## Mathematics: Key Stage 3 OVERVIEW

| Term 1 | Term 2 | Term 3 |
| :---: | :---: | :---: |
| Basic number skills <br> - Number properties <br> - Rounding <br> - Directed number <br> - Four operations | Substitution and formulae <br> - Substitution into formulae <br> - Expressions with brackets/indices <br> - Changing the subject of a formula | Algebraic graphs <br> - Coordinates <br> - Linear graphs, identifying and drawing <br> - Gradient <br> - $Y=m x+c$ |
| Shape properties <br> - Properties of 2D and 3D shapes <br> - Estimating and measuring angles <br> - Angle facts <br> - Circumference and perimeter | Area, volume and construction <br> - Calculating area and volume <br> - Surface area of prisms <br> - Nets <br> - Area of circles and compound shapes <br> - Construct angles and triangles | Averages <br> - Find mean, median, mode and range <br> - Choose appropriate average <br> - Frequency tables <br> - Steam and leaf diagrams |
| Fractions, decimals, percentages <br> - Converting between fractions, decimals and percentages <br> - Four operations | Measures <br> - Using time <br> - Converting between metric units <br> - Basic understanding of imperial conversions | Transformations and congruency <br> - Symmetry <br> - Reflect, rotate, enlarge and translate <br> - Construct congruent shapes <br> - Similarity |
| Expressions and equations <br> - Simplifying expressions <br> - Expanding brackets <br> - Forming and solving equations | Sequences <br> - Generating sequences <br> - Find the nth term of linear sequences <br> - Arithmetic, geometric and quadratic sequences | Graphs and charts <br> - Read and draw a range of charts <br> - Interpret data shown in charts <br> - Discreet and continuous data <br> - Compare data in different charts <br> - Solve problems using charts |
| Probability <br> - Probability scales <br> - Calculating with probabilities <br> - Experimental and theoretical probability <br> - Frequency trees <br> - Venn Diagrams | Ratio and proportion <br> - Simplifying and scaling ratios <br> - Recipes <br> - Conversion graphs <br> - Proportion problems <br> - Unitary ratios <br> - Solving ratio problems |  |

