

Year 12 A Level Biology

Learning Programme 2

<p>The LORIC skill focus for his LP is: ORGANISATION</p> <p>The Moral Virtues focus for this LP are: COMPASSION and HONESTY</p> <p>Compassion - the quality of feeling pity and concern for the sufferings or misfortunes of others.</p> <p>Honesty - the quality of being truthful.</p> <p>What will I be learning about in this Learning Programme?</p> <p>You are learning about how DNA replicates and how exchange systems are specialised.</p> <p>Where have I seen this learning before?</p> <p>You have learnt about DNA and gas exchange systems in GCSE Biology.</p> <p>What could I use it for?</p> <p>You will use this again if you pursue a career in human physiology, zoology.</p>		<p>Literacy:</p> <ul style="list-style-type: none"> • Capital letters must be used at the start of sentences and for the first letter of proper nouns • Full stops must be used at the end of a sentence • Question marks must be used at the end of a question • Apostrophes should only be used for possession or omission • Days of the week and months must be spelled correctly • Key words must be spelled correctly
<p>In LP2.1, I will know:</p> <p>how to carry out paper and thin-layer chromatography to how to identify proteins; how to describe the structure of a nucleotide; how to describe the process of semi-conservative DNA replication.</p>	<p>21/10/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Nucleotide</p>	<p>Homework</p> <p>Exam Questions on Nucleotides</p>
<p>In LP2.2, I will know:</p> <p>how to carry out a practical investigation into the purification of DNA by precipitation.</p>	<p>04/11/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Transcription</p>	<p>Homework</p> <p>Exam Questions on The nature of the genetic code</p>
<p>LP2 RLW, I will:</p> <p>review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.</p>	<p>11/11/24 - (WK 2)</p>	
<p>In LP2.3, I will know:</p> <p>how to describe transcription and translation of genes resulting in the synthesis of polypeptides; how to describe the role of enzymes in catalysing reactions that affect metabolism at a cellular and whole organism level; how to explain the effects of pH, temperature, enzyme concentration and substrate concentration on enzyme activity.</p> <p>Extended Task.</p>	<p>18/11/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Enzyme</p>	<p>Homework</p> <p>Task on role of enzymes</p>
<p>In LP2.4, I will know:</p> <p>my strengths and areas for development for my learning so far.</p>	<p>25/11/24 - (WK 2)</p> <p>Key Vocabulary</p>	<p>Homework</p> <p>Revision task</p>
<p>In LP2.5, I will know:</p> <p>how to explain the effects of inhibitors on the rate of enzyme controlled reactions; how to describe the need for coenzymes, cofactors, and prosthetic groups in some enzyme controlled reactions; how to explain the need for specialised exchange surfaces.</p>	<p>02/12/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Prosthetic group</p>	<p>Homework</p> <p>Exam Questions on specialised exchange systems</p>
<p>In LP2.6, I will know:</p> <p>how to describe the structures and functions of the components of mammalian gaseous exchange system.</p> <p>Extended Task.</p>	<p>09/12/24 - (WK 2)</p> <p>Key Vocabulary</p> <p>Gaseous exchange system</p>	<p>Homework</p> <p>Short answer questions on exchange surfaces.</p>
<p>In LP2.7, I will know:</p> <p>how to explain the relationship between vital capacity, tidal volume, breathing rate and oxygen uptake; how to explain the relationship between vital capacity, tidal volume, breathing rate and oxygen uptake; my strengths and areas for development so far.</p>	<p>16/12/24 - (WK 1)</p> <p>Key Vocabulary</p> <p>Ventilation</p>	<p>Homework</p> <p>Practice task on Vital capacity and tidal volumes</p>
<p>Resources to support learning:</p> <p>Knowledge organiser, http://www.a-levelnotes.co.uk/biology-ocr-as-notes-foundations-in-biology-nucleotides-and-nucleic-acids.html, http://www.a-levelnotes.co.uk/biology-ocr-as-notes-foundations-in-biology-enzymes.html</p>		
<p>FEET Award Challenge for this Learning Programme:</p> <p>You have learnt about biological molecules and cell membranes. Create a poster of a cell membrane, linking your knowledge of biological molecules to its structure.</p>		

