



Overview

Students study topics in each of the five key strands in mathematics: Number, Algebra, Geometry, Ratio & Proportion and Statistics & Probability. Each strand builds on their prior learning from Years 7, 8, 9 and 10.

Students on Higher tier will complete the specification content, focusing on building reasoning and problem-solving skills alongside exam technique to increase pupil independence in preparation for their Mock exams.

Autumn

Unit H25: Further Trigonometry – area of a non-right angle triangle, sine rule, cosine rule, trigonometry graphs

Unit H26: Iteration – identifying roots, rearranging, finding a solution, recurrence relations

Unit H27: Simultaneous Equations 2 – non-linear and linear equations algebraically and graphically

Unit H28: Functions – function notation, composite functions, inverse functions, functions and equations

Unit H29: Proof – equivalent statements, multiples, odd and even, consecutive numbers

Unit H30: Inequalities 2 – shading inequalities, describing shaded regions, solving quadratic inequalities

Unit H31: Vectors 2 – resultant vectors, midpoints, ratios, parallel vectors and proof, co-linear vectors and proof, unknown vector scalar proofs

Unit H32: Graphical Transformations – translations, reflections of functions, transformations of trigonometric graphs

Unit H33: Gradients and Area Under a Graph – equation of a tangent to a circle, interpreting gradients, finding acceleration, estimating distance travelled

Assessment:

Mock 1 takes place in Half Term 2.

Students will be informally assessed every lesson using questioning, mini whiteboards and marking of independent work.

There will be an fortnightly Pre Seen assessments to prepare students for the full GCSE exams.

Spring

Unit H34 Upper and Lower Bounds – error intervals, calculations with upper and lower bounds and suitable degrees of accuracy

Unit H35*: Circle Theorems – all circle theorem rules and circle theorem proofs

Classes follow a bespoke Revision Programme based on identified areas of need to prepare them for the final GCSE assessment.

Assessment:

Mock 1 takes place in Half Term 4.

Students will be informally assessed every lesson using questioning, mini whiteboards and marking of independent work.

There will be fortnightly Pre Seen assessments to prepare students for the full GCSE exams.

Summer

Classes follow a bespoke Revision Programme based on identified areas of need to prepare them for the final GCSE assessment.

Assessment:

Students will be informally assessed every lesson using questioning, mini whiteboards and marking of independent work.

There will be an End of Topic Review at the end of each unit.

There will be fortnightly Pre Seen assessments to prepare students for the full GCSE exams.

Useful resources for supporting your child at home:

Videos on Sparx (www.sparxmaths.uk)

Videos on Corbett Maths ([Videos and Worksheets – Corbettmaths](#))

CGP GCSE Maths Edexcel Revision Guide ([link here](#))

REVISE Pearson Edexcel GCSE (9-1) Mathematics ([link here](#))

Homework:

Year 11 homework will be set once a week.

In week B homework will be to complete a shadow paper in preparation for their Pre Seen exam. In week A their homework will be selected exam questions based on feedback from their Pre Seen exam.