

Key Stage 3 Curriculum Map 2021-22

Term 2

Year Group: 7		Subject: Science - Biology		
Focus/Topic	Objectives	Key Skills/ UAE Links	HPL Links	Home Learning/ Recommended Reading
<ul style="list-style-type: none"> • Eukaryotic Cells • Observing cells. • Specialised cells 	<ul style="list-style-type: none"> • Use your knowledge to identify a cell. • Draw and label an animal and plant cell. • Compare animal and plant cells. • Assemble a microscope slide • Sketch and label your slide • Calculate magnification. • Interpret a diagram to define a specialised cell. • Draw and label specialised cells • Relate the structure to the function of specialised cells. • 	<ul style="list-style-type: none"> • Recall, how science works, application of knowledge and mathematics • UAE link: How is a cell similar to the Burj Khalifa. • 	<p>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></p>	<ul style="list-style-type: none"> • Guided Reading
<ul style="list-style-type: none"> • Diffusion Investigation • Diffusion Analysis 	<ul style="list-style-type: none"> • Define diffusion • Identify variables and construct a scientific table • Collect results from a scientific investigation • Justify the type of graph for a set of results. • Draw a graph for your results. • Interpret the graph you have drawn. 	<ul style="list-style-type: none"> • Recall, application, how science works and mathematics • Research and summarise coronary heart disease within the UAE 	<p>ACP: Analysing Critical thinking: <i>The ability to deduct, hypothesise, reason, seek supporting evidence</i></p>	<ul style="list-style-type: none"> • Guided Reading

Cells practice questions and feedback				
<ul style="list-style-type: none"> • Puberty • Fertilisation • Pregnancy 	<ul style="list-style-type: none"> • Use your knowledge to define puberty. • Compare the changes that take place in boys and girls during puberty. • Justify why puberty happens • Use your knowledge to define key terms • Relate the structure of human sex cells to their function. • Outline the process of fertilisation in plants • Use your knowledge to define key terms. • Construct a model of a foetus in a womb • Create a timeline of fetus development • 	<ul style="list-style-type: none"> • Recall, how science works, application of knowledge and mathematics • UAE link: Explore how plants in the UAE are adapted for successful fertilisation. 		<ul style="list-style-type: none"> • Guided Reading
<ul style="list-style-type: none"> • The Menstrual Cycle Reproduction practice questions and feedback	<ul style="list-style-type: none"> • Use your knowledge to define key terms • Outline the process of the menstrual cycle • Create a leaflet about the menstrual cycle 	<ul style="list-style-type: none"> • Recall, how science works, application of knowledge and mathematics • UAE link: Explore different UAE organisms pregnancies – why are some longer/ shorter than others. 		<ul style="list-style-type: none"> • Guided Reading
Revision of first two biology topics: cells and reproduction				<ul style="list-style-type: none"> • Guided Reading
Half term				
<ul style="list-style-type: none"> • Variation 	<ul style="list-style-type: none"> • Categorise organisms. • Compare inherited and environmental variation. 	<ul style="list-style-type: none"> • Recall, how science works, application of 	VAA: Agile Open minded: <i>The ability to take an objective view of</i>	<ul style="list-style-type: none"> • Guided reading

<ul style="list-style-type: none"> Variation Investigation Variation Graphs 	<ul style="list-style-type: none"> Evaluate the study of identical twins for variation. Use your knowledge to identify variables Construct a scientific table. Collect results from a scientific investigation. Justify the type of graph for a set of results. Draw a graph for your results. Interpret the graph you have drawn. 	<p>knowledge and mathematics</p> <ul style="list-style-type: none"> UAE link: Justify why variation is important in the UAE. 	<p><i>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></p> <p>ACP: Linking Connection finding: <i>The ability to use connections from past experiences to seek possible generalisations</i></p>	
<ul style="list-style-type: none"> Genetics Variation and inheritance practice questions and feedback 	<ul style="list-style-type: none"> Distinguish between DNA, genes and chromosomes Interpret punnet squares Construct punnet squares 	<ul style="list-style-type: none"> Recall, how science works, application of knowledge and mathematics UAE link: Create genetic diagrams for organisms within the UAE. 		<ul style="list-style-type: none"> Guided Reading
<ul style="list-style-type: none"> Classification Competition and Adaptation Ecosystems 	<ul style="list-style-type: none"> Distinguish between vertebrates and invertebrates Interpret a classification key Create a classification key Distinguish between the resources animals and plants compete for Relate the adaptation of an organism to its survival Collect results from a scientific investigation. Define key terms Interpret food chains and food webs Construct a food web 	<ul style="list-style-type: none"> Recall, how science works, application of knowledge and mathematics UAE link: Create a classification key for organisms within the UAE. 		<ul style="list-style-type: none"> Guided Reading

<ul style="list-style-type: none"> • Ecology practice questions and feedback 		<ul style="list-style-type: none"> • Recall, how science works, application of knowledge and mathematics • UAE link: Relate the adaptation to its function within UAE organisms. • 		<ul style="list-style-type: none"> • Guided Reading
Revision of all of the biology topics: cells, reproduction, variation and inheritance and ecology			<ul style="list-style-type: none"> • Guided Reading 	
Synoptic assessment which covers all the topics of biology studied.			<ul style="list-style-type: none"> • Guided Reading 	
End of term 2				