



Maths Curriculum

“Go down deep enough into anything and you will find mathematics.” ~Dean Schlicter

Overview

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics and a sense of enjoyment and curiosity about the subject.

Key Stage 3

In Year 7, students begin a programme of study tailored specifically to their attainment in year 6. They are put on a pathway that aims to take their existing knowledge and understanding of mathematics and develop them further into abstract thinkers and independent problem solvers.

We work closely with our locality and feeder schools to ensure a consistent approach to teaching key concepts as well as ensuring a deep collective understanding of the latest developments in the national curriculum (Autumn 2014).

Our KS3 curriculum follows the progression stages as detailed on Kangaroo Maths.

<http://www.kangaroomaths.com/kenny2.php?page=Kschemeks3>

"The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on."
National Curriculum Extract Autumn 2014.

Key Stage 4

In KS4 students are increasingly encouraged to develop good patterns of study and independent learning. Classroom work focuses on guiding students to reach their full potential in Mathematics, and we offer Edexcel entry level examinations and Edexcel Linear GCSE (specification A 1MA0) at both Foundation and Higher levels. For that extra challenge for our more able students we also study the AQA Further Maths GCSE course.

Edexcel GCSE Specification A is a linear course. This means that all examinations are taken at the end of the course, namely in the summer of Year 11.

<http://www.edexcel.com/quals/gcse/gcse10/maths/maths-a/Pages/default.aspx>

<http://www.aqa.org.uk/subjects/mathematics/aqa-certificate/further-mathematics-8360/past-papers-and-mark-schemes>



Key Stage 5

In Years 12 and 13 students have the opportunity to study Mathematics AS and A2 level and Further Mathematics AS and A2 level. In Year 12 students study Core 1, Core 2 and Decision 1. In Year 13 they study Core 3, Core 4 and Mechanics 1. Each unit is equally weighted.

If students choose to study Further Mathematics they are required to study another 6 modules. This will include Further Pure 1 and 2, Mechanics 2, and Statistics 1,2 and 3.

<http://www.edexcel.com/quals/gce/gce08/maths/Pages/default.aspx>

Useful Study links

Every student will have been given a log in for the mymaths website www.mymaths.co.uk

We have subscriptions with the following sites which have useful links and work sheets to help students with their maths

<http://justmaths.co.uk/online/>

<http://www.mymaths.co.uk/>

<https://trockstars.com/>

We also suggest that students use these links as well to further their understanding:

<http://www.examsolutions.net/maths-revision/syllabuses/Edexcel/period-1/specification.php>

<http://www.hegartymaths.com/>

<http://corbettmaths.com/>

<http://www.mrbartonmaths.com/>

Subject Leader: Mrs D Denyer MA (Maths Education)

Department Website: <http://maths.stwilfrids.com>