**YEAR 11 INTO YEAR 12 2025**

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**Preparing for Maths A Level – This document is on Firefly in the Maths Yr11 into Yr12 Transition**

Congratulations! You have chosen to embark upon the A-Level Maths course in September, and it is vital for your success that you are ready for the step up. The best way to prepare yourself is to make sure you have a firm grasp of the knowledge and skills you have already developed at GCSE level and have recent practice of these when you begin the course.

There are a number of key skills which you need to make sure you are confident with before starting the A-Level course - these are used regularly in the pure Maths, and it is essential that you are not struggling with basic skills when you are trying to learn more advanced material for the first time.

You will have 13 periods per fortnight with two teachers. One of them will teach you Pure and Statistics. The other will teach you Pure and Mechanics. We will be following the Edexcel 2017 specification. You will be issued textbooks in September along with a digital copy. Over the summer you should complete the summer work ready to bring to your first lessons in September to discuss.

**Tasks to be completed for September:**

**Pure Mathematics - Yr11 to Yr12 Transition**

**You should complete the pure Edexcel transition sheets these are also available on firefly**

You should complete these on A4 paper and file into a folder. You should mark the these and do your corrections. In September, your class teacher will ask to see the completed work so please bring along to your lessons.

[**https://whs.fireflycloud.net/mathematics/y11-into-y12-transition/y11-into-y12-edexcel-transition-sheets**](https://whs.fireflycloud.net/mathematics/y11-into-y12-transition/y11-into-y12-edexcel-transition-sheets)

You will need to be fully prepared and confident in these topics in September. You will receive a test on the pure topics in your first lessons to assess your understanding and readiness for the A Level Maths course

**Statistics - Large Data Set**

**You should complete the data set booklet provided in full. Use the excel spreadsheet to help answer the questions**

[**https://whs.fireflycloud.net/mathematics/y11-into-y12-transition/y11-into-y12-large-data-set**](https://whs.fireflycloud.net/mathematics/y11-into-y12-transition/y11-into-y12-large-data-set)

**Online resources to support the move to A Level mathematics**

Here is a link to some online resources that will support the summer work and would be worth exploring:

<https://amsp.org.uk/resource/gcse-alevel-transition-resources>

<https://alevelmathsrevision.com/bridging-the-gap/>

<https://amsp.org.uk/teachers/11-16-maths/transition-to-level-3-maths>

<https://www.cimt.org.uk/projects/mepres/step-up/index.htm>

**Enjoy the beauty of Mathematics!**

Read, read, read! See some suggestions of wonderful books to read here on our firefly page

<https://www.maths.cam.ac.uk/undergrad/admissions/files/admissions/reading-list.pdf>

<https://whs.fireflycloud.net/mathematics/mathematical-reading>

Alternatively, the University of Cambridge has developed a free online magazine called +plus with all maths related articles. <https://plus.maths.org/content/>

**Where maths meets... the world of work!**

These [resources](https://amsp.org.uk/resource/where-maths-meets-the-world-of-work) are designed to showcase the maths in different careers and link directly to the curriculum. As well as finding out what a particular career entails, through the activities provided, students will get to try it out for themselves.

***FMSP resources – For Further Mathematicians only***

The Further Mathematics Support Programme (FMSP) produced a wealth of resources to support the teaching and learning of A level Mathematics. They are available within the [FMSP Resources Archive](https://amsp.org.uk/resource/teachers-fmsp-legacy-resources-archive).

* A collection of *A level Problem Solving Resources* which includes material for use with both AS/A level Mathematics and AS/A level Further Mathematics students.
* Mechanics resources which include practical activities for *Modelling with the Dynakar*.

**We would like you to do some research on the topic of Complex Numbers**

What are they? Who invented them? What applications do they have?

Watch the following as an introduction:

[**https://www.youtube.com/watch?v=gHUHZXjpwOE**](https://www.youtube.com/watch?v=gHUHZXjpwOE)

[**https://www.youtube.com/watch?v=0OHiSZUvn0I**](https://www.youtube.com/watch?v=0OHiSZUvn0I)

**Work through some of the activities here,** [**Activities on Complex Numbers**](https://nrich.maths.org/search?text=complex+numbers)

You can use the following resource to help you get started: [Complex Numbers](https://plus.maths.org/content/teacher-package-complex-numbers)

When you begin your Further Mathematics course in September you will be asked to do a short presentation on your findings! Be prepared!

*Any queries please contact The Head of Maths - Mrs Rees* *helena.rees@wim.gdst.net*