Curriculum Map for Mathematics: 2023-2024

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y7	-Numerical skills -Order of operations -Basic algebra -Factors and multiples	-Expanding and factorising -Addition and subtraction -Perimeter -Programming with Scratch	-Multiplication and Division -Area -Mean	-Fraction manipulation -Comparing and ordering fractions -Adding and subtracting fractions -Fractions of amounts -Basic probability	-Polygons and symmetry -Angles -Coordinates -Using variables in programs	-Substitution -Generalising with algebra -Time -Digital data representation
Y8	-Indices -Prime factorisation -Rounding -Fractions -Co-ordinates and basic graphs -Programming with Python	-Solving equations -Creating algebraic models -Linear graphs	-Angles in parallel lines -Interior and exterior angles -Circumference of circles -Modular programming with Python	-Proportional reasoning -Fractions, decimals and percentages -Ratio	-Area of circles -Presenting and interpreting data -Averages and spread	-Spreadsheets -3D shapes -Volume -Computer systems
Y9	-Index laws and prime factor decomposition -Standard form -Estimation -Related calculations -Fraction calculations -Manipulating decimals	-Algebraic fractions -Expanding and factorising -Probability -Text-based programming with Python	-Proportion -Percentages and percentage change -Modelling growth with spreadsheets	-Sequences -Linear equations -Linear inequalities -Pythagoras' theorem	-Interior and exterior angles -Angles on parallel lines -Basic vectors -Transformations	-Plans and elevations -Circles -Surface area -Basic vectors -Programming with sequences of data

Y10 (F)	-Volume -Rearranging formulae -Linear graphs	-Simultaneous equations -Compound measures -Quadratic graphs -Factorising quadratic equations -Further graphs	-Probability -Statistics	-Standard form -Ratio (further) -Growth and decay	-Pythagoras' theorem -Bearings and scale drawing	-Number skills revision -Factors and multiples revision
Y10 (H)	-Rearranging formulae -Advanced linear graphs -Simultaneous equations -Compound measures	-Volume -Properties of quadratic graphs -Quadratic equations -Further graphs	-Probability trees -Statistics -Statistical digrams	-Growth & decay -Further ratio -Further proportion -Similar shapes	-Surds -Right-angled trigonometry -Bearings and scale drawing	-Bounds -Congruence -Further transformations
Y11 (F)	-Ratio and proportion revision -Similar shapes -Right-angled trigonometry	-Congruence -Constructions and loci	-Vectors and transformations revision -Algebra skills revision -Further co-ordinate geometry	-Revision	-Revision	Exams
Y11 (H)	-Recurring decimals and algebraic proof -Solving quadratics and further simultaneous equations -Quadratic sequences (2023 only) -Functions -Transformation of functions	-Further trigonometry and trigonometric graphs -Circle theorems -Bearings and scale drawing (2023 only)	-Histograms -Vectors -Iteration -Constructions and loci	-Differentiation -Matrices -Binomial theorem -Polynomials	-Revision	Exams

GCSE topics which also contain additional content for students taking Further Maths
Further Maths only topics

Y12 (A&A) HL only	-Exponentials and logarithms -The binomial theorem -Sequences and series -Further permutations and combinations -Polynomials -Further binomial expansion -Partial fractions	-Functions -Quadratic functions -Graphs of functions -Introduction to complex numbers -Sums and products of roots -Further functions	-Radians -Trigonometry -Trig Equations -Vectors (dot and cross product) -Trigonometric equations -Further trigonometry	-Trigonometric Equations -Limits & derivatives -Further trigonometry -Powers and roots of complex numbers	-Probability -Statistics -Differentiation	-The Exploration -Statistics -Differentiation -Probability -Reasoning & proof
Y12 (A&I) HL only	-Number systems, approximations and error -Functions -Matrices -Eigenvalues and eigenvectors	-Linear equations -Voronoi diagrams -Modelling -Types of graphs -Transition matrices and Markov processes -The unit circle and radian measure -Affine transformations -Transformations of functions	-Sampling and data -Bivariate statistics -Vectors -Vector applications	-Probability and Venn diagrams -Graph theory -Logarithms and power relationships	-Random variables and statistical distributions -Non-linear models -Validity and data collection	-The Exploration -Hypothesis testing -The Poisson distribution -Expectation -Transformations of random variables -Confidence intervals -Further hypothesis testing

Y13 (A&A) HL only	-Exploration -Integral calculus -Random variables -Reasoning & proof -Systems of equations -Vectors	-Random variables -Normal distribution -Deductive proofs -Integration -Volumes of revolution -Continuous random variables	-Applications of calculus -Revision -1st order ordinary differential equations -Numerical differential equations	-Maclaurin Series -Revision	-Revision	
Y13 (A&I) HL only	-Introduction to differentiation -Properties of curves -Integration -Complex numbers -Rules of differentiation	-Sequences and series -Financial mathematics -Amortization and annuities -Rules of integration -Volumes of revolution	-Applications of differentiation -Geometric measures -Right angled trigonometry -Non-right angled trigonometry -Points in space -Kinematics -Differential equations -Slope fields	-Coupled differential equations -Revision	-Revision	