

## Statistics and Further Mathematics Curriculum Overview 21-22



Below is a curriculum overview, showing what is taught at each stage of the year.

	Cycle 1	Cycle 2	Cycle 3
<b>Year 9</b>	<p><b>Topic:</b> Stats: Unit 1: The Collection of Data Stats: Unit 2: Processing, Representing and Analysing Data</p> <p><b>Overview:</b> Unit 1  <ul style="list-style-type: none"> <li>• Types of Data</li> <li>• Populations &amp; Sampling</li> <li>• Sampling Methods</li> <li>• Planning and Collecting Data</li> </ul>                     Unit 2  <ul style="list-style-type: none"> <li>• Qualitative and discrete data</li> <li>• Continuous Data</li> <li>• Tabulation</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> Unit 1: The Collection of Data</p> <p><b>Assessment Week:</b> Unit 1-2 Assessment</p>	<p><b>Topic:</b> Stats: Unit 3: Summarising Data</p> <p><b>Overview:</b> Unit 3  <ul style="list-style-type: none"> <li>• Measures of Central Tendency - mean, mode, median</li> <li>• Measures of dispersion - range, quartiles, interquartile range</li> <li>• Interpercentile range</li> <li>• Interdecile range</li> <li>• Standard Deviation</li> <li>• Box Plots, Skewness</li> <li>• Calculating and representing outliers</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> Unit 3: Summarising Data</p> <p><b>Assessment Week:</b> Unit 1-3 Assessment</p>	<p><b>Topic:</b> Stats: Unit 4: Scatter Diagrams &amp; Correlation Stats: Unit 5: Time Series</p> <p><b>Overview:</b> Unit 4  <ul style="list-style-type: none"> <li>• Describing correlation by inspections</li> <li>• Lines of Best Fit</li> <li>• Spearman's rank correlation coefficient</li> <li>• Product Moment Correlation Coefficient</li> </ul>                     Unit 5  <ul style="list-style-type: none"> <li>• Moving Averages</li> <li>• Seasonal &amp; Cycle Trends</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> Unit 4: Scatter Diagrams &amp; Correlation</p> <p><b>Assessment Week:</b> Unit 1-5 Assessment</p>

	Cycle 1	Cycle 2	Cycle 3
<b>Year 10</b>	<p><b>Topic:</b> Stats: Unit 6: Probability Stats Unit 8: Probability Distributions</p> <p><b>Overview:</b> Unit 6  <ul style="list-style-type: none"> <li>• Simple and theoretical probability</li> <li>• Two way tables</li> <li>• Sample Space Diagrams</li> <li>• Tree Diagrams</li> <li>• Venn Diagrams</li> <li>• Interpreting</li> </ul>                     Unit 8  <ul style="list-style-type: none"> <li>• Binomial Distribution</li> <li>• Normal Distributions</li> <li>• Quality Assurance</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> Unit 6: Probability</p> <p><b>Assessment Week:</b> Stats Mock Exam Assessment</p>	<p><b>Topic:</b> FM Unit 1: Further Algebra FM Unit 2: Coordinate Geometry</p> <p><b>Overview:</b> FM Unit 1  <ul style="list-style-type: none"> <li>• Algebraic Manipulation</li> <li>• Polynomials, functions &amp; equations</li> <li>• Inequalities</li> <li>• Sequences &amp; recurrence relationships</li> </ul>                     FM Unit 2  <ul style="list-style-type: none"> <li>• Points, Lines and Circles</li> <li>• Graphs</li> <li>• Linear Inequalities</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> Unit 1: Further Algebra</p> <p><b>Assessment Week:</b> Unit 1 - 2 Assessment</p>	<p><b>Topic:</b> FM Unit 3: Trigonometry FM Unit 4: Selections</p> <p><b>Overview:</b> Unit 3  <ul style="list-style-type: none"> <li>• Trigonometric Functions</li> <li>• Solve Trigonometric Equations</li> <li>• Trigonometric Identities</li> <li>• Applications of Trigonometry</li> </ul>                     Unit 4  <ul style="list-style-type: none"> <li>• Permutations and Combinations</li> <li>• The Binomial Distribution</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> FM Unit 2 &amp; 3</p> <p><b>Assessment Week:</b> FM Unit 1-4 Assessment Stats Mock Exam Assessment</p>

	Cycle 1	Cycle 2	Cycle 3
Year 11	<p><b>Topic:</b> FM Unit 5: Powers and Iteration FM Unit 6: Calculus</p> <p><b>Overview:</b> Unit 5  <ul style="list-style-type: none"> <li>• Exponentials and Logarithms</li> <li>• Numerical Methods</li> </ul>           Unit 6  <ul style="list-style-type: none"> <li>• Differentiation</li> <li>• Integration</li> <li>• Application to Kinematics</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> Unit 5: Powers &amp; Iteration</p> <p><b>Assessment Week:</b> Stats Mock Exam FM Mock Exam</p>	<p><b>Topic:</b> Stats Revision: Unit 1 - 3 Stats Revision: Unit 4-6</p> <p><b>Overview:</b> Stats Revision  <ul style="list-style-type: none"> <li>• Stats: Unit 1: The Collection of Data</li> <li>• Stats: Unit 2: Processing, Representing and Analysing Data</li> <li>• Stats: Unit 3: Summarising Data</li> </ul>           Stats Revision  <ul style="list-style-type: none"> <li>• Stats: Unit 4: Scatter Diagrams &amp; Correlation</li> <li>• Stats: Unit 5: Time Series</li> <li>• Stats: Unit 6: Probability</li> <li>• Stats Unit 8: Probability Distributions</li> </ul> </p> <p><b>Mid-Cycle Assessment:</b> Revision Past Paper</p> <p><b>Assessment Week:</b> Stats Mock Exam FM Mock Exam</p>	<p><b>Topic</b> FM Revision: Unit 1-6</p> <p><b>Overview</b> FM Unit 1: Further Algebra FM Unit 2: Coordinate Geometry FM Unit 3: Trigonometry FM Unit 4: Selections FM Unit 5: Powers and Iteration FM Unit 6: Calculus</p> <p><b>Assessment Week:</b> Stats Exam FM Exam</p>

