

# Preparing for A-level Maths

**You need to be aware of the following things!**

## **Ways of working**

- ❖ Generally your teacher will introduce you to a topic and give you an example or two, demonstrating the method and workings – you are probably advised to make a copy of this!
- ❖ You may then get a chance to practise in lessons, but will also need to complete further practice from the exercises in your own time. You are likely to have homework set most lesson, as preparation for the next lesson. (Reckon on at least an hour outside lessons for each hour in class – but see the note below about the importance of each module.)
- ❖ You must bring your textbook and calculators to every lesson.
- ❖ You will need a graphical calculator and you are also advised to upgrade from your GCSE calculator. We will give you advice and an opportunity to purchase these through the college in September.

## **All topics are important**

- ❖ You will have 3 lessons with one teacher, covering mostly Pure Mathematics topics and 1 lesson with another teacher working on Statistics and Mechanics. However, your A-level exam will contain questions from all areas and the applied topics will make up one-third of your overall grade. You must therefore make sure that you keep up with the work set by all teachers and you are likely to need to spend extra time on your applied subjects outside lessons.

## **Written work**

- ❖ The answers are in the back of the textbook. You are expected to regularly check your own work and **physically mark** it to show that you have done so. This way, if necessary, you can quickly identify when you are going wrong and correct your work or get help.
- ❖ NB: Thorough and clear workings really are essential and you will not get full marks in the exams without them – in some cases you won't get any marks if you don't show certain stages!
- ❖ Your teachers will set regular topic reviews and assessments so that you can receive feedback on your workings and identify areas which need even more work.

## **Other suggestions:**

- ❖ Keep notes pages and practice work separate.
- ❖ Use a highlighter, colours or boxes to make important formulae and information stand out.
- ❖ Keep a smaller folder for carrying current work – you'll need a big one to store all of your work, see below.
- ❖ Make your own formulae/methods notebook for quick reference during revision.

## In preparation for September:

### Set up a method for organising your notes.

- ❖ Your work should be separated into chapters.
- ❖ This is best done by filing A4 sheets (lined paper) into a lever arch folder with dividers – you will also need to keep Mechanics and Statistics topics together.
- ❖ If you want to work in notebooks, A4 will be best (solutions and workings will be longer than you are used to at GCSE). You could use post-its or similar to separate chapters and make them easier to find.
- ❖ **NB Exercise books are not provided in 6<sup>th</sup> Form – you are expected to bring your own paper and equipment to each lesson.**

Summer Work checklist	✓
❖ <b>Complete the diagnostic test at the front of the booklet</b> , making sure that you are confident with the methods covered. These are the topics from GCSE that are essential knowledge when it comes to A-level. <b>NB: The test has 13 sections – you do not have to complete them all at once!</b> I suggest you do one or two at a time, then mark them (answers at the back) and <b>complete the additional practice for problem sections.</b>	
❖ It will then be useful to work through more of the book, completing the practice questions at the bottom of the pages and <b>marking your work</b> as you go. <b>See essentials below:</b>	
❖ <b>You must complete the questions on the following key topics: Indices p9, Surds p12-13, Quadratics p16-17, Simultaneous equations p28-29, Straight lines p34-36, Trigonometry p42, Averages p 55.</b> You will need to bring this work to hand in at the start of term.	
❖ <b>Set up your filing system as described above</b> – the sooner it is up and running, the more organised you will be from the start.	
❖ <b>Bring your completed and marked</b> practice questions, organised by section, together with the work book to hand in at the <b>first maths lesson</b> (so bring in on <b>Day 1</b> just in case!)	

**Good luck and welcome to A-level maths!**