

## Maths Programme of Study Y7-11 Higher (Year 9 Set 2 & 3, KS4 Year 10 Sets A2/A3/B1/B2)

Assessment objectives covered through all units:

AO1: Use and apply standard techniques. Students should be able to accurately recall facts, terminology and definitions, use and interpret notation correctly and accurately carry out routine procedures or set tasks requiring multi-step solutions.

AO2: Reason, interpret and communicate mathematically. Students should be able to make deductions, inferences and draw conclusions from mathematical information, construct chains of reasoning to achieve a given result, interpret and communicate information accurately, present arguments and proofs, assess the validity of an argument and critically evaluate a given way of presenting information.

AO3: Solve problems within mathematics and in other contexts. Students should be able to translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes, make and use connections between different parts of mathematics, interpret results in the context of the given problem, evaluate methods used and results obtained and evaluate solutions to identify how they may have been affected by assumptions made

	Year 7	Year 8	Year 9 (A2 & 3/B2 & 3)
Phase 1	<b>Units:</b> 1 Whole number arithmetic 2 Rounding Numbers 3 Decimals 4 Area 5 Negative numbers 6 Using a calculator 7 Rules of Algebra 8 Properties of number 9 Coordinates 10 Straight line graphs 11 Line and rotational symmetry 12 2D Shapes	<b>Units:</b> 1 Using algebra and expanding brackets 2 Probability 3 Pythagoras' theorem 4 Linear Equations 5 Averages and range 6 Prime factors	<b>Units:</b> 1 Algebra review 2 Data handling 3 Using fractions 4 Working with indices 5 Calculating with standard form 6 Scatter graphs 7 Shape and space review 8 Sequences 9 Rounding, estimation & bounds
Phase 2	<b>Units:</b> 1 Proportion & ratio 2 Fractions 3 More algebra 4 Venn diagrams 5 Fractions, decimals & percentages 6 Percentages 7 Angles 8 Metric and imperial units 9 Estimating 10 Displaying and interpreting data  <b>END OF YEAR EXAM</b>	<b>Units:</b> 1 Factorising 2 Percentage change 3 Circles 4 Volume 5 Fractions 6 Sequences 7 Transformation	<b>Units:</b> 1 Percentage change 2 Sets and Venn diagrams 3 Solving Quadratics 4 Simultaneous equations 5 Trigonometry 6 Inequalities 7 Charts & graphs 8 Solving quadratics with the formula 9 Compound measures 10 Locus 11 Angle Geometry  <b>END OF YEAR EXAM:</b>
	11 Plans and elevations 12 Constructing triangles	8 Proportion & ratio 9 Bearings and scale drawing	12 Changing the subject 13 Trigonometric Graphs

	Year 10 (10SAB/10EHN/10EJD)	Year 11 (11A2/11A3/11B1/11B2)
Phase 1	<b>Units:</b> 1 Probability 2 Non-right-angled trigonometry 3 Area 4 Volume	<b>Units:</b> 1 Kinematics 2 Non-linear simultaneous equations 3 Equation of a circle 4 Completing the square 5 Solving equations graphically
Phase 2	<b>Units:</b> 1 Identities 2 Indices 3 Transformations 4 Similar shapes 5 Straight line graphs 6 Coordinates and ratio 7 Surds	<b>Units:</b> 1 Inequalities 2 Vectors 3 Graph transformations 4 Growth and decay 5 Algebraic proof  <b>TRIAL EXAMS</b>
Phase 3	<b>Units:</b> 1 Exact values and right-angled trigonometry 2 Rearranging formulas 3 Functions 4 Circle theorems 5 Congruency 6 Iteration 7 Histograms  <b>YEAR 10 EXAMS</b>	<b>REVISION</b>
Phase 4	<b>Units:</b> 1 Angles of elevation, depression, and 3D trigonometry 2 Algebraic fractions 3 Direct and inverse proportion	<b>STUDY LEAVE</b>