# Sample Assessment Task Year 11

# Earth and Environmental Science

## Sample for implementation for Year 11 from 2018

### Context

This task may be used as an assessment of, or for the learning in Module 2: Plate Tectonics.

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| Task number: 2 | Weighting: 35% | Timing: Term 2, Week 9 |
| Outcomes assessedA student* conducts investigations to collect valid and reliable primary and secondary data and information EES11/12-3
* selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media EES11/12-4
* analyses and evaluates primary and secondary data and information EES11/12-5
* communicates scientific understanding using suitable language and terminology for a specific audience or purpose EES11/12-7
* describes the evidence for the theory of plate tectonics and the energy and geological changes that occur at plate boundaries EES11-9
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| Nature of the taskStudents will be allocated four hours of class time to:* carry out research to outline the theory of plate tectonics and assess the evidence supporting the theory
* identify the tectonic plates that may collide and the type of boundary they will form and relate this to the types of geological changes that may occur as a result
* predict what will happen as the continents start to move closer together again
* reference any secondary resources used in a bibliography
* develop and deliver an oral presentation
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### Marking criteria

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| Knowledge and UnderstandingStudents:* **describe the evidence for the theory of plate tectonics and the energy and geological changes that occur at plate boundaries EES11-9**
* identify and evaluate the evidence supporting the theory of plate tectonics
* predict what the continents will look like in another 250 million years citing evidence and research

Conducting investigationsStudents:* **conduct investigations to collect valid and reliable primary and secondary data and information EES11/12-3**
* select and extract information from a wide range of reliable secondary sources and acknowledge them using an accepted referencing style

Processing and analysing data and informationStudents:* **select and process appropriate qualitative and quantitative data and information using a range of appropriate media EES11/12-4**
* select qualitative and quantitative data and information and represent them using a range of formats, digital technologies and appropriate media
* **analyse and evaluate primary and secondary data and information EES11/12-5**
* derive trends, patterns and relationships in data and information
* assess the relevance, accuracy, validity and reliability of primary and secondary data and suggest improvements to investigations

CommunicatingStudents:* **communicate scientific understanding using suitable language and terminology for a specific audience or purpose EES11/12-7**
* select and use suitable forms of digital, visual, written and/or oral forms of communication
* select and apply appropriate scientific notations, nomenclature and scientific language to communicate in a variety of contexts
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| Feedback providedTo inform future learning your feedback will consist of:* Comments on marking guidelines and class discussion.
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### Marking Guidelines

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| A student: | Mark Range |
| * demonstrates comprehensive knowledge and understanding of plate tectonics and the supporting evidence
* makes a supported judgement to assess at least four different pieces of evidence for plate tectonics
* uses extensive and varied data/sources of information and includes a thorough evaluation of accuracy, reliability and validity
* evaluates and analyses the general patterns and trends of the data collected and predicts future trends identifying any anomalies in the data
* uses scientific representations and notations precisely and appropriately to organize and display information using a variety of appropriate media
* uses a suitable form of communication and extensive use of scientific terminology and includes a thorough reference list/bibliography using an accepted referencing style
 | 21-25 |
| * demonstrates a thorough knowledge and understanding of the nature of plate tectonics and the supporting evidence
* assesses at least three different pieces of evidence for plate tectonics
* uses appropriate data and source information and includes an evaluation of accuracy, reliability and validity
* uses representations and notations to effectively organize and display information using one form of appropriate media
* analyses the general patterns and trends in the data collected and identifies any anomalies in the data
* uses scientific terminology and suitable communication media and includes a reference list/bibliography using an accepted referencing style
 | 16-20 |
| * demonstrates sound knowledge and understanding of the nature of plate tectonics and the supporting evidence
* describes at least three different pieces of evidence for plate tectonics
* uses suitable data and source information and includes a brief evaluation of some aspects of accuracy, reliability and validity
* applies scientific techniques to display evidence in a simplistic manner
* uses suitable communication media and limited use of scientific terminology and includes a reference list/bibliography
 | 11-15 |
| * demonstrates a basic understanding of the nature of plate tectonics and the supporting evidence
* describes at least two different pieces of evidence for plate tectonics
* includes brief data and source information and includes minimal evidence of validity, reliability and accuracy
* demonstrates basic skills in organising data
* uses suitable communication media and limited use of scientific terminology and includes a limited reference list
 | 6-10 |
| * demonstrates limited understanding of the nature of plate tectonics or the supporting evidence
* describes one or two different pieces of evidence for plate tectonics
* does not represent data in a scientific manner
* makes simple statements
 | 1-5 |