

Achievement Standard

Subject Reference Science 3.5

Title Describe geological processes affecting New Zealand

Level 3

Credits 2

Assessment External

Subfield Science

Domain Science – Core

Registration date 9 November 2005

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This achievement standard involves describing geological processes affecting New Zealand.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Describe geological processes affecting New Zealand. 	<ul style="list-style-type: none"> Explain geological processes affecting New Zealand. 	<ul style="list-style-type: none"> Discuss geological processes affecting New Zealand

Explanatory Notes

- 1 This achievement standard is derived from *Science in the New Zealand Curriculum*, Learning Media, Ministry of Education, 1993, Making Sense of Planet Earth and Beyond strand, pp. 122–123. This achievement standard is also related to *Pūtaiao i roto i te Marautanga o Aotearoa*, Learning Media, Ministry of Education, 1996, Ō Mataora: Te Whē, Whāinga Paetae 6, pp. 32–33, and Ō Ahupūngao: Te Whē, Whāinga Paetae 1, pp. 50–51.
- 2 *New Zealand* refers to geographical New Zealand, its continental shelf area, and the tectonic plates on which it sits.
- 3 *Processes* will be selected from:
 - Plate tectonics: simple plate tectonic theory including subduction zones, deep sea trenches, mid-oceanic ridges, and transform faults.

- Seismic activity: the cause, nature, measurement, and distribution of earthquakes, knowledge of P and S waves. This will include the description, detection, measurement and use of P and S waves in locating earthquake epicentres and determining the nature of the Earth's internal structure. Measurement of earthquakes is limited to the Richter and Modified Mercalli scales.
- Volcanic activity: types and locations of dormant and active volcanoes and volcanic activity areas, associated phenomena such as geothermal activity, relationship between magma type and volcanic features.

4 Terms

- *Describe* requires the student to recognise, name, draw, give characteristics of or an account of.
- *Explain* requires the student to provide a reason as to how or why something occurs.
- *Discuss* requires the student to show understanding by linking scientific ideas. It may involve students in justifying, relating, evaluating, comparing and contrasting, analysing.

Quality Assurance

- 1 Providers and Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against achievement standards.
- 2 Accredited providers and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Accreditation and Moderation Action Plan (AMAP) reference

0226