

## Scheme of Learning – Long Term Planning

Subject: Mathematics – 2017-18

Key stage: 3

Year	Autumn Term*	Spring Term*	Summer Term*
7	<u>Autumn 1</u> <ul style="list-style-type: none"> <li>• Whole numbers and decimals</li> <li>• Measures, perimeter and area</li> <li>• Case Study: Dairy Farm</li> </ul>	<u>Spring 1</u> <p>End of Block 2 assessment Jan</p> <ul style="list-style-type: none"> <li>• Angles and 2D shapes</li> <li>• Graphs</li> <li>• Whole number calculations</li> </ul>	<u>Summer 1</u> <ul style="list-style-type: none"> <li>• Ratio &amp; Proportion</li> <li>• Sequences</li> <li>• Case Study : Labyrinth</li> <li>• Revision for school exams</li> </ul>
	<u>Autumn 2</u> <p>End of Block 1 assessment Oct/Nov</p> <ul style="list-style-type: none"> <li>• Factors and multiples</li> <li>• Expressions and formulae</li> <li>• Fractions, decimals and percentages</li> <li>• Case Study: Recycling &amp; Energy</li> </ul>	<u>Spring 2</u> <p>End of Block 3 assessment March</p> <ul style="list-style-type: none"> <li>• Statistics</li> <li>• Equations</li> <li>• Case Study : Rangoli</li> </ul>	<u>Summer 2</u> <p>School Summer Exams June</p> <ul style="list-style-type: none"> <li>• Constructions &amp; 3D shapes</li> <li>• Probability</li> <li>• Probability Fair</li> <li>• Case Study : School Fair</li> </ul>
8	<u>Autumn 1</u> <ul style="list-style-type: none"> <li>• Whole Numbers, decimals, indices</li> <li>• Units for measures, perimeter, area, volume</li> <li>• Notation, substitution, indices, simplifying expressions, expanding and factorising, formulae</li> <li>• Case Study: Energy in the Home</li> </ul>	<u>Spring 1</u> <p>End of Block 2 assessment Jan</p> <ul style="list-style-type: none"> <li>• Written and Calculator Methods, Order of operations, problem solving</li> <li>• Collecting and representing data</li> <li>• Transformations</li> </ul>	<u>Summer 1</u> <ul style="list-style-type: none"> <li>• Constructions</li> <li>• Probability</li> <li>• Revision for school exams</li> </ul>
	<u>Autumn 2</u> <p>End of Block 1 assessment Oct/Nov</p> <ul style="list-style-type: none"> <li>• Fractions, decimals and percentages</li> <li>• Angles and Shapes</li> <li>• Graphs</li> <li>• Case Study: Patchwork</li> </ul>	<u>Spring 2</u> <p>End of Block 3 assessment March</p> <ul style="list-style-type: none"> <li>• Equations</li> <li>• Ratio, proportion, linking to fractions and percentages</li> <li>• Case Study: Food Crops</li> </ul>	<u>Summer 2</u> <p>School Summer Exams June</p> <ul style="list-style-type: none"> <li>• Case Study: Paper Folding</li> <li>• Sequences</li> <li>• 3D shapes</li> <li>• Case studies: Perspective, Free Range, "Every Day Maths"</li> </ul>

<b>9 H</b>	<u>Autumn 1</u> <ul style="list-style-type: none"> <li>• Number work</li> <li>• Using algebra</li> <li>• Congruency and construction</li> <li>• Geometrical reasoning</li> <li>• Multiplying brackets</li> </ul>	<u>Spring 1</u> <p>End of Block 2 assessment Jan</p> <ul style="list-style-type: none"> <li>• Shape and space problems</li> <li>• Sequences</li> <li>• Rounding, estimating and error bounds</li> <li>• Drawing and visualising 3D shapes</li> <li>• Percentage Change</li> </ul>	<u>Summer 1</u> <ul style="list-style-type: none"> <li>• Trigonometry</li> <li>• Simultaneous equations</li> <li>• Revision for Summer exams</li> </ul>
	<u>Autumn 2</u> <p>End of Block 1 assessment Oct/Nov</p> <ul style="list-style-type: none"> <li>• Data handling</li> <li>• Using fractions</li> <li>• Indices</li> <li>• Standard form</li> <li>• Applying mathematics</li> <li>• Scatter graphs</li> <li>• Trial and improvement</li> </ul>	<u>Spring 2</u> <p>End of Block 3 assessment March</p> <ul style="list-style-type: none"> <li>• Transformations, single &amp; combined</li> <li>• Reading and interpreting charts and graphs</li> <li>• Area and volume</li> <li>• Collecting and interpreting data</li> <li>• Applying mathematics in context</li> </ul>	<u>Summer 2</u> <p>School Summer Exams June</p> <ul style="list-style-type: none"> <li>• Further trigonometry work</li> <li>• Review of <math>y=mx+c</math></li> <li>• Forming and solving linear equations and inequalities</li> <li>• Rearranging harder formulae</li> <li>• Quadratics graphing</li> <li>• Factorising and solving quadratics</li> </ul>

