



Task Number	2	Task Name	Geological Timelines
Course	Earth and Environmental Science	Faculty	Science
Teacher	Ms C Sulek	Head Teacher	Mr B Yates
Issue date	Monday 12 th February, 2024	Due date	Monday 25 th March, 2024
Focus (Topic)	Earth's Processes	Task Weighting	20%

Outcomes

<p>Students</p> <ul style="list-style-type: none"> › analyses and evaluates primary and secondary data and information EES11/12-5 › solves scientific problems using primary and secondary data, critical thinking skills and scientific processes EES11/12-6 › communicates scientific understanding using suitable language and terminology for a specific audience or purpose EES11/12-7 › describes and evaluates the models that show the structure and development of the Earth over its history EES12-12
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Task description

<p>Your task is divided into a Part A and a Part B.</p> <p>Part A</p> <p>You are required to produce a Geological Timeline highlighting the four Eons and the significant events within them. Special mention needs to be made of the following;</p> <ul style="list-style-type: none"> • Banded Iron Formations • Extremophiles • Stromatolites • First multicellular soft bodies • First multicellular hard bodies • Urey & Miller experiment • The Panspermia Theory <p>Part B</p> <p>You are required to produce a Geological Timeline highlighting the eleven Periods of the Phanerozoic Eon, with special mention of the major organisms for each period and the five Mass extinctions which have occurred within this eon.</p>
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Marking Guidelines

<p>Students will be assessed on their ability to be able to;</p> <ul style="list-style-type: none"> - produce a geological timeline to scale from the evaluation of secondary data sources - Communicate effectively using scientific language suitable for the specific audience and purpose.
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Failure to submit on the due date, by the due time, will receive a zero mark and an "N Award" warning.

HSC Earth and Environmental Science: Assessment Task 2, Marking Guide

Part 1: Geological timeline of the four Eons	
<i>Criteria</i>	<i>Mark</i>
Timeline large enough and readable	0 - 1 - 2
Timeline drawn to scale	0 - 1
Four Eons in correct sequence and length	0 - 1 - 2 - 3 - 4
<i>Banded Iron Formations</i>	
Positioned correctly on timeline	0 - 1
Cause and effect	0 - 1 - 2 - 3 - 4
Evidence	0 - 1 - 2
<i>Extremophiles</i>	
Positioned correctly on timeline	0 - 1
Cause and effect	0 - 1 - 2 - 3 - 4
Evidence	0 - 1 - 2
<i>Stromatolites</i>	
Positioned correctly on timeline	0 - 1
Cause and effect	0 - 1 - 2 - 3 - 4
Evidence	0 - 1 - 2
<i>First Multicellular soft bodied organisms</i>	
Positioned correctly on timeline	0 - 1
Cause and effect	0 - 1 - 2 - 3 - 4
Evidence	0 - 1 - 2
<i>First Multicellular hard bodied organisms</i>	
Positioned correctly on timeline	0 - 1
Cause and effect	0 - 1 - 2 - 3 - 4
Evidence	0 - 1 - 2
<i>Urey & Miller experiment</i>	
Positioned correctly on timeline	0 - 1
Cause and effect	0 - 1 - 2 - 3 - 4
<i>The Panspermia Theory</i>	
Positioned correctly on timeline	0 - 1
Cause and effect	0 - 1 - 2 - 3 - 4
Part 2: Geological timeline of the eleven Periods of the Phanerozoic	
<i>Criteria</i>	<i>Mark</i>
Timeline large enough and readable	0 - 1 - 2
Timeline drawn to scale	0 - 1
Eleven periods in correct sequence and length	0 - 1
Major organisms of the period named	0 - 1 - 2 - 3 - 4 - 5
Five Mass Extinctions named and positioned correctly	0 - 1 - 2 - 3 - 4 - 5
<i>Bibliography:</i>	
At least three sources	0 - 1 - 2 - 3
Sources referenced correctly	0 - 1
TOTAL	/70

FEEDBACK: _____
