

Step up to Biology A-Level

This is a menu of tasks to help you get ready to study Biology at A-Level. Try to choose a 'balanced diet' of activities each week to ensure variety in your learning. Keep your completed work organised in a folder so that you can submit your transition work during your first Biology lesson.



Short Video Clips (less than 10 minutes)

Each of these clips offers context for the course. Write down any key details they reveal or inferences you can make from them. List questions the clips raise that you would like to understand more about (aim for 3)?

What are stem cells?
[What are stem cells?](#)



Amoeba Sisters: Cell Structure & Function
[Microscopes and How to Use a Light Microscope - YouTube](#)



How a single-celled organism almost wiped out life on Earth
[How a single-celled organism almost wiped out life on Earth](#)



Longer Video Clips, Films or Documentaries

These videos will get you thinking even more about biological issues. Select one video, record the key points of context or information that you found significant, alongside 5 subsequent questions that the video has spawned.

David Attenborough:
A Life on Our Planet
Found on Netflix – Trailer:
[David Attenborough: A Life on Our Planet | Official Trailer](#)



A Perfect Planet
[BBC iPlayer - A Perfect Planet - 1. Volcano](#)



Life on Our Planet
Found on Netflix – Trailer:
[Life on Our Planet | Official Trailer](#)



Attenborough's Life in Colour
[BBC iPlayer - Attenboroughs Life in Colour - 2. Hiding in Colour](#)
(Third episode found on Netflix)



Programmes and Podcasts

There is a huge array of scientific radio programmes and podcasts available. If you do not have a podcast app, or cannot sign in to BBC Sounds, this would be your first thing to remedy. Below are a few stretching and informative programmes for you to enjoy. Make notes on ½ page of A4 about what you have learnt about the topic of each programme and which opinions you agree with and why.

Made of stronger stuff:
human Biology
[BBC Sounds - Made of Stronger Stuff](#)



Bad Blood: The Story of Eugenics -
including episode: The Curse of Mendel
[BBC Sounds - Bad Blood: The Story of Eugenics](#)



Just One Thing -
with Michael Mosley
[BBC Sounds - Just One Thing - with Michael Mosley](#)



On the brain:
[BBC Sounds - On the Brain](#)



Questions to Consider

The questions below are designed to get you thinking more broadly about some of the underlying issues within the course we study in Year 12. Choose a question and try discussing it with somebody else. Then write 500 words exploring different possible responses and explaining your own opinions.

Why are cycles so important in the Biological world?

Do plants have a form of consciousness?

Are viruses alive?

Can we reverse climate change?



Debate

Task: Read the linked pages regarding Human Evolution and complete the activities below.

[Are humans still evolving? - BBC Science Focus Magazine](#)

[Are humans still evolving? \(yourgenome.org\)](#)

[Are humans still evolving? - PMC \(nih.gov\)](#)



Give arguments that support that humans have stopped evolving

Give arguments that support that humans continue evolving

Give your opinion on the debate and justify using scientific information



Books and Other Longer Reads

These books are excellent introductions to the themes we study in Biology. They are available to buy and download as e-books.

Entangled Life
Merlin Sheldrake

What is Life?
Understand Biology in Five Steps
Paul Nurse

An Immense World
Ed Young

Pathogenesis: How Germs Made History
Jonathan Kennedy

