Subject Curriculum Map: Mathematics Year 11 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 it 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 11	Aut 1 Weeks	Revisit Opportunity 9: Units 11-15	Aut 2 weeks	Revision Opportunity: Mocks	Spring 1 weeks	Revisit Opportunity 10: Units 13-19	Spring 2 Weeks	Revision Opportunity: Exams	Summer 1 weeks	Summer 2 weeks
Themes/Concepts/Ideas	SSM/Number		SSM/Revision for Mocks		Algebra		Revision		Revision	Exams
Unit	17 & 18		19		20		Target 3 Or Target 5		Exam Papers	
Knowledge and understanding	Perimeter, area and volume 2: circles, cylinders, cones and spheres More fractions, reciprocals, standard form, zero and negative indices		Congruence, similarity and Vectors		Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations		Various depending on unit covered, which is sometimes chosen based on mock papers completed		All Foundation GCSE course	
Subject specific skills- Prior Knowledge	Students should know the formula for calculating the area of a rectangle *from Unit 8.* Students should know how to use the four operations on a calculator *from Unit 1* Students should know how to do the four operations with fractions from *Unit 4* Students should be able to write powers of 10 in index form and recognise and recall powers of 10, i.e. $10^2 = 100$ *from Unit 1* Students should recall the index laws *from Unit 1*		Students will have used column vectors when dealing with translations *from Unit 10* Students can recall and apply Pythagoras' Theorem on a coordinate grid *from Unit 12* Students should be able to recognise and enlarge shapes and calculate scale factors *from Unit 10* Students know how to calculate area and volume in various metric measures *from Unit 8 &17* Students should be able to measure lines and angles and using compasses, ruler and protractor, and construct standard constructions *from Unit 15*		Students should be able to draw linear graphs *from Unit 9* Students should be able to plot coordinates and sketch simple functions with a table of values *from Unit 9* Students should be able to substitute into and solve equations *from Unit 5* Students should have experience of using formulae *from Unit 2* Students should recall and use the hierarchy of operations and use of inequality symbols *from Unit 2 & 5*		Topics that students request are covered, topics that students have struggled with in homeworks, tests and on SAM learning are covered.			
SMSC	Safe Learning Environment Appreciate the role of mathematics Explore patterns/relationships Benefit from Advice Work successfully in a group Take a Leadership Role Develop the ability to reflect Show Persistence Use logical Reasoning		Explore patterns/relationships Benefit from Advice Work successfully in a group Exercise Responsibility Take a Leadership Role Show Persistence Use logical Reasoning		Use logical reasoning Benefit from advice Show persistence Develop the ability to reflect Appreciate the Role of Mathematics Appreciate the Heights of Human Achievement		Appreciate the Role of Mathematics Appreciate the Heights of Human Achievement Benefit from Advice Appreciate the intangible Recognise the Use and misuse of Data Develop the ability to reflect Take a leadership role Show persistence		Benefit from Advice Develop the ability to reflect Show persistence Use logical Reasoning Exercise Responsibility	
Skills For life	Problem Solving Numeracy Independence Teamwork Creativity Leadership Independence Numeracy		Problem Solving Creativity Leadership Empathy		Problem Solving Independence Teamwork Leadership Creativity		Problem Solving Independence Empathy Leadership Numeracy Problem Solving Independence		Problem Solving Independence Creativity Empathy Leadership Numeracy	
FBV	Mutual Respect		Mutual Respect		Mutual Respect		Mutual Respect Use/Misuse of Statistics		Mutual Respect Use/Misuse of Statistics	
Key assessment focus, suggested assessments	Check Up Strengthen/Extend End of Unit Test ½ termly Mock Exam		Check Up Strengthen/Extend End of Unit Test ½ termly Mock Exam		Check Up Strengthen/Extend End of Unit Test ½ termly Mock Exam		End of Unit Test ½ termly Mock Exam		Mock Exam	

Special events	**-**		**-**		**-**		**-**		**-**	**-**
Visits/extra curric	**-**		**-**		**-**		**-**		**-**	**-**
Homework/Independent Learning	**Weekly to consolidate learning** **4 Weekly assessed homework to consolidate knowledge, understanding and skills** **SAM Learning** **Corbett Maths**		**Weekly Exam Paper to consolidate learning** **4 Weekly assessed homework to consolidate knowledge, understanding and skills** **SAM Learning** **Corbett Maths**		**Weekly Exam Paper to consolidate learning** **4 Weekly assessed homework to consolidate knowledge, understanding and skills** **SAM Learning** **Corbett Maths**		**Weekly Exam Paper to consolidate learning** **4 Weekly assessed homework to consolidate knowledge, understanding and skills** **SAM Learning** **Corbett Maths**		**Weekly Exam Paper to consolidate learning** **4 Weekly assessed homework to consolidate knowledge, understanding and skills** **SAM Learning** **Corbett Maths**	**Bridging Unit for those returning to do A level Maths**