# 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 assessed A 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 | | |
| Nature of the task Students 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 | | |

### Marking criteria

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| Knowledge and Understanding Students:   * **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 investigations Students:   * **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 information Students:   * **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  Communicating Students:   * **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 |
| Feedback provided To inform future learning your feedback will consist of:   * Comments on marking guidelines and class discussion. |

### 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 |