

Support Your Transition to Studying Biology A level Preparatory Work: Pre-course Reading, Research and Tasks

Pre-reading and research will help you to become more familiar with the topics you are going to study on your A Level Biology course. If you complete the tasks below they will also help you to become more confident when you start your course. Remember it is also a good idea to make sure you recap and consolidate your GCSE Biology and Organic Chemistry knowledge as well.

Specification:

A good place to start to look at the A level specification and familiarise yourself with what you will be studying on the course:

https://www.aqa.org.uk/subjects/science/as-and-a-level/biology-7401-7402

TASK 1:

Produce a 1 side (A4) summary of 2 of the topics you will be studying as part of your course. Biological Molecules: Focus on Carbohydrates and Lipids first, as we begin the course with these.

Use this summary for your work: <u>Summary Notes.pdf</u> (physicsandmathstutor.com)

TASK 2:

Research the biology behind a news story that has recently caught your interest e.g. Why is the Sars cov 2 virus so infectious and causing such variable symptoms? How do vaccines work? What is the biology behind the antibody test?

https://www.theguardian.com/science

https://www.bbc.co.uk/news/science and environment

What is Crispr technology? Why are insect numbers declining?

https://www.independent.co.uk/news/science

Websites for further research and reading:

Watch a biology video – crash course/Bozeman/Craig savage/Penguin prof/ Amoeba sisters/snap revise on any part of the biology specification that catches your interest

Books to Read:

R Skloot 'The Immortal Life of Henrietta Lacks'

B Goldacre 'Bad Science'

Nessa Carey 'The Epigenetics Revolution: How Modern Biology is Rewriting Our Understanding of Genetics, Disease and Inheritance'

Frances Ashcoft 'Life at the extremes'

R Dawkins 'The Ancestor's Tale: A pilgrimage to the dawn on life **Frances Ashcoft** 'The Spark of life: Electricity in the human body'

Margaret Attwood 'Oryx and Crake'

Podcasts:

https://www.flashforwardpod.com/

https://www.alieward.com/ologies

https://www.sciencefriday.com/articles/show-not-tell-the-rise-of-the-infographic/

http://thispodcastwillkillyou.com/

https://gimletmedia.com/shows/science-vs

https://gimletmedia.com/shows/the-habitat

TASK 3: Source one of the above books or listen to one of the podcasts. Write a summary of the key biological facts and main points you have learnt

Programmes to Watch:

Currently on BBC iPlayer

Primates

Planet earth 2

The blue planet 1 and 2

Or if you have Netflix there are a number of nature and ecology documentaries and films to watch.

https://www.netflix.com/gb/browse/genre/48768

Progression Opportunities with Biology— understand possible Biology related careers

Why chose A level Biology

https://successatschool.org/advicedetails/208/Why-Study-Biology%3F

Explore the range of careers you can access by studying Biology

- https://www.rsb.org.uk/careers-and-cpd/careers
- https://www.rsb.org.uk/images/Teacher careers resource for KS5 2016.pdf

We hope you enjoy completing these tasks and look forward to you joining the course.