

**Learning Programme – Mathematics – 5<sup>th</sup> Year – Set 3**

<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 First Half Term</b>				
<b>Angle rules</b>	Use basic angle rules; angles on straight line, angles at a point, vertically opposite angles (3). Identify angles on parallel lines (3). Interior and exterior angles of polygons (3).	Two to three teacher marked pieces of homework will be set each half-term.	Half Term Test (week before October half-term)	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>Angles in circles</b>	Identifying the different parts of a circle. Understand and prove the special rules for angles in circles (8). Finding missing angles using angle in circle rules and using them as part of geometric proofs (8).				
<b>Graphs and further graphs</b>	Recognise quadratic (5), cubic (5), reciprocal (6) and exponential (7) graphs. Draw graphs of quadratic functions and use them to solve simple quadratic equations, identify and interpret roots, intercepts and turning points (7). Calculate or estimate gradients of graphs and areas under graphs.				
<b>Inequalities</b>	Understanding and writing inequalities (4). Solving 'linear' inequalities (5). Representing and interpreting inequalities on graphs.				
<b>Congruent triangles</b>	Identifying triangles are congruent (6) Using congruent triangles for geometric proofs (7).				