Maths – Key Stage 3

Intent:

Our KS3 Maths curriculum is intended to develop a broad range of skills, equipping students with the tools and knowledge they need to access maths in a mainstream setting. We recognise that maths is a subject that many students find daunting, numbers rapidly growing, letters replacing numbers, sequencing, formulae...Our primary aim is to contextual maths as much as we can, removing some of the dread. For many students the dominant narrative in school is 'you will need maths to access the world outside, the world of work', implying by proxy, that if you don't have secure maths capabilities, you will be significantly limited.

We believe there is truth in the former statement, but we present it to our students, through the KS3 curriculum in a different way: 'look how much maths you already know and use all the time, often without thinking about it, worrying about it or realising it! We are going to teach you how to formalise that knowledge and to build on what is already there, to empower you."

Implementation:

	Term 1	Term 2	Term 3
Year 1	- Place Value 4 Operations - Multiplying and dividing by 10,100,1000 - Long Division/Long Multiplication - Multiples and Factors - Highest Common Factor and Lowest Common Multiple - Odd, Even, Square and Cube Numbers - Prime numbers - Prime factor decomposition - Negative numbers - Rounding and approximating - Exchange rates	- Number patterns and sequences - Indices Laws - BIDMAS (order of operations) - Square/square roots - Basic Algebra, expressions and substitutions - Input/output machines - Balancing equations - Coordinates - Straight line graphs	- Scales - Metric/Imperial units - Regular and 3D shapes - Area and perimeter - Congruence/similarity - Transformations: symmetry, enlargement, reflection and rotation - Volume and capacity - Consolidation of topics - Using bookwork to support recapping of topics Focus on 15 most popular topics that require retention for progression.

	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.