



**COURSE**

Students are placed into 6 groups and taught Key Stage 3 Mathematics over 2 years.

The course builds on the Mathematics learnt at primary school in the areas of Number, Algebra, Geometry, Measure and Statistics.

At the start of year 7, there will inevitably be some cross over between work done at primary school and secondary school as we find out the ability and experience of the students.

Students may change sets over the course of the two years, with a number of changes happening annually from year 7 to year 8. At the end of year 8, students are placed in 7 groups for year 9 and so there are more major set changes at this point. Set changes are made based on performance throughout the year, performance in tests and exams and teachers personal assessment of the students.

**TOPICS**

**DURING**

Angles and Shapes : angles in shapes, angles on a line, angles around a point, angles on parallel lines, classifying quadrilaterals and triangles, symmetry, interior and exterior angles in polygons

SPRING TERM

Decimals : Place value, rounding, arithmetic with decimal numbers, ordering decimals, equivalence of fractions, decimals and percentages, terminating decimals, fraction/decimal/percentage of a number, approximating using rounding.

SPRING TERM

Equations : solving linear equations, rearranging equations and formulae

SPRING TERM

**TOPICS**

**DURING**

Analysing and displaying data : Drawing, interpreting graphs, using measures of average and spread

AUTUMN TERM

Number Skills : Positive and negative numbers, order of operations, number properties, squares, cubes and roots.

AUTUMN TERM

Equations, functions and formulae : understanding the language of algebra, simplifying algebraic expressions, writing expressions and equations, substituting values into algebraic expressions and formulae

AUTUMN TERM

Fractions : ordering decimals and fractions, equivalence, fractional arithmetic.

AUTUMN TERM

**TOPICS**

**DURING**

Multiplicative reasoning : simplifying ratio, splitting in a ratio, describing proportions using ratio, solving problems involving proportion, writing ratio as fractions and percentages.

SUMMER TERM

Perimeter, area and volume : using formula for the area, perimeter and volume of both 2D and 3D shapes. Drawing representations of 3D shapes. Converting between measures of length, area and volume.

SUMMER TERM

Sequences and graphs : continuing sequences, identifying patterns, generating terms of a sequence from different rules, finding the nth term of a sequence, identifying whether numbers are in a sequence, develop coordinate skills to draw straight lines from their equations.

SUMMER TERM