

Curriculum Maps – Year 11
Maths – Higher

Overview of the year for (Year 11 / Sets 4-5):		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. https://www.mathsgenie.co.uk/ Use of Corbett- Maths. https://corbettmaths.com/ Use of Maths Watch. https://vle.mathswatch.co.uk/vle/ Weekly Hegarty maths HW with assigned 'fix up five' clip numbers https://hegartymaths.com/login/learner Use Lesson PPTs and revision specific materials uploaded on Microsoft Teams.		
Half Term	Unit title	Knowledge	Skills	Assessment
1	Number- 1 Algebra- 1 Geometry and Measures -1	Write a number of the product of its prime factors, find the HCF and LCM of two numbers, use powers and roots in calculations, multiply and divide using index laws, work out a power raised to a power, use negative indices, use fractional indices, write a number in standard form, calculate with numbers in standard form, calculate error intervals and bounds. Simplifying expressions, expand expressions, factorise expressions, substitute into expressions, rearrange formulae, solving linear equations. Derive and use the sum of angles in a triangle and in a quadrilateral, exterior and interior angles of polygons, reflection, rotation, translation, and enlargement, convert between metric speed measures. Formula to calculate speed and acceleration. Solve problems involving compound measures.	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 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	Mid-phase assessment Weekly homework Pre-Public Examination
2	Statistics & probability- 1 Ratio & proportion- 1 Number- 2	Tables and data collection sheets, bar charts, line graphs and box plots, cumulative frequency, time series graphs, trends, stem and leaf, pie charts, scatter graphs. Averages & tables. Calculate rates, convert between metric speed measures, use a formula to calculate speed and acceleration, compound measures, relationships involving ratio, direct and indirect proportion. Compare, find quantities, and solve problems involving ratios. Fractions, percentages, reciprocals, and surds.	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	Mid-phase assessment Weekly homework End of Term written assessments
3	Algebra- 2 Geometry and Measures -2 Statistics & probability 2	Quadratics and simultaneous equations. Perimeter, area, volume, surface area. Arc lengths, angles, and area of sectors of circles. Pyramids and cones. Pythagoras and trigonometry. Understand how to calculate probability, interpret and draw sample space diagrams, venn diagrams, frequency trees and probability trees	Can break down problems into a series of simpler steps and preserving in seeking solutions.	Mid-phase assessment Weekly homework Pre-Public Examination
4	Algebra- 3 Geometry and Measures -3	Arithmetic, geometric, and quadratic sequences. Fibonacci like sequences. Congruent and similar shapes	Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.	Mid-phase assessment Weekly homework End of Term written assessments