Mathematics – Year 11 (GCSE Mathematics)

Introduction

In Year 11 we are following the new 9-1 GCSE Syllabus and our scheme of work is broken down into topics. Most topics take between 4-8 hours and problem-solving tasks are integrated into the learning. These tasks provide students with the opportunity to delve deeper into their conceptual understanding of maths and consider the practical, lengthier tasks. We also give students many opportunities to work collaboratively, discussing their learning and to make revisions and changes and notice details (such as units cm to metres). In maths, we also give students plenty of opportunity to overcome frustration through our 'stuck' questions. We try to contextualise learning using real-life examples wherever possible. These functional style questions help to prepare students for the everyday maths they will meet outside college.

In Year 11, we focus on helping students to assess their current understanding and knowledge in order to identify topics for improvement. Teaching also focuses on these topics and aims to review, consolidate and extend student understanding. Students will be developing their problem-solving skills, procedural fluency, and conceptual understanding alongside examination technique.

In addition to GCSE mathematics, students in top set also have the option to study the Free Standing Maths Qualification (FSMQ). The FSMQ is A level standard mathematics and earns points which will count when applying to university. The course also prepares students for both A level mathematics and for other maths related A levels.

Inspiring Learning

The maths department at South Dartmoor use interesting and varied activities and resources to allow students to make discoveries, build knowledge, and practise new skills. We use activities such as mysteries, stuck problems, real life examples (or functional maths) and investigations. We use resources such as interactive white boards, individual mini-white-boards, Tarsia card sort problems and much more!

The department also makes excellent use of groupwork and as a result, students are very good at discussing both their mathematics and their learning and have excellent listening and questioning skills.

Subject Summary:
Year 11 have 7 maths lessons a fortnight

Personnel Information

Classes studying Higher syllabus (grades 4-9)	Classes studying Foundation syllabus (grades 1-5)
11Ma3 – Miss Ackerman	11Ma6 – Mr Jones
11Ma4 – Mrs Holt	11Ma7 – Miss Dixon
11Ma5 – Mrs Turner	11Ma8 – Mrs Wheeler
	11Ma9 – Mr Cowdry
	11M10 – Mr Hayes

Syllabus Overview / Assessment Criteria	
New 9-1 GCSE (3 year study) EdExcel Board - 1MA1 specification For certain top set students: OCR FSMQ Additional Mathematics	GCSE: 100% Examination – 3 papers. FSMQ: 100% Examination – 1 paper.
Important Dates	
Coursework / Controlled Assessment	**Examination**
N/A	GCSE Paper 1 (non-calculator) – 19th May 2020 GCSE Paper 2 (calculator) – 4th June 2020 GCSE Paper 3 (calculator) – 8th June 2020 FSMQ Paper 1 (calculator) – 16th June 2020
Mock Exams	
November mocks w/c 4th November and w/c 11th November	February mocks w/c 10th February and w/c 24th February
Curriculum Map / Areas of Study	
The following topics have still to be taught and are spread out across the **Autumn and Spring terms**, according to which set is being taught. In amongst these topics, there will be opportunities for revision. The **Summer term** will consist of revision and past papers practise.	
Higher Tier 17: Changing the subject of formulae, algebraic fractions, solving equations, algebraic fractions, rationalising surds and proof 18: Vectors and geometric proof 19a: Reciprocals and exponential graphs; gradient and area under graphs 19b: Direct and inverse proportion	Foundation Tier 18a: Fractions and reciprocals 18b: Indices and standard form 19a: Similarity and congruence in 2D 19b: Vectors 20: Rearranging, graphs of reciprocals and cubics, simultaneous equations
Try this at home	

- WORKBOOK / REVISION GUIDE **:** Buy the appropriate tier revision guide and workbook from the library. Use this to review your learning or get additional help on a topic. The Progression ladders on Moodle show you which pages match each topic.
- MathsWatch: Use this to review your learning or get additional help on a topic. The Progression ladders on Moodle show you which clip matches each topic.
- MyMaths: Use the GCSE booster packs to boost your maths skills.
- Pinpoint: Use this to review how you did in your mocks and to identify the areas to work on. You will also have Pinpoint booklets with targeted questions on these topics.
- **Make notes, posters and prompt cards.** Anything that helps you to remember!