

# KS3 Maths

<b>Year 7</b>			
<b>Term</b>	<b>Learning Programme</b>	<b>Assessments</b>	<b>Homework opportunities</b>
Autumn Term 1	<p><b>Unit 1 and 5 -</b> Properties of number: multiples, factors and primes, Order of operations, powers and roots</p> <p><b>Unit 2 - Angles</b></p> <p><b>Unit 3 - Sequences</b></p> <p><b>Unit 4 - Collecting data</b></p> <p><b>Unit 6 - Decimals</b></p>	<p><b>Assessment 1</b> - <b>Units 1 to 6</b></p>	<p>Homework is linked to the Learning Programme.</p> <p>In Year 7 students and their parents may support learning by accessing the Maths in Practice textbooks from home through: Dynamic Learning: <a href="http://my.dynamic-learning.co.uk/Default.aspx?cid=14695">http://my.dynamic-learning.co.uk/Default.aspx?cid=14695</a> <b>Centre ID:</b> 14695 <b>Student's school username</b> <b>Password:</b> Password.</p> <p>Homework is set by teachers to meet the needs of the classes that they teach. Homework can take a number of forms: exercise questions to consolidate understanding, revision questions, investigational work, research or planning tasks for subsequent lessons, on-line "My Maths" homework. The amount of homework set depends on the age and ability of the students. Parents are encouraged to monitor that homework is being completed by looking in their child's planner and in their exercise book on a regular basis.</p>

Autumn Term 2	<p><b>Unit 7</b> - Rounding and estimating</p> <p><b>Unit 8</b> - multiplication and division</p> <p><b>Unit 9</b> - symmetry</p> <p><b>Unit 10</b> - properties of 2D shapes</p> <p><b>Unit 11</b> - area and perimeter.</p> <p><b>Unit 12</b> - Constructions</p>	<p><b>Assessment 2</b> - Units 7 to 12</p>	
Spring Term 1	<p><b>Units 13, 14 and 15</b> - Introduction to algebra: simplifying expressions, substitution, functions machines, brackets.</p> <p><b>Unit 16</b> - Interpreting Data</p>		
Spring Term 2	<p><b>Unit 17</b> - Averages and range</p> <p><b>Unit 18</b> - negative numbers</p> <hr/> <p><b>Unit 19</b> - Fractions: simplifying, convert to decimal, arithmetic with fractions, fractions of amounts.</p> <p><b>Unit 23</b> - Frac/Dec/% : converting between them, percentages of amounts, percentage change.</p>	<p><b>Assessment 3</b> - Units 13 to 18</p>	
Summer Term 1	<p><b>Unit 20</b> - Measures: converting metric units, interpreting scales, time.</p> <p><b>Unit 21</b> - Transformations:</p>	<p><b>Assessment 4</b> - Units 19 to 23</p>	

	<p>Reflection, Rotation and Translation</p> <p><b>Unit 22</b> - properties of 3D shapes.</p>		
<p>Summer Term 2</p>	<p><b>Unit 24</b> - Ratio and Proportion</p> <p><b>Unit 25, 26 and 27</b> - Advanced algebra solving equations straight line graphs</p> <p><b>Unit 28</b> - probability</p> <p><b>Unit 29</b> - interpreting charts.</p>	<p><b>Assessment 5</b></p> <p><b>- Units 24 to 29</b></p>	

Year 8			
Term	Topic		Homework opportunities
Autumn Term 1	<p><b>Unit 1, 5 and 6 -</b> Collecting and interpreting data: frequency tables for discrete and continuous data, two way tables, bar charts, pie charts, averages, stem and leaf diagrams and frequency diagrams.</p> <p><b>Unit 2 -</b> Order of operations, powers and roots.</p> <p><b>Unit 3 -</b> Angles</p> <p><b>Unit 4 -</b> Sequences</p>	<p><b>Assessment 1</b> - <b>Units 1 to 6</b></p>	<p>Homework is linked to the Learning Programme. In Year 8 students and their parents may support learning by accessing the Maths in Practice textbooks from home through:</p> <p>Dynamic Learning:  <a href="http://my.dynamic-learning.co.uk/Default.aspx?cid=14695">http://my.dynamic-learning.co.uk/Default.aspx?cid=14695</a>  <b>Centre ID: 14695</b></p> <p><b>Student's school username</b></p> <p><b>Password:</b> Password.</p> <p>Homework is set by teachers to meet the needs of the classes that they teach. Homework can take a number of forms: exercise questions to consolidate understanding, revision questions, investigational work, research or planning tasks for subsequent lessons, on-line "My Maths" homework. The amount of homework set depends on the age and ability of the students. Parents are encouraged to monitor that homework is being completed by looking in their child's planner and in their exercise book on a regular basis.</p>

