






<b>Mathematics Year 7</b>	<b>Curriculum Intent</b> The Year 7 curriculum will consolidate and build on the key themes studies at KS2. Students will study all aspects of mathematics – <b>Number, Shape, Ratio and Proportion, Algebra and Data</b> . Key concepts will be revisited through retrieval practice, and then developed at a level appropriate to the ability of each student. New learning will be carefully spaced and regular consolidation tasks will enable retention of key knowledge. Key skills will be developed with repeated practice and frequent problem solving activities requiring students to identify the skills needed to complete the task. Students will develop understanding of key concepts and will be given the opportunity to demonstrate this in a range of different contexts.		
<b>Curriculum pathway</b>  <b>Emerging Learners</b> <b>Developing, Securing and Mastery</b>  	<p style="text-align: center;"><b>Term 1 and 2</b></p> <p><b>Number E1</b> Counting, Ordering, Patterns</p> <p><b>Shape E1</b> 2D shapes, Perimeter, Area</p> <p><b>Number E2</b> Expressing Fractions, Sharing in fractions, Decimal value, Ordering</p> <p><b>Shape E2</b> Measurement, Units, Metric Conversion</p> <p><b>Data E1</b> Sorting data, Collecting data, Reading charts</p> <p><b>Number 1</b> 4 Operations, Place Value, Rounding, Multiples</p> <p><b>Shape 1</b> Angle facts, Perimeter, Units, Construction</p> <p><b>Ratio and Prop. 1</b> Expressing fractions, equivalence, addition and subtractions Expressing ratio</p> <p><b>Number 2</b> HCF, Prime numbers. Inequalities</p> <p><b>Algebra 1</b> Expressions, Collecting like terms, Substitution</p>	<p style="text-align: center;"><b>Term 3 and 4</b></p> <p><b>Shape E3</b> Area, Perimeter</p> <p><b>Number E3</b> Ordering decimals, Rounding, Number patterns</p> <p><b>Shape E4</b> 3D shapes, Properties</p> <p><b>Number E4</b> Four operations over Integers</p> <p><b>Shape E5</b> Angle facts, Coordinates, Rotation</p> <p><b>Data 1</b> Sampling, Collecting Data, Representing Data, Averages</p> <p><b>Shape 2</b> Area, Symmetry, Angles in triangles, Parallel lines</p> <p><b>Algebra 2</b> Multiplying terms, Laws of indices, Expanding single bracket, Solve</p> <p><b>Ratio and Prop. 2</b> Multiplying fractions, Dividing fractions, Converting Frac, Dec, %</p> <p><b>Data 2</b> Averages, Probability</p>	<p style="text-align: center;"><b>Term 5 and 6</b></p> <p><b>Number E5</b> Multiplication, Division</p> <p><b>Algebra E1</b> Applying formulae, Functions</p> <p><b>Number E6</b> Number sequences</p> <p><b>Shape E6</b> 3D shape properties, Volume</p> <p><b>Ratio and Prop. 3</b> Percentage of an amount, Ratio, Enlargement</p> <p><b>Algebra 3</b> Solving equations, Sequences, Nth term</p> <p><b>Number 3</b> Rounding, Significant figures, Estimation, Percentage change</p> <p><b>Shape 3</b> Surface Area, Circles, Congruence, Transformations</p> <p><b>Data 3</b> Combined events, Scatter diagrams</p>
<b>Skills</b>	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability
<b>Understanding</b>	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital
<b>Interleaving starters</b>	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters
<b>Assessment</b>	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>Baseline assessment at the beginning of Year 7</b>	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>End of Year assessment</b>

<b>Mathematics Year 8</b>	<b>Curriculum Intent</b> The Year 8 curriculum will consolidate and build on the key themes studied at KS2 and during Year 7. Students will study all aspects of mathematics – – <b>Number, Shape, Ratio and Proportion, Algebra and Data.</b> Key concepts will be revisited through retrieval practice, and then developed at a level appropriate to the ability of each students. New learning will be carefully spaced and regular consolidation tasks will enable retention of key knowledge. Key skills will be developed with repeated practice and frequent problem solving activities requiring students to identify the skills needed to complete the task. Students will develop understanding of key concepts and will be given the opportunity to demonstrate this in a range of different contexts.		
