

# Maths Curriculum 2016/17

## **Programme of study in Key stage 3**

Year 7	Year 8
Unit 1 Analysing and displaying data	Unit 1 Number properties and calculations
Unit 2 Calculating	Unit 2 Shapes and measures in 3D
Unit 3 Expressions, functions and formulae	Unit 3 Statistics and lesson 3.1 from Pi 3
Unit 4: Graphs	Unit 4 Expressions and equations
Unit 5 Factors and multiples	Unit 5 Decimals calculations
Unit 6 Decimals and measures	Unit 6 Angles
Unit 7 Angles and lines	Unit 7 Number properties
Unit 8 Measuring and shapes	Unit 8 Sequences
Unit 9 Fractions, decimals and percentages	Unit 9 Fractions and percentages
Unit 10: Transformations and lesson 10.1 from Pi 3	Unit 10 Probability

## **Most able students (Students who entered with a Level 5 or above)**

Year 7	Year 8
Unit 1 Analysing and displaying data and lesson 4.1 from Delta 3	Unit 1 Factors and powers
Unit 2 Number skills	Unit 2 Working with powers
Unit 3 Equations, functions and formulae	Unit 3 2D shapes and 3D solids
Unit 4 Fractions	Unit 4 Real-life graphs
Unit 5 Angles and shapes	Unit 5 Transformations
Unit 6 Decimals	Unit 6 Fractions, decimals and percentages
Unit 7 Equations	Unit 7 Constructions and loci
Unit 8 Multiplicative reasoning	Unit 8 Probability
Unit 9 Perimeter, area and volume	Unit 9 Scale drawings and measurements
Unit 10 Sequences and graphs	Unit 10 Graphs

During Key Stage 4 in years 9, 10 and 11 your child will be studying for their Mathematics GCSE Exam. The KS4 Mathematics builds on the skills learned at KS3 and ensures all students understand the processes and can apply it to various problem solving questions. Students' knowledge is built upon stretching and challenging their understanding of topics such as Number, Algebra, Ratio, proportion and rates of change, Geometry and measures, Probability and Statistics.

### **Assessment at KS4**

There are two tiers available: Foundation and Higher. The qualification consists of three equally-weighted written examination papers at either Foundation tier or Higher tier. Paper 1 is a non-calculator assessment and a calculator is allowed for Paper 2 and Paper 3. Each

paper has 80 marks and is 1 hour and 30 minutes long. The qualification will be graded and certificated on a nine-grade scale from 9 to 1 using the total mark across all three papers where 9 is the highest grade. The Foundation tier grades 1 to 5 and the higher tier: grades 4 to 9 (grade 3 allowed).

## **Programme of study in Key Stage 4**

### Higher Tier

Year 9	Autumn	Unit 1 Number
	Autumn	Unit 2 Algebra
	Spring	Unit 3 Interpreting and representing data
	Spring	Unit 4 Fractions, ratio and proportion
	Spring	Unit 5 Angles and trigonometry
	Summer	Unit 6 Graphs
	Summer	Unit 7 Area and volume
	Summer	Unit 8 Transformation and constructions
Year 10	Autumn	Unit 9 Equations and inequalities
	Autumn	Unit 10 Probability
	Spring	Unit 11 Multiplicative reasoning
	Spring	Unit 12 Similarly and congruence
	Spring	Unit 13 More trigonometry
	Summer	Unit 14 Further statistics
	Summer	Unit 15 Equations and graphs
	Summer	Unit 16 Circle theorems
Year 11	Autumn	Unit 17 More algebra
	Autumn	Unit 18 Vectors and geometric proof
	Spring and Summer	Unit 19 Proportion and graphs and Exam preparation

### Foundation Tier

Year 9	Autumn	Unit 1 Number
	Autumn	Unit 2 Algebra
	Spring	Unit 3 Graphs, tables and charts
	Spring	Unit 4 Fractions and percentages
	Spring	Unit 5 Equations, inequalities and sequences
	Summer	Unit 6 Angles
	Summer	Unit 7 Averages and range

	Summer	Unit 8 Perimeter, area and volume 1
Year 10	Autumn	Unit 9 Graphs
	Autumn	Unit 10 Transformations
	Spring	Unit 11 Ratio and proportion
	Spring	Unit 12 Right-angled triangles
	Spring	Unit 13 Probability
	Summer	Unit 14 Multiplicative reasoning
	Summer	Unit 15 Constructions, loci and bearings
	Summer	Unit 16 Quadratic equations and graphs
Year 11	Autumn	Unit 17 Perimeter, area and volume 2
	Autumn	Unit 18 Fractions, indices and standard form
	Spring and Summer	Unit 19 Congruence, similarity and vectors Unit 20 More algebra