

KS4 COURSE OPTIONS

Course Title	GCSE Mathematics (Exam board: AQA*) * this is subject to change depending on exam board changes to the style of exams
Course Description	<p>Building on the Mathematics studied in KS3 the GCSE course is designed to deepen students understanding of basic concepts, provide intellectual challenge with new topics, and provide an insight in to how mathematics is used in everyday life.</p> <p>A major focus on the new GCSE course is the ability to apply student's knowledge to unfamiliar problems that require multiple steps to achieve a solution. As such the course uses much of the knowledge learnt in year 7/8 but seeks to combine them in to a wider understanding of the relationship between different topics.</p> <p>This will be the 4th year of a 5-year program of study designed to allow students to achieve their full potential at GCSE.</p>
Course Content (Term 1,2,3 etc.)	See table on the next page
Extra-Curricular Opportunities	Much of the Mathematics out of school support is provided by online activities, it is helpful for the students to have access to a computer for use out of lessons.
Useful Websites	www.Mathswatch.vle.com www.mymaths.co.uk https://cloud.guilsborough.northants.sch.uk
Important Information	<p>Students in Mathematics will be set based on their ability, this is initially based on information from the primary school, and then through our own regular testing.</p> <p>Students identified as needing additional help in Mathematics, will be supported through a basic skills numeracy program.</p> <p>All students are expected to have their own scientific calculator; these can be brought from the Mathematics Department. Students are also expected to have basic geometry set available for every lesson. We provide this equipment and a tablet in Year 7 for any student receiving the PP fund.</p>
Provision For Most Able	As all students in Mathematics are set, the more able students, will follow an accelerated program of study, that enable them to explore new topics earlier, and challenges them to think about their current knowledge in new and unfamiliar ways. This course has been designed to incorporate elements of A Level Mathematics as preparation for their next stage of study.
Assessment	<p>Students in Mathematics are continually assessed in lessons. In addition to this, every couple of week students will complete an assessed homework, once marked by teacher students will receive targets for improvement.</p> <p>In addition to this, students will sit setting and assessment tests in Terms 2 and 6.</p>

This is based on the 3 year GCSE course (Students in year 10 in 2016-2017), students in earlier years will follow a similar program

	Excelling Mathematicians Higher + (Set 1)	Mastering Mathematicians Higher (Set 2-5)	Developing Mathematicians Higher with Stats (Set 6-7)	Emerging Mathematicians Foundation (Set 8-10)
Term 1	Powers and Standard Form	Powers and Standard Form	Powers and Standard Form	Probability and Events
	Equations and Inequalities	Equations and Inequalities	Equations and Inequalities	Volumes and Surface Area
Term 2	Linear Programming	Equations and Inequalities	Equations and Inequalities	Linear Equations
	Triangles	Number Recap	Number Recap	Constructions and Loci
	Trigonometry	Equations and Inequalities	Statistical Diagrams and Averages	
	Counting and Accuracy	Counting and Accuracy		
Term 3 & Term 4	Surds	Surds	Sampling and More complex diagrams	Charts, Tables and Averages
	Trigonometry Applications	Quadratic Equations	GCSE Statistics Controlled Assessment	Representation and Interpretation of Data
	Quadratics Equations		GCSE Statistics	GCSE Statistics Controlled Assessment
Term 5	Sampling and More Complex Diagrams	Sampling and More Complex Diagrams	GCSE Statistics	GCSE Statistics
	Quadratic Equations	Quadratic Equations		
Term 6	Probability Combined Events	Probability Combined Events	GCSE Statistics	GCSE Statistics
	Binomials	Ratio and Proportion Recap	Probability, combined events Ratio and proportion recap	Percentages and Compound Measures