

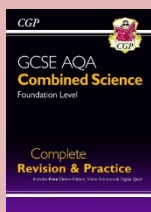
The English Martyrs Catholic School and Sixth Form College



<u>Biology Year 10</u>	<u>Module 1</u>	<u>Module 2</u>	<u>Module 3</u>
<u>Topic Theme and Intent</u>	Students are introduced to the immune system and its response to communicable disease . They study this to develop an understanding of spread, prevention and treatment of diseases that threaten health.	Students revisit photosynthesis and respiration from year 8. They focus on the conversion of light to chemical energy in plants, and then how this energy is unlocked so it can be used to facilitate survival in organisms.	Students are introduced to the nervous systems and the endocrine systems of humans. They look at how these systems ensure optimal internal conditions to facilitate survival , despite fluctuating external conditions .
<u>Knowledge</u>	<ul style="list-style-type: none"> Communicable diseases – viral, bacterial, fungal, protist disease. Human defences. Vaccination. Antibiotics, painkillers, and the development of drugs. SEP specific – Monoclonal antibodies. 	<ul style="list-style-type: none"> Photosynthesis and limiting factors affecting it. Uses of glucose. Aerobic and anaerobic respiration. Effect of exercise on respiration. Metabolism. 	<ul style="list-style-type: none"> The human nervous system. The endocrine system. HT specific – Negative feedback and infertility. SEP specific – the brain, the eyes and sight, the kidney and kidney failure, plant hormones and their uses.
<u>Skills</u>	Consider the necessity of clinical drug trials.	Investigate the rate of photosynthesis.	Investigate reaction time.
<u>Literacy Links</u>	<p>Reading – Students will read about compulsory vaccination</p> <p>Writing – Students start to communicate scientific ideas and concepts through writing.</p> <p>Oracy – Students start to use scientific vocabulary in discussion and question and answering.</p>	<p>Reading – Students will read about the compromise to respiration during F1 racing.</p> <p>Writing – Students practise communicating scientific ideas and concepts through writing.</p> <p>Oracy – Students practise the use scientific vocabulary in discussion and question and answering.</p>	<p>Reading – Students will read about head impacts and dementia.</p> <p>Writing - Students will communicate scientific ideas and concepts through writing.</p> <p>Oracy – Students use scientific vocabulary in discussion and question and answering.</p>
<u>Essential Vocabulary</u>	Communicable, Pathogen, Phagocytosis, Antibodies, Clinical, (plus additional vocab for SEP science).	Endothermic, Limiting Factors, Denatures, Exothermic, Insoluble, Aerobic, Anaerobic, Oxygen Debt, Fermentation, Metabolism.	Homeostasis, Denature, Neurotransmitter, Neurone, Synapse, Impulse (plus additional vocab for HT and SEP science).

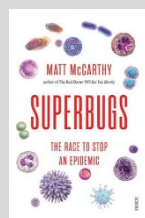
Disciplinary Reading

CGP Books – GCSE Science COM and SEP, & Oxford Revise COM and SEP.

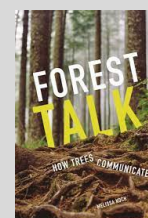


Reading for Pleasure

M. McCarthy – Superbugs



M. Koch – Forest Talk



J. Franklin – 438 Days

