

Curriculum Overview: Mathematics

	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
HT1	Place Value, the four operations	Indices, Multiples, Factors, primes, negative numbers, rounding.	Arithmetic, Powers, Fractions, decimals and percentages.	F: Rounding and error intervals, percentages and ratio. H: Surds and indices, quadratics and graphs.	F: Multiples and factors, algebra, solving equations.	Pure: Algebraic Expressions, Quadratics, Equations and Inequalities Applied: Data Collection, Measures of Location and Spread, Representation of data,	Pure: Algebraic fractions, algebraic division, Functions and graphs. Applied: Regression, correlation and hypothesis testing
HT2	Perimeter, Area and units, Angles and 2D shapes	Length and area, 3D shapes, Compound measures	Algebraic Manipulation, Co-ordinates and graphs.	F: Perimeter, Area and Volume H: Arcs and sectors, circle theorems	F: Indices and standard form, right angled triangles.	Pure: Quadratics, Straight Line graphs, Circles Applied: Correlation, Probability	Pure: Sequences and series, binomial expansion, Radians Applied: Conditional probability and the Normal distribution

HT3	Fractions, Decimals and Percentages	Fractions and Probability	2D and 3D Shapes	F: Angles, bearings and transformations. H: Similarity and congruence, transformations, probability.	Revision	Pure: Algebraic Methods, Differentiation Applied: Binomial distribution, probability distributions, hypothesis testing.	Pure, Trigonometric functions, Trigonometry and modelling Applied: Moments, Forces and Friction
HT4	Algebra, Co-ordinates and graphs	Algebraic manipulation and solving equations.	Solving equations and sequences.	F: Drawing graphs H: Volume, Bounds	Revision	Pure: Integration, The Binomial Expansion Applied: Modelling in mechanics, constant acceleration	Pure: Parametric equations, Differentiation Applied: Projectiles, application of forces
HT5	Order of operations, ratio and proportion.	Angles and Transformations	Percentages and Proportion	F: Compound measures, probability. H: Graphs of circles, linear and quadratic equations.	Revision	Pure: Trigonometric Ratios, Exponentials and Logs Applied: Forces and motion	Pure: Numerical methods, Integration. Vectors Applied: Further Kinematics.

HT6	Working with data	Statistics	Constructions, Loci and bearings.	F: Averages and range H: Histograms, Cumulative frequency and box plots.	Pure: Vectors Applied: Variable Acceleration
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