

**Mathematics 5 Year Curriculum:** The Mathematics curriculum builds up over 5 years, where pupils cover a range of topics from Number, Algebra, Geometry, Ratio, Statistics & Probability. The topics are interleaved, allowing pupils to regularly visit key concepts across the key stages and deepen their knowledge and understanding. An overview of the topics is broken down below:

#### Year 8 Topics Studied

- Number skills and Algebra
- 3D Shapes
- Solving Equations and Presenting Data
- Angles and Transformations
- Fractions and Constructions
- Probability and Graphs
- Statistics and Co-Ordinate Geometry

#### Year 10 Topics Studied

- Algebra, Graphs, Transformations and ratio
- Right Angled Triangles and Compound Measures
- More Probability
- Percentage Change and Constructions
- Quadratic Equation and Ratio & Proportion
- Representing and Analysing Data
- Advanced Trigonometry
- Advanced Solving Equations and Circle Theorems
- Advanced Co-Ordinate Geometry

#### Year 11 Topics Studied

- More Algebra, Inequalities and Graphs
- Indices and Standard Form
- Pythagoras & Trigonometry (Including 3D)
- Bearings
- Vectors and Proofs
- Non Linear Functions
- Iteration
- Bounds

#### Year 9 Topics Studied

- Fractions, Decimals & Percentages
- More Algebra
- Sequences and Graphs
- Angles, Averages and 3D Shapes
- Surds & Indices
- Quadratic Equation
- Displaying Data
- Ratio & Proportion
- Angles and Trigonometry
- Co-Ordinate Geometry
- Circles
- Transformations

#### Year 7 Topics Studied

- Analysing Data
- Number Skills
- Equations, Expressions and Formulae
- Probability and Angles
- Ratio & Proportion and Decimals
- Solving Equations and 2D Shapes
- Linear Sequences
- Transformations

**KS5 Next Steps:** Pupils can continue their journey at Norlington Sixth Form for an additional 2 years of study. A Level Maths and Further Maths offer the option to study Pure Maths, Statistics and Mechanics at an advanced level.