Achievement Standard

Subject Reference	Science 1.16				
Title	Investigate an astronomical or Earth science event				
Level	1	**Credits**	4	**Assessment**	Internal
Subfield	Science				
Domain	Science - Core				
Status	Registered	**Status date**	30 November 2010		
Planned review date	31 December 2020	**Date version published**	20 November 2014		

This achievement standard involves investigating an astronomical or Earth science event.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
• Investigate an astronomical or Earth science event.	• Investigate, in-depth, an astronomical or Earth science event.	• Investigate, comprehensively, an astronomical or Earth science event.

Explanatory Notes

1 This achievement standard is derived from *The New Zealand Curriculum,* Learning Media, Ministry of Education, 2007, Level 6. It is aligned with the Nature of Science strand, and is related to the material in the *Teaching and Learning Guide for Science*, Ministry of Education, 2010 at http://seniorsecondary.tki.org.nz.

This standard is also derived from Te Marautanga o Aotearoa. For details of Te Marautanga o Aotearoa achievement objectives to which this standard relates, see the Papa Whakaako.

2 This investigation involves collecting, processing and communicating information about an astronomical or Earth science event. The information could come from a variety of sources such as direct observations, collection of experimental data, resource sheets, photos, videos, websites, and reference texts. Communicating will be by way of a report appropriate to the investigation.

The procedures outlined in *Safety and Science: A Guidance Manual for New Zealand Schools*, Learning Media, Ministry of Education, 2000, must be followed during any practical component investigation.

3 An *astronomical event* may be selected from an historical or recent event, discovery or space probe exploration.

4 An *Earth science event* may be selected from a historical or recent event taken from geological science, marine science, atmospheric science, or a combination of these sciences.

5 The purpose of the investigation may be given by the teacher or chosen by the student.

6 *Investigate* involves:
- collecting, selecting, and processing primary or secondary data and/or information
- communicating the processed data and/or information by describing key stages of the event
- recording the sources used in a traceable format.

7 *Investigate in depth* involves:
- communicating the processed data and/or information by explaining key stages of the event.

8 *Investigate comprehensively* involves the further development of an in-depth investigation by:
- communicating the processed data and/or information by explaining thoroughly links between key stages of the event. This may involve elaborating, applying, justifying, relating, evaluating, comparing and contrasting, and analysing.

9 Conditions of Assessment related to this achievement standard can be found at http://ncea.tki.org.nz/Resources-for-Internally-Assessed-Achievement-Standards

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Quality Assurance

1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233