

## **Maths Department**

### **Overall Curriculum Intent:**

- To foster a love of mathematics, in class and at home, with increasing ambition and challenge
- To develop confident and articulate mathematicians, able to reason and think logically.
- To develop automaticity of mathematical skills through regular purposeful practice.
- To ensure students have mathematical knowledge embedded into long term memory.
- To develop students ability to problem solve in a range of contexts
- To provide opportunities for extracurricular activities and competitions (UKMT, MEM, National Cipher Challenge and Alan Turing Cryptography competition)
- To develop learners memory skills to ensure maximum efficiency at GCSE.
- To provide a wide and varied curriculum with the offer of further maths, MCSP HOT maths, and GCSE Statistics
- To ensure annual success at GCSE in Mathematics.
- To encourage and promote the further study of mathematics beyond GCSE by fostering the love of maths with our most able students.

## Year Group Curriculum Intent

<b>Year 7</b>	To maintain the high standards and expectations of learning and presentation set by our MCSP partnership schools. To build on and extend knowledge learnt at KS2. Master the basic skills for KS3.
<b>Year 7 core</b>	<ol style="list-style-type: none"><li>1. Analysing and displaying data</li><li>2. Number skills</li><li>3. Expressions, functions and formulae</li><li>4. Decimals and measures</li><li>5. Fractions and percentages</li><li>6. Probability</li><li>7. Ratio and proportion</li><li>8. Lines and angles</li><li>9. Sequences and Graphs</li><li>10. Transformations</li></ol>
<b>Year 8</b>	To introduce new mathematical concepts. To strengthen prior knowledge and understanding by interleaving and retrieval practice.
<b>Year 8 core</b>	<ol style="list-style-type: none"><li>1. Number</li><li>2. Area and Volume</li><li>3. Statistics, graphs and charts</li><li>4. Expressions and equations</li><li>5. Real life graphs</li><li>6. Decimals and ratio</li><li>7. Lines and angles</li><li>8. Calculating with fractions</li><li>9. Straight line graphs</li><li>10. Percentage, decimals and fractions</li></ol>
<b>Year 9</b>	To consolidate Year 7 and 8 knowledge and prepare for GCSE, with an increasing focus on independence and problem solving. Make use of formal assessment to establish the most appropriate GCSE pathway for each individual.
<b>Year 9 core</b>	<ol style="list-style-type: none"><li>1. Indices and standard form</li><li>2. Expressions and formulae</li><li>3. Dealing with data - averages</li><li>4. Multiplicative reasoning</li><li>5. Constructions</li><li>6. Sequences, inequalities, equations and proportion</li><li>7. Circles, Pythagoras and prisms</li><li>8. Graphs</li><li>9. Probability</li><li>10. Comparing shapes</li></ol>
<b>Year 10</b>	To apply key skills developed at KS3 to more challenging context and problems. To become more familiar with the style of questions at GCSE level, developing their comprehension of the questions and exam literacy.

**Year 11**

To secure and master the essential knowledge and skills, and be able to apply those skills in a wide range of contexts.