Curriculum Summary Document

Year 11 – Maths – M Groups

Module/Unit of Learning	Taught During	What will students learn?	How does this develop expertise and challenge students?	Links to other subjects
GCSE **Higher Level Trig**	**Autumn**	Students will extend their knowledge of trigonometry to look at non-right angled triangles and applying their knowledge to real-life contexts with bearings. Taking on their trigonometric knowledge students will graph these functions and identify common patterns and look at how transforming the functions affects the graphs	This work stretches the students to achieve the highest of grades and beyond fully preparing them for mathematics at and beyond GCSE. This is also an opportunity to look with Bearings and how trigonometry can be used for Real World problems.	Geography Duke of Edinburgh
GCSE **Graph Transformations**	**Autumn**	Students will learn how to transform graphical functions.	Linking with A Level, students will begin to use functional notation and link back to the work that they have done with Trigonometric Graphs,	
GCSE **Functions**	**Autumn**	Building graph work of functions students will look at the algebraic forms and how to manipulate them including composite functions and inverse functions.	This work stretches the students to achieve the highest of grades and beyond fully preparing them for mathematics at and beyond GCSE	

GCSE **Vectors**	**Autumn**	Students will build on their knowledge of vectors from their previous Transformation unit and linking back to their geometric reasoning for developing their understanding of Vector Geometry.	This is an introduction into proof and being explicit with the mathematical language that is used drawing on previous learning to explain and communicate mathematically.	
GCSE **Proof**	**Autumn**	Building on from the previous module, students will look at algebraic proof and how to validate a mathematical statement.	By drawing on their algebraic skills and use of mathematical facts and language, students will be making links with A Level topics to help prepare them for future studies.	
GCSE **Iterative Processes**	**Autumn**	Students will build on their knowledge of rearranging formulae and compound interest to apply to algebraic and real-life context iterative processes.	This work stretches the students to achieve the highest of grades and beyond fully preparing them for mathematics at and beyond GCSE	Geography and Science
GCSE **Perpendicular Lines and Equations of Circles**	**Autumn**	Students will revisit their knowledge of linear graphs and build on the work to consider perpendicular lines. This will then link into equations of circles and how to find the equation of the tangent	This work stretches the students to achieve the highest of grades and beyond fully preparing them for mathematics at and beyond GCSE	
Adaptive Learning PPE Preparation	**Autumn**	Students are now at a point to practise revision of various topics in mixed lessons. This will build on the exam skills needed for the upcoming PPE exams	This work builds the students exam technique allowing them to become experts at the GCSE.	

GCSE **Inequalities**	**Autumn**	Students will revisit their knowledge of graphs both linear and non-linear. They will then extend this knowledge to consider inequalities and the regions enclosed by them.	This work stretches the students to achieve the highest of grades and beyond fully preparing them for mathematics at and beyond GCSE	
QLA from PPE	**Spring**	Following on from the first round of PPEs, question analysis will highlight key topics per class to focus upon. Students will work on these areas in the groups	This work builds the students exam technique allowing them to become experts at the GCSE.	
GCSE **Revision Block 1 Fundamentals**	**Spring**	After the QLA from PPE round 1, topics will be chosen per group to focus upon the core areas that students can gain maximum marks from.	This work stretches the students to achieve the highest of grades and beyond fully preparing them for mathematics at and beyond GCSE	
GCSE **Revision Block 2 Challenge**	**Spring**	Students are now at a point to stretch their knowledge to the highest level and focus upon topics that will push them to the highest grade they are capable of.	This work builds the students exam technique allowing them to become experts at the GCSE.	
GCSE **Mind the Gaps**	**Spring**	Students will work on confidence and exam technique by completing a Mind the Gap paper once per week, subsequent lessons each week will build on practising the key questions coming out as target areas.	This work builds the students exam technique allowing them to become experts at the GCSE.	
Adaptive Learning PPE 2 Preparation	**Spring**	Students are now at a point to practise revision of various topics in mixed lessons. This will build on the exam skills needed for the final PPE in March	This work builds the students exam technique allowing them to become experts at the GCSE.	

Adaptive Learning		Students are now at a point to practise revision of various topics in mixed lessons. This will build on the exam skills needed for the summer exams	This work builds the students exam technique allowing them to become experts at the GCSE.	
QLA from PPE	**Spring**	Following on from the second round of PPEs, question analysis will highlight key topics per class to focus upon. Students will work on these areas in the groups	This work builds the students exam technique allowing them to become experts at the GCSE.	
Walking Talking Mock Week	**Summer**	In the final throws of lessons before the exams, we will hone the skills of all students by going through a final paper in our walking talking mock format. Students will hear experts go through the key exam technique and knowledge needed to further build their confidence in preparation for the exams.	This work builds the students exam technique allowing them to become experts at the GCSE.	
Adaptive Learning Summer Preparation	**Summer**	Students are now at a point to practise revision of various topics in mixed lessons. This will build on the exam skills needed for the summer exams	This work builds the students exam technique allowing them to become experts at the GCSE.	