<b>Curriculum pathway</b>  <b>Emerging Learners</b> <b>Developing, Securing and Mastery</b>  	<p style="text-align: center;"><b>Term 1 and 2</b></p> <p><b>Number E7</b> Counting, Ordering, Patterns</p> <p><b>Shape E7</b> 2D shapes, Perimeter, Area</p> <p><b>Data E2</b> Statistical tables, Bar charts, pictograms</p> <p><b>Ratio and Prop. 4</b> Ratio and fraction equivalence, direct proportion</p> <p><b>Shape 4</b> Quadrilaterals, Plans and elevations, Volume</p> <p><b>Algebra 4</b> Substitution, Solve, Factorise</p> <p><b>Data 4</b> Grouped frequency, Estimated mean</p> <p><b>Number 4</b> Percentage increase/decrease</p> <p><b>Graphs 1</b> Straight line graph, Gradient</p>	<p style="text-align: center;"><b>Term 3 and 4</b></p> <p><b>Ratio and Prop. 1</b> Write ratio, understand proportion</p> <p><b>Shape E8</b> Perimeter, Area, counting and calculating</p> <p><b>Number E8</b> 4 operations, multiples, patterns</p> <p><b>Number 5</b> Reverse percentage</p> <p><b>Ratio and Prop. 5</b> Compound measures</p> <p><b>Graphs 2</b> Non-linear graphs, Real-life graphs</p> <p><b>Ratio and Prop. 6</b> Share in a ratio, ratio problems</p> <p><b>Algebra 5</b> Solve inequalities, Changing the subject, Function notation</p> <p><b>Shape 5</b> Scale drawings, Bearings</p>	<p style="text-align: center;"><b>Term 5 and 6</b></p> <p><b>Shape E9</b> Angles, using protractors, scales, time, movement</p> <p><b>Number E9</b> Fractions, decimals,</p> <p><b>Algebra E2</b> Solve, collect like terms, use formulae</p> <p><b>Number 6</b> Bounds, Reciprocals, Fractional indices</p> <p><b>Algebra 6</b> Expand double brackets, Factorise quadratic expression</p> <p><b>Shape 6</b> Right-angled triangles, (Pythagoras, Trigonometry), Arcs and Sectors</p> <p><b>Ratio and Proportion 7</b> Compound measures, Similar shapes</p> <p><b>Data 7</b> Combined events</p> <p><b>Number 7</b> Surd manipulation</p>
<b>Skills</b>	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability
<b>Understanding</b>	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital
<b>Interleaving starters</b>	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters
<b>Assessment</b>	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>End of Year assessment</b>

<b>Mathematics Year 9</b>	<b>Curriculum Intent</b> The Year 9 curriculum will consolidate and build on the key themes studied during Year 7 and Year 8. Students will study all aspects of mathematics – <b>Number, Shape, Ratio and Proportion, Algebra and Data</b> . Key concepts will be revisited through retrieval practice, and then developed at a level appropriate to the ability of each students. New learning will be carefully spaced and regular consolidation tasks will enable retention of key knowledge. Key skills will be developed with repeated practice and frequent problem solving activities requiring students to identify the skills needed to complete the task. Students will develop understanding of key concepts and will be given the opportunity to demonstrate this in a range of different contexts.		
