

Subject Curriculum Map: Mathematics Year 9 Foundation Updated June 2024

Exam Board : Edexcel – 100% terminal Examination

Our Intent in Mathematics

Results - Passion for Maths – Wider Learners – Cultural Capital - High-Quality Teaching – Success

Throughout their education at Alleynes, we intend to deliver high-quality, rigorous and engaging Maths lessons, which not only ensure that students are prepared for external examinations, but also leave school with proficient Maths skills to be equipped for modern life. We want to instil a love of Maths, at every level, and encourage students to continue their Mathematical education to the highest level, where appropriate. We also aim to give students a breadth of opportunities to develop their knowledge further outside of the classroom by coming to Maths club, attending trips, speeches and competitions across a range of topics and abilities.

Our Implementation of the Curriculum

Starter – Quality of Delivery – Assessment – Homework – Recap and Retrieval

In our Maths department, we pride ourselves on a well-structured delivery of the curriculum. We start all lessons with a consistent starter with the clear objective of recap and retrieval. The lessons consist of high-quality teaching from experienced and dedicated teachers, followed by rigorous practise and assessment. Monitoring tests are set 4 times a year to ensure that we can monitor progress accurately. This allows teachers to address and misconceptions and reteach and gaps. Students receive quality exam-practice, and are set to ensure teaching at the correct level. Assessed homework is set every 4 weeks. This provides us another opportunity for recap and retrieval, as well as monitoring progress on the most recent topics.

The Impact of our Curriculum

Results – Aspiration – Positive Feedback – Success

Our curriculum delivers consistently good GCSE and A Level results, above the national average. It has helped the department to achieve an increase in A Level numbers in the past 2 years, alongside launching a successful Level 2 Further Maths qualification. We believe that students enjoy Maths, and thrive on the consistency and challenge we provide. Internal monitoring, such as student voice, book scrutiny and lesson observations all reflect this view.

Year 9	Aut 1 Weeks		Aut 2 weeks		Spring 1 weeks		Spring 2 Weeks		Summer 1 weeks		Summer 2 weeks
Themes/Concepts/Ideas	Number/Algebra		Algebra/Statistics		Number/Algebra		Algebra/ SSM		/Statistics		Revision/Catch Up SSM
Unit	1 & 2		2 & 3		4 & 5		5&6		7		8
Knowledge and understanding	Number, powers, decimals, HCF and LCM, roots and rounding Expressions Substituting into simple formulae Expand/Factorise		Expressions Substituting into simple formulae Expand/Factorise Drawing and Interpreting graphs, tables and Charts		Fractions, percentages, ratio and proportion Equations		Equations Angles, polygons and parallel lines		Averages and range, sampling, collecting data, analysing data		Perimeter, area and volume I
Subject specific skills	Use of Calculators Mental Maths Showing full methods Use of correct notation Derive formulae Manipulate Algebra Interpret Solution		Use of correct notation Derive formulae Manipulate Algebra Interpret Solution Read Scales Use Compasses & Protractors accurately Control of a compass Drawing lines on grids		Use of Common Factors from Aut1 for non calc questions How to use a calculator efficiently Apply BODMAS Knowledge of Numbers and Powers from Aut1		Apply BODMAS Knowledge of Numbers and Powers from Aut1 Use of Protractor and Compasses Awareness of reflection/symmetry		Draw Diagrams learned in Unit 3		Recall Names of Shapes Number from Unit 1 Scales from Unit 3
SMSC	Have a set of Values Safe Learning Environment Show persistence Appreciate the role of mathematics Explore patterns/relationships Appreciate the intangible Benefit from Advice Work successfully in a group	Revision Opportunity: Mon Test 1	Explore patterns/relationships Appreciate the intangible Benefit from Advice Work successfully in a group Safe Learning Environment Develop the ability to reflect Take a leadership role Draw conclusions based on Evidence	Revisit Opportunity 1: Units 1-3	Use logical reasoning Benefit from advice Show persistence Have a set of values Appreciate the Role of Mathematics Appreciate the Heights of Human Achievement Benefit from Advice Appreciate the intangible	Revisit Opportunity 2: Units 3-5	Appreciate the Role of Mathematics Appreciate the Heights of Human Achievement Benefit from Advice Appreciate the intangible Explore patterns/relationships Benefit from Advice Develop the ability to reflect Take a leadership role Show persistence	Revisit Opportunity 3: Units 4-6	Draw conclusions based on Evidence Develop the ability to reflect Have a set of Values	Revision Opportunity: Mocks	Draw conclusions based on Evidence Develop the ability to reflect Appreciate the Role of Mathematics Appreciate the Heights of Human Achievement Benefit from Advice
Skills For life/Careers Ideas	Problem Solving Numeracy Independence Teamwork Problem Solving Basic Numeracy is required for all jobs Shop Worker Engineering Financial Advisor		Problem Solving Independence Creativity Statistician Weather forecaster Data Analyst		Problem Solving Numeracy Independence Teamwork Problem Solving Independence Empathy Leadership Hair Dressing Chef Baker Sales and Accounting		Problem Solving Independence Empathy Leadership Problem Solving Numeracy Independence Landscape Gardener Air Traffic Controller Builder Architect Graphic Designer		Problem Solving Independence Creativity Epidemiologists Football Statistician F1 Statistician Market Research		
FBV	Mutual Respect		Mutual Respect Use/Misuse of Statistics		Mutual Respect		Mutual Respect		Mutual Respect Use/Misuse of Statistics		
Key assessment focus, suggested assessments	Check Up Strengthen/Extend End of Unit Test ½ termly test		Check Up Strengthen/Extend End of Unit Test ½ termly test		Check Up Strengthen/Extend End of Unit Test ½ termly test		Check Up Strengthen/Extend End of Unit Test ½ termly test		Check Up Strengthen/Extend End of Unit Test ½ termly test		Check Up Strengthen/Extend End of Unit Test End of Year test
Special events	-		-		-		-		-		-
Visits/extra curric	-	-	-	-	-	-					
Homework/Independent Learning	Weekly to consolidate learning	Weekly to consolidate learning	Weekly to consolidate learning	Weekly to consolidate learning	Weekly to consolidate learning	Weekly to consolidate learning					
											Revisit Opportunity 4: Units 5-7

	4 Weekly assessed homework to consolidate knowledge, understanding and skills SAM Learning Corbett Maths		4 Weekly assessed homework to consolidate knowledge, understanding and skills SAM Learning Corbett Maths		4 Weekly assessed homework to consolidate knowledge, understanding and skills SAM Learning Corbett Maths		4 Weekly assessed homework to consolidate knowledge, understanding and skills SAM Learning Corbett Maths		4 Weekly assessed homework to consolidate knowledge, understanding and skills SAM Learning Corbett Maths	
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