

Year 10 Biology: Programme of Study 2020-2021

Units	Autumn Term 1	Autumn Term 2	Spring Term 3	Spring Term 4		Summer Term 5 & 6	
	Biology Paper One: Recap Section 1 and 2 (from year 9 work). Start Section 3	Biology Paper One: Finish Section 3. Start Section 4	Biology Paper One: Finish Section 4. Start Section 5	Biology Paper One: Finish Section 5	Biology Paper One Revision	Y10 Mock Exams	Biology Paper Two: Section 6
Knowledge	<p><u>Recap of Year 9 Programme of study</u></p> <p><u>Section 3</u></p> <ul style="list-style-type: none"> Meiosis DNA structure and function Protein Synthesis Genes and Inheritance Mutations and Variation 	<p><u>Section 4</u></p> <ul style="list-style-type: none"> Human Evolution Darwin's Theory of Evolution Classification (Linnaean) GM and genetic engineering GM and agriculture Case studies 	<p><u>Section 5</u></p> <ul style="list-style-type: none"> Health and disease Cardiovascular disease Pathogens Disease Transmission Virus Lifecycles Plant diseases Immune Response Antibiotics 	<p>The end of teaching for the paper one component of GCSE Biology</p>		<p><u>Section 6</u></p> <ul style="list-style-type: none"> Photosynthesis Factors affecting the rate of photosynthesis Plant adaptations Transpiration and translocation Plant hormones and uses of hormones 	
Links to Learning	<p>Links to previous learning These units build on aspects of KS3 Biology and look at expanding the scope of study further into the scientific process and how knowledge is acquired and tested with a focus on famous scientists like Francis Crick, James Watson and Dorothy Hodgkin to Gregor Mendel. Also looking at more depth into the nature of inheritance. Links to the curriculum include:</p> <p>← Y9 Mitosis ← Y8 Topic 5 Reproduction ← Y7 Topic 3 Genetics</p> <p>Links to future learning → Y10 Paper One: Section 4 Evolution and Genetics → Y10 English: Study of Never Let Me Go → RP and Ethics</p>	<p>Links to previous learning This unit builds on students understanding on the theory of life and evolution it builds on the evidence for human evolution and why some religious groups still may have arguments against it. We also discuss the ethics and issues of GM and cloning. Links to the curriculum include:</p> <p>← Y8 Topic 5 Reproduction and growth ← Y7 Topic 3 Evolution</p> <p>Links to future learning → Y12 Inheritance and selection → Y11 Section 9: Food security → RP and Ethics</p>	<p>Links to previous learning This units build on KS3 ideas on the nature of disease and focuses on how key scientists changed our knowledge of infection (Semmelweis, Lister, and Fleming) to what challenges are to be faced in the 21st Century. We then focus on non-communicable disease. Links to the curriculum include:</p> <p>← History Medicine through time ← Y8 Topic 4 Circulation ← Y7 Topic 2 Diet and Organs</p> <p>Links to future learning → Y11 Section 9 Human impacts on ecosystems → Y12 Immune Response → Y12 CV Disease and epidemiology</p>	<p>Links to previous learning Review of all 5 sections of the paper one component of the course</p> <ol style="list-style-type: none"> Key concepts in Biology Cells and Control Genetics Natural Selection and Genetic Modification Health, disease, and medicine <ul style="list-style-type: none"> EDEXCEL SPECIFICATION Seneca GCSE Pod COLIN BBC BITESIZE 		<p>Links to previous learning This units build on students' ideas on the importance of plants and our interdependence with them. It explores what plants do with the glucose from photosynthesis and links to wider aspects of the food chain and land management. Links to the curriculum include:</p> <p>← Y9 Topic 1 Cell structure ← Y8 Topic 4 Photosynthesis ← Y7 Topic 1 Cells</p> <p>Links to future learning → Y13 Photosynthesis → Y11 Section 7 Respiration → Y11 Section 9 Ecology and Carbon Cycle</p>	
Assessment	<ul style="list-style-type: none"> End of section summative test which cover section content and also some from Section One Key concepts in Biology Mid topic Review Satchel: One Quizzes Exam Question Review Teacher Assessment of required practical work 	<ul style="list-style-type: none"> End of section summative test which cover section content and also some from Section One Key concepts in Biology Mid topic Review Satchel: One Quizzes Exam Question Review Teacher Assessment of required practical work 	<ul style="list-style-type: none"> End of section summative test which cover section content and also some from Section One Key concepts in Biology Mid topic Review Satchel: One Quizzes Exam Question Review Teacher Assessment of required practical work 	<ul style="list-style-type: none"> End of section summative test which cover section content and also some from Section One Key concepts in Biology Mid topic Review Satchel: One Quizzes Exam Question Review Teacher Assessment of required practical work 		<ul style="list-style-type: none"> Students sit a paper one exam that covers section one to five. End of section summative test which cover section content and also some from Section One Key concepts in Biology Mid topic Review Satchel: One Quizzes Exam Question Review Teacher Assessment of required practical work. 	

