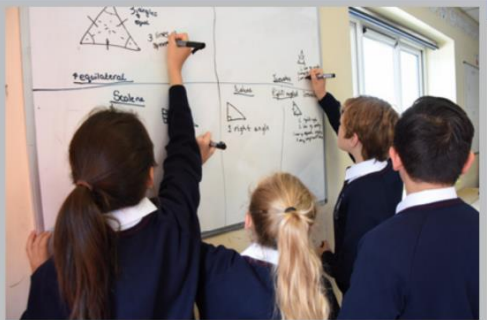





<h2>Key Stage 3 Maths</h2>	<h2>Curriculum aims</h2>	<h2>Curriculum content</h2>	<h2>Curriculum Delivery</h2> <p>Typical curriculum allocation: 8 hours per fortnight</p>
<h3>Year 7</h3> 	<p>The aim of the KS3 curriculum is for students to master the key skills apply their knowledge to challenging and unfamiliar contexts. Lessons are designed to support <i>all</i> learners. The structure of each lesson allows students to complete basic skill practice as well as support and challenge.</p> <p>The year 7 curriculum is designed to review and extend on students' knowledge from primary school. There is a heavy emphasis on number and developing conceptual understanding. This year lays the foundation for the remaining year of KS3.</p>	<p><b>Term 1</b> Four rules of number, laws of arithmetic, integer powers, order of operations (BIDMAS), calculating with negative numbers.</p> <p><b>Term 2</b> Coordinates, calculating with fractions, calculating with decimals.</p> <p><b>Term 3</b> Properties of 2D shapes, basic angle facts.</p>	<p>Students are taught in mixed attainment groups. Home learning tasks are set for each topic. Teachers regularly mark students' work and give them individual feedback on to improve and close the gap.</p> <p>Teachers use shared resources to ensure students have a similar, positive experience of maths. Lessons are delivered such that intervention can take place every lesson ensuring no student is left behind.</p>
<h3>Year 8</h3> 	<p>The year 8 curriculum builds on the knowledge and skills gained in year 7. There is a focus on algebraic understanding and curriculum allows students to develop their understanding through concrete, pictorial and abstract representations.</p>	<p><b>Term 1</b> Algebraic notation, expanding and factorising single brackets, substitution, solving linear equations, rearranging simple formulae.</p> <p><b>Term 2</b> Angles in parallel lines and polygons, area of 2D shapes, surface area of 3D shapes, area and circumference of circles, volume of prisms, linear sequences.</p> <p><b>Term 3</b> Simple probability, tree diagrams, types of data, calculating with averages.</p>	<p><b>Students complete 'mastery assessments' that test their skill, mastery and greater depth knowledge each term.</b> Students self assess their progress after each pre and post assessment. After the post assessment students' knowledge gaps are identified and closed by placing them into intervention group.</p>

Our Values



Pursuit of Excellence



Value our People



High Quality Learning Environment



Achievement for all



Extending the Boundaries of Learning

## Key Stage 4 Maths

### Curriculum aims

### Curriculum content

### Curriculum Delivery

Typical curriculum allocation: 8 hours per fortnight

#### Year 9



The aim of **GCSE study in year 9** is to begin to build upon the key constructs of the year 7/8 mastery curriculum. The curriculum is designed to allow students to follow a curriculum that underpins both foundation and higher content. The vast majority of the students' tiers are decided by the end of year 10.

Each topic is taught so that the key skills are mastered. Students develop fluency through reasoning and problem solving.

#### AQA 8300

3 papers: one non-calculator, two calculator. (1.5 hours, 80 marks per paper)

**Number:** arithmetic, working with fractions, decimals and percentages, surds, standard form, rounding, factors and multiples.

**Algebra:** algebraic manipulation, equations, formulae, inequalities, functions, identities, graphing functions, sequences, real life graphs.

**Ratio, Proportion & Rates of change:** growth and decay, compound measures, conversion graphs, best buys.

**Geometry & Measure:** angles, trigonometry, Pythagoras' Theorem, similarity and congruence, area, perimeter, surface area and volume, transformations, loci and constructions, 2D/3D shapes.

**Probability:** basic probability, independent/mutually exclusive events, representing probabilities, relative frequency.

**Statistics:** analysing and representing bivariate/univariate data, averages.

Lessons are designed so that they address the objectives as outlined by the AQA specification. However, real world contexts and enrichment activities are completed to allow for enjoyment of the subject.

**Students are prepared for cumulative assessments. Assessments are written using board specific exam level questions.**

#### Year 10



A greater focus is put upon exam technique and cross topic fluency. Time is allowed for students to develop as independent learners and refine and improve their own mathematical ability.

**Ratio, Proportion & Rates of change:** growth and decay, compound measures, conversion graphs, best buys.

**Statistics:** analysing and representing bivariate/univariate data, averages.

The first two assessments are cumulative assessments based on previous learning and compiled using exam level questions. **At the end of the year students will sit an official GCSE paper.**

#### Year 11



Students complete preparation examinations in November and February. **In each of these windows students will sit official exam papers.**