

Year 7	Year 8	Year 9
<p><b><u>Knowledge and understanding:</u></b></p> <p>Students following the Key Stage 3 national curriculum programme of study, which covers the 6 key areas of Mathematics: Number, Algebra, Rates of Change, Geometry and Measure, Statistics and Probability. Particular emphasis is placed upon ensuring that all students have a solid grounding in numerical work.</p> <p><b><u>Skills Development:</u></b></p> <p>During the course students will develop a variety of problem solving skills in order to simpler mathematical problems which increase in complexity. A typical year 7 student will display skills which include:</p> <ul style="list-style-type: none"> <li>• Multiplying and dividing large numbers</li> <li>• Simplify algebraic expressions and solve increasingly complex equations</li> <li>• Solving angle problems involving triangles and straight lines</li> <li>• Calculate the mean, median and mode for small sets of data</li> <li>• Add information to, and use a Venn diagram to solve problems, including probability.</li> </ul>	<p><b><u>Knowledge and understanding:</u></b></p> <p>Students continue following the Key Stage 3 national curriculum programme of study, which covers the 6 key areas of Mathematics: Number, Algebra, Rates of Change, Geometry and Measure, Statistics and Probability. Particular emphasis is placed upon ensuring that students develop their mathematical understanding.</p> <p><b><u>Skills Development:</u></b></p> <p>During the course of the year, students will develop a wider variety of problem solving skills to help them tackle everyday problems. A typical student in year 8 will display skills such as:</p> <ul style="list-style-type: none"> <li>• Being able to solve linear equations</li> <li>• Identify a variety of shapes, along with their properties including quadrilaterals and regular polygons</li> <li>• Use ratios and proportional reasoning to solve in a variety of contexts</li> <li>• Use diagrams such as pie charts to analyse data</li> <li>• Use Venn diagrams to enumerate problems</li> </ul>	<p><b><u>Knowledge and understanding:</u></b></p> <p>Students conclude their work on the Key Stage 3 national curriculum programme of study, which covers the 6 key areas of Mathematics: Number, Algebra, Rates of Change, Geometry and Measure, Statistics and Probability. Particular emphasis is placed upon consolidating learning from year 7 &amp; 8, whilst preparing students for the demand of GCSE Mathematics.</p> <p><b><u>Skills development:</u></b></p> <p>During the course of the year, students will develop a wider variety of problem solving skills to help them tackle a wider range of problems. A typical student in year 9 will display skills such as:</p> <ul style="list-style-type: none"> <li>• Construct and use straight line graphs, including speed/time graphs</li> <li>• Use Pythagoras' Theorem in different contexts</li> <li>• Understand and use rounding to calculate estimates of calculations</li> </ul> <p><b><u>Expected progress by the end of the Key Stage:</u></b></p> <p>Students will be able to progress on to the GCSE Higher or Foundation depending which is most appropriate to their level.</p>