

Year 9/10/11 Mathematics

Subject Leader – Mr J Dickinson

Exam Board and syllabus code

AQA - Mathematics (8300)

Content

We aim to inspire young people to enjoy maths, to develop their thinking skills, to exceed their expectations in public examinations and to be functionally numerate in the workplace.

For the current GCSE course pupils are assessed on their skills, knowledge and understanding in relation to number, algebra, geometry and measures and statistics. The aims of the course are to enable pupils to:

- develop knowledge, skills and understanding of mathematical methods and concepts
- acquire and use problem-solving strategies
- select and apply mathematical techniques and methods in mathematical, everyday and real world situations
- reason mathematically, make deductions and inferences and draw conclusions
- interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

At both foundation and higher tier, we are following the scheme of work which is in line with Mathematics Mastery, our partnership organisation, and follow their 5 year GCSE mastery plan. Learners also have access to an online personal text book.

Assessment

Throughout the course, pupils are assessed during each unit and at the end of each stage.

At the end of the course, pupils sit three papers – each worth 80 marks – at either foundation or higher tier. The first of these papers is undertaken without a calculator, whereas a (scientific) calculator is required for the second and third paper.

Pupils passing the foundation tier examinations will be awarded a grade between 5 and 1.

Pupils passing the higher tier examinations will be awarded a grade between 9 and 3.

Home Learning

Home learning is set each week for all learners with the aim of consolidating, broadening or extending understanding. This will include a variety of written practice, past papers, online tasks, research and revision.

How Parents and Carers Can Support

- Make sure that your child has all the equipment they need including a scientific calculator, ruler, protractor and a good quality pair of compasses.
- Keep rehearsing mental calculations, such as times tables, with them.
- Point out where you use mathematics whether in personal finance, at work or recreationally.
- Encourage your child to complete their home learning and to show how they have found their answers.
- Talk with your child about what they are doing and how they have reached their conclusions.
- Be positive in your approach to mathematics. Your child will pick up on and may adopt your attitude towards the subject.
- Use the booster packs on www.mymaths.co.uk

Additional Support Available/Useful Links

<https://www.kerboodle.com/users/login>
www.mymaths.co.uk
<http://www.bbc.co.uk/education/subjects/z6pfb9g>
https://www.cgpbooks.co.uk/School/books_ocr_maths_range
<http://www.mathscareers.org.uk/14-16/>
www.mrbartonmaths.com/freeresources.htm
<https://hegartymaths.com/>

Reading List

For pupils:

Revision Guides and Workbooks for QAQ GCSE Maths – CGP

17 Equations that Changed the World – Ian Stewart

1089 and All That – David Acheson

How to Cut a Cake – Ian Stewart

For parents:

More Maths for Mums and Dads – Rob Eastaway and Mike Askew