

Maths

Head of Department: Mr J Longley

Meet the Department:

Teachers of Maths:

Mr J Towers

Mr N Fletcher

Mrs A Howlett

Mr T Bennett

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How is the learning organised?

In KS3 the maths department follow a mastery approach to teaching and learning. Y7 are taught in mixed ability forms. Y8 and Y9 are set and set movement will be common based on their previous tests and expected grades. Where students are off target extra work will be offered for students to complete at home. All students are regularly assessed and receive feedback on their strengths and weaknesses from their last test with suggested links to online resources so students take an emphasis on their own learning.

Students are taught regularly to discuss their mathematical thinking and process skills with their peers. Problem solving tasks are used regularly within year 7 and year 8 with a move towards GCSE pathways in year 9. Use of mini whiteboards are common. In Y7 students are delivered a variety of lessons with a specific emphasis of teaching through problem solving. Use of large whiteboards at the back of the classroom allow the class to develop a model solution in maths classrooms. Given the current COVID outbreak students are taught in non maths classrooms so while problem solving is been taught it will adhere to health and safety guidelines. There has been an emphasis on online learning with the use of hegarty maths and Oak academy.

Key Stage 3 Content:

Year 7	Year 8	Year 9
<p>In Year 7 students follow a mastery approach to learning mathematics. This includes mastery tests to monitor understanding throughout the course. This is linked the white rose hub resources. If students do not do well in these tests the teacher will either re teach topics or will intervene on an individual level. Students will need to</p> <ul style="list-style-type: none"> • demonstrate knowledge, skills and understanding of mathematical methods and concepts, including: <ul style="list-style-type: none"> – Number – Algebra – Geometry – Measures 	<p>In year 8 students will need to</p> <ul style="list-style-type: none"> • demonstrate knowledge, skills and understanding of mathematical methods and concepts, including: <ul style="list-style-type: none"> – Number – Algebra – Geometry – Measures – Statistics – Probability <ul style="list-style-type: none"> • Use their knowledge and understanding to make connections between mathematical concepts • Apply the functional elements of mathematics in 	<p>In year 9 students will start to be taught the edexcel GCSE scheme of work with the aim to finish content by Christmas of year 11. Students will need to</p> <ul style="list-style-type: none"> • demonstrate knowledge, skills and understanding of mathematical methods and concepts, including: <ul style="list-style-type: none"> – Number – Algebra – Geometry – Measures – Statistics – Probability <ul style="list-style-type: none"> • Use their knowledge and understanding to make connections

<p>– Statistics – Probability</p> <ul style="list-style-type: none"> • Use their knowledge and understanding to make connections between mathematical concepts • Apply the functional elements of mathematics in everyday and real-life situations. • Learn formulae off by heart. <p>Students will sit a test paper before each data collection that will be on an accumulation of knowledge taught.</p> <p>More able students are entered into the junior school UKMT Maths challenges which is a national competition.</p>	<p>everyday and real-life situations.</p> <ul style="list-style-type: none"> • Learn formulae off by heart. <p>Students will sit a test paper before each data collection that will be on an accumulation of knowledge taught from year 7 and year 8.</p> <p>More able students are entered into the junior school UKMT Maths challenges which is a national competition.</p>	<p>between mathematical concepts</p> <ul style="list-style-type: none"> • Apply the functional elements of mathematics in everyday and real-life situations. • Learn formulae off by heart. <p>Students will sit a test paper before each data collection that will be on an accumulation of knowledge taught from year 7 to year 9. Tests will become more developed to include GCSE style questions.</p> <p>More able students are entered into the intermediate school UKMT Maths challenges which is a national competition.</p>
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Useful Resources:

- <https://www.mymaths.co.uk/> (Online platform for students to learn and answer questions at home)
- <https://corbettmaths.com> (Online videos and question for students with answers)
- <https://corbettmaths.com/revision-cards/> (To order revision cards for all topics at KS4)
- <http://mathswebsite.com/> (Online videos and question for students with answers)
- www.bbc.co.uk/schools/gcsebitesize (Examples and online questions)
- <https://www.youtube.com/channel/UCdV1dWYzmXpZ48FkFMpdJRg> (Online walk through of the GCSE exam papers)
- <http://www.mathsgenie.co.uk/> (Revision material including pre done modal answers for GCSE exams-pupil friendly versions.)
- <http://www.onmaths.com/> (Online tests and revision material)
- <https://www.ukmt.org.uk/> (Maths challenge questions and answers)

How you can support your child:

We expect students to own their own calculator given the Covid outbreak. The ones we recommend in school are 'Casio fx-83-GT PLUS' and 'Casio fx-GTx'.

Please check your child is attempting their homework and additional homework can be found below with links to videos and worksheets that roughly follow the school curriculum.

Encourage your child to practise maths regularly – 15 minutes every day would help him / her to keep on top of the basics and to focus on more difficult areas. <https://corbettmaths.com/5-a-day/gcse/> is good to use for the numeracy questions every day.

