

Key Stage 3 Curriculum Map 2021 - 2022 Term 3

Year Group: 8	Sul	bject: Biology		
Focus/Topic	Objectives	Key Skills/ UAE (United Arab Emirates) Links	HPL LINKS	Home Learning/ Recommended Reading
Biology: Disease 1) Prokaryotic Cells 2) Communicable Diseases	 Use your knowledge to identify prokaryotic cells Draw and label a prokaryotic cell Compare prokaryotic cells and eukaryotic cells Use your knowledge to define key terms Interpret information to identify what causes the spread of communicable diseases Outline Semmelweis findings. 	 Recall, working scientifically Diseases caused by prokaryotic cells and eukaryotic cells in the UAE. Working scientifically, application Common communicable diseases in the UAE. Is Coronavirus a communicable disease? Why are the precautions put in place in school and around UAE to protect you. Working scientifically, application How are common 	VAA: Empathetic 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. ACP: ANALYSING Critical or logical thinking The ability to deduct, hypothesize, reason, seek supporting evidence	Guided reading and BBC Bitesize. Guided reading and BBC Bitesize. Guided reading and BBC Bitesize.
spread of		diseases in the		

pathogens		UAE stopped		
investigation		from spreading?		
4) Stopping the spread of pathogens analysis 5) Treating communicable diseases 6) Test	 Use your knowledge to identify variables. Construct a scientific table. Collect results from a scientific investigation Collect data for an investigation Plot data onto a graph Justify the type of graph for a set of results. Draw a graph of your results. Interpret the graph you have drawn. Evaluate your knowledge. Recognise areas of improvement and what went well. Reflect on your knowledge. 	 Working scientifically, calculate, analyze, evaluate Working scientifically, application Treatments in the UAE Revise and reflect 	The ability to approach new learning experiences by actively attempting to connect it to existing knowledge or concepts and hence determine an appropriate way to think about the work. Work diligently and work systematicallyNot be satisfied until high quality, appropriate	Guided reading and BBC Bitesize. Guided reading and BBC Bitesize. Guided reading and BBC Bitesize.
			precision and the desired outcome are achieved.	
7) Feedback	 Evaluate your knowledge. Recognise areas of improvement and what went well. 	Revise and reflect	The ability to monitor, evaluate and self-correct.	Guided reading and BBC Bitesize.
	 Reflect on your knowledge. 			Guided reading and BBC Bitesize.

B) Digestion 1) Food Groups 2) Energy in	 Use your knowledge to recall different food groups Relate the food group to the body's need Design a diet plan for people with unique needs 	 Working scientifically, application Common foods in the UAE. How different people who live in the UAE need different diets etc. teacher, construction worker, personal trainer 	The ability to be curious, be willing to work alone, be proactive, keen to learn, show enterprise think independently	
Food Investigation	 Use your knowledge to identify variables. Construct a scientific table. Collect results from a scientific investigation. 	 Recall, working scientifically 	-The ability to see how what is happening in this instance could be extrapolated to other similar situations.	Guided reading and BBC Bitesize.
3) Energy in Food Analysis	 Justify the type of graph for a set of results. Draw a graph of your results. Interpret the graph you have drawn. 	 Recall, apply and evaluate Energy of common/typical foods in the UAE 		Guided reading and BBC Bitesize.
4) The Digestive System	 Use your knowledge to define digestion Interpret a diagram to label the digestive system. Draft a story about the journey of a cheese sandwich 	 Working scientifically, application, analysis. Working scientifically, application, analysis. Which foods in the UAE can help aid digestion? 	CREATING Fluent thinking The ability to generate ideas	Guided reading and BBC Bitesize.

5) Helping our Digestion 6) Test 7) Feedback	 Interpret information to define an enzyme. Relate the structure of an enzyme to its function. Justify the importance of bacteria in digestive system. Evaluate your knowledge. Recognise areas of improvement and what went well. Reflect on your knowledge. 	 Revise and reflect 	The ability to train and prepare through repetition of the same processes to become more proficient. The ability to monitor, evaluate and self-correct. The ability to overcome setbacks. Remain confident, focused, flexible, and optimistic.	Guided reading and BBC Bitesize. Guided reading and BBC Bitesize.
C) Staying Alive 1) Levels of Organization	 Use your knowledge to define key terms. Interpret information to identify cells, tissues, organs, 	 Working scientifically, application Recall, working scientifically 	Connection finding The ability to use connections from past experiences to seek possible generalisations	Guided reading and physics and BBC Bitesize.

