

Our Vision:

To develop aspirational learners who strive for excellence academically, creatively and culturally, benefitting from a wide range of opportunities led by inspirational educators.

Maths Curriculum Overview Mapping

Year Group	Curriculum Intention	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	The Year 7 curriculum begins with a week dedicated to providing students with opportunities to explore the wonder of Mathematics and engage with Mathematics in ways that many students have not yet experienced in their education. The curriculum covers the fundamental topics from the six key concepts of Mathematics at Key Stage 3: Algebra, Geometry and Measures, Number, Ratio, Proportion and Rates of Change, Probability and Statistics. Whilst prior knowledge is consolidated from KS2, students are also exposed to rigorous mathematical communication, logic and reason.	(IWM) Inspirational week of maths (1) Analysing and displaying data (2) Number skills	 (3) Equations, functions and formulae (4) Decimals and measures 	(5) Fractions and percentages (6) Probability	(7) Ratio and proportion	(8) Angles and shapes (9) Sequences	(10) Transformations (R) Revision (EoY) End of Year Assessment

Year 8	The Year 8 curriculum builds upon the knowledge students have acquired in Year 7. The curriculum continues to cover the fundamental topics from the six key concepts of Mathematics at Key Stage 3: Algebra, Geometry and Measures, Number, Ratio, Proportion and Rates of Change, Probability and Statistics. Students are introduced to a range of interactive activities that promote an enjoyment of Mathematics as well as the necessary practice to ensure content retention.	(1) Number (2) Area and volume	 (3) Statistics, graphs and charts (4) Expressions and equations 	(5) Real-life graphs (6) Decimals and ratio	(7) Lines and angles	(8) Calculating with fractions (9) Straight-line graphs	 (10) Percentages, decimals and fractions (R) Revision (EoY) End of Year Assessment
Year 9	The Year 9 curriculum builds upon the knowledge students have acquired in Year 8. The curriculum continues to cover the fundamental topics from the six key concepts of Mathematics at Key Stage 3: Algebra, Geometry and Measures, Number, Ratio, Proportion and Rates of Change, Probability and Statistics. Students continue to participate in a range of interactive activities that promote an enjoyment of Mathematics as well as the necessary practice to ensure content retention.	(1) Indices and standard form(2) Expression and formulae	(3) Dealing with data (4) Multiplicative reasoning	(5) Constructions (6) Sequences, inequalities, equations and proportion	(7) Circles, Pythagoras and prisms	(8) Graphs (9) Probability	(10) Comparing shapes (R) Revision (EoY) End of Year Assessment
Year 10 Foundation	The year 10 curriculum builds on the knowledge and skills students have acquired in Key Stage 3. Examination technique is introduced, and students now focus on using their ability to communicate and reason Mathematically, developed at Key Stage 3, to problem solve using a wide array of techniques learnt from the six key concepts of Mathematics at Key Stage 4: Algebra, Geometry and Measures, Number, Ratio, Proportion and Rates of Change, Probability and Statistics.	(1) Number (2) Algebra (3) Graphs, tables and charts	 (4) Fractions and percentages. (5) Equations, inequalities and sequences 	(6) Angles (7) Averages and range	(8) Perimeter, area and volume 1 (9) Graphs (10) Transformations	(11) Ratio and proportion (12) Right- angled triangles (13) Probability	 (14) Multiplicative reasoning (15) Constructions, loci and bearings (R) Revision (EoY) End of Year Assessment

Year 10 Higher	The year 10 curriculum builds on the knowledge and skills students have acquired in Key Stage 3. Examination technique is introduced, and students now focus on using their ability to communicate and reason Mathematically, developed at Key Stage 3, to problem solve using a wide array of techniques learnt from the six key concepts of Mathematics at Key Stage 4: Algebra, Geometry and Measures, Number, Ratio, Proportion and Rates of Change, Probability and Statistics.	(1) Number (2) Algebra (3) Interpreting and representing data	 (4) Fractions, ratios and percentages. (5) Angles and trigonometry 	(6) Graphs (7) Area and volume	(8) Transformations and construction (9) Equations and inequalities (10) Probability	(11) Multiplicative reasoning (12) Similarity and congruence (13) More trigonometry	(14) Further statistics (15) Equations and graphs (R) Revision (EoY) End of Year Assessment
Year 11 Foundation	The Year 11 curriculum builds on the knowledge and skills students have acquired in year 10. Students are regularly examined at GCSE level, with a focus on improving exam technique, knowledge application and time keeping. Students are regularly assessed according to their ability to: use and apply standard techniques; interpret and communicate Mathematically and solve problems within Mathematics and other contexts.	 (16) Quadratic equations and graphs (17) Perimeter, area and volume 2 (18) Fractions, indices and standard form 	(19) Congruence, similarity and vectors (20) More algebra	Revision and Exam Practice	Revision and Exam Practice	Revision and Exam Practice	Public examination.
Year 11 Higher	The Year 11 curriculum builds on the knowledge and skills students have acquired in Year 10. Students are regularly examined at GCSE level, with a focus on improving exam technique, knowledge application and time keeping. Students are regularly assessed according to their ability to: use and apply standard techniques; interpret and communicate Mathematically and solve problems within Mathematics and other contexts.	(16) Circle theorems (17) More algebra	(18) Vectors and geometric proof (19) Proportion and graphs	Revision and Exam Practice	Revision and Exam Practice	Revision and Exam Practice	Public Examination

Year 12	The Year 12 curriculum provides a framework within which students continue to study Mathematics beyond GCSE level. Students will see how mathematical ideas are interconnected and how mathematics can be applied to model situations mathematically using algebra, calculus and other representations. Through the study of Pure Mathematics, Statistics and Mechanics students will learn how to present robust mathematical argument, language and proof and create mathematical models in order to problem solve.	 1(a) Algebraic expressions 1(b) Data collection 2(a) Quadratics 2(b) Measures of location and spread 3(a) Equations and inequalities 	4(a) Graphs and transformations 3(b) Representation s of data 5(a) Straight line graphs 4(b) Correlation 6(a) Circles	7(a) Algebraic methods 5(b) Probability 8(a) The binomial expansion 6(b) Statistical distributions	9(a) Trigonometric ratios 7(b) Hypothesis testing 10(a) Trigonometric identities and equations 8(b) Modelling in mechanics	11(a) Vectors 9(b) Constant acceleration 12(a) Differentiation 10(b) Forces and motion	 13(a) Integration 11(b) Variable acceleration 14(a) Exponentials and logarithms (R) Revision (EoY) End of Year Assessment
Year 13	The Year 13 curriculum builds upon Year 12, with more complex areas within pure Mathematics, Statistics and Mechanics covered. Students will be expected to accurately assess the reliability of their Mathematical models. Students are regularly assessed according to their ability to: use and apply standard techniques; reason, interpret and communicate mathematically and solve problems within Mathematics and other contexts.	 1(a) Algebraic methods 1(b) Regression, correlation and hypothesis testing 2(a) Functions and graphs 2(b) Conditional probability 3(a) Sequences and series functions 	4(a) Binomial expansion 3(b) Moments 5(a) Radians 4(b) Forces and Friction 6(a) Trigonometric	7(a) Trigonometry and modelling 5(b) Projectiles 8(a) Parametric equations 6(b) The normal distribution	9(a) Differentiation 7(b) Applications of forces 10(a) Numerical methods 8(b) Further Kinematics	11(a) Integration 12(a) Vectors Revision and Exam Practice	Public Examination

