

Key Stage 5 Curriculum Map 2021-22

Year 12 AS Biology

Term 1

Subject: Biology	Year: 12		
Focus/Topic	UAE Links	HPL Links	Home Learning / Reading
Induction, curriculum orientation and expectations			
<ul style="list-style-type: none"> • Carbohydrates • Disaccharides and polysaccharides • Starch and cellulose • Pathogens • Data and diseases 	Summarise how the UAE promotes a healthy diet	VAA: Empathetic 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> ACP: Analysing Critical thinking: <i>The ability to deduct, hypothesise, reason, seek supporting evidence</i>	Guided reading
<ul style="list-style-type: none"> • Lipids • Proteins • Food test required practical • Lifestyle and health • Causes of disease end of topic test 	Research the most common diseases in the UAE, justify why these are the most common and how to prevent them.		Guided reading
<ul style="list-style-type: none"> • Biological molecules end of topic test • Enzymes and digestion 	Justify the protocols the UAE has put into place to protect the nation against covid-19.		Guided reading
<ul style="list-style-type: none"> • Investigating the structure of cells • The electron microscope • Eukaryotic cell structure • Digestion • Absorption of the product of digestion 	Compare the plant cell of a cactus and an oak tree.		Guided reading
<ul style="list-style-type: none"> • Digestion end of topic test • Cell differentiation and organization • The structure of prokaryotic cells 	Explore how the camel's digestive system is		Guided reading

<ul style="list-style-type: none"> Cells and cell structure end of topic test 	adapted to living in the desert.		
<ul style="list-style-type: none"> Plasma membrane Diffusion Cholera 	Evaluate whether the UAE should utilise reverse osmosis		Guided reading
Mid Term Break			
<ul style="list-style-type: none"> Osmosis Osmosis required practical Oral rehydration therapy Human immunodeficiency virus Active transport Human diseases end of topic test 	Create a summary about active transport within the UAE.	VAA: Agile 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 ideas should there be compelling evidence to do so.</i> ACP: Linking Connection finding: <i>The ability to use connections from past experiences to seek possible generalisations</i>	Guided reading
<ul style="list-style-type: none"> Active transport Transport into and out of cells end of topic test Cell recognition and the cells of the immune system 	Create a summary about active transport within the UAE.		Guided reading
<ul style="list-style-type: none"> Enzymes and enzyme action Factors affecting enzyme action Enzyme inhibition Phagocytes T lymphocytes and cell mediated immunity 	Create a summary how enzymes are utilised within the UAE.		Guided reading
<ul style="list-style-type: none"> Enzyme required practical Enzyme end of topic test B lymphocytes, humoral immunity and antibodies Vaccination 	Justify the importance of the UAE investing in immunity research.		Guided reading
<ul style="list-style-type: none"> Exchange between organisms and their environment Gas exchange in single cells organisms and insects Defensive mechanisms end of topic test 	Justify why we have large insects within the UAE.		Guided reading
<ul style="list-style-type: none"> Gas exchange in the leaf of a plant Structure of the human gas exchange system The mechanism of breathing 	Create a summary about respiratory disorders within the UAE		Guided reading
<ul style="list-style-type: none"> Exchange of gases in the lungs Haemoglobin Oxygen-haemoglobin dissociation curves Gas exchange and the transport of oxygen end of topic test 	Research anemia in the UAE and explain how this deficiency affects haemoglobin.		Guided reading
Winter Break			