<b>Curriculum pathway</b>  <b>Emerging Learners</b> <b>Developing, Securing</b> <b>Mastery</b>  	<p align="center"><b>Term 1 and 2</b></p> <p><b>Number 1</b> 4 Operations, Place Value, Rounding, Multiples</p> <p><b>Shape 1</b> Angle facts, Perimeter, Units, Construction</p> <p><b>Ratio and Prop. 1</b> Expressing fractions, equivalence, addition and subtractions Expressing ratio</p> <p><b>Number 2</b> HCF, Prime numbers. Inequalities</p> <p><b>Ratio and Prop. 8</b> Ratio problems, 1 : n</p> <p><b>Data 6</b> Time series, Venn diagrams</p> <p><b>Algebra 7</b> Algebraic convention, Simple proof</p> <p><b>Shape 7</b> Vector diagrams, Operating with column vectors</p> <p><b>Number 8</b> Percentages, Simple interest, Compound interest</p>	<p align="center"><b>Term 3 and 4</b></p> <p><b>Algebra 1</b> Expressions, Collecting like terms, Substitution</p> <p><b>Data 1</b> Sampling, Collecting Data, Representing Data, Averages</p> <p><b>Shape 2</b> Area, Symmetry, Angles in triangles, Parallel lines</p> <p><b>Algebra 2</b> Multiplying terms, Laws of indices, Expanding single bracket, Solve</p> <p><b>Number 9</b> Combinations</p> <p><b>Shape 8</b> Construction, Loci, Right-angled triangles, (Pythagoras, Trigonometry)</p> <p><b>Algebra 8</b> Plotting quadratic functions, Roots, Quadratic equations</p> <p><b>Ratio and Prop. 9</b> Graphs in Proportion</p> <p><b>Number 10</b> Rounding, <b>Truncation</b>, Error intervals, Bounds</p>	<p align="center"><b>Term 5 and 6</b></p> <p><b>Ratio and Prop. 2</b> Multiplying fractions, Dividing fractions, Converting Frac, Dec, %</p> <p><b>Data 2</b> Averages, Probability</p> <p><b>Ratio and Prop. 3</b> Percentage of an amount, Ratio, Enlargement</p> <p><b>Algebra 3</b> Solving equations, Sequences, Nth term</p> <p><b>Data 7</b> Statistical diagrams, Comparisons</p> <p><b>Shape 9</b> Transformations, Vector Geometry</p> <p><b>Algebra 9</b> Special sequences, Linear, Quadratic, <b>Expand Trinomials</b></p> <p><b>Algebra 10</b> Equations of straight lines, Velocity-Time graphs</p> <p><b>Ratio and Proportion 10</b> Exact Trigonometric values, <b>Sine and Cosine rule</b></p>
<b>Skills</b>	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability	Number, Place Value and Operations Shape, Geometry and Measures Number, Ratio and Proportion Algebra Data, Statistics, Charts and Probability
<b>Understanding</b>	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital
<b>Interleaving starters</b>	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters
<b>Assessment</b>	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>Autumn term Formal assessments in class</b>	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>Spring term Formal assessments in class</b>	Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>End of Year assessment</b>

<b>Mathematics Year 10</b>	<b>Curriculum Intent</b> The Year 10 curriculum will consolidate and extend the differing areas of mathematics covered during Key Stage 3. Students will continue to study Number, Algebra, Geometry and Data Handling as they prepare for the GCSE Mathematics examinations at the end of Year 11. Opportunities to revisit key concepts through retrieval practice will be frequent parts of the curriculum. Key knowledge and skills will be developed with the use of problem solving activities and the frequent use of 'problem solving' style GCSE questions. Students will be required to identify which part of their knowledge and skills will be best suited to the question.					
