

A-Level Biology Preparation: September Preparation Tasks

If you have questions about any of the tasks/resources, please contact Miss Clegg using the itslearning message function.

You should bring all three completed tasks along with a ring binder file to your first biology lesson in September.

Task 1 – Biological molecules preparation task

The first topic that you will study in A-level biology is biological molecules. Biological molecules are groups of chemicals that are found in living organisms. Life on Earth is carbon-based and there are four main types of carbon-containing biological molecules: carbohydrates, proteins, lipids (fats) and nucleic acids.

You have already studied some of the basics of biological molecules at GCSE. The aim of the first task is to recap relevant GCSE work and look in a bit more detail into what each type of molecule is made up of. Click here [\(Task 1\)](#) to download and complete the worksheet.

Use the following resources to help you:

GCSE recap

- GCSE revision guide
- GCSE Kerboodle textbook
- BBC Bitesize (AQA biology)
- [The Chemistry of Food: Carbohydrates, Lipids and Proteins - 9-1 GCSE Biology - YouTube](#)
- [GCSE Biology - Food Tests Practicals #15 - YouTube](#)

Beyond GCSE

[Introduction to Biological Molecules: Monomers & Polymers | A-level Biology | OCR, AQA, Edexcel - YouTube](#)

Task 2 – Scientific, investigative and maths skills

During your A level studies you will carry out a range of practical activities that will enhance your understanding of the theory work as well as equip you with essential practical skills required for further studies and future employment. You will also develop mathematical skills involved in handling and interpreting data.

Click here [\(Task 2\)](#) to download the 'practical and maths skills transition worksheet'. Read and highlight/make notes on each section and complete the questions at the end of each section.

Task 3 – Brine shrimp

An important skill is being able to form links between different areas of the specification. Brine shrimp can be linked to many areas of the Year 12 biology specification. Your final task is to produce a mini project on brine shrimp and how they link to the A-level biology specification. Click here to view the task instructions [\(Task 3\)](#). It is up to you how you present this information.