



Year 11 Preparation for Study at Loreto College

SUBJECT

Biology



QUALIFICATION

A Level



PREPARATION TASKS



1. Use this [Biological Compounds Notes PDF](#) to make a table of the key features of carbohydrates, lipids and proteins. Highlight the information which you haven't learnt at GCSE (either use another colour or a star).
2. Use your GCSE knowledge to write a bullet point summary of each of the following methods of transport
 - Diffusion
 - Osmosis
 - Active Transport

Now use this [Cell Membrane and Transport Notes PDF](#) to add extra notes to make explanations A Level standard.

RESEARCH



1. Draw a large diagram of a cell with labels to the structures you learnt about at GCSE. Now do a web search for A level cell diagrams and add in any additional structures. Research the functions of these additional structures
2. Sketch graphs to show the following for enzyme reactions
 - Concentration of substrate over time
 - Concentration of products over time
 - The effect of temperature on rate of reaction
 - The effect of pH on rate of reaction

Use web searches to check your answers. Research the explanations of why the graphs are these shapes and use this to write a short explanation of each graph.

RECOMMENDED READING



- [New Scientist – Health](#)
- [New Scientist – Environment](#)
- [The Guardian – Biology](#)
- [Nature](#)
- [Head Start to A Level Biology - CGP](#)

RECOMMENDED WEBSITES



- [Eduqas \(WJEC GCE A Level Biology\)](#)
- [Eduqas \(WJEC GCE A Level Biology – Guidance for Teachers\)](#)
- [Component 1 – Basic Biochemistry and Cell Organisation](#)

The links below are to a selection of YouTube videos

- [Biological Molecules](#)
- [Eukaryopolis – The City of Animal Cells](#)
- [Plant Cells](#)
- [In Da Club – Membranes and Transport](#)

This research work is really useful to do, as it will help you to explore your options for college study. Please be aware that agreed courses will be finalised at enrolment after students have been awarded their GCSE results.