

## Year 10 Biology

### Learning Programme 4

<p>The LORIC skill focus for his LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles.</p> <p>Gratitude - Feeling and expressing thanks.</p> <p><b>What will I be learning about in this Learning Programme?</b></p> <p>You are learning about communicable disease and bioenergetics.</p> <p><b>Where have I seen this learning before?</b></p> <p>You have learnt about photosynthesis and plant structure at KS3 and plants at KS2.</p> <p><b>What could I use it for?</b></p> <p>You will use this knowledge in A-level Biology, BTEC Applied Science and if you pursue a BSc in Biology.</p>		<p><b>Literacy:</b></p> <ul style="list-style-type: none"> <li>Capital letters must be used at the start of sentences and for the first letter of proper nouns</li> <li>Full stops must be used at the end of a sentence</li> <li>Question marks must be used at the end of a question</li> <li>Apostrophes should only be used for possession or omission</li> <li>Days of the week and months must be spelled correctly</li> <li>Key words must be spelled correctly</li> </ul>
<p><b>In LP4.1, I will know:</b></p> <p>the global use of vaccinations; how to complete a summative assessment.</p>	<p><b>10/03/25 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Vaccination</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP4.2, I will know:</b></p> <p>the impact of antibiotic-resistant bacteria and the issues with overuse of antibiotics; why 'double-blind' trials are conducted.</p>	<p><b>17/03/25 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Double-blind</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP4.3, I will know:</b></p> <p>that bacteria cell division by binary fission and explain how to grow an uncontaminated culture of bacteria in the lab and explain how they are used; how to investigate the effect of disinfectants on bacterial growth and calculate the number of bacteria in a population.</p> <p>Extended Task.</p>	<p><b>24/03/25 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Binary fission</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP4.4, I will know:</b></p> <p>how to review the data from the investigations of disinfectants on bacterial growth; how plants defend against pathogens, and the symptoms and identification methods of some plant diseases.</p>	<p><b>31/03/25 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Disinfectant</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP4.5, I will know:</b></p> <p>how to name non-communicable diseases, give risk factors for disease and explain what a causal mechanism is; how smoking affects the risk of developing cardiovascular disease, lung disease and lung cancer, how alcohol affects the liver, brain and the effect of smoking and alcohol on unborn babies.</p>	<p><b>21/04/25 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Cardiovascular disease</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP4.6, I will know:</b></p> <p>the effect of diet and exercise on the development of disease; what a tumour is and how to compare benign and malignant tumours.</p> <p>Extended Task.</p>	<p><b>28/04/25 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Cancer</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP4.7, I will know:</b></p> <p>the balanced symbol equation for photosynthesis and explain how the leaf's structure is adapted for photosynthesis; the effects of limiting factors on photosynthesis and food production.</p>	<p><b>05/05/25 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Photosynthesis</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>Resources to support learning:</b></p> <p>Knowledge organiser, synergy, Sparx Science.</p>		
<p><b>FFET Award Challenge for this Learning Programme:</b></p> <p>LP4 Year 10 Science: Create a revision resource on a topic of your choice.</p>		

PRT Task 1

PRT Task 2