

	Autumn Term	Spring Term	Summer Term
<b>Year 12</b>	<p><b>Curriculum and Skills:</b>                      2.1.1. Cell structure                      2.1.2. Biological molecules                      2.1.3. Nucleotides and nucleic acid                      2.1.4. Enzymes                      2.1.5. Biological membranes                      2.1.6. Cell division, cell diversity and cellular organisation</p> <p><b>Maths skills:</b>                      Standard deviation                      T- test                      % change                      Rates of reaction                      Graphical work                      Magnification calculations</p> <p><b>Practical Skills:</b></p> <ul style="list-style-type: none"> <li>• Use of a light microscope at high power and low power, including use of a graticule.</li> <li>• How to follow written procedures</li> <li>• How to safely use a range of practical equipment and materials</li> <li>• How to make and record observations</li> <li>• How to produce scientific drawings from observations with annotations.</li> <li>• How to use of laboratory glassware apparatus for a variety of experimental techniques- to include serial dilutions</li> <li>• How to present information and data in a scientific way</li> <li>• How to keep appropriate records of experimental activities</li> <li>• How to use a colorimeter.</li> <li>• How to use qualitative reagents to identify biological molecules</li> </ul>	<p><b>Curriculum and Skills:</b>                      3.1.1. Exchange surfaces and breathing                      3.1.2. Transport in animals                      3.1.3. Transport in plants                      4.2.1. Biodiversity</p> <p><b>Maths: skills:</b>                      Spearman’s Rank calculations                      T- tests                      Uncertainty                      Simpson’s Index                      Surface area : Volume ratio</p> <p><b>Practical Skills:</b></p> <ul style="list-style-type: none"> <li>• To repeat the skills listed in term 1</li> <li>• To improve scientific drawings</li> <li>• To safely use of instruments for dissection of an animal or plant organ</li> <li>• How to use a potometer</li> </ul>	<p><b>Curriculum and Skills:</b>                      4.1.1. Communicable disease                      4.2.2. Classification and Evolution</p> <p><b>Maths: skills:</b>                      All mathematical work reviewed                      Mark release recapture                      Chi- squared</p> <p><b>Practical Skills:</b></p> <ul style="list-style-type: none"> <li>• To review all practical skills and</li> <li>• To use sampling techniques in fieldwork</li> <li>• To use microbiological aseptic techniques, including the use of agar plates and broth</li> <li>• To safely and ethically use organisms to measure animal responses</li> <li>• To use online and offline research skills including websites, textbooks and other printed scientific sources of information</li> <li>• Correctly cite sources of information</li> <li>• Applies investigative approaches &amp; methods when using instruments &amp; equipment.</li> </ul> <p>6 .3.1. Ecosystems                      6.3.2. Populations</p>
	<p><b>Assessment:</b>                      Transition test- GCSE content and work set over the summer (transition summer work)                      Autumn test- Module 2 content</p>	<p><b>Assessment:</b>                      Mock exam- All of Module 2 content                      Module 3 test- Animal transport, Plant transport and Gas Exchange surfaces</p>	<p><b>Assessment:</b>                      Module 4 test- Biodiversity, Disease, Classification and evolution                      Summer Mock exam- Modules 1- 4</p>

Year 13	<p><b>Curriculum and Skills:</b>  5.1.1 Communication &amp; Homeostasis  5.1.2 Excretion  5.1.3 Neuronal Communication  5.1.4 Hormonal Communication  5.1.5 Animal &amp; plant Responses  5.2.1 Photosynthesis  Module 5.2.2. Respiration  <b>Maths skills:</b>  To review all maths skills already taught</p> <p><b>Practical Skills:</b></p> <ul style="list-style-type: none"> <li>• To safely and ethically use organisms to measure physiological functions</li> <li>• To practically separate biological compounds using thin layer chromatography</li> </ul>	<p><b>Curriculum and Skills:</b>  6.1.1 Cellular control   6.1.3. Manipulating genomes  <b>Maths skills:</b>  To review all maths skills already taught</p> <p><b>Practical Skills:</b></p> <ul style="list-style-type: none"> <li>• To use appropriate software and tools to process data, carry out research and report findings</li> </ul>	<p><b>Curriculum and Skills:</b>  6.2.1 Cloning &amp; biotechnology  6.1.2 Patterns of Inheritance   <b>Maths skills:</b>  To review all maths skills already taught</p> <p><b>Practical Skills:</b>  To review all practical skills already taught</p>
	<p><b>Assessment:</b>  September Mock exam – Modules 1- 4  Populations and Ecosystems test  Respiration test</p>	<p><b>Assessment:</b>  A level Mock exam- modules 1,2,3 &amp; 5  A level Mock exam- Modules 1,2,4 &amp; 6</p>	<p><b>Assessment:</b>  A level Mock exam – all modules  Final exams- Paper 1, Paper 2, &amp; Paper 3</p>