



Y10 Separate Science (Biology - AQA)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	B3 Infection and response Communicable and non-communicable diseases, drug development, human defence systems, plant disease, aseptic techniques.	B4 Bioenergetics Photosynthesis and rate, aerobic and anaerobic respiration, metabolism.	B5 Homeostasis and Response Homeostasis, the nervous system, the brain and eye, endocrine system, control of blood glucose levels, temperature and water levels, diabetes, hormones.	B6a Inheritance, variation and evolution Reproduction, DNA structure and mutations, inheritance,	B6b Inheritance, variation and evolution Variation, evolution, genetic engineering, classification and speciation, cloning.	B7a Ecology Competition, adaptations, decomposition, water and carbon cycles.
Assessment	End of topic assessment	End of topic assessment	End of topic assessment	End of topic assessment	End of topic assessment	End of topic assessment End of year PPE

Building on Prior Learning	Year 10 Biology builds on prior knowledge by spiralling the topics previously learnt in Year 9 such as cells, osmosis, diffusion and microscopy. Learning components at the start of lessons remind students of prior learning and point out links to prior topics.
Links with other subjects	Maths - 20% of the Science GCSE is numeracy based around fractions, standard form, and basic maths. Tabulation and analysis of data. English - Literacy link, scientific terminology, command words, comprehension, and reading and extended writing.
Extracurricular opportunities	GCSE Science live talks trips. STEM ambassador visits to engage students in science in the real world.
A successful learner in this subject will demonstrate	The knowledge and recall of the above topics, along with the ability to explain, analyse and make links between different areas of Biology. They will have the ability to take ownership of their own learning needs. Practical skills will develop through the completion of required practicals throughout the year.
Impact on personal development	Science will help students to become logical thinkers and problem solvers with a better understanding of the world around them. Demonstrating resilience and the ability to consider moral and ethical implications of scientific developments.



Ways to support student learning in this subject

- Encourage the completion of homework.
- Encourage discussion of science issues that arise in the news.
- Discuss science lessons and their progress.
- Encourage a positive attitude towards science.
- Personalised learning checklists (PLC)
- Encourage students to use Seneca Learning (<https://www.senecalearning.com/>) to consolidate knowledge and build on recall skills.
- CGP science revision guides and workbooks are available to purchase throughout the year on parent pay.