



<b>Overview</b>	<p>The purpose of the Maths curriculum is to equip students with uniquely powerful ways to describe, analyse and solve problems and to make them more prepared for the real world.</p> <p>We do this by providing a secure understanding of mathematical concepts, from basic principles of mathematics to complex topics that combine several areas of study into a single question.</p> <p>In Year 7 we concentrate on retention of knowledge and depth of learning. In doing this, all our students have the opportunity to master key skills.</p>
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<b>Autumn Term</b>	<b>Half Term 1</b>	<b>Half Term 2</b>	<b>Assessment</b>
	<p><b>Numerical Skills</b></p> <ul style="list-style-type: none"> <li>■ Understand and use place value for decimals. Calculations with negative numbers. Estimate calculations by rounding.</li> <li>■ Order of operations</li> <li>■ Solve calculations requiring understanding of B-I-DM-AS (know that the inverse of squaring is 'square rooting')</li> <li>■ Basic rules of algebra</li> <li>■ Use the basic rules of algebra</li> </ul> <p><b>Factors and Multiples</b></p> <ul style="list-style-type: none"> <li>■ Use the concepts and vocabulary of prime numbers, factors (or divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple</li> <li>■ Expand and factorise</li> <li>■ Simplify and manipulate algebraic expressions to maintain equivalence by multiplying a single term over a bracket or by taking out common factors</li> </ul>	<p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>■ Use Addition and Subtraction, including formal written methods, applied to integers, decimals</li> <li>■ Perimeter</li> <li>■ Calculate and solve problems involving perimeters of rectangles and compound shapes (not circles)</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>■ Use Multiplication and Division, including formal written methods, applied to integers, decimals</li> <li>■ Area of rectangles and triangles and parallelograms</li> <li>■ Derive and apply formulae to calculate and solve problems involving area of triangles and rectangles</li> </ul>	<p>Baseline Test. First week of Term</p> <p>The assessments in Year 7 mainly test the content covered in that half term but also test cumulative learning.</p> <p>Half Term 1. Immediately after Oct Half Term Break.</p> <p>Half Term 2. Just before Christmas Break</p>

<b>Spring Term</b>	<b>Half Term 3</b>	<b>Half Term 4</b>	<b>Assessment</b>
	<p><b>Fraction Manipulation</b></p> <ul style="list-style-type: none"> <li>■ Express one quantity as a fraction of another, where the fraction is less than 1 and greater than 1</li> </ul> <p><b>Adding and Subtracting Fractions</b></p> <ul style="list-style-type: none"> <li>■ Use addition and subtraction, including formal written methods, applied to proper and improper fractions, and mixed numbers</li> </ul> <p><b>Comparing and Ordering Fractions</b></p> <ul style="list-style-type: none"> <li>■ Compare and order fractions by creating common denominators</li> </ul>	<p><b>Substitution</b></p> <ul style="list-style-type: none"> <li>■ Substitute into simple formulae</li> </ul> <p><b>Angles</b></p> <ul style="list-style-type: none"> <li>■ Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles</li> </ul> <p><b>Polygons</b></p> <ul style="list-style-type: none"> <li>■ Derive, describe and illustrate properties of triangles, quadrilaterals and other plane figures [for example, equal lengths and angles] using appropriate language and technologies</li> </ul>	<p>The assessments in Year 7 mainly test the content covered in that half term but also test cumulative learning.</p> <p>Half Term 3. Last week of Half Term 3</p> <p>Half Term 4 Last week of HT 4.</p>

<b>Fractions of amounts</b>		
<ul style="list-style-type: none"> <li>Interpret fractions as operators</li> </ul>		

<b>Summer Term</b>	<b>Half Term 5</b> <b>Symmetry and Reflection</b> <ul style="list-style-type: none"> <li>Describe, sketch and draw regular polygons, and other polygons that are reflectively and rotationally symmetric</li> </ul> <b>Coordinates</b> <ul style="list-style-type: none"> <li>Read and plot coordinates in all 4 quadrants</li> </ul>	<b>Half Term 6</b> <b>Mean</b> <ul style="list-style-type: none"> <li>Describe, interpret and compare observed distributions of a single variable through the use of the mean</li> </ul> <b>Two-way tables &amp; Venn Diagrams</b> <ul style="list-style-type: none"> <li>Enumerate sets and unions/ intersections of sets systematically, using tables, grids and Venn diagrams</li> </ul>	<b>Assessment</b>
			<p>The assessments in Year 7 mainly test the content covered in that half term but also test cumulative learning.</p> <p>Half Term 5. Last Week of HT5</p> <p>Summer Exam these exams cover all the topics learnt in year 7 in equal measures.</p>

<b>Useful Resources for Supporting Your Child at Home:</b>	<b>Homework:</b>
<ul style="list-style-type: none"> <li><a href="http://whgs-academy.sparxmaths.uk">whgs-academy.sparxmaths.uk</a></li> <li><a href="http://curriculum.unitedlearning.org.uk">curriculum.unitedlearning.org.uk</a></li> <li><a href="http://trockstars.com">trockstars.com</a></li> <li><a href="http://www.bbc.co.uk/bitesize/subjects/zqhs34j">www.bbc.co.uk/bitesize/subjects/zqhs34j</a></li> <li><a href="http://mmerevise.co.uk">mmerevise.co.uk</a></li> </ul>	<p>Sparx Homework is set automatically weekly, and students have 7 days to achieve 100%</p>