

Key Stage 5 Curriculum Map 2020 - 2021

Year 12 AS level Biology

Term 2

Subject: Biology		Year: 12	
Focus/Topic		UAE Links	Home Learning / Reading
<ul style="list-style-type: none"> Exchange between organisms and their environment Gas exchange in single cells organisms and insects Gas exchange in the leaf of a plant Enzymes and digestion 		Justify why we have large insects within the UAE.	Guided reading
<ul style="list-style-type: none"> The mechanism of breathing Haemoglobin Oxygen-haemoglobin dissociation curves Digestion Absorption of the product of digestion 		Research anemia in the UAE and explain how this deficiency affects haemoglobin	Guided reading
<ul style="list-style-type: none"> Gas exchange and the transport of oxygen end of topic test Digestion end of topic test 		Research cardiovascular disease within the UAE and why it is or is not prevalent	Guided reading
<ul style="list-style-type: none"> Investigating variation Types of variation Structure of RNA and DNA Movement of water through roots Movement of water up stems 		Justify how xerophytes are adapted to survive in the UAE.	Guided reading
MOCKS			
MOCKS			
Half Term			
<ul style="list-style-type: none"> DNA, genes and chromosomes DNA replication The genetic code Transpiration and factors affecting it 		Explore what has influenced the genetic variation of the UAE population	Guided reading

<ul style="list-style-type: none"> • Transport of organic substances in the phloem 		
<ul style="list-style-type: none"> • Polypeptide synthesis – transcription and splicing • Polypeptide synthesis – translation • Protein folding • Investigating transport in plants • Aphids and plant viruses 	Explore how a cactus differs from a dicotyledenous plant in their transport and root systems	Guided reading
<ul style="list-style-type: none"> • Variation, DNA, genes and chromosomes and protein synthesis end of topic test • Meiosis and genetic variation • Mass transport in plants end of topic test • The cell cycle and mitosis 	Explore why UAE ancestry can be traced back to Africa	Guided reading
<ul style="list-style-type: none"> • Classification • Genetic comparisons using DNA and proteins • Genetic diversity • Binary fission 	Explore how binary fission has led to antibiotic resistance and how hospitals in the UAE are countering it.	Guided reading
<ul style="list-style-type: none"> • Species diversity • Species diversity and human activities • Genetic diversity and biodiversity end of topic test • Gene mutation • Cell division end of topic test 	Explore how could biodiversity be increased in the UAE	Guided reading
End of term 2		