

Curriculum Maps – Year 11  
**Maths Higher**

Overview of the year for (year 11 sets 1, 2, 3):		Ways to consolidate and extend your learning in Maths:		
Number Algebra Ratio and Proportion Geometry and Measures Statistics and Probability		Can use Maths genie questions & worked solutions. <a href="https://www.mathsgenie.co.uk/">https://www.mathsgenie.co.uk/</a> Use of Corbett- Maths. <a href="https://corbettmaths.com/">https://corbettmaths.com/</a> Use of Maths Watch. <a href="https://vle.mathswatch.co.uk/vle/">https://vle.mathswatch.co.uk/vle/</a> Weekly Hegarty maths HW with assigned 'fix up five' clip numbers <a href="https://hegartymaths.com/login/learner">https://hegartymaths.com/login/learner</a> Use Lesson PPTs and revision specific materials uploaded on Microsoft Teams.		
Half Term	Unit title	Knowledge	Skills	Assessment
1	Statistics & probability- 1 Algebra- 1 Number- 1	Tables and data collection sheets, bar charts, line graphs and histograms, time series graphs, trends, stem and leaf, pie charts, scatter graphs. Averages & tables.  Rationalise a denominator, algebraic notation. Write and simplify expressions, index laws, formulae, substitution, expand brackets, factorise algebraic expressions & quadratics ALL for ALGEBRAIC FRACTIONS  Simplify expressions involving surds, expand expressions involving surds, rationalise the denominator of a fraction.	Can communicate, justify, argue and prove using mathematical vocabulary.  Can solve problems by applying their mathematics to a variety of routine and non-routine problem  Can break down problems into a series of simpler steps and preserving in seeking solutions.	Mid-phase assessment Weekly homework Pre public examinations
2	Geometry and Measures -1 Algebra- 2 Geometry & Measure- 1	Solve problems involving angles, triangles and circles, understand and use facts about chords, tangents, circumference, arc lengths and segments of a circle. Find missing angles using these theorems and give reasons for answers. Prove the alternate segment theorem. Solve angle problems using circle theorems, give reasons for angle sizes using mathematical language.  Use function notation, find composite functions, find inverse functions.  Understand and use vector notation, work out the magnitude of a vector, calculate using vectors and represent the solutions graphically, calculate the resultant of two vectors, solve problems using vectors, use the resultant of two vectors to solve vector problems, express points as position vectors, prove lines are parallel, prove points are collinear, solve geometric problems in two dimensions using vector methods, apply vector methods for simple geometric proofs.	Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.  Become fluent in the fundamentals of mathematics, through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.	Mid-phase assessment Weekly homework End of Term written assessment
3	Geometry and Measures- 2 Geometry and Measures- 3 Geometry and Measures- 4	Similarity and congruence through showing knowing and proving as well as application in real life.  Know how to describe and carry out all transformations, rotation, enlargement, reflection and translation. Construction, loci and bearings. Scales on maps and scale drawings  Transformation of graphs, relationships and changes.		Mid-phase assessment Weekly homework End of Term written assessment Pre public examinations
4	REVISION	Knowledge based on areas of weakness informed by PLCs from Pre public examinations, fix up five from Hegarty, PLCs from previous assessments and homework's. (unique to each group/ child)	Exam skills, time management, revision skills	Mid-phase assessment Weekly homework End of Term written assessment