2) Breathing	organ systems and organisms. Create a diagram to illustrate the levels of organization. Apply your knowledge to label the respiratory system. Outline how gases move into and out of the lungs. Create a leaflet to explain how smoking affects the body.	 Working scientifically, application, recall. Effects of Shisha on the body. 	The ability to work with extensive ideas and holistic concepts The ability to seek out opportunities to receive responses to your work. -Present your own views and ideas clearly and conciselyListen 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	Guided reading and BBC Bitesize.
3) Respiration4) Photosynthesis	 Distinguish between respiration and breathing. Write the word equations for aerobic and anaerobic respiration. Justify when we respire aerobically or anaerobically. Use your knowledge to define photosynthesis 	 Working scientifically, application Athletes in the UAE and effects of exercise on respiration. Recall, application and working scientifically Effects of sunlight on crops on the UAE compared to Iceland. 	The ability to be open-minded and flexible in your thought processes. -Demonstrate a willingness to innovate and invent new and multiple solutions to a problem or situation.	Guided reading and BBC Bitesize. Guided reading and BBC Bitesize.

5) Photosynthesis	 Write the word equation for photosynthesis Design an investigation into photosynthesis Justify the type of graph for a set of results. 	Working scientifically, application	-Work diligently and work systematicallyNot be satisfied until high quality, appropriate precision and the desired outcome are achieved.	Guided reading and BBC Bitesize.
Analysis	 Draw a graph of your results. Interpret the graph you have drawn. 		The ability to abandon one idea for a superior one or generate multiple solutions.	
6) Test	 Evaluate your knowledge. Recognise areas of improvement and what went 	 Revise and reflect 	AGILE Open-minded Become more receptive to other ideas	Guided reading and BBC Bitesize.
7) Feedback	well. • Reflect on your knowledge.	 Revise and reflect 	and beliefs based on the arguments of others.	Guided reading and BBC Bitesize.
	 Evaluate your knowledge. Recognise areas of improvement and what went well. Reflect on your knowledge. 	 Recall, apply and evaluate 		Guided reading and BBC Bitesize.
Human Impacts on the Environment 1) Evolution	 Use your knowledge to define evolution Interpret information to explain Darwin's theory of evolution Evaluate the use of fossils as evidence of evolution 		Be aware of your own and others' cultural heritage and sensitive to the ethical and moral issues raised by their studies	

2) Speciation	 Use your knowledge to define adaptation and competition Outline how speciation occurs Interpret information to define species. 	 Recall, working scientifically Species of animals in UAE. 	The ability to articulate personal views based on evidence.	Guided reading and BBC Bitesize. Guided reading and BBC Bitesize.
3) Human Population	 Interpret a graph on human population growth. Outline how humans are sustaining such a large population and their impact on the environment. Justify how farming could be made more ethical and environmentally friendly 	 Working scientifically, application. How could we make farming more sustainable in the UAE? 	The ability to approach new learning experiences by actively attempting to connect it to existing knowledge or concepts and hence determine an appropriate way to think about the work. The ability to keep going and not give up. -Face obstacles and difficulties but never give up.	
4) Global Warming	 Create a diagram to explain global warming Distinguish between global warming and the greenhouse effect. Argue how we can combat global warming. 	 Recall, working scientifically What is the UAE doing to reduce global warming? Working scientifically, application, evaluate 	Critical or logical thinking The ability to deduct, hypothesise, reason, seek supporting evidence.	Guided reading and BBC Bitesize. Guided reading and BBC Bitesize.

		End of	term	
5) Test 6) Feedback	 Evaluate your knowledge. Recognise areas of improvement and what went well. Reflect on your knowledge. 	 Revise and reflect 	The ability to develop a belief in your knowledge, understanding and action.	Guided reading and BBC Bitesize.
	 Use your knowledge to describe the Bernoulli Principle Use your knowledge to describe the Magnus Effect Evaluate how the Magnus effect is used in sports 		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. CREATING Floxible thinking The ability to generate ideas	