

**Plan Of Learning For The Year (Unit/Topic/Project Context)**

<p><b>Half Term 1</b></p> <ul style="list-style-type: none"> <li>• <b>Biological Molecules Unit 1</b> – monomers and polymers, carbohydrates, lipids and proteins</li> <li>• <b>Cells Unit 2</b> - structure and specialization</li> </ul> <p><b>Half Term 2</b></p> <ul style="list-style-type: none"> <li>• <b>Biological Molecules Unit 1</b> – Enzymes,</li> <li>• <b>Cells Unit 2</b> – Cell cycle and division</li> </ul> <p><b>Half Term 3</b></p> <ul style="list-style-type: none"> <li>• <b>Biological Molecules Unit 1</b> – DNA, ATP and water potential.</li> <li>• <b>Cells Unit 2</b> – Diffusion and Active transport</li> </ul>	<p><b>Half Term 4</b></p> <ul style="list-style-type: none"> <li>• <b>Organisms exchange substances with their environment Unit 3</b> – gas exchange</li> <li>• <b>Cells Unit 2</b> – absorption of glucose, immunity</li> </ul> <p><b>Half Term 5</b></p> <ul style="list-style-type: none"> <li>• <b>Organisms exchange substances with their environment Unit 3</b> – digestion and absorption and mass transport</li> <li>• <b>Genetic Information Unit 4</b> – Protein synthesis and genetic diversity</li> </ul> <p><b>Half Term 6</b></p> <ul style="list-style-type: none"> <li>• <b>Organisms exchange substances with their environment Unit 3</b> – Cardiac cycle and translocation</li> <li>• <b>Genetic Information Unit 4</b> – Meiosis and taxonomy</li> </ul>
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<b>Feedback, Retrieval &amp; Assessment</b>	<b>Super curriculum opportunities / extra-curricular activities</b>	<b>Cultural Capital, SMSC, Careers and Futures</b>
<ul style="list-style-type: none"> <li>• Regular self and peer assessment</li> <li>• Regularly assessed homework</li> <li>• Termly Teacher Assessment</li> <li>• Termly Formal Assessment (FA)</li> <li>• Learning logs used to guide feedback and develop students’ mindset</li> </ul>	<ul style="list-style-type: none"> <li>• Visits to local university</li> <li>• Visits to “The Deep” aquarium</li> </ul>	<ul style="list-style-type: none"> <li>• Application of Biology in real life contexts embedded throughout the course</li> <li>• Development of skills to meet the practical endorsement to allow students to progress to onto practical based degrees</li> <li>• Careers session run with the university</li> </ul>

<b>Common misconceptions</b>	<b>Connecting New Knowledge</b>	<b>Challenge for all</b>
<ul style="list-style-type: none"> <li>• Cell membrane is “partially permeable”. Should avoid using “semi-permeable “</li> <li>• Poor interpretation of graphed pressure changes during cardiac cycle.</li> <li>• Plant nutrient and transport: For substances to be translocated they need to be in solution; hence starch cannot be translocated.</li> </ul>	<ul style="list-style-type: none"> <li>• Linking GCSE knowledge to new A Level ideas to build upon prior knowledge</li> <li>• Notes provided to students on content</li> <li>• Spaced retrieval homework that covers a wide selection of knowledge to develop deeper understanding of content</li> </ul>	<ul style="list-style-type: none"> <li>• Support is given in lesson for those students who have not taken A Level Mathematics</li> <li>• Modelling in lessons is key to showing students the steps involved in each process</li> <li>• Students are encouraged to question everything to build a deep understanding of the knowledge</li> </ul>