	<b>Term 1 and 2</b>		<b>Term 3 and 4</b>		<b>Term 5 and 6</b>	
<b>Curriculum pathway</b>  <b>Foundation tier only</b>  <b>Foundation/Higher Crossover</b>  <b>Higher tier only</b>  	<p><b>Number 3</b> Rounding, Significant figures, Estimation, Percentage change</p> <p><b>Number A</b> Products of prime factors, Multiples</p> <p><b>Data 8</b> Probability diagrams, Conditional probability</p> <p><b>Shape 3</b> Surface Area, Circles, Congruence, Transformations</p> <p><b>Data 3</b> Combined events, Scatter diagrams</p> <p><b>Ratio and Prop. 4</b> Ratio and fraction equivalence, direct proportion</p> <p><b>Algebra A</b> Expand, Simplify, Inequalities</p> <p><b>Shape A</b> Coordinates, Pythagoras, Trigonometry</p> <p><b>Data A</b> Two-way tables, Frequency trees</p> <p><b>Number 11</b> Recurring decimals, Rationalising the denominator</p> <p><b>Ratio and Prop. 11</b> Growth and decay</p> <p><b>Algebra 11</b> Simultaneous equations, Area under a curve, Estimating Gradients</p> <p><b>Data 9</b> Cumulative frequency diagrams, Boxplots</p>	<p><b>Shape 4</b> Quadrilaterals, Plans and elevations, Volume</p> <p><b>Algebra 4</b> Substitution, Solve, Factorise</p> <p><b>Data 4</b> Grouped frequency, Estimated mean</p> <p><b>Number 4</b> Percentage increase/decrease</p> <p><b>Number B</b> Fraction operations, Calculating with percentages</p> <p><b>Algebra B</b> Linear graphs, Quadratic graphs</p> <p><b>Ratio and Prop. B</b> Growth and decay</p> <p><b>Shape B</b> Angles in parallel lines, Angles in polygons</p> <p><b>Data B</b> Averages from tables</p> <p><b>Ratio and Proportion 12</b> Ratio, Contextual problems</p> <p><b>Shape 10</b> Area of any triangle, Circle Theorems</p> <p><b>Algebra 12</b> Completing the square, Roots, Turning points, Iteration</p> <p><b>Data 10</b> Histograms</p> <p><b>Algebra 13</b> Applying functions, Inverse functions, Compound functions</p>	<p><b>Graphs 1</b> Straight line graph, Gradient</p> <p><b>Number 5</b> Reverse percentage</p> <p><b>Ratio and Prop. 5</b> Compound measures</p> <p><b>Graphs 2</b> Non-linear graphs, Real-life graphs</p> <p><b>Ratio and Prop. 6</b> Share in a ratio, ratio problems</p> <p><b>Number C</b> Indices, Standard index form</p> <p><b>Algebra C</b> Sequences, Forming and solving equations</p> <p><b>Ratio and Prop. C</b> Ratio</p> <p><b>Shape C</b> Construction, 2D representation, Circles, Similar shapes</p> <p><b>Data C</b> Frequency diagrams, Scatter diagrams, Probability</p> <p><b>Shape 11</b> Bearings and Trigonometry, Similar shapes Area and Volume</p> <p><b>Algebra 14</b> Non-linear simultaneous equations</p> <p><b>Algebra 15</b> Algebraic fractions, Geometric sequences</p> <p><b>Shape 12</b> The equation of a circle</p> <p><b>Algebra 16</b> Trigonometric graphs, Transforming graphs</p>			
<b>Skills</b>	<p>Number, Place Value and Operations</p> <p>Shape, Geometry and Measures</p> <p>Number, Ratio and Proportion</p> <p>Algebra</p> <p>Data, Statistics, Charts and Probability</p>	<p>Number, Place Value and Operations</p> <p>Shape, Geometry and Measures</p> <p>Number, Ratio and Proportion</p> <p>Algebra</p> <p>Data, Statistics, Charts and Probability</p>	<p>Number, Place Value and Operations</p> <p>Shape, Geometry and Measures</p> <p>Number, Ratio and Proportion</p> <p>Algebra</p> <p>Data, Statistics, Charts and Probability</p>			
<b>Understanding</b>	<p>Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital</p>	<p>Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital</p>	<p>Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital</p>			
<b>Interleaving starters</b>	<p>Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters</p>	<p>Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters</p>	<p>Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters</p>			
<b>Assessment</b>	<p>Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>Autumn term Formal assessments in class</b></p>	<p>Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>Spring term Formal assessments in class</b></p>	<p>Low Stakes tasks in class. Feedback sheets Formal written assessment at end of each unit of work <b>End of Year assessment</b></p>			

<b>Mathematics</b> <b>Year 11</b>	<b>Curriculum Intent</b> The Year 11 curriculum will consolidate and extend the differing areas of mathematics covered during Year 10. Students will continue to study Number, Algebra, Geometry and Data Handling as they prepare for the GCSE Mathematics examinations at the end of the year. Opportunities to revisit key concepts through retrieval practice will be frequent parts of the curriculum. Key knowledge and skills will be developed with the use of problem solving activities and the frequent use of 'problem solving' style GCSE questions. Students will be required to identify which part of their knowledge and skills will be best suited to the question.		
