

Subject content (What will be covered)	As a result, what students should know /understood <i>Higher Tier only in bold</i>	What students should be able to do	How students will be assessed	By when (Half term 1 > 6)
<p>Number (HIGHER 15% FOUNDATION 25%) [Estimation; primes and cryptography, Space and Science – working with very large and small values]</p>	<p>Calculations; Factors and Multiples; Basic Fractions, Decimals and Percentages, Rounding; Indices; Standard form; Surds; Calculating with Percentages.</p>	<p>AO1: Use and apply standard techniques Students should be able to:</p> <ul style="list-style-type: none"> • accurately recall facts, terminology and definitions • use and interpret notation correctly • accurately carry out routine procedures or set tasks requiring multi-step solutions. 	Homework	Weekly
<p>Algebra (HIGHER 30% FOUNDATION 20%) [Modelling real life situations using algebra and graphs, speed distance time and Engineering]</p>	<p>Basic algebra; coordinates and linear graphs; Sequences; Real Life Graphs; Equations; Quadratic Equations</p>	<p>AO2: Reason, interpret and communicate mathematically Students should be able to:</p> <ul style="list-style-type: none"> • make deductions, inferences and draw conclusions from mathematical information •construct chains of reasoning to achieve a given result • interpret and communicate information accurately • present arguments and proofs • assess the validity of an argument and critically evaluate a given way of presenting information. 	Topic Examinations	Termly
<p>Ratio, Proportion and Rates of Change (HIGHER 20% FOUNDATION 25%) [Modelling growth and decay of real life populations, banking and interest rates]</p>	<p>Ratio and proportion.</p>	<p>AO3: Solve problems within mathematics and in other contexts Students should be able to:</p> <ul style="list-style-type: none"> •translate problems in mathematical or non-mathematical contexts into a process or a 	Mock Exam	January and April
<p>Geometry and Measures (HIGHER 20% FOUNDATION 15%)</p>	<p>Angles; Scale diagrams and bearings; perimeter and area; circumference and area; properties of polygons; transformations; congruence and</p>			

<p>[Symmetry and geometry in design and architecture, plans and elevations – floor plans and scale drawings; efficient use of materials]</p>	<p>similarity; 2D representations of 3D shapes; Measures; Constructions and Loci.</p>	<p>series of mathematical processes</p> <ul style="list-style-type: none"> • make and use connections between different parts of mathematics • interpret results in the context of the given problem • evaluate methods used and results obtained • evaluate solutions to identify how they may have been affected by assumptions made. 		
<p>Probability and Statistics (HIGHER and FOUNDATION 15%) [being analytical, big data, testing hypotheses, backing up claims, evaluating, effective surveys, data presentation, trends in data</p>	<p>Collecting and Representing Data; Statistical Measures (Averages and Range).</p>			