

## Key Stage 4 Curriculum Map 2021 - 2022

### Year 10 GCSE Biology

#### Term 1

Subject: Biology		Year: 10	
Focus/Topic	UAE Links	HPL Links	Home Learning / Reading
Induction, curriculum orientation and expectations			
<ul style="list-style-type: none"> <li>• Animal and plant cells</li> <li>• Eukaryotic cells</li> <li>• Specialized cells</li> </ul>	Compare the plant cell of a cactus and an oak tree.	<b>VAA: Empathetic</b> Collaborative: <i>The ability to seek out opportunities to receive responses to your work; present your own views and ideas clearly and concisely; listen to the views of others; be willing and able to work in teams; take a variety of roles and be able to evaluate your own ideas and contributions.</i>  <b>ACP: Analysing</b> Critical thinking: <i>The ability to deduct, hypothesise, reason, seek supporting evidence</i>	Guided reading
<ul style="list-style-type: none"> <li>• Tissues and organs</li> <li>• Organ system</li> </ul>	Research how desert animal's organ systems are adapted to survive		Guided reading
<ul style="list-style-type: none"> <li>• Cells End of topic test</li> <li>• Diffusion</li> </ul>	Justify why diffusion is faster in the UAE compared with Antarctica		Guided reading
<ul style="list-style-type: none"> <li>• Osmosis</li> <li>• Osmosis required practical</li> </ul>	Evaluate whether the UAE should utilise reverse osmosis		Guided reading
<ul style="list-style-type: none"> <li>• Active transport</li> <li>• Transport into and out of cells End of topic test</li> </ul>	Create a summary about active transport within the UAE.		Guided reading
<ul style="list-style-type: none"> <li>• Cell division, growth and differentiation</li> <li>• Cell division in sexual reproduction</li> </ul>	Evaluate whether the UAE should invest in research into cell division.		Guided reading
<b>Half Term</b>			
<ul style="list-style-type: none"> <li>• Stem cells</li> <li>• Cell growth and cancer</li> </ul>	Evaluate whether the UAE should utilise stem cells and if so, justify what for.	<b>VAA: Agile</b> Open minded: <i>The ability to take an objective view of different ideas and beliefs; become more receptive to other ideas and beliefs based on the arguments of others; change</i>	Guided reading
<ul style="list-style-type: none"> <li>• Cell division end of topic test</li> <li>• Exchanging materials</li> </ul>	Justify why we have large insects within the UAE.		Guided reading

<ul style="list-style-type: none"> <li>Breathing and gas exchange in the lungs</li> <li>Artificial breathing aids</li> </ul>	Create a summary about respiratory disorders within the UAE	<i>ideas should there be compelling evidence to do so.</i>  <b>ACP: Linking</b> <b>Connection finding:</b> <i>The ability to use connections from past experiences to seek possible generalisations</i>	Guided reading
<ul style="list-style-type: none"> <li>Anaerobic respiration</li> <li>The effect of exercise on the body required practical</li> </ul>	Design an investigation into how the effect of exercise on the body differs in the UAE when compared to the UK.		Guided reading
<ul style="list-style-type: none"> <li>Breathing end of topic test</li> <li>The circulatory system and the heart</li> </ul>	Justify the importance of blood donation within the UAE		Guided reading
<ul style="list-style-type: none"> <li>Helping the heart</li> <li>Keeping the blood flowing</li> </ul>	Create a summary about coronary heart disease within the UAE		Guided reading
<ul style="list-style-type: none"> <li>Transport in the blood</li> <li>The immune system and blood groups</li> <li>Circulation end of topic test</li> </ul>	Create a summary about blood disorders within the UAE		Guided reading
Winter Break			