

## Year 10 Biology

### Learning Programme 5

The LORIC skill focus for his LP is: COMMUNICATION. The Moral Virtues focus for this LP are: COURAGE and HUMILITY. Courage - Acting with bravery and overcoming fears. Humility - Having a modest view of oneself. <b>What will I be learning about in this Learning Programme?</b> How living organisms photosynthesis and respire and how this can be manipulated and how the liver is involved in removal of lactic acid.  <b>Where have I seen this learning before?</b> You have learnt about respiration and photosynthesis in KS2 and KS3.  <b>What could I use it for?</b> You will use this knowledge in A-level Biology and Applied Science.		<b>Literacy:</b> <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>	
<b>In LP5.1, I will know:</b>	<b>12/05/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
the balanced symbol equation for photosynthesis and how the leaf's structure is adapted for photosynthesis; the effects of limiting factors on photosynthesis.		Photosynthesis	Sparx Science task.
<b>In LP5.2, I will know:</b>	<b>19/05/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
the benefits of manipulating the environment to increase food production; how to use distance to change light intensity and measure rate of photosynthesis.		Light intensity	Sparx Science task.
<b>LP5 RLW, I will:</b>			
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.		Review	Sparx Science task.
<b>In LP5.3, I will know:</b>	<b>09/05/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
the relationship between transpiration and leaf structure and how different factors affect transpiration; about the movement of sugar through the plant and how to test a variegated leaf.  Extended Task.		Transpiration	Sparx Science task.
<b>In LP5.4, I will know:</b>	<b>16/06/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to complete summative assessment; my strengths and areas of development.		Aerobic	Sparx Science task.
<b>In LP5.5, I will know:</b>	<b>23/06/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
the importance of fertilisers; the importance of aerobic respiration and the importance of cellular respiration.		Respiration	Sparx Science task.
<b>In LP5.6, I will know:</b>	<b>30/06/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to compare and contrast the amount of energy transferred in anaerobic respiration and how this occurs in plants, bacteria and fungi; metabolism as the sum of all the reactions in the body of an organism and explain how the liver is involved in repaying oxygen debt.  Extended Task.		Fermentation	Sparx Science task.
<b>In LP5.7, I will know:</b>	<b>07/06/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
why your kidneys are important and how they work and explain the role of ADH in water balance; how dialysis and kidney transplants can be used to treat damaged kidneys.		Dialysis	Sparx Science task.
<b>Resources to support learning:</b> <a href="https://www.bbc.co.uk/bitesize/guides/zg8nrwx/revision/1">https://www.bbc.co.uk/bitesize/guides/zg8nrwx/revision/1</a> Knowledge organiser, booklet and Synergy.			
<b>FFET Award Challenge for this Learning Programme:</b> Complete a practice paper as part of your revision.			

PRT Task 1

PRT Task 2