

# Curriculum Overview | What will my child learn in Maths?



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Year 7</b>	<ul style="list-style-type: none"> <li>- Probability representation</li> <li>- Calculating probability</li> <li>- Factors, multiples &amp; primes</li> <li>- Rounding &amp; calculator skills</li> <li>- Simplifying fractions</li> <li>- Adding &amp; subtracting fractions &amp; mixed numbers</li> </ul>	<ul style="list-style-type: none"> <li>- Order of operations</li> <li>- Calculating with negative numbers</li> <li>- Algebraic notation</li> <li>- Substitution with algebra</li> <li>- Simplifying algebra</li> <li>- Expanding brackets</li> </ul>	<ul style="list-style-type: none"> <li>- Exploring different types of sequences</li> <li>- Recognising square and cube numbers</li> <li>- Multiplying &amp; dividing fractions and mixed numbers</li> </ul>	<ul style="list-style-type: none"> <li>- Understanding decimal place value</li> <li>- Calculating with decimals</li> <li>- Proportional reasoning (including direct proportion, recipes and best buys)</li> <li>- Ratio notation</li> <li>- Simplifying ratio</li> <li>- Quantities with ratio</li> </ul>	<ul style="list-style-type: none"> <li>- Convert between standard units of measure for time, length, area, mass and volume</li> <li>- Properties of 2D shapes</li> <li>- Line and rotational symmetry of polygons</li> <li>- Perimeter of 2D shapes</li> <li>- Area of 2D shapes</li> </ul>	<ul style="list-style-type: none"> <li>- Recognising parts of a circle</li> <li>- Calculating circumference and area of circles</li> <li>- Working with coordinates</li> <li>- Horizontal and vertical line graphs</li> </ul>
<b>Year 8</b>	<ul style="list-style-type: none"> <li>- Draw &amp; measure line segments and angles</li> <li>- Use angles facts to solve problems</li> <li>- Construct and interpret different charts and graphs</li> <li>- Calculate and interpret averages and the range</li> <li>- Plot and interpret scatter graphs</li> <li>- Data project</li> </ul>	<ul style="list-style-type: none"> <li>- Solve a variety of linear equations</li> <li>- Calculate and use the Nth term rule for sequences</li> </ul>	<ul style="list-style-type: none"> <li>- Plotting and interpreting graphs of linear functions</li> <li>- Calculate and use percentages</li> </ul>	<ul style="list-style-type: none"> <li>- Calculate and use the four operations with decimals</li> <li>- Converting between fractions, decimals and percentages</li> <li>- Percentage increase and decrease</li> <li>- Finding the original value after a percentage change</li> </ul>	<ul style="list-style-type: none"> <li>- Linking ratios with fractions</li> <li>- Interpret a scale on a map or drawing</li> <li>- Know and use Pythagoras's Theorem to solve problems</li> </ul>	<ul style="list-style-type: none"> <li>- Properties of 3D shapes</li> <li>- Calculating volume of 3D prisms</li> <li>- Calculating angles in polygons</li> </ul>
<b>Year 9</b>	<ul style="list-style-type: none"> <li>- Rounding and estimation</li> <li>- Error intervals and calculating with bounds</li> <li>- Index laws and standard form</li> <li>- Simplifying algebra and expanding brackets</li> <li>- Rearranging equations and formula</li> <li>- Identities</li> </ul>	<ul style="list-style-type: none"> <li>- Use percentages &amp; calculate percentage change</li> <li>- Find the original value after a percentage change</li> <li>- Money &amp; financial maths</li> <li>- Probability from charts and graphs</li> <li>- Frequency &amp; probability trees</li> </ul>	<ul style="list-style-type: none"> <li>- Identify patterns in data</li> <li>- Identify types of data</li> <li>- Calculate averages &amp; the range</li> <li>- Averages from frequency tables</li> <li>- Read and draw box plots</li> <li>- Identify angles in parallel lines</li> <li>- Solve angle problems</li> </ul>	<ul style="list-style-type: none"> <li>- Use a compass with bearings</li> <li>- Measure &amp; drawing bearings</li> <li>- Constructions &amp; loci</li> <li>- Use number machines</li> <li>- Substitution into formula</li> <li>- Solve linear equations</li> <li>- Solve simultaneous equations</li> <li>- Use inequalities symbols and solve inequalities</li> </ul>	<ul style="list-style-type: none"> <li>- Work out &amp; use the nth term rule</li> <li>- Solve problems using the nth term rule</li> <li>- Recognise types of sequences &amp; term to term rules</li> <li>- Plot linear graphs</li> <li>- Interpret equations of straight line, <math>y = mx + c</math></li> <li>- Make links between gradient &amp; parallel</li> <li>- Rearranging equations</li> </ul>	<ul style="list-style-type: none"> <li>- Convert units of measurement</li> <li>- Calculate speed, distance &amp; time</li> <li>- Calculate density, mass &amp; volume</li> <li>- Interpret direct &amp; inverse proportion problems</li> <li>- Perform and describe translations, rotations and reflections</li> <li>- Use 2D representations of 3D shapes</li> <li>- Calculate surface area of 3D shapes</li> </ul>

