



Maths


2020/21

CURRICULUM MAP


Maths is a hierarchical subject. The curriculum consists of a set of interconnected mathematical ideas which need to be both conceptually and procedurally understood. At every stage, foundational knowledge is assessed, consolidated and deepened, laying the groundwork for that understanding to develop further through the introduction of the next naturally connected ideas.

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Primary School Knowledge & Skills	Topics covered	Topics covered	Topics covered	Topics covered	Topics covered	Topics covered
	Knowledge of multiplication and division facts, mental calculations Understanding of Place value, angles, equivalence, units of measure, area and perimeter	Number and the Number System Counting and Comparing Calculating Baseline Assessment	Continuing Calculating Visualising and Constructing Investigating properties of shape Christmas assessment	Exploring Fraction, decimal and percentages Algebraic proficiency - tinkering Proportional Reasoning	Measuring Space Investigating Angles Solving equations and inequalities	Calculating Fractions, decimals and percentages Checking and Approximating Mathematical movement	Exploring time Measuring Data Presenting Data Summer Assessment
Year 8	Prior Knowledge & Skills from Year 7	Topics covered	Topics covered	Topics covered	Topics covered	Topics covered	Topics covered
	Decimals, Approximating, Use mathematical equipment, Fraction, Decimals Percentage Common factors and multiples, Inequality symbols	Measuring Data Number and the number system Calculating Visualising and constructing	Investigating Properties of Shapes Algebraic proficiency - tinkering Understanding Risk Assessment	Exploring Fractions, Decimals, Percentages Proportional Reasoning Pattern Sniffing	Assessment Measuring Space Calculating Fractions, Decimals, Percentages	Investigating Angles Solving Equations & Inequalities Calculating Space Assessment	Calculating Space continued Mathematical Movement Algebraic proficiency - visualising
Year 9	Prior Knowledge & Skills from Year 8	Topics covered	Topics covered	Topics covered	Topics covered	Topics covered	Topics covered
	Prime Calculate with fractions Concept of enlargement Rules of algebra Ratio notation Angle facts Use of calculators Balancing equations	Numbers and the number System Calculating Collecting data	Proportional Reasoning Investigating properties of shapes Algebraic proficiency - Tinkering	Exploring and Calculating Fractions, Decimals, Percentages Processing, representing and analysing data Calculating Space Assessment	Investigating Angles Solving Equations & Inequalities Pattern sniffing Conjecturing	Measuring Space / Calculating Space Algebraic Proficiency - Visualising Continuing Processing representing and analysing data Assessment	Solving Equations & Inequalities Mathematical movement Visualising & Constructing

Foundation GCSE

	Prior Knowledge & Skills from Year 9	Autumn		Spring		Summer	
Year 10	Prime factorisation Calculate with negatives Fraction, Decimal, Percentage Equivalence Rules of algebra	Numbers & Number System Calculating Central Tendency and Dispersion	Investigating Properties of Shapes Exploring FDP Algebraic proficiency - Tinkering Continuing Central Tendency and Dispersion	Exploring FDP Proportional reasoning Pattern sniffing Scatter Diagrams and Correlation	Measuring Space Calculating FDP Proportional reasoning Continuing Proportional reasoning	Calculating FDP continued Investigating Angles Calculating Space Probability	Checking, approximating & estimating Algebraic Proficiency - Tinkering Visualising & Constructing Time-Series Analysis
Year 11	Algebraic manipulation Sampling methods Problem solving investigations Proportional understanding Probability	Numbers and the number system Calculating Pattern Sniffing Scatter Diagrams, Measures of central tendency and dispersion	Proportional Reasoning Probability Algebraic proficiency: tinkering Visualising and Construction	Exploring FDP and Calculating FDP Algebraic proficiency: tinkering Solving equations and inequalities (i)	Solving equations Investigating angles Calculating space Algebraic visualising	Class specific revision based on assessments	<div style="background-color: #f4a460; padding: 5px; text-align: center;"> Pathways Afterwards  </div> Level 3 Core Maths Accounting A Level

Higher GCSE

	Prior Knowledge & Skills from Year 9	Autumn		Spring		Summer	
Year 10	Indices Scale drawings Calculate with negatives and algebra Linear graphs Linear sequences Linear inequalities	Calculating Algebraic proficiency - Tinkering Solving Equations & Inequalities 1 Central Tendency and Dispersion	Proportional Reasoning Algebraic proficiency - Tinkering 1 Mathematical Movement 1 Continuing Central Tendency and Dispersion	Pattern Sniffing Solving Equations & Inequalities 1 Calculating Space Solving Equations and Inequalities 2 Scatter Diagrams and Correlation	Visualising and constructing Conjecturing Continuing Calculating Space Continuing Scatter diagrams and correlation	Continuing Conjecturing Algebraic Proficiency - Visualising Exploring FDP Probability	Continuing Algebraic Proficiency - Visualising Solving Equations & Inequalities 2 Investigating properties of shapes Algebraic Proficiency - Visualising 2 Index Numbers
Year 11	Pythagoras Theorem Negative and fractional indices Surds Trigonometry	?Investigating properties of shape Solving equations Calculating Index Numbers	?Probability Mathematical Movement Algebraic Tinkering Probability Distributions	Proportional Reasoning Visualising and constructing Pattern Sniffing	Exploring FDP Solving equations and inequalities (ii) Visualising (ii) Specific revision from Mocks	Class specific revision based on assessments	Pathways Afterwards  Level 3 Core Maths Accounting A Level Maths A Level Further Maths A Level

Extra Curricular Projects

- Junior Maths Challenge
- Intermediate Maths Challenge
- Year 10 Maths Feast
- Maths Symposium
- Public lectures at University of Oxford