



Summer Transition Work

Mathematics

Hoe Valley Sixth Form

Dear Student,

Over the summer we want you to complete the following tasks below to help you make a successful transition from GCSE to Sixth Form study. Our summer transition work includes the following 3 elements to help you feel like a pro when your sixth form journey begins!

Preparation

Below are some essential tasks that will prepare you for the start of the A level courses and should consolidate some key GCSE level material. This work is designed to refresh your memory and skills and consists of revision and practice of the main GCSE topics that are important knowledge for A level mathematics.

In preparation for your A Level you are expected to complete this work and bring it with you on your induction day in September, link below:

[HVS Transition work for Maths A level](#)

Please do this on lined paper, with your name on it. Always show your working out, and work down the page making it clear how you get from one stage to the next. Be proud of your work.

Suggested weeks have been given for each task so that you do a little bit each week keeping the maths fresh in your mind, instead of trying to complete it all in one go.

Reading and viewing

Below is some suggested reading material or some titles that will help you to read around your subject and develop a deeper understanding of the subject, a crucial skill for success in the Sixth Form.

One of the best ways you stand out during your Sixth Form studies is through the amount of independent study you undertake outside of the classroom. Regardless of your future plans, the ability to extend yourself and research independently into your interests is an invaluable skill – this will support your university applications and/or future job applications and interviews.

Alex's Adventures in Numberland – Alex Bellos

Alan Turing, the Enigma - A. Hodges

The Simpsons and Their Mathematical Secrets - Simon Singh [Accompanying video](#)

Fermat's Last Theorem – Simon Singh [Accompanying video](#)

Sixth formers who take A level Further Mathematics earn on average £25,500 by the age of 24 which is more than any other A level. The highest-flying Further Mathematics students, those in the upper quartile of earnings, can earn up to £31,500 at that age. Read this to find out more - [Why it pays to study maths at A level - AMSP](#)

Organisation

Below are tasks to help you to be organised with your work when you start in September.

You will be completing a huge amount of work and to be successful you must keep on top of everything!

You must have at least one lever arch file per A Level (Mathematics and Further Maths if appropriate), with dividers for each topic and paper. It may be beneficial to separate the different elements (Pure1, Pure2, Mechanics, Statistics for A Level and Further Pure1, Further Pure2, Applied for Further Maths) into separate folders entirely.

You must have an A Level appropriate calculator. We suggest the Casio FX-991CW Classwiz . Spend some time over the summer familiarising yourself with the functions as it is a newer model, with menus replacing some of the functions which were previously just a button. An introductory video can be found here

<https://education.casio.co.uk/resources/videos/new-classwiz-calculator-keys-fx-991cw/>