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<b>Year 10</b>	<ul style="list-style-type: none"> <li>- Factors, multiples &amp; primes, HCF/LCM</li> <li>- Laws of indices</li> <li>- Negative &amp; fractional indices (Higher only)</li> <li>- Surds (Higher only)</li> <li>- Pythagoras Theorem in 2D</li> <li>- Pythagoras Theorem in 3D (Higher only)</li> <li>- Rationalising surds (Higher only)</li> </ul>	<ul style="list-style-type: none"> <li>- Congruent &amp; similar shapes</li> <li>- Performing &amp; describing enlargement</li> <li>- Trigonometry in 2D</li> <li>- Fractions of an amount</li> <li>- Percentages of an amount</li> <li>- Interpret &amp; use fractions, decimals &amp; percentages in a variety of problems</li> <li>- Recurring decimals to fractions (Higher only)</li> <li>- Percentage change</li> <li>- Compound interest</li> <li>- Reverse percentages</li> </ul>	<ul style="list-style-type: none"> <li>- Systematic listing</li> <li>- Design &amp; use two-way tables &amp; frequency trees</li> <li>- Product rule (Higher only)</li> <li>- Possibility space diagrams &amp; probability</li> <li>- Venn diagrams &amp; set notation</li> <li>- Probability trees</li> <li>- Area &amp; circumference of circles</li> <li>- Area &amp; perimeter of sectors</li> </ul>	<ul style="list-style-type: none"> <li>- Area &amp; perimeter of 2D shapes</li> <li>- Volume of 3D shapes</li> <li>- Surface area of 3D shapes</li> <li>- Recognise &amp; use the equation of a straight line</li> <li>- Plot equations of straight lines</li> <li>- Interpret gradient of parallel &amp; perpendicular lines</li> <li>- Plot &amp; interpret real life graphs</li> <li>- Expand triple brackets (Higher only)</li> <li>- Solve quadratic equations</li> <li>- Function notation (Higher only)</li> </ul>	<ul style="list-style-type: none"> <li>- Sketch quadratic graphs (Higher only)</li> <li>- Equation of a circle (Higher only)</li> <li>- Simplify &amp; compare fractions</li> <li>- Apply the four operations to fractions &amp; mixed numbers</li> <li>- Simplify &amp; manipulate algebraic fractions (Higher only)</li> <li>- Describe &amp; transform 2D shapes using the four transformations</li> <li>- Understand &amp; use the term invariance</li> </ul>	<ul style="list-style-type: none"> <li>- Understand &amp; use column vectors</li> <li>- Solve geometric problems with vectors (Higher only)</li> <li>- Draw &amp; interpret different bar charts &amp; graphs</li> <li>- Draw &amp; interpret pie charts</li> <li>- Interpret scatter graphs</li> <li>- Draw &amp; interpret cumulative frequency (Higher only)</li> <li>- Draw &amp; interpret histograms (Higher only)</li> <li>- Know &amp; use angle facts to solve problems</li> <li>- Calculate angles in polygons</li> </ul>
<b>Year 11</b>	<p><b>Foundation</b></p> <ul style="list-style-type: none"> <li>- Simplifying &amp; manipulating algebra</li> <li>- Solving equations</li> <li>- Rearranging formula</li> <li>- Solving quadratic equations</li> <li>- Understand &amp; apply rules of congruence</li> <li>- Exact trig values</li> <li>- Understand &amp; use column vectors</li> </ul> <p><b>Higher</b></p> <ul style="list-style-type: none"> <li>- Linear &amp; quadratic simultaneous equations</li> <li>- Iteration</li> <li>- Circle theorems</li> <li>- Exact trig values</li> <li>- Pythagoras &amp; trigonometry with 3D shapes</li> <li>- Sine &amp; cosine rule with non-right angled triangles</li> </ul>	<p><b>Foundation</b></p> <ul style="list-style-type: none"> <li>- Surface area of 3D shapes</li> <li>- Area &amp; perimeter of sectors</li> <li>- Plot linear graphs</li> <li>- Recognise &amp; use the equation of a straight line</li> <li>- Solve problems with repeated percentage change</li> <li>- Solve &amp; represent inequalities</li> </ul> <p><b>Higher</b></p> <ul style="list-style-type: none"> <li>- Rearranging complex formula</li> <li>- Composite &amp; inverse functions</li> <li>- Understand &amp; apply rules of congruence &amp; similarity</li> <li>- 3D similarity</li> <li>- Calculating with bounds</li> </ul>	<p>Class level responsive teaching from exam analysis, including use of high frequency topic analysis &amp; class question level analysis, overseen by Maths leads.</p> <p><b>Higher</b></p> <ul style="list-style-type: none"> <li>- Solve growth &amp; decay problems</li> <li>- Recognise &amp; draw exponential graphs</li> <li>- Equations of direct &amp; inverse proportion</li> <li>- Understand gradients of lines as rates of change</li> <li>- Calculate area under a curve</li> <li>- Know the shapes of trig graphs</li> <li>- Transformations of functions</li> </ul>	<p>Class level responsive teaching from exam analysis, including use of high frequency topic analysis &amp; class question level analysis, overseen by Maths leads.</p> <p><b>Higher</b></p> <ul style="list-style-type: none"> <li>- Apply reasoning &amp; make deductions to solve a geometrical problem</li> <li>- Apply vector methods for geometric proofs</li> </ul>	<b>Final exams</b>	<b>Final exams</b>