<b>9 C</b>	<u>Autumn 1</u> <ul style="list-style-type: none"> <li>• Written calculations</li> <li>• Using Algebra</li> <li>• Geometrical reasoning</li> <li>• Fractions</li> <li>• Index laws</li> </ul>	<u>Spring 1</u> <p>End of Block 2 assessment Jan</p> <ul style="list-style-type: none"> <li>• Drawing graphs and <math>y=mx+c</math></li> <li>• Area</li> <li>• Transformations</li> <li>• Charts and graphs</li> <li>• Drawing and visualising 3D shapes</li> </ul>	<u>Summer 1</u> <ul style="list-style-type: none"> <li>• Pythagoras' theorem</li> <li>• Simultaneous equations</li> <li>• Revision for summer exams</li> </ul>
	<u>Autumn 2</u> <p>End of Block 1 assessment Oct/Nov</p> <ul style="list-style-type: none"> <li>• Scatter graphs</li> <li>• Using a calculator</li> <li>• Construction &amp; Scale drawing</li> <li>• Solving equations</li> <li>• Estimating</li> <li>• Functional maths</li> </ul>	<u>Spring 2</u> <p>End of Block 3 assessment March</p> <ul style="list-style-type: none"> <li>• Percentages</li> <li>• Finding a rule</li> <li>• Averages and range</li> <li>• Ratio and map scales</li> <li>• Locus</li> </ul>	<u>Summer 2</u> <p>School Summer Exams June</p> <ul style="list-style-type: none"> <li>• Double brackets</li> <li>• Factorising quadratic equations</li> <li>• Graphs of quadratic equations</li> <li>• Inequalities</li> <li>• Solving quadratic equations</li> </ul>

<p><u>Autumn 1</u></p> <ul style="list-style-type: none"><li>• Sequences and nth term</li><li>• Real-life graphs</li><li>• Straight lines</li><li>• Fractions, decimals and percentages</li><li>• Rounding</li><li>• Percentage increase and decrease</li><li>• Mixed number work</li></ul>	<p><u>Spring 1</u></p> <p>End of Block 2 assessment Jan</p> <ul style="list-style-type: none"><li>• Co-ordinates and mid-point of line</li><li>• Metric Measures</li><li>• Area and volume</li><li>• Number skills</li><li>• 3D drawing</li><li>• Plans and elevations</li></ul>	<p><u>Summer 1</u></p> <ul style="list-style-type: none"><li>• Transformations</li><li>• Ratio and scale drawings</li><li>• Revision for summer exams</li></ul>
<p><u>Autumn 2</u></p> <p>End of Block 1 assessment Oct/Nov</p> <ul style="list-style-type: none"><li>• Ratio and unitary method</li><li>• Angle calculations</li><li>• Parallel and perpendicular lines</li><li>• Triangles and quadrilaterals</li><li>• Circles</li><li>• Constructions</li><li>• Statistical graphs and data handling</li></ul>	<p><u>Spring 2</u></p> <p>End of Block 3 assessment March</p> <ul style="list-style-type: none"><li>• Collecting terms and brackets</li><li>• Substitution in expressions &amp; equations</li><li>• Creating and Solving equations</li><li>• Statistical diagrams</li><li>• Probability</li></ul>	<p><u>Summer 2</u></p> <p>School Summer Exams June</p> <ul style="list-style-type: none"><li>• Scale drawings and design</li><li>• Bearings</li><li>• Circles</li><li>• Investigating quadratic graphs</li></ul>