NRC Key Stage 3 – Mathematics Curriculum Overview

Term	Units	Content
Autumn 1	**Number properties and calculations**	• Adding and subtracting with larger numbers including decimals • Estimating calculations • Using brackets • Calculating with money • Negative numbers • Ratio • Using proportion to solve problems
	Shapes and measure in 3D	• Recognise and name 3D shapes • Identify the properties of 3D shapes • Identify and sketch nets of 3D shapes • Calculate the surface area of cubes and cuboids • Calculate the volume of cubes and cuboids
Autumn 2	**Statistics**	• Designing data collection sheets • Drawing and interpreting bar charts, pie charts and stem and leaf diagrams • Interpreting two-way tables • Finding averages • Using averages to compare data
	Algebra	• Simplifying expressions • Substitution • Functions • Solving equations • Using brackets • Expanding brackets
Spring 1	**Angles**	• Measuring and drawing angles • Understand and use the rule for vertically opposite angles • Angles in a triangle • Constructing accurate triangles • Constructing accurate nets of 3D shapes
	Decimal calculations	• Adding and subtracting decimals • Multiplying decimals • Ordering and rounding decimals • Problem solving with decimals
Spring 2	**Real-life graphs**	• Conversion graphs • Distance-time graphs • Line graphs
	Number properties	• Squares, Cubes and Roots • Calculating with brackets and indices • LCM (Lowest Common Multiple) and HCF (Highest Common Factor) • Prime Factor Decomposition
Summer 1	**Sequences**	• Generating sequences • Extending sequences • Generating terms of a sequence using the position to term rule • Finding the nth term of a sequence
	Fractions, decimals and percentages	• Comparing fractions • Fractions of amounts • Adding and subtracting fractions • Equivalent fractions, decimals and percentages
Summer 2	**Fractions and percentages**	• Convert between fractions and percentages • Calculating percentages • Work out one number as a percentage of another • Compare proportions using percentages
	Probability	• Use the language of probability • Use a probability scale • Learn and use probability notation • Write probabilities as fractions, decimals or percentages • Work out probabilities of events not happening • Work out theoretical probabilities • Work out experimental probabilities