

## Curriculum Map-

Below is a curriculum map, showing what is taught at each stage of the year.

	Unit 1	Unit 2	Unit 3
Year 7	<p>Four operations &amp; prime numbers. LCM &amp; HCF. Area &amp; perimeter. Place Value, negative numbers and BIDMAS and Equivalent Fractions.</p> <p>Students will have been working with these in KS2. They will build skills with the introduction of triangular numbers in Unit 1, and further work with prime decomposition in Y8U1, Y9U1 and skills used in context in KS4.</p> <p>Assessments of this Unit takes place in Week 12 of Unit 1 (1 calculator and 1 non calculator paper).</p>	<p>Equivalence (Conversion between fraction/decimal &amp; percentage). Ratio. Algebraic notation. Simplify, substitute &amp; solve linear equations. Draw 2D shapes &amp; find missing angles in triangles and quadrilaterals.. Identify angles at a point and on a straight line.</p> <p>Equivalence of fractions is revisited and built upon in Y8U2 &amp; Y9U2 and developed further in KS4. Equations Y8U2 Angles Y8U2</p> <p>Assessments of this Unit, and previous unit, takes place in Week 12 of Unit 2 (1 calculator and 1 non calculator paper).</p>	<p>Collect, organise &amp; interpret data. Interpret statistical data (mean, median, mode &amp; range) Find and contextualise statistical measures using graphs. Visualise &amp; identify 2 &amp; 3D shapes, 3D nets and calculate volume of prisms.</p> <p>Previously area and naming shapes in KS2 Revisited Y8U3 where they will develop a deeper understanding of surface area and measures will be given in algebraic terms</p> <p>Assessments of this Unit, and previous units, takes place in Week 12 of Unit 3 (1 calculator and 1 non calculator paper).</p>
Year 8	<p>Order of operations, estimation &amp; negative numbers. Indices &amp; prime numbers, HCF &amp; LCM. Equivalences, perimeter &amp; area and conversion between units. The Use of Pi, area &amp; perimeter of circles. Compound Measures.</p>	<p>Plot linear &amp; quadratic graphs, simplify, expand &amp; factorise and solve formulae, inequalities &amp; linear sequences. Missing angles, ratio &amp; proportion and percentage change. Constructions with a compass &amp; protractor, similar &amp; congruent shapes.</p>	<p>2D &amp; 3D shapes: surface area. Volume of prisms. Averages &amp; range and probability laws. Find and contextualise statistical measures.</p> <p>Previously: Area Y7U1 Vol Y7 Unit 3. Average Y7U3</p>

	<p>Students will build on previously visited topics adding complexity and broadening their skills.</p> <p>Previously visited in Y7U1, revisited and developed in Y9U1 and skills used in context in KS4</p> <p>Assessments of this Unit takes place in Week 12 of Unit 1 (1 calculator and 1 non calculator paper).</p>	<p>Algebraic manipulation revisited Y9U2 . Congruency in Y9U3</p> <p>Assessments of this Unit, and previous unit, takes place in Weeks 12 of Unit 2(1 calculator and 1 non calculator paper).</p>	<p>Revisited Y9 Unit 3 and KS4 where a deeper understanding will be developed with more complex shapes, missing sides and algebraic notation will be used.</p> <p>Assessments of this Unit, and previous units, takes place in Week 12 of Unit 3(1 calculator and 1 non calculator paper).</p>
<p><b>Year 9</b></p>	<p>Estimate, prime numbers, LCM &amp; HCF, index laws &amp; standard form. Fractions, percentages, ratio &amp; proportion and equivalences. Represent data.</p> <p>Previously visited in Y7U1 and Y8U1 and skills used in context in KS4.</p> <p>Assessments of this Unit takes place in Week 12 of Unit 1 (1 calculator and 1 non calculator paper).</p>	<p>Probability. Simplify algebraic expressions by collecting like terms, expanding and factorising. Use algebraic manipulation to solve multi-step equations including unknowns on both sides and change the subject of a formulae. Simultaneous equations. Plot linear, quadratic, cubic, reciprocal, circle &amp; direct proportion &amp; real life graphs.</p> <p>Previously Proportion: Y8U3 Revisited in KS4</p> <p>Assessments of this Unit, and previous unit, takes place in Weeks 12 of Unit 2 (1 calculator and 1 non calculator paper).</p>	<p>Calculate area and perimeter of shapes including triangles, quadrilaterals and circles. Represent and use 3D shapes in 2D form to calculate surface area and volume of prisms. Identify and calculate angles in polygons &amp; unknown angles in parallel lines. Identify and calculate angles in polygons &amp; unknown angles in parallel lines. Surface area &amp; volume. Missing angles. Pythagoras' Theorem &amp; trigonometry. Transform shapes.</p> <p>Previously in Y7U3, Y8U3 Concepts used in Y9 but missing sides are now found with Pythagoras and Trigonometry. Further complexity introduced in KS4</p> <p>Assessments of this Unit, and previous units, takes place in Week 12 of Unit 3 (1 calculator and 1 non calculator paper).</p>

<p><b>Year 10</b></p>	<p>Simplify, expand &amp; factorise and solve equations. Plot &amp; interpret linear, quadratic, cubic &amp; reciprocal graphs. Pythagoras' Theorem &amp; trigonometry.</p> <p><i>Proportion, geometric progression surds and fdp. Plot &amp; interpret graphs, solving quadratic equations &amp; inequalities and algebraic manipulation.</i></p> <p>Students will be revisiting key mathematical concepts and developing these further for their GCSE exams in Y11.</p> <p>For example, they will have seen equations in Y7U2, Y8U2 &amp; Y9U2, now they will develop their understanding solving and factorising different equations. This could be further developed when studying the Pure section of A Level Maths.</p>	<p>Solve ratio &amp; proportion, percentages growth &amp; decay. Index laws, standard form, error intervals and compound measures. Perimeter &amp; area, surface area and volume.</p> <p><i>Iterative process, functions, gradients and rate of change. Construct shapes, finding shapes similar &amp; congruent. Circle theorems.</i></p> <p>Students will be revisiting key mathematical concepts and developing these further for their GCSE exams in Y11.</p> <p>For example, they will have seen measures in Y7U3, Y8U3 &amp; Y9U3, now they will develop their understanding with compound measures and change. This could be further developed when studying the Mechanics section of A Level Maths.</p>	<p>Missing angles, similar &amp; congruent shapes. Interpret charts &amp; graphs. Transform &amp; construct shapes. Probability and frequency trees.</p> <p><i>Use trigonometric ratios &amp; Pythagoras' Theorem in 2D &amp; 3D. Transform graphs, shapes, and use vectors. Calculate probability and construct statistical diagrams.</i></p> <p>Students will be revisiting key mathematical concepts and developing these further for their GCSE exams in Y11.</p> <p>For example, they will have seen probability in Y7U3 &amp; Y8U3, now they will develop their understanding with different representations and explanations with data. This could be further developed when studying the Statistics section of A Level Maths</p>
<p><b>Year 11</b></p>	<p>Revisiting gaps from Yr 10 mock</p> <p>React to each topic: Algebra Geometry and Measure Number Probability Ratio, Probability and Rate of Change Statistics</p>	<p>Exam practice</p> <p>Filling gaps in knowledge</p> <p>Use of topic tests Algebra Geometry and Measure Number Probability Ratio, Probability and Rate of Change Statistics</p>	<p>Maths Exam Foundation</p> <p><i>Maths Exam Higher</i></p>

