



## Biology Year 11

**Intent** : Science curriculum intent: As a school our curriculum inspires students to want to know more, understand more and be able to do more. In science we intend to harness the innate desire in young people to want to know more about the world and use this to help them understand how the strands of science learning fit into the big picture. We intend to help the students develop into learners who can see a problem and work both independently and together to find a solution. We recognise that all young people are scientists, and we aim to enable them to develop these skills. By year 11 students will have covered all the “paper one” topics for each science and will aim to finish the course in time for their final mock. They will then consolidate their learning and revise key areas before their final GCSE exams in the summer.



	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 11 combined Biology Units	CB9 - ecosystems - up to CB9f	CB9 - ecosystems – to end	CB8 - exchange and transport in animals	Mock two revision	Exams and revision	Exams and revision
Key Content	<b><u>CB9 ecosystems and material cycles</u></b> levels of organisation and community interactions; effects of abiotic and biotic factors; sampling techniques for population studies; human impacts on biodiversity; and key material cycles—carbon, water, and nitrogen.	<b><u>CB9 ecosystems and material cycles</u></b> levels of organisation and community interactions; effects of abiotic and biotic factors; sampling techniques for population studies; human impacts on biodiversity; and key material cycles—carbon, water, and nitrogen.	<b><u>CB8 – exchange and transport</u></b> Why multicellular organisms need exchange surfaces and transport systems, adaptations of alveoli, blood composition, heart structure, and circulatory system; aerobic and anaerobic respiration; calculations for heart rate, stroke volume, and cardiac output.	All the content for GCSE combined science can be found here, in the <a href="#">exam specification</a> .		
Literacy	Key word sheets – CB9	Key word sheets – CB9	Key word sheets – CB8	All previous key word sheets are relevant for revision		
Knowledge organiser	Knowledge organiser – CB9	Knowledge organiser – CB9	Knowledge organiser – CB8	All previous knowledge organisers are relevant for revision.		
Assessment		Mock 2 will cover all the content from “paper 1” in biology.		Mock three will cover all the content from “paper 2” in biology.		

GCSE AO Link (or other) if applicable	In science the assessment objectives are: AO1 Demonstrate knowledge and understanding. AO2 Apply knowledge and understanding. AO3 Analyse information and ideas. These are all covered in each block of three modules.
---------------------------------------	--

Homework	One piece of homework, set on Seneca, each week. This will form an important part of the student's revision and should take around 30 minutes.
----------	--

CEIAG – STEM careers that relate to these topics.	<b>CB9 – Ecosystems and Material Cycles</b> <ul style="list-style-type: none"> <li>● Ecologist</li> <li>● Conservationist</li> <li>● Environmental Consultant</li> <li>● Wildlife Biologist</li> </ul>	<b>CB8 – Exchange and Transport in Animals</b> <ul style="list-style-type: none"> <li>● Cardiologist</li> <li>● Respiratory Therapist</li> <li>● Paramedic</li> <li>● Biomedical Engineer</li> </ul>			
---	--	--	--	--	--

Enrichment	
------------	--