

Year 10	Curriculum Content Mathematics	Home Learning and Wider Study
	<p>Following the Edexcel scheme of work a topic will be taught for 4 weeks, tested and then 2 weeks of therapy will commence in order to ensure that all topics have been thoroughly learnt by all students. Students will be offered catch up sessions after school as well. Please note that the KS4 scheme of work is 2 year scheme and this is only an exemplar of what you may study at either foundation or higher level.</p>	
Autumn 1	<p>Number properties and calculations (applying all operations to decimals, ordering decimals, index laws, powers of ten, prime factors, calculating and estimating.) <i>Real life links; powers of 10 linked to distance of planets and size of microbes.</i></p> <p>Algebra brackets, formula, simplifying (simplifying terms, expanding and factorising expressions, expanding polynomials)</p>	<p>May include; Mathswatch Corbett maths Hegarty maths A worksheet as decided by the class teacher</p>
Autumn2	<p>Graphs (display data on a variety of graphs; calculate speed, distance and time, straight line graphs, graphing quadratics)</p> <p>Fractions, decimals and percentages (applying all operations, reverse percentages, increasing and decreasing percentages and compound interest) <i>Real life links; interest rates and loans, APR</i></p> <p>Equations (constructing and solving both linear and quadratic equations, recognising what they would look like on graphs)</p>	<p>A worksheet as decided by the class teacher Please check my homework</p>
Spring 1	<p>Angles and lines (trigonometry, read and plot coordinates, calculate missing angles on a 2d plane including parallel lines)</p> <p>Analysing data (calculating averages, collecting data and completing frequency tables) <i>Real life links; data handling cycle, completing a surveys, questionnaires</i></p>	
Spring 2	<p>Perimeter, area and volume (calculating 2d areas, volumes of 3D shapes, surface area, and problem solving) <i>Real life links to decorating, product design and engineering.</i></p>	
Summer 1	<p>Transformations (enlarge, translate, rotate and reflect shapes on a Cartesian plane, draw shapes using 2D isometric paper)</p> <p>Graphs (display data on a variety of graphs; calculate speed, distance and time, straight line graphs, graphing quadratics)</p>	
Summer 2	<p>Ratio (simplify, sharing amounts, proportion, best value and problem solving)</p> <p>Trigonometry and right angled triangles (using the trigonometric formulas to calculate missing sides and angles, using Pythagoras' theorem)</p>	

Additional subject specific guidance and resources:

All content is linked to the Edexcel scheme of work, with assessment points every four weeks, followed by two weeks of therapy.