

# A LEVEL BIOLOGY

## **CORE PREPARATION: You must complete all of these tasks:**

- Look at the [OCR Biology A specification](#), available on their website. We will be starting with Module 2: Foundations in Biology so read over this Module so you know what to expect from your course
- One of the most important skills you will need to develop as an A level Biology student is how to learn independently, and make good notes. We often set homework to make notes on a topic so we can use class time to apply the information. The Cornell notes method helps you to better engage with material and learn it better as a result. [This video](#) shows you how to take them
- Use the Cornell notes method to make notes on water using [this video](#), and then make another set using [this video](#). You will need to bring these notes to your first Biology lesson, *and* use them to complete the following task
- Write a 15 mark essay to describe how hydrogen bonding occurs between water molecules, and explain the role of water in living organisms, linking this to its properties
- And finally, the A level Biology course contains at least 10% maths now, so here are a few Maths problems relating to water!
  1. If a raindrop has a diameter of 7mm, what is its volume to 2dp?
  2. Another raindrop has a diameter of 0.5cm, what percentage smaller is it than the original raindrop to 2dp?
  3. If you dissolve a 5g teaspoon of sucrose (sugar) in your 200ml cup of tea, what percentage is the solution? Give your answer to 2 significant figures
  4. If you have 0.006dm<sup>3</sup> of water how many ml do you have?
  5. 73876329 raindrops fell in an hour, what was the rate of rainfall per minute? Give your answer in standard form

## **ENRICHMENT: You should complete at least three of these:**

- Purchase the [CGP Head Start to A level Biology](#) for £4.95 and work through the book, completing the questions on each page. Our first topic is section 1 in the book, Biological Molecules, so pay special attention to this
- Choose 2 papers that interest you from <http://scienceintheclassroom.org/?tid=All> and use the annotations function to help you understand them
- Watch a Biology-related documentary. David Attenborough is always a treat, and the BBC Horizon series on the iplayer also has some excellent ones
- Use the New Scientist website to keep up to date with scientific breakthroughs
- Play the [Blood Typing game](#) on the Nobel Prize website
- Research a couple of Nobel Prize winners on the website

## **RESIDENTIAL TRIP**

The A Level Biology course involves a 3 day residential trip to cover the Environmental Sampling part of the course. This trip will take place in March and will cost around £250. Students that qualify for financial assistance can apply for help through Student Services, and all students will receive a letter about the trip and details of a payment plan during induction.