classes	<p>As students move towards their PPEs (Pre-Public Examinations), they will take part in Walking Talking Mocks (WTMs), where teachers guide them step by step through exam papers, modelling how to approach questions and interpret mark schemes. Students will then reattempt the papers to consolidate their learning and exam technique. Alongside this preparation, they will continue to strengthen their knowledge of key topics, including vectors, linear equations, inequalities, and rearranging algebraic expressions. At the end of term, students will sit a full set of PPE papers, consisting of one non-calculator and two calculator exams.</p>	<p>Students are challenged to become experts by moving beyond simply practising questions to developing the strategies and resilience needed to succeed under exam conditions. WTMs encourage them to reflect on their own methods, identify misconceptions, and apply feedback directly, building independence and exam confidence. With topics such as vectors and inequalities, students are expected to connect abstract concepts to problem-solving, while algebraic rearranging develops precision and flexibility. Completing a full set of PPE papers gives students the opportunity to demonstrate their growing expertise, apply skills across multiple topics, and refine the exam techniques that will prepare them for their final GCSEs.</p>
Spring Term 1	All Year 11 Classes	<p>To support students in preparing for their GCSEs, they will take part in <i>Mind The Gap (MTG)</i> assessments. Each week, students will complete a partial exam paper that is then marked to identify specific gaps in knowledge or skills. These areas are targeted in lessons and practice tasks throughout the week, ensuring that support is personalised and focused on what</p>	<p>Students are challenged to become experts by responding directly to feedback, taking ownership of their progress, and applying corrections to strengthen weak areas. The regular rhythm of MTG papers means they are continually practising under exam-style conditions, but with focused intervention to close gaps quickly. This cycle of assessment, feedback,</p>

		students most need to improve. This approach allows steady, structured progress while building exam confidence.	and targeted practice develops resilience, adaptability, and the exam technique required to perform at their best in full GCSE papers.
Spring Term 2	All Year 11 Classes	In this stage, teaching will be adapted to meet the needs of each class, with teachers tailoring the curriculum to address the specific strengths and areas for development identified in their students. This personalised approach ensures that learners receive targeted support where it is most needed, while also continuing to prepare them for their final set of mock exams. Alongside this tailored teaching, students will complete a full set of mock papers, giving them another opportunity to apply their skills under exam conditions.	Students are challenged to become experts by engaging with lessons that are carefully matched to their needs, ensuring they can close gaps, consolidate knowledge, and refine exam technique. Adaptive teaching demands active participation and resilience, as students are pushed to stretch their understanding while also strengthening weaker areas. The final mock exams provide the chance to demonstrate this progress, applying skills across the full curriculum with accuracy, confidence, and the independence needed for GCSE success.
Summer Term 1 and 2	All Year 11 Classes	In the final build-up to GCSE exams, teaching will continue to be adapted to meet the specific needs of each class. Lessons will focus on targeted revision and consolidation, ensuring that students are fully prepared for the demands of their exams. This will include a Walking Talking Mock (WTM), where teachers model how to approach exam questions and mark schemes, alongside structured revision sessions right up to and during exam season. The focus is on building confidence, refining exam skills, and ensuring students are supported every step of the way.	Students are challenged to become experts by applying all of their knowledge and skills across the full range of GCSE content, tackling increasingly exam-focused practice and revision. The adaptive approach ensures that gaps are addressed while students are also stretched to achieve their full potential. WTMs and revision tasks require them to think critically, justify their reasoning, and apply strategies under exam-style conditions, developing the resilience, accuracy, and independence essential for success in their final GCSE examinations.