

## Secondary Science Scheme of Work Proforma:

**Module title / topic** \_\_Adaptation in animals (B1b 5.1) + Theories of evolution (B1b 7.1)\_\_ **Duration of scheme** \_\_3/4 lessons\_\_

**Year Group** \_\_\_\_\_10\_\_\_\_\_

**Set (if applicable)** \_\_\_\_\_A4\_\_\_\_\_

Title	Learning Objectives	Learning Outcomes	NC ref.	Suggested Activities	Resources	Health & Safety	Links to Other Areas – Numeracy, Literacy, ICT and SMCS	Assessment	H/work
Adaptation in animals and plants	Students will learn... - why animals and plants develop adaptations to the environment. - to understand what is volume ratio? - to define the term adaptation as well describe examples of animals adapted to	Students will be able to learn... -that animals and plants are adapted for survival in their particular environment. -that volume ratio is the relationship between body size and surface area. -to describe the adaptations shown by plants in dry climates.	AQA GCSE Science Topic B1b 5.1 (Adaptation in animals and plants).	Students will watch a video about adaptation in animals and answer some questions (page 85) about the topic. Revision booklet made by the trainee teacher to support pupils. Each pupils will make a short presentation about an animal adaptation to the environment.	Computer Video Revision booklet Text book Power Point	Lesson totally safe for pupils without practical.	Literacy by writing some notes and by developing communication skills during presentation. ICT used to show the video.	1 <sup>st</sup> lesson to get know pupils and be aware of some misconceptions as well pupils subject knowledge.	No homework

	survive in cold and dry climates .								
Adaptation in animals and plants	-to define and describe reasons for competition in animals and plants to survive.	-to understand that competition is necessary for survival.	AQA GCSE Science Topic B1b 5.1 (Adaptation in animals and plants).	Starter activity to recap last lesson. Pupils will answer to a short quiz recapping last lesson main ideas.  Pupils will read the revision booklet and answer to summary questions(page 87) Class notes if necessary.	Computer AQA science text book Quiz Exercise books Revision Booklet	Lesson totally safe for pupils without practical.	Literacy by writing some notes and by developing communication skills during presentation. ICT used to show the video. Citizenship when teacher speaks about animals' extinction.	Pupils' summary questions.	Worksheet (page 89)
The origin of life on Earth	Students will learn to...  - understand the nature of fossils and their importance.  -identify and describe the	Students will be able...  -to describe fossils as evidence for the existence of prehistoric plants and animals. -to suggest reasons why scientists cannot be certain about	AQA GCSE Science Topic B1b 7.1 (The origin of life in Earth).	Introducing the unit by some Q+A about last lesson.  Students will pay attention to teacher instructions and use the booklet to start answering some revision questions about the topic.	Computer AQA science text book Quiz Exercise books	Lesson totally safe for pupils without practical.	Literacy by writing some notes and by developing communication skills during presentation. Link with numeracy skill by interpreting data.	Last lesson homework.	Revise new topic.

Theories of evolution	<p>different theories of evolution.</p> <p>- explain natural selection theory. -define what mutation is?</p>	<p>how life began on Earth.</p> <p>-to describe and state Darwin's and Lamarck theories about evolution.</p> <p>-to describe and define natural selection as one of the theories suggested by Darwin.</p> <p>-to describe mutation as a change in an existing gene.</p>	AQA GCSE Science Topic B1b 7 (The origin of life in Earth).	<p>Power point introducing the unit about theories of evolution.</p> <p>Pupils will read some important notes about it and answer some text book questions.</p> <p>At the end of lesson and after text book questions correction, pupils will watch a short video about Darwin theories.</p>	Computer AQA science text book Exercise books video	Lesson totally safe for pupils without practical.	Literacy by writing some notes and by developing communication and writing skills during lesson.	Pupils' ability to understand and answer Q+A answers recapping last lessons.	Students need to bring for next lesson an example of animal on an extinction situation.
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Extinction	<p>Students will learn...</p> <ul style="list-style-type: none"> <li>- to explain environmental changes and consequences?</li> <li>-to describe the reasons of evolution occurring via natural selection?</li> </ul>	<p>Students will be able to...</p> <ul style="list-style-type: none"> <li>- describe predators, diseases and competitors' as the causes of environmental changes.</li> <li>-describe the genes which have enabled individuals to survive are then passed on to the next generation and that this is one of the contents of natural selection theory.</li> </ul>	AQA GCSE Science Topic B1b 7 (The origin of life in Earth)	<p>Start unit with short video about predators and competitors.</p> <p>Class notes about causes of environmental changes.</p> <p>Listen to pupils doubts about the topic and explain again before end of unit test (AQA test).</p> <p>Final test to approach all the last lessons contents reinforcing pupils knowledge.</p>	Computer AQA science text book Exercise books video	Lesson totally safe for pupils without practical.	Literacy by writing some notes and by developing communication skills during presentation. ICT used to show the video. Citizenship when teacher speaks about animals' extinction.	Pupils' presentation about last homework task and also pupils test.	No homework for next lesson.
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