

## Key Stage 3 Curriculum Map 2020-21

### Term 1

Year Group: 9	Subject:		
Focus/Topic	Objectives	Key Skills/ UAE Links	Home Learning/ Recommended Reading
<ul style="list-style-type: none"> <li>Induction, expectations, baseline assessment, lab safety, reaction time investigation and analysis and test feedback.</li> </ul>			
<ul style="list-style-type: none"> <li><b>BIOLOGY, A) Environment.</b> 1) The carbon cycle</li> <li>2) Conservation</li> <li>3) Farming</li> </ul>	<ul style="list-style-type: none"> <li>Use your knowledge to name carbon compounds.</li> <li>Create a diagram of the carbon cycle.</li> <li>Interpret diagrams of the carbon cycle</li> <li>Interpret information to define biodiversity.</li> <li>Create a diagram to explain global warming.</li> <li>Justify the importance of conserving the environment.</li> <li>Use your knowledge to define decay and stable community.</li> <li>Analyse different farming methods of livestock.</li> <li>Evaluate the farming of livestock</li> </ul>	<ul style="list-style-type: none"> <li>Recall, working scientifically</li> <li>Working scientifically, application</li> <li>Apply and evaluate</li> <li>Greenhouses in the UAE</li> <li>Farms in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>4) Pesticide and fertilisers</li> <li>5) test</li> </ul>	<ul style="list-style-type: none"> <li>Use your knowledge to define key terms.</li> <li>Outline the consequences of using pesticides and fertilisers.</li> <li>Evaluate the use of pesticides and fertilisers.</li> <li>Evaluate your knowledge.</li> <li>Recognise areas of improvement and what went well</li> <li>Reflect on your knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>Working scientifically, application</li> <li>Recall, application and working scientifically</li> <li>Revise and reflect</li> <li>Where can someone find pesticides and fertilisers in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>Guided reading</li> </ul>

<ul style="list-style-type: none"> <li>6) test feedback</li> <li><b>B) Advances in Scientific Technology</b> 1) The secret of life</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate your knowledge.</li> <li>Recognise areas of improvement and what went well</li> <li>Reflect on your knowledge.</li> <li>Outline the discovery of DNA.</li> <li>Carry out a DNA extraction.</li> <li>Evaluate a scientific method.</li> </ul>	<ul style="list-style-type: none"> <li>Recall, application and working scientifically</li> <li>DNA labs in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>2) Sexual and asexual reproduction</li> <li>3) Selective breeding</li> </ul>	<ul style="list-style-type: none"> <li>Distinguish between sexual and asexual reproduction.</li> <li>Outline a process of asexual reproduction.</li> <li>Compare and contrast sexual and asexual reproduction.</li> <li>Use your knowledge to define selective breeding.</li> <li>Outline the process of selective breeding.</li> <li>Evaluate selective breeding.</li> </ul>	<ul style="list-style-type: none"> <li>Working scientifically, apply, evaluate</li> <li>Selective breeding in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>4) Cloning</li> <li>5) Genetic engineering</li> <li>6) Test</li> </ul>	<ul style="list-style-type: none"> <li>Use your knowledge to define cloning</li> <li>Outline the methods of cloning.</li> <li>Evaluate cloning.</li> <li>Use your knowledge to define genetic engineering.</li> <li>Outline the process of genetic engineering.</li> <li>Evaluate genetic engineering.</li> <li>Evaluate your knowledge.</li> <li>Recognise areas of improvement and what went well</li> <li>Reflect on your knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>Working scientifically, evaluate</li> <li>Revise and reflect</li> <li>Cloning and genetic engineering labs in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>7) Test review</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate your knowledge.</li> <li>Recognise areas of improvement and what went well</li> <li>Reflect on your knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>Working scientifically, application</li> <li>Revise and reflect</li> <li>Hospitals in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>Guided reading</li> </ul>

<ul style="list-style-type: none"> <li>• <b>C) More about the body_1)</b> Skeletal and muscular system</li> </ul>	<ul style="list-style-type: none"> <li>• Use your knowledge to describe the function of the skeletal and muscular systems.</li> <li>• Carry out a chicken wing dissection to interpret how bones and muscles work together.</li> <li>• Sketch and label a diagram of a chicken wing.</li> </ul>		
<b>Half Term</b>			
<ul style="list-style-type: none"> <li>• 2) The heart</li> <li>• 3) Effects of exercise on the body investigation</li> </ul>	<ul style="list-style-type: none"> <li>• Use your knowledge to describe the function of the heart.</li> <li>• Label a diagram of the heart.</li> <li>• Outline how blood flows through the heart.</li> <li>• Use your knowledge to identify variables.</li> <li>• Construct a scientific table.</li> <li>• Collect results from a scientific investigation.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate and application</li> <li>• Revise and reflect</li> <li>• Marathon in UAE</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>• 4) Effects of exercise on the body analysis</li> <li>• 5)Test</li> </ul>	<ul style="list-style-type: none"> <li>• Justify the type of graph for a set of results.</li> <li>• Draw a graph of your results.</li> <li>• Interpret the graph of your results</li> <li>• Evaluate your knowledge.</li> <li>• Recognise areas of improvement and what went well</li> <li>• Reflect on your knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• Working scientifically, recall and application</li> <li>• Revise and reflect</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>• 6) Test feedback</li> <li>• <b>D) Designing an investigation_1)</b> Planning</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate your knowledge.</li> <li>• Recognise areas of improvement and what went well</li> <li>• Reflect on your knowledge.</li> <li>• Write an investigation title.</li> <li>• Produce a method for a scientific investigation.</li> <li>• Write an equipment list.</li> </ul>	<ul style="list-style-type: none"> <li>• Working scientifically, application</li> <li>• Revise and reflect</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading</li> </ul>

<ul style="list-style-type: none"> <li>• 2) Planning</li> <li>• 3) Practical</li> </ul>	<ul style="list-style-type: none"> <li>• Write an investigation title.</li> <li>• Produce a method for a scientific investigation.</li> <li>• Write an equipment list.</li> <li>• Write a risk assessment.</li> <li>• Construct a table.</li> <li>• Collect results from a scientific investigation.</li> </ul>	<ul style="list-style-type: none"> <li>• Numeracy skills, apply and working scientifically</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>• 4) practical</li> <li>• 5) Analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Write a risk assessment.</li> <li>• Construct a table.</li> <li>• Collect results from a scientific investigation.</li> <li>• Draw a graph of your results.</li> <li>• Interpret a graph of your results.</li> <li>• Evaluate your scientific investigation.</li> </ul>	<ul style="list-style-type: none"> <li>• Numeracy skills and working scientifically</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>• 6) Analysis</li> <li>• 7) Presenting</li> <li>• 8) Presenting</li> </ul>	<ul style="list-style-type: none"> <li>• Draw a graph of your results.</li> <li>• Interpret a graph of your results.</li> <li>• Evaluate your scientific investigation.</li> <li>• Create a presentation of your scientific investigation.</li> <li>• Present your ideas to an audience.</li> <li>• Evaluate a peer's investigation.</li> </ul>	<ul style="list-style-type: none"> <li>• Working scientifically, recall and application</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading</li> </ul>
<ul style="list-style-type: none"> <li>• Revision</li> <li>• Test</li> <li>• Test feedback</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluate your knowledge.</li> <li>• Recognise areas of improvement and what went well</li> <li>• Reflect on your knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>• Revisiting all science skills</li> </ul>	<ul style="list-style-type: none"> <li>• Guided reading</li> </ul>
<b>Winter Break</b>			