Autumn Term 2	<p><b>Unit 7 - Multiples and factors</b></p> <p><b>Unit 8 - Decimals:</b> rounding, ordering, converting to fractions, recurring decimals and multiplication and division.</p> <p><b>Unit 9 - Negative numbers</b></p> <p><b>Unit 10 - Properties of 2D and 3D shapes.</b></p> <p><b>Unit 11 - Transformations:</b> reflection, rotation, translation and combinations of the three.</p>	<p><b>Assessment 2</b> <b>- Units 7 to 11</b></p>	
Spring Term 1	<p><b>Unit 12 - Area (including circles), Unit 13 - Constructions</b></p> <p><b>Unit 14 and 15 - Algebra:</b> substitution, simplification, brackets, factorising, algebraic fractions and functions.</p>		
Spring Term 2	<p><b>Unit 16 - scatter graphs</b></p> <p><b>Unit 17 - Probability</b></p> <hr/> <p><b>Unit 18 - Fractions:</b> equivalence, simplification, addition, subtraction, multiplication and division.</p>	<p><b>Assessment 3</b> <b>- Units 12 to 17</b></p>	

	<b>Unit 19 - Percentages</b> (including increase and decrease)		
Summer Term 1	<b>Unit 20 - Ratio and proportion</b> <b>Unit 21 - Measures:</b> conversions from metric to imperial, metric conversions, converting between area units and working with time. <b>Unit 22 - Enlargements and scale.</b>	<b>Assessment 4</b> <b>- Units 18 to 22</b>	
Summer Term 2	<b>Unit 23 - Plans and elevations, nets, volume, surface area.</b>  <b>Unit 24, 25 and 26 - Advanced algebra:</b> using formulae, substitution, changing the subject, solving equations (including with brackets), trial and improvement, straight line graphs and real life graphs.	<b>Assessment 5</b> <b>- Units 23 to 26</b>	

Year 9			
Term	Topic		Homework opportunities
Autumn Term 1	<p><b>Unit 1</b> - Indices, standard form, rounding and estimating, decimals, using a calculator efficiently.</p> <p><b>Unit 2</b> - Fractions (including arithmetic, ordering, comparing and equivalence), percentages (including increase and decrease and compound interest) and decimals.</p> <p><b>Unit 3</b> - Ratio and proportion</p>	<p><b>Assessment 1</b> - Units 1 to 3</p>	<p>Homework is linked to the Learning Programme.</p> <p>Homework is set by teachers to meet the needs of the classes that they teach. Homework can take a number of forms: exercise questions to consolidate understanding, revision questions, investigational work, research or planning tasks for subsequent lessons, on-line "My Maths" homework.</p> <p>Homework in Year 9 includes a series of standard tasks set at the end of each unit, every two or three weeks. The amount of homework set depends on the ability of the students. Parents are encouraged to monitor that homework is being completed by looking in their child's planner and in their exercise book on a regular basis.</p>
Autumn Term 2	<p><b>Unit 4</b> - Using time in real life contexts.</p> <p><b>Unit 5</b> - Metric and Imperial measures (including converting between units, choosing the correct units, reading scales, Pythagoras' Theorem and Trigonometry)</p>	<p><b>Assessment 2</b> - Units 4 and 5</p>	

Spring Term 1	<p><b>Unit 6</b> - Properties of 2D and 3D shapes, angles, similarity, loci and constructions and transformations.</p> <p><b>Unit 8</b> - area, perimeter, volume, surface area and enlargements.</p>	<p><b>Assessment 3</b> - Units 6 and 8</p>	
Spring Term 2	<p><b>Unit 7 - Algebra</b> - substitution, simplifications, solving equations, sequences, functions, straight line graphs, quadratic functions and equations and inequalities.</p>	<p><b>Assessment 4</b> - Unit 7</p>	
Summer Term 1	<p><b>Unit 9 - Collecting data</b> - bar charts, pie charts, scatter graphs and interpreting frequency tables.</p> <p><b>Unit 10 - Using data</b> - averages, stem and leaf diagrams, cumulative frequency, box plots and frequency polygons.</p> <p><b>Unit 11</b> - probability</p>	<p><b>Assessment 5</b> - Units 9, 10 and 11</p>	
Summer Term 2	<p>Now Year 9 students will start the GCSE scheme of work with a module on Algebra.</p>	<p><b>GCSE Module 1 Assessment</b></p>	