

## Year 11 Curriculum Overview [2022-2023]

### Subject – Biology Separate Science

Autumn Term	Knowledge & Understanding			Literacy Skills  Opportunities for developing literacy skills	Employability Skills [if any]	Assessment Opportunities
	Composites	Components  [includes understanding of KEY concepts & subject specific vocab]	Formal Retrieval [if any]			
HT1	B6 Plant structures and their functions	<ul style="list-style-type: none"> <li>• Photosynthesis</li> <li>• Factors that affect Photosynthesis</li> <li>• Core Practical – Light Intensity and Photosynthesis</li> <li>• Absorbing Water and Minerals</li> <li>• Transpiration &amp; Translocation.</li> <li>• Plant adaptations</li> <li>• Plant hormones</li> </ul>	<ul style="list-style-type: none"> <li>• KS3 Plant growth and Reproduction</li> <li>• Photosynthesis review</li> <li>• Trends in data</li> </ul>	<p><b>Extended writing focus:</b></p> <ul style="list-style-type: none"> <li>• Evaluation – how to improve results / modify investigations – apply knowledge of CP to elodea practical.</li> <li>• Leaf adaptations</li> <li>• Transpiration vs translocation</li> <li>• Phloem vs Xylem</li> <li>• Explain how mineral ions are transported in plants.</li> <li>• Explain how sucrose is transported to storage organs.</li> </ul>	<ul style="list-style-type: none"> <li>• Ecologist</li> <li>• Botanist</li> </ul>	<p style="text-align: center;"><b>Assessment Point 1</b> B6</p> <p style="text-align: center;">Feedback Lesson</p>
	B7 Animal Coordination, Control and Homeostasis	<ul style="list-style-type: none"> <li>• Hormones</li> <li>• Hormonal control of metabolic Rate</li> <li>• The Menstrual Cycle</li> <li>• Hormones and the Menstrual Cycle</li> </ul>	<ul style="list-style-type: none"> <li>• KS3 Review – Animal Reproduction</li> <li>• Food &amp; Nutrition</li> <li>• Drugs &amp; Diseases</li> </ul>	<ul style="list-style-type: none"> <li>• Key terminology- names and roles of hormones</li> </ul>	<ul style="list-style-type: none"> <li>• Endocrinologist</li> <li>• Midwifery</li> <li>• Reproductive assistance clinic</li> <li>• IVF procedures</li> <li>• Phlebotomy technician</li> </ul>	<p style="text-align: center;">Review &amp; Feedback on Year 10 Mock Assessment</p>

<b>HT2</b>	<b>B7 Animal Coordination, Control and Homeostasis</b>	<ul style="list-style-type: none"> <li>Control of Blood Glucose,</li> <li>Type 2 Diabetes</li> <li>Thermoregulation</li> <li>Osmoregulation</li> <li>The Kidneys</li> </ul>	<ul style="list-style-type: none"> <li>KS3 Review – Animal Reproduction</li> <li>Food &amp; Nutrition</li> <li>Drugs &amp; Diseases</li> </ul>	<ul style="list-style-type: none"> <li>Extended writing Diabetes type 2</li> </ul>	<ul style="list-style-type: none"> <li>Endocrinologist</li> <li>Midwifery</li> <li>Reproductive assistance clinic</li> <li>IVF procedures</li> <li>Phlebotomy technician</li> </ul>	
	<b>B8 Exchange and transport in animals</b>	<ul style="list-style-type: none"> <li>Efficient transport and Exchange</li> <li>Factors affecting diffusion</li> <li>The circulatory System</li> <li>The heart</li> <li>Cellular Respiration</li> <li>Measuring respiration Rates</li> </ul>	<ul style="list-style-type: none"> <li>KS3 Review - Breathing &amp; Respiration</li> <li>Drugs and Diseases</li> </ul>	<ul style="list-style-type: none"> <li>Oral explanations</li> <li>Describing route of a blood cell</li> <li>Comparing adaptations of blood vessels</li> </ul>	<ul style="list-style-type: none"> <li>Biomedical Scientist</li> <li>Heart surgeon</li> <li>Cheese or wine / beer production</li> <li>Astronaut</li> </ul>	<p><b>Assessment Point 2</b> Mock Examination Biology Paper 1</p> <p>Feedback lesson</p>

