SCIENCE ASSESSMENT TASK NOTIFICATION

YEAR 12 EES

2022

Task Number: 1

Topic/s: Module 5 Earth's Processes

Weighting: 20%

Due Date: Term 4, Week 8, Friday 26th November

Time: Before 8.45am

Venue: n/a

Outcomes to be Assessed:

EES11/12-4 selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media
EES11/12-5 analyses and evaluates primary and secondary data and information
EES11/12-7 communicates scientific understanding using suitable language and terminology for a specific audience or purpose
EES12-12 describes and evaluates the models that show the structure and development of the Earth over its history

Task: HI

Electronic Submission of Task:

Yes

Format of Electronic Submission:

Stile 12EES classroom > assessment folder > Task 1
Specific instructions can be found on the back of this cover sheet

Please Note:

1. The College policy regarding malpractice, including cheating and plagiarism, late submission and absenteeism will apply. Please refer to moodle.pmaclism.catholic.edu.au (Assessment Tasks – Rules and Procedures). Stage 6 students should also refer to their *2021 Assessment Handbooks*.
2. Email is NOT an accepted form of assessment task submission.
3. If you are going to be away for any reason, including school based activities, you must fill in a "Planned Absence Notification" form and submit to the Assistant Principal Curriculum or the Leader of Curriculum. This form can be found at http://moodle.pmaclism.catholic.edu.au/mod/page/view.php?id=17637.

Electronic Submission Specifications:

STEP 1: **PART A:** to be done on the collaborative Google Map link that will be given to you in class. Editing rights on this will be stopped at the due submission time.

PART B: Save your assignment as a PDF with your name in the file name *(e.g. RmahonEEStask1.pdf).*

STEP 2: Upload **Part B** to the assessment folder in Stile Yr. 12 EES > Assessments > Task 1.

Task Outline

Part A - Collaborative Project

1) **Use Google maps to create an interactive tour of an overseas (i.e. not Australian) fossil site of your choice.** Each student will be randomly assigned a different continent to work in.

My continent is _____

**Class time will be given to ensure that you can access and edit the collaborative map successfully.*

A. Give the name, location and absolute age of the site. **3 marks**

B. Describe 2 typical or important fossil species found here, including images of fossils and reconstructions. **6 marks**

C. Explain the fossil types/forms found here. (E.g. moulds, casts, trace, etc.) **3 marks**

D. Analyse the stratigraphy of the site.

1. Present an image of the site stratigraphy. **NOTE**: If a stratigraphy diagram for this site is unavailable, find a stratigraphic sequence for another fossil site of similar age in another location. **2 marks**

2. Analyse the stratigraphy (E.g. What can you say about relative ages of layers and what stratigraphic laws did you use for this? What layers are suitable for absolute dating and why? What do the rock types indicate about the formation environment?). **5 marks**

E. Discuss what index fossils are indicative for this specific geologic period or epoch. Are these particular fossils found at this site? **4 marks**

F. Include links to other relevant information for your site (e.g. academic articles, tourist information, site or locality sub-maps, photos, etc.). Include a description of the material you have linked **3 marks**

G. All sections A-G have hyperlinks to the sources of the information presented. **3 marks**

H. Marks allocated for the quality of the digital display **2 marks**

Part B - Individual Report: answer the following questions

2) Evaluate the relative significance of your individually assigned fossil site **9 marks**

3) Compare your fossil site with the site at Nilpena in the Ediacaran Hills of South Australia (which you have done a virtual field trip for) in the following categories: **12 marks**

- Supercontinental arrangement at the time of formation of each.
- Environmental conditions when these species were living at these sites.
- Fossil formation/types or sedimentary/geologic features.
- Construct a single diagram that communicates:
    - 1 major evolutionary change that occurred BEFORE both sites formed
    - 1 major evolutionary change that occurred BETWEEN when both sites formed
    - 1 major evolutionary change that occurred AFTER both sites formed