

**MATHEMATICS Scheme of Work 2023-24: YEAR 11**

(OCR Syllabus)

AUTUMN TERM 1: SEPT - OCT	AUTUMN TERM 2: OCT - DEC	SPRING TERM 1: JAN - FEB
<p><b>Number, Algebra, Geometry and Statistics</b></p> <p><b>AO:</b> to revise and consolidate knowledge that were previous areas of confusion. Year 11 have substantially finished the GCSE course now, so we are finishing off the course, going through previous areas of confusion and revising for the mock exams. <b>Main text: Hodder GCSE Foundation or Higher Maths text books.</b> <b>Number topics:</b> Index notation, the laws of indices, standard form. Rounding, approximation and estimation, limits of accuracy. Converting recurring decimals to exact fractions. Surds (higher only.) <b>Algebra topics:</b> Multiplying two binomials, factorising quadratics, (H) completing the square, algebraic fractions. <b>Geometry topics:</b> Standard units of measurement, compound units. Volume and surface area. <b>Vectors - prioritise – hardly covered last year.</b> Loci. <b>Statistics topics:</b> Pie charts, cumulative frequency curves, misleading graphs, scatter graphs, histograms. Also, baseline and number age tests in 1<sup>st</sup> week.</p>	<p><b>Geometry, Probability and Number</b></p> <p><b>AO:</b> to revise and consolidate knowledge that were previous areas of confusion. Year 11 have substantially finished the GCSE course now, so we are finishing off the course, going through previous areas of confusion and revising for the mock exams. <b>Main text: Hodder GCSE Foundation or Higher Maths text books.</b> <b>Geometry topics:</b> Congruent triangles, applications and proofs. Similar triangles. Enlargements and similar shapes. Straight line graphs, parallels, perpendiculars and tangents. Trig (do sine, cos and area rules in higher only boosters.) The four isometric transformations. <b>Probability topics:</b> Working with probability, representing combined events, theoretical probability, conditional probability. <b>Number topics:</b> Sharing in a given ratio, algebraic and graphical representations, direct and inverse proportion. <b>Mock exams.</b></p>	<p><b>Geometry, Number and Algebra.</b></p> <p><b>AO:</b> to revise and consolidate knowledge that were previous areas of confusion. Year 11 have substantially finished the GCSE course now, so the rest of the year will be revision. Work this term will be largely based on the mocks results, but could include the following. <b>Main text: Hodder GCSE Foundation or Higher Maths text books. Mock exam papers.</b> <b>Geometry topics:</b> Vector arithmetic. Using vectors in geometric proofs. Graphs of real world contexts, gradients, areas under graphs. <b>Number topics:</b> Approximation and exact values of surds, manipulating surds, working with surds. Trig ratios, exact values of trig ratios, sine cos and area rules, graphs of trig functions. <b>Algebra topics:</b> Quadratic equations, simultaneous equations, graphical solutions, iteration.</p>
SPRING TERM 2: FEB - MAR	SUMMER TERM 1: APR - MAY	SUMMER TERM 2: JUN - JUL
<p><b>Revision based on past papers.</b></p> <p><b>AO:</b> To complete past papers, filling knowledge gaps, in preparation for GCSE's. Pupils are now free to complete past papers (some under exam conditions) and find/revise/study their own knowledge gaps, with my support. <b>Main text: Hodder GCSE Foundation or Higher Maths text books, past papers.</b></p> <p>Structured revision is now complete. Pupils are to complete past papers, (with my support) identify their own knowledge gaps and fill them, ready for the GCSE's.</p>	<p><b>Revision based on past papers.</b></p> <p><b>AO:</b> To complete past papers, filling knowledge gaps, in preparation for GCSE's. Pupils are now free to complete past papers (some under exam conditions) and find/revise/study their own knowledge gaps, with my support. <b>Main text: Hodder GCSE Foundation or Higher Maths text books, past papers.</b></p> <p>Structured revision is now complete. Pupils are to complete past papers, (with my support) identify their own knowledge gaps and fill them, ready for the GCSE's. Exams will start towards the end of the term.</p>	<p><b>Exams</b></p> <p><b>AO:</b> To revise for and complete exams.</p>

