Year 11 → Year 12 Transition

Mathematics

Below is a list of suggestions for preparing yourself for AS Level Mathematics at Cardiff High School.

- GCSE Basics
    - AS Level Maths builds on lots of the algebra covered at GCSE. To begin the AS course well, you will need to be fluent in the following topics:
        - Expanding single and double brackets
        - Factorising quadratics
        - Solving linear equations
        - Solving quadratic equations
        - Simultaneous Equations
        - Laws of Indices
        - Changing the subject (Rearranging)
- Additional Maths
  Complete the Additional Maths Booklets and then try a couple of past papers. These topics are a perfect bridging activity between GCSE and AS Maths. The booklets are available electronically on Google Classrooms. Use the internet or a textbook or email your teacher for support.
- Textbooks
  Consider buying a textbook to help with your preparation for AS Maths.
    - CGP Head Start to A-Level Maths is free on Kindle and available as a paperback too
    - WJEC Mathematics for AS Level: Pure by Stephen Doyle. This is the only WJEC specific book for the Unit 1 Core module (which is 62.5% of the AS course)
- Fun Books
    - Why do Buses Come in Threes? by Rob Eastaway and Jeremy Wyndham
    - Alex's Adventures in Numberland by Alex Bellos
    - Fermat's Last Theorem by Simon Singh
    - Gladiators, Pirates and Games of Trust by Haim Shapira
    - Things to Make and Do in the Fourth Dimension
    - Professor Stewart's Hoard of Mathematical Treasures by Ian Stewart
- Youtube
    - Numberphile Channel: An amusing look at some maths you may not learn about in school
    - 3Blue1Brown Channel: A more serious look at some more difficult topics