## Year 11 Higher

> 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 problemsolving skills alongside exam technique to increase pupil independence in preparation for their Mock exams.

Unit H25: Further Trigonometry - area of a non-right angle triangle, sine rule, cosine rule, trigonometry graphs
Unit H26: Functions - function notation, composite functions, inverse functions, functions and equations
Unit H27: Proof - equivalent statements, multiples, odd and even, consecutive numbers
Unit H28: Iteration - identifying roots, rearranging, finding a solution, recurrence relations
Unit H29: Simultaneous Equations 2 - non-linear and linear equations algebraically and graphically
Unit H30: Inequalities 2 - shading inequalities, describing shaded regions, solving quadratic inequalities
Unit H21: 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

Unit H34*: Congruence and Similar Shapes - congruent triangles, congruency proof, similar triangles, area scale factor, volume scale factor, mixed area and volume problems

Unit H35*: Circle Theorems- all circle theorem rules, circle theorem proofs

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


#### Abstract

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 ful GCSE exams.


## 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.

## 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 and paper based.
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.

