



Biology	Working towards expected outcomes	Working at expected outcomes	Working beyond expected outcomes
<p>Year 8 Biology</p> <p><u>Autumn term</u> Adaptations and Evolution: adaptations, evolution, natural selection. Food and the Digestive System: diet, the digestive system, enzymes, food production. Supplying the Cell: respiration, the circulatory system.</p> <p><u>Spring term</u> Supplying the Cell: the respiratory system, the skeleton, muscle action. Health and Disease: microorganisms, pathogens, disease, the immune system.</p>	<p>Your child is not yet making the expected progress within this course.</p> <p>Students working <b>towards</b> expected outcomes in Year 8 can:</p> <p><b>Understanding knowledge</b></p> <ul style="list-style-type: none"> <li>demonstrate developing knowledge of most of the concepts covered so far in the topic checklists.</li> </ul> <p><b>Applying knowledge</b></p> <ul style="list-style-type: none"> <li>use knowledge, from the topic checklists, in some familiar contexts.</li> <li>use knowledge in straightforward new contexts with partially accurate use of biological terminology.</li> <li>begin to develop logical descriptions that include accurate and mostly relevant details.</li> </ul> <p><b>Mathematical skills</b></p> <ul style="list-style-type: none"> <li>use appropriate mathematical skills to perform single step calculations from numerical data. Values may not</li> </ul>	<p>Your child is achieving the expected progress for this point within the course.</p> <p>Students working <b>at</b> expected in Year 8 can:</p> <p><b>Understanding knowledge</b></p> <ul style="list-style-type: none"> <li>recall a range of knowledge covered so far in the topic checklists with few errors.</li> </ul> <p><b>Applying knowledge</b></p> <ul style="list-style-type: none"> <li>apply knowledge, from the topic checklists in most familiar and some unfamiliar contexts.</li> <li>develop accurate explanations with good use of biological terminology.</li> <li>begin to make clear links between ideas from different parts of the course in responses to questions.</li> </ul> <p><b>Mathematical skills</b></p> <ul style="list-style-type: none"> <li>use a range of mathematical skills to perform multi-step scientific calculations with the required level of</li> </ul>	<p>Your child is working beyond the expected progress for this point within the course.</p> <p>Students working <b>beyond</b> expected in Year 8 can:</p> <p><b>Understanding knowledge</b></p> <ul style="list-style-type: none"> <li>demonstrate relevant and comprehensive knowledge and understanding of all the concepts covered so far in the topic checklists.</li> </ul> <p><b>Applying knowledge</b></p> <ul style="list-style-type: none"> <li>use detailed knowledge and understanding, from the course so to formulate concise answers. This will be in both familiar and unfamiliar contexts using accurate biological terminology.</li> <li>develop accurate, logical explanations and arguments during longer answers. The biological terminology used will be fully relevant to the question.</li> <li>make clear links between concepts from various sections of the Year 8 course within your answers to provide comprehensive and well-rounded explanations to problems.</li> </ul> <p><b>Mathematical skills</b></p> <ul style="list-style-type: none"> <li>use a range of mathematical skills to perform complex calculations with the required level of precision. These complex</li> </ul>



<p>Summer Term</p> <p>Health and Disease: preventing and treating disease.</p> <p>Genes and Variation: variation, inheritance, selective breeding, genetic engineering.</p>	<p>always be recorded to right number of decimal places.</p> <p><b>Investigative skills</b></p> <ul style="list-style-type: none"><li>• plan and carry out investigations that will give mostly reliable and accurate data.</li><li>• interpret qualitative and quantitative data to draw straightforward conclusions supported by mostly relevant evidence.</li><li>• Suggest simple improvements to experimental methods, and comment briefly on the accuracy of scientific conclusions.</li></ul>	<p>precision. This data will usually be recorded to the right number of decimal places.</p> <p><b>Investigative skills</b></p> <ul style="list-style-type: none"><li>• plan and carry out investigations that will give reliable and accurate data.</li><li>• analyse qualitative and quantitative data and draw logical conclusions, supported by a variety of relevant evidence.</li><li>• evaluate and suggest improvements and developments to experimental methods and can comment on the accuracy and validity of scientific conclusions.</li></ul>	<p>calculations may involve using data from graphs or from previously calculated data.</p> <p><b>Investigative skills</b></p> <ul style="list-style-type: none"><li>• critically analyse qualitative and quantitative data and draw logical, well evidenced conclusions that fully explain the results.</li><li>• critically evaluate and refine investigative methods. Any improvements suggested would give precise data with high levels of repeatability.</li><li>• judge the validity of scientific conclusions accurately.</li></ul>
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