

Maths – Key Stage 3

Intent:

Our KS3 Maths curriculum is designed to cultivate a broad range of skills, providing students with the tools and knowledge they need to succeed in a mainstream setting. We understand that Maths can feel intimidating for many students, with challenges such as rapidly increasing numbers, letters replacing numbers, complex sequences, and formulae. To address this, our primary aim is to contextualise Maths, reducing the sense of dread often associated with the subject. We want students to see Maths as accessible and relevant, rather than as an abstract barrier to future success. At KS3, our focus is on building confidence, boosting self-esteem, and making Maths approachable. By fostering a positive relationship with the subject, we aim to better prepare students for further education and progression across Key Stages. We achieve this by using the White Rose Maths resources, which provide a structured and effective framework for transitioning to KS4. These resources allow us to assess and consolidate prior knowledge while building a strong foundation for future learning. Through this approach, we empower our students to dream big and achieve more than they ever thought possible.

Implementation:

	Term 1	Term 2	Term 3
Year 1	• Ratio & scale • Understand the meaning and representation of ratio • Understand and use ratio notation • Multiplicative change • Solve problems involving direct proportion • Explore conversion graphs • Convert between currencies • Multiplying and dividing fractions • Represent multiplication of fractions • Multiply a fraction by an integer • Find the product of a pair of any fractions • Divide any pair of fractions • Multiply and divide improper and mixed fractions • Representations • Work with coordinates in all four quadrants	• Algebraic techniques • Brackets, equations and inequalities • Form algebraic expressions • Multiply out a single bracket • Factorise into a single bracket • Sequences • Generate sequences given a rule in words • Generate sequences given a simple algebraic rule • Indices • Adding and subtracting expressions with indices • Simplifying algebraic expressions by multiplying indices • law for indices • Developing Number • Fractions and percentages • Standard index form • Number sense including problems involving money, bills and statements	• Developing Geometry • Understand and use basic angles rules and notation • Identify and calculate with alternate and corresponding angles • Construct triangles and special quadrilaterals • Identify and calculate with sides and angles in special quadrilaterals • Calculate the area of triangles, rectangles and parallelograms • Line symmetry and reflection • Recognise line symmetry • Reflect a shape in a horizontal or vertical line 1 (shapes touching the line) • Reflect a shape in a horizontal or vertical line 2 (shapes not touching the line) • The Data Handling Cycle • Design and criticise questionnaires

- **Representing data**

- Draw and interpret scatter graphs
- Draw and use line of best fit

- Draw and interpret pictograms, bar charts and vertical line charts
- Measures of Location – including practical activities
- Understand and use the mean, median and mode

	Term 1	Term 2	Term 3
Year 2	- Averages: Mean, Mode, Median and Range - Tally/frequency tables - Pictograms - Bar charts - Frequency diagrams - Pie charts - Scatter diagrams - Surveys - Probability and Venn diagrams	- Clocks and calendars - Angle properties - Lines and angle rules - Maps and map scales - Measuring angles with a protractor - Angles in parallel lines and polygons - Compass directions and bearings - Measuring bearings with a protractor - Three letter angle notations.	- Ratio and proportion - Rates of change - Percentages - Percentages of amounts - Consolidation of topics - Using bookwork to support recapping of topics Focus on 15 most popular topics that require retention for progression.