Prior to starting AS Level maths it is important to ensure you have a full understanding of the work covered at IGCSE level.

This work will allow you to consolidate key skills from Extended IGCSE maths that will underpin your studies at AS and A Level.

- a) Simplifying
- b) Expanding
- c) Factorising
- d) Rearranging
- e) Solving
- f) Sketching

You can download and print the worksheets from the folder here

There is also an online version of this course which can be accessed through the following <u>link</u>. You will need to register for the "Transition to

A Level Mathematics Course" which is free to do so.

Additional Work:

Head start to A-Level Maths available for purchase and <u>download</u> via Amazon.

Enrichment Work:

Some of the following investigations you may find challenging – this is ok. Do not be disheartended if you find them difficult. They are designed to challenge you and are to encourage you to think about the mathematical concepts and why they work – rather than following a set of rules.

Brackets Out, Brackets In

Two Repeats

The 3-Fact Triangles

Arithmetic Simultaneous Equations

Index Triples

<u>Tangent through the Origin</u> – you may find <u>https://www.desmos.com/calculator</u> useful for this investigation.

If you are interested in wider reading about maths in the world, the following books are recommended, but not a requirement:

17 maths equations that changed the world

The Simpsons and their Mathematical secrets

Alex's Adventures in Numberland

Alex through the Looking Glass

The Music of Primes

Humble Pi

Maths on the Back of an Envelope

How Many Socks Make a Pair?

Professor Stewart's Cabinet of Mathematical Curiosities

The Code Book