<b>Curriculum pathway</b>  <b>Foundation tier only</b>  <b>Foundation/Higher Crossover</b>  <b>Higher tier only</b>  	<p style="text-align: center;"><b>Term 1 and 2</b></p> <p><b>Algebra 5</b> Solve inequalities, Changing the subject, Function notation</p> <p><b>Shape 5</b> Scale drawings, Bearings</p> <p><b>Number D</b> Rounding, Estimation, Error intervals</p> <p><b>Algebra D</b> Simultaneous equations</p> <p><b>Ratio and Prop. D</b> Compound measures</p> <p><b>Shape D</b> Transformations, Vector geometry</p> <p><b>Data D</b> Probability trees, Venn diagrams</p> <p><b>Algebra 17</b> Drawing inequalities, Solving quadratic inequalities</p> <p><b>Algebra 18</b> Vector geometry, Vector proof</p> <p><b>Algebra 19</b> Proof of Circle theorems</p> <p><b>Shape 13</b> 3-Dimensional Pythagoras and Trigonometry</p>	<p style="text-align: center;"><b>Term 3 and 4</b></p> <p>Analysis of assessment results and Exam board information to identify topics for consideration</p> <p>Bespoke programmes of study</p> <p>Consolidation and preparation for GCSE exams</p>	<p style="text-align: center;"><b>Term 5 and 6</b></p> <p>Analysis of assessment results and Exam board information to identify topics for consideration</p> <p>Bespoke programmes of study</p> <p>Consolidation and preparation for GCSE exams</p>
<b>Skills</b>	<ul style="list-style-type: none"> <li>Number, Place Value and Operations</li> <li>Shape, Geometry and Measures</li> <li>Number, Ratio and Proportion</li> <li>Algebra</li> <li>Data, Statistics, Charts and Probability</li> </ul>	<ul style="list-style-type: none"> <li>Number, Place Value and Operations</li> <li>Shape, Geometry and Measures</li> <li>Number, Ratio and Proportion</li> <li>Algebra</li> <li>Data, Statistics, Charts and Probability</li> </ul>	<ul style="list-style-type: none"> <li>Number, Place Value and Operations</li> <li>Shape, Geometry and Measures</li> <li>Number, Ratio and Proportion</li> <li>Algebra</li> <li>Data, Statistics, Charts and Probability</li> </ul>
<b>Understanding</b>	Problem solving activities used to broaden understanding Real-life concepts explored such as finance, to develop pupil's cultural capital		
<b>Interleaving starters</b>	Regular consolidation of prior teaching Reviewing skills for future learning Use of Mathsbox starters		
<b>Assessment</b>	Low Stakes tasks in class  <b>MOCK EXAMS - NOVEMBER/DECEMBER</b>	Low Stakes tasks in class  <b>MOCK EXAMS - MARCH</b>	Low Stakes tasks in class  <b>FINAL EXAMS – MAY/JUNE</b>