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Spring Term	Knowledge & Understanding			Literacy Skills  Opportunities for developing literacy skills	Employability Skills [if any]	Assessment Opportunities
	Composites	Components  [includes understanding of KEY concepts & subject specific vocab]	Formal Retrieval [if any]			
HT3	B8 Exchange and transport in animals	<ul style="list-style-type: none"> <li>Efficient transport and Exchange</li> <li>Factors affecting diffusion</li> <li>The circulatory System</li> <li>The heart</li> <li>Cellular Respiration</li> <li>Core practical- measuring respiration Rates</li> </ul>	<ul style="list-style-type: none"> <li>KS3 Review - Breathing &amp; Respiration</li> <li>Drugs and Diseases</li> </ul>	<ul style="list-style-type: none"> <li>Oral explanations</li> <li>Describing route of a blood cell</li> <li>Comparing adaptations of blood vessels</li> </ul>	<ul style="list-style-type: none"> <li>Biomedical Scientist</li> <li>Heart surgeon</li> <li>Cheese or wine / beer production</li> <li>Astronaut</li> </ul>	<b>Assessment point 3</b>  Class Assessment Paper 2 Content
	B9 Ecosystems and material cycles	<ul style="list-style-type: none"> <li>Ecosystems</li> <li>Energy transfer</li> <li>Abiotic Factors and Communities</li> <li>Core Practical – Quadrats and Transects,</li> <li>Biotic Factors and Communities</li> </ul>	<ul style="list-style-type: none"> <li>KS3 Review = Ecosystems, Plant Growth</li> <li>Animal Exchange and Transport</li> </ul>	Key terminology focus for material cycles and Belt transects	<ul style="list-style-type: none"> <li>Careers involving pollution control</li> <li>Conservationist</li> <li>Organic Farmers</li> </ul>	

<p><b>HT4</b></p>	<p>B9 Ecosystems and material cycles</p>	<ul style="list-style-type: none"> <li>• Assessing pollution</li> <li>• Parasitism and Mutualism</li> <li>• Biodiversity and humans</li> <li>• Preserving biodiversity</li> <li>• Food security</li> <li>• The water cycle</li> <li>• The carbon cycle</li> <li>• The nitrogen cycle</li> <li>• Rates of decomposition</li> </ul>	<ul style="list-style-type: none"> <li>• KS3 Review = Ecosystems, Plant Growth Animal Exchange and Transport</li> </ul>	<ul style="list-style-type: none"> <li>• Key terminology focus for material cycles and Belt transects</li> </ul>	<ul style="list-style-type: none"> <li>• Careers involving pollution control</li> <li>• Conservationist</li> <li>• Organic Farmers</li> <li>• Climate Scientist</li> </ul>	<p><b>Assessment Point 4</b></p> <p>Mock Examination Paper 2 Biology</p>
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## Year 11 Curriculum Overview [2022-2023]

### Subject – Biology Separate Science

Summer Term	Knowledge & Understanding			Literacy Skills  Opportunities for developing literacy skills	Employability Skills [if any]	Assessment Opportunities
	Composites	Components  [includes understanding of KEY concepts & subject specific vocab]	Formal Retrieval [if any]			
<b>HT5</b>	GCSE Preparation	<ul style="list-style-type: none"> <li>Biology</li> </ul>			<ul style="list-style-type: none"> <li>N/A</li> </ul>	GCSE Examinations
					<ul style="list-style-type: none"> <li>N/A</li> </ul>	