

<p>Overview</p>	<p>Since the GCSE curriculum was updated with 9-1 replacing A*-G grades, we have ensured that that curriculum content offered at St Michael's match the rigour and development of a broad depth of mathematical skills and knowledge.</p> <p>KS3 students are now provided with opportunities to access GCSE content immediately, which offers challenge and ensures there are no wasted years. Our KS4 students are provided with an in-depth curriculum which develops their ability to apply problem-solving strategies to content.</p> <p>Students that require additional support in mathematics can follow a bespoke curriculum, which is tailored for their academic needs. Students will follow individual flight paths for their end of year targets and pupil progress is tracked through regular marking and feedback in addition to three full formal assessments each year.</p>
<p>What skills will pupils develop?</p>	<p>Studying mathematics develops a range of skills that can be helpful in a range of different jobs. You will gain communication skills, independent skills, teamwork skills and the ability to organise your work and develop good time management.</p> <p>Other qualities that students will develop include analytical and problem-solving skills, the ability to analyse and interpret data, and you will be articulate and adaptable.</p> <p>The aims of the 9-1 GCSE in Mathematics are to enable students to:</p> <ul style="list-style-type: none"> • Develop fluent knowledge, skills and understanding of mathematical methods and concepts • Acquire, select and apply mathematical techniques to solve problems • Reason mathematically, make deductions and inferences and draw conclusions • Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.
<p>What will help pupils to learn?</p>	<p>Students will improve the rate of their progress by arriving at lessons equipped and ready to learn, ensuring they complete homework to the best of their ability and using the MathsWatch VLE.</p> <p>Pupils at St Michael's are encouraged to speak to their class teacher, or any other mathematics teacher if further explanations or help is required.</p> <p>Pupils should follow the advice given after their assessments feedback sheets, as these provided a detailed question by question analysis on specific topics for improvement. Students will be given timely teacher comments using our WOW, NOW, HOW feedback stamp and students will be set bespoke progress tasks based upon their areas for development.</p>
<p>KS3 Course Structure</p>	<p>The KS3 mathematics course builds on the mathematical skills learned at primary school and ensures all students understand the processes by applying it to various problem-solving questions. Students are introduced to all of the GCSE foundation tier content and taught to be systematic with their written responses through end-of-term assessments.</p>

	<p>The Mathematics Department is passionate about its subject and look forward to sharing their expertise with our students. Our KS3 programme of study is designed to suit the students' mathematical abilities and has taken into account the changes to the GCSE course, ensuring there are no wasted years. Whilst the general titles do not change irrespective of being in Year 7 or Year 8, the students will learn new content that builds on the previous year. The more-able students are challenged to apply a depth of understanding to those Grade 5, 6 and 7 topics.</p>																						
KS3 Assessment	<p>Students are given full GCSE papers each half-term to stimulate them and prepare them for the added challenge faced with the 9-1 curriculum and these will form part of the three formal assessments students receive throughout the year. A rationale is in place to generate grade boundaries that ensure students are rewarded for their efforts, yet provide accurate and useful data for all of the students, staff and parents.</p>																						
KS4 Course Structure	<p>The KS4 mathematics course builds on the mathematical skills learned at KS3 and ensures all students understand the processes and can apply them in more depth.</p> <p>Students' knowledge is developed by stretching and challenging their understanding of topics such as geometry and measures, number, ratio, proportion and rates of change, algebra and statistics and probability.</p> <p>Our programme of study is designed to suit the students' mathematical abilities and has taken into account the changes to the GCSE course and content.</p>																						
KS4 Assessment	<p>Students studying the foundation tier will study 20 units of work and the higher tier students will study 19 units of work. Once students have completed their understanding of the learning, they will complete an end-of-unit assessment. Alongside this, in the 2018-2019 academic year, students will also complete mock exam papers from the new 9-1 curriculum and uses question by question analysis to help target their areas for development. MathsWatch will also be used to support students with their ongoing improvements.</p>																						
Staff	<table> <tr> <td>Mr Smith</td> <td>Director of Maths</td> </tr> <tr> <td>Mr Rigby</td> <td>Head of Maths</td> </tr> <tr> <td>Mrs Bagley</td> <td>Numeracy across the curriculum/Teacher of Maths</td> </tr> <tr> <td>Miss Cartwright</td> <td>Teacher of Maths</td> </tr> <tr> <td>Mrs Clark</td> <td>Teacher of Maths</td> </tr> <tr> <td>Mr Gaff</td> <td>Teacher of Maths</td> </tr> <tr> <td>Mr Hickling</td> <td>Teacher of Maths</td> </tr> <tr> <td>Miss Loucas</td> <td>HPA and Aim Higher Co-Ordinator /Teacher of Maths</td> </tr> <tr> <td>Miss Mycock</td> <td>Teacher of Maths</td> </tr> <tr> <td>Mr Quigley</td> <td>Teacher of Maths</td> </tr> <tr> <td>Mr Rock</td> <td>Teacher of Maths</td> </tr> </table>	Mr Smith	Director of Maths	Mr Rigby	Head of Maths	Mrs Bagley	Numeracy across the curriculum/Teacher of Maths	Miss Cartwright	Teacher of Maths	Mrs Clark	Teacher of Maths	Mr Gaff	Teacher of Maths	Mr Hickling	Teacher of Maths	Miss Loucas	HPA and Aim Higher Co-Ordinator /Teacher of Maths	Miss Mycock	Teacher of Maths	Mr Quigley	Teacher of Maths	Mr Rock	Teacher of Maths
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	<p>Mrs Weir Teacher of Maths</p> <p>Miss Wilkinson Teacher of Maths</p>		
Opportunities out of lessons	<p>Pupils are given opportunities to participate in:</p> <ul style="list-style-type: none"> • Intervention • Maths Futures • Maths Mentors • STEM • UK Junior Maths Challenge 		
Career Pathways in this subject	<p>There is a wide range of careers into which you could progress. These include:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> • accounting • biological sciences • business/management • economics • engineering • medicine </td> <td style="width: 50%; vertical-align: top;"> <ul style="list-style-type: none"> • physical sciences • programming • construction • games development • forensic pathology • statistician </td> </tr> </table>	<ul style="list-style-type: none"> • accounting • biological sciences • business/management • economics • engineering • medicine 	<ul style="list-style-type: none"> • physical sciences • programming • construction • games development • forensic pathology • statistician
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Example Websites to look at:

- <https://vle.mathswatch.co.uk/vle/>
- <http://www.mrbartonmaths.com/students/legacy-gcse/gcse-maths-takeaway.html>