Mathematics – Year 9 (GCSE Mathematics)

Introduction

In Year 9 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 functional skills 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.

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 9 have 7 maths lessons a fortnight

Personnel Information

Classes studying Higher syllabus (grades 4-9)	Classes studying Foundation syllabus (grades 1-5)
9Ma1 – Mr Hayes	9Ma4 – Mr Cowdry
9Ma2 – Miss Dixon / Mrs Turner	9Ma5 – Miss Ackerman
9Ma3 – Mrs Wheeler	9Ma6 – Mrs Holt
	9Ma7 – Mr Jones

Syllabus Overview / Assessment Criteria	
New 9-1 GCSE (3 year study) EdExcel Board - 1MA1 specification	100% Examination – 3 papers. Please note: No external examination during Year 9
Important Dates	
Coursework / Controlled Assessment	**Examination**
N/A	Autumn Assessment: w/c 9th December 2019 Spring Assessment: w/c 20th April 2020 Summer Assessment: w/c 29th June 2020
Curriculum Map / Areas of Study	
Autumn Term	
Higher Tier 1a: Calculations, checking and rounding 1b: Indices, roots, reciprocals, order of operations 1c: Factors, multiples and primes 1d: Standard form and surds 2a: Algebra: The basics 2b: Setting up, rearranging and solving equations 2c: Sequences 3a: Averages and range	Foundation Tier 1a: Integers and place value 1b: Decimals 1c: Indices, powers and roots 1d: Factors, multiples and primes 2a: Algebra: the basics 2b: Expanding and factorising single brackets 2c: Expressions and substitution into formulae 3a: Tables
Spring Term	
Higher Tier 3b: Representing and interpreting data 3c: Scatter graphs 4a: Fractions 4b: Percentages 4c: Ratio and proportion 5a: Polygons, angles and parallel lines 5b: Pythagoras Theorem and Trigonometry	Foundation Tier 3b: Charts and graphs 3c: Pie charts 3d: Scatter graphs 4a: Fractions 4b: Fractions, decimals and percentages 4c: Percentages 5a: Equations 5b: Inequalities 5c: Sequences
Summer Term	
Higher Tier 6a: Graphs: The basics and real-life graphs 6b: Linear graphs and coordinate geometry 6c: Quadratic, cubic and other graphs 8a: Transformations 8b: Construction, loci and bearings	Foundation Tier 6a: Properties of shapes, parallel lines and angle facts 6b: Interior and exterior angles of polygons 7b: The averages 8a: Perimeter and area 8b: 3D forms and volume
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.
- **Make notes, posters and prompt cards.** Anything that helps you to remember!