

**Learning Programme – Mathematics – 3<sup>rd</sup> Year – Set 1**

<b>Topic/ Content</b>	<b>Objectives/Skills (topic grade in brackets)</b>	<b>Homework</b>	<b>Assessment</b>	<b>Success Criteria (GCSE grades)</b>	<b>Stretch &amp; Challenge (Thirst for Learning)</b>
	<b>Michaelmas Second Half Term</b>				
<b>Changing the subject</b>	Re-arranging equations where the new subject appears once (5).	Two to three teacher marked pieces of homework will be set each half-term.	Half Term Test (two weeks before Christmas holiday)	Mainly determined from Half-Term test, however, class work & homework may also be used.  GCSE Grade boundaries dependent on difficulty of test.	Students will be challenged using extension questions on the topics they are studying, designed to develop their ability to solve multi-staged problems.
<b>Distributions</b>	Calculate averages and range of discrete data (3). Calculate averages from frequency table (4) and grouped frequency table (5). Construct frequency polygon for continuous data. Being able to interpret and construct pie charts.				
<b>Percentage Increase and decrease</b>	Finding a percentage of a quantity and one quantity as a percentage of another (3). Calculate percentage increase and decrease (4), profit & loss, compound interest (5) and reverse percentages (5).				
<b>Area, perimeter and volume</b>	Area & perimeter of parallelograms (3), triangles (3), trapeziums (4), circles (4) and compound shapes (4). Calculating the length of an arc and the area of a sector (6). Volume (4) and surface area (5) of prisms. Converting between different metric units of length, area and volume (4).				
<b>Compound Measures</b>	Calculate compound measures, including density and pressure (4).				
<b>Quadrilateral and Symmetry</b>	Identifying and using the properties of quadrilaterals (3). Reflective symmetry and order of rotational symmetry.				