

Unit Title	Adaptation				
Subject group and discipline	Sciences	MYP year	1	Unit duration (hrs)	16-18 hours

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context <i>choose 1 and then drill down to exactly which aspect of these the unit will focus on</i>
Change	Communities Connections Relationships Time, and Systems	Orientation in Time and Space
Statement of inquiry		
<i>This needs to be non-subject specific (as far as possible) and connect the key concept, related concepts and Global Contexts</i>		
Changes in species over time lead to observable differences which allow us to impose order on the observed universe		
Inquiry questions		
<p>Factual — What is a species? What causes variation? How can variation be explained? How can organisms be classified into groups according to similarities and differences at the cellular level? All fossils are the mineralised remains of once-living organisms or of traces left behind by once-living organisms – how does this occur?</p> <p>Conceptual — How do we know what species an organism is? What can fossils tell us about how mammals developed? How can we describe variation in the natural world?</p> <p>Debatable — What would happen if we and/or all living things were identical? What would life be like for humans if the dinosaurs were still alive? Humans perceive order in the universe. Is this real or something we have created?</p>		

Objectives	Summative assessment	
<p><i>Learning objectives for the unit</i></p> <p>Aiii interpret information to make scientifically supported judgments. Bi outline an appropriate problem or research question to be tested by a scientific investigation Cii interpret data and outline results using scientific reasoning Ciii discuss the validity of a prediction based on the outcome of the scientific investigation</p> <p>Dii describe and summarize the various implications of using science and its application in solving a specific problem or issue</p>	<p>G Present a conference poster highlighting which theory for the extinction of dinosaurs you think is most likely</p> <p>R Team of paleontologists</p> <p>A Presenting at a university conference in the hopes that you will be able to get more funding for research into the theory</p> <p>S There are currently multiple theories as to why dinosaurs became extinct e.g. weather/climate/temperature changes, meteors e.g. Chicxulub crater in the Yucatán Peninsula. None of these have been agreed on by scientists. You need to do further research into one theory (e.g. looking at data of weather changes and thinking about which organisms would be affected by weather or climate changes and why. Or for the meteor theory, analysing the data from rocks and ask in the strata (layers of rock) of the crater in Mexico.</p> <p>P Present a conference poster informing readers about the theory you believe is the the most compelling. Include a description of the theory you have chosen, data that you have found with graphs or other visual displays, and reasons why you think this is the most likely theory.</p> <p>Standards and criteria</p> <p>Working scientifically – Identifying rocks?</p> <p>Fact recall – how can climate impact different organisms’ abilities to survive</p> <p>What are strata? What is extinction? What are fossils?</p>	<p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>Students will demonstrate they know how changes in species occur over time by explaining different theories for the extinction of dinosaurs</p>
<p>Approaches to learning (ATL) <i>These can be listed or you could offer some explanation of how they will be developed</i></p>		
<p>Thinking - They need to think about different characteristics that could be</p> <p>Communication - Poster presentation for GRASP task</p> <p>Social - Working together to discuss groupings for organisms</p>		

Research - Looking into current theories of extinction

Self management – managing the GRASP project to produce a piece of work to a deadline