

Mathematics

Students are organised into sets based on their mathematical development and ability in numeracy.

The students in the academic sets follow the Key Stage 3 Mathematics Programme of Study. They consolidate their numerical and mathematical capability from key stage 2 and extend their understanding of the number system and place value to include decimals, fractions, powers and roots.

Students also extend their understanding of the number system; make connections between number relationships and their algebraic and graphical representations.

They develop their mathematical knowledge, through solving problems and evaluating the outcomes, including multi-step problems. Students in the creative and vocational sets follow a programme based on the lower levels of the National Curriculum for Mathematics.

Students develop confidence and mental fluency with whole numbers, counting and place value. This involves working with numerals, words and the four operations, including work with practical apparatus. They also develop their skills to recognise, describe, draw, compare and sort different shapes and use related vocabulary. They will use a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

Maths			
Key Stage 3	Autumn	Spring	Summer
US1	<ul style="list-style-type: none"> • Number properties • Number patterns • Number and Place Value • Addition and Subtraction 	<ul style="list-style-type: none"> • Multiplication • division • Fractions • Decimals • Rounding numbers • Shapes • Angles • Plotting co-ordinates 	<ul style="list-style-type: none"> • Measuring length / weights / capacity • Days of the week and month of the year • Time • Handling data • Money • End of year assessment
US2	<ul style="list-style-type: none"> • Number skills • Analysing and Displaying data • Expressions, functions and formulae • Decimals and measures • End of term assessment 	<ul style="list-style-type: none"> • Fractions • Probability • Ratio and Proportion • End of term assessment 	<ul style="list-style-type: none"> • Lines and angles • Sequences and graphs • Transformations • End of term assessment • End of year assessment
US3	<ul style="list-style-type: none"> • Number and Place Value • Addition and subtraction • Symmetry • 2D and 3D shapes • Time • Multiplication and Division • Fractions 	<ul style="list-style-type: none"> • Place value and decimals • Length, weight & capacity • Bar charts & pictograms • Equivalent Fractions • Negative numbers • Coordinates 	<ul style="list-style-type: none"> • Place value + - x ÷ • Working with decimals • Area and perimeter • Angles • Line graphs • Solving word problems • End of year assessment
US4	<ul style="list-style-type: none"> • Number skills • Area and volume • Statistics, graphs and charts • Expressions and equations • End of term assessment 	<ul style="list-style-type: none"> • Real-life graphs • Decimals and ratio • Lines and angles • End of term assessment 	<ul style="list-style-type: none"> • Calculating with fractions • Straight-line graphs • Percentages, decimals and fractions • End of term assessment • End of year assessment