

Key Stage 3 Curriculum Map 2021-22

Term 1

Year Group: 9	Subject: Biology			
Focus/Topic	Objectives	Key Skills/ UAE Links	HPL Links	Home Learning/ Recommended Reading
<ul style="list-style-type: none"> Induction, expectations, baseline assessment, lab safety, reaction time investigation and analysis and test feedback. 				
<ul style="list-style-type: none"> BIOLOGY, A) Environment. 1) The carbon cycle 2) Conservation 3) Farming 	<ul style="list-style-type: none"> Use your knowledge to name carbon compounds. Create a diagram of the carbon cycle. Interpret diagrams of the carbon cycle Interpret information to define biodiversity. Create a diagram to explain global warming. Justify the importance of conserving the environment. Use your knowledge to define decay and stable community. Analyse different farming methods of livestock. Evaluate the farming of livestock 	<ul style="list-style-type: none"> Recall, working scientifically Working scientifically, application Apply and evaluate Greenhouses in the UAE Farms in the UAE 	<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> <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
<ul style="list-style-type: none"> 4) Pesticide and fertilisers 	<ul style="list-style-type: none"> Use your knowledge to define key terms. Outline the consequences of using pesticides and fertilisers. Evaluate the use of pesticides and fertilisers. 	<ul style="list-style-type: none"> Working scientifically, application Recall, application and working scientifically Revise and reflect 		<ul style="list-style-type: none"> Guided reading

<ul style="list-style-type: none"> • 5) test 	<ul style="list-style-type: none"> • Evaluate your knowledge. • Recognise areas of improvement and what went well • Reflect on your knowledge. 	<ul style="list-style-type: none"> • Where can someone find pesticides and fertilisers in the UAE 		
<ul style="list-style-type: none"> • 6) test feedback • <u>B) Advances in Scientific Technology</u> 1) The secret of life 	<ul style="list-style-type: none"> • Evaluate your knowledge. • Recognise areas of improvement and what went well • Reflect on your knowledge. • Outline the discovery of DNA. • Carry out a DNA extraction. • Evaluate a scientific method. 	<ul style="list-style-type: none"> • Recall, application and working scientifically • DNA labs in the UAE 		<ul style="list-style-type: none"> • Guided reading
<ul style="list-style-type: none"> • 2) Sexual and asexual reproduction • 3) Selective breeding 	<ul style="list-style-type: none"> • Distinguish between sexual and asexual reproduction. • Outline a process of asexual reproduction. • Compare and contrast sexual and asexual reproduction. • Use your knowledge to define selective breeding. • Outline the process of selective breeding. • Evaluate selective breeding. 	<ul style="list-style-type: none"> • Working scientifically, apply, evaluate • Selective breeding in the UAE 		<ul style="list-style-type: none"> • Guided reading
<ul style="list-style-type: none"> • 4) Cloning • 5) Genetic engineering 	<ul style="list-style-type: none"> • Use your knowledge to define cloning • Outline the methods of cloning. • Evaluate cloning. 	<ul style="list-style-type: none"> • Working scientifically, evaluate • Revise and reflect • Cloning and genetic engineering labs in the UAE 		<ul style="list-style-type: none"> • Guided reading

<ul style="list-style-type: none"> 6) Test 	<ul style="list-style-type: none"> Use your knowledge to define genetic engineering. Outline the process of genetic engineering. Evaluate genetic engineering. Evaluate your knowledge. Recognise areas of improvement and what went well Reflect on your knowledge. 			
<ul style="list-style-type: none"> 7) Test review C) More about the body 1) Skeletal and muscular system 	<ul style="list-style-type: none"> Evaluate your knowledge. Recognise areas of improvement and what went well Reflect on your knowledge. Use your knowledge to describe the function of the skeletal and muscular systems. Carry out a chicken wing dissection to interpret how bones and muscles work together. Sketch and label a diagram of a chicken wing. 	<ul style="list-style-type: none"> Working scientifically, application Revise and reflect Hospitals in the UAE 		<ul style="list-style-type: none"> Guided reading
Half Term				
<ul style="list-style-type: none"> 2) The heart 3) Effects of exercise on the body investigation 	<ul style="list-style-type: none"> Use your knowledge to describe the function of the heart. Label a diagram of the heart. Outline how blood flows through the heart. Use your knowledge to identify variables. Construct a scientific table. 	<ul style="list-style-type: none"> Evaluate and application Revise and reflect Marathon in UAE 	<p>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></p> <p>ACP: Linking</p>	<ul style="list-style-type: none"> Guided reading

	<ul style="list-style-type: none"> Collect results from a scientific investigation. 		Connection finding: <i>The ability to use connections from past experiences to seek possible generalisations</i>	
<ul style="list-style-type: none"> 4) Effects of exercise on the body analysis 5) Test 	<ul style="list-style-type: none"> Justify the type of graph for a set of results. Draw a graph of your results. Interpret the graph of your results Evaluate your knowledge. Recognise areas of improvement and what went well Reflect on your knowledge. 	<ul style="list-style-type: none"> Working scientifically, recall and application Revise and reflect 		<ul style="list-style-type: none"> Guided reading
<ul style="list-style-type: none"> 6) Test feedback <u>D) Designing an investigation_1)</u> Planning 	<ul style="list-style-type: none"> Evaluate your knowledge. Recognise areas of improvement and what went well Reflect on your knowledge. Write an investigation title. Produce a method for a scientific investigation. Write an equipment list. 	<ul style="list-style-type: none"> Working scientifically, application Revise and reflect 		<ul style="list-style-type: none"> Guided reading
<ul style="list-style-type: none"> 2) Planning 3) Practical 	<ul style="list-style-type: none"> Write an investigation title. Produce a method for a scientific investigation. Write an equipment list. Write a risk assessment. Construct a table. Collect results from a scientific investigation. 	<ul style="list-style-type: none"> Numeracy skills, apply and working scientifically 		<ul style="list-style-type: none"> Guided reading
<ul style="list-style-type: none"> 4) practical 	<ul style="list-style-type: none"> Write a risk assessment. Construct a table. Collect results from a scientific investigation. 	<ul style="list-style-type: none"> Numeracy skills and working scientifically 		<ul style="list-style-type: none"> Guided reading

<ul style="list-style-type: none"> • 5) Analysis 	<ul style="list-style-type: none"> • Draw a graph of your results. • Interpret a graph of your results. • Evaluate your scientific investigation. 			
<ul style="list-style-type: none"> • 6) Analysis • 7) Presenting • 8) Presenting 	<ul style="list-style-type: none"> • Draw a graph of your results. • Interpret a graph of your results. • Evaluate your scientific investigation. • Create a presentation of your scientific investigation. • Present your ideas to an audience. • Evaluate a peer's investigation. 	<ul style="list-style-type: none"> • Working scientifically, recall and application 		<ul style="list-style-type: none"> • Guided reading
<ul style="list-style-type: none"> • Revision • Test • Test feedback 	<ul style="list-style-type: none"> • Evaluate your knowledge. • Recognise areas of improvement and what went well • Reflect on your knowledge. 	<ul style="list-style-type: none"> • Revisiting all science skills 		<ul style="list-style-type: none"> • Guided reading
<p>Winter Break</p>				