

## Achievement Standard

<b>Subject Reference</b>	Science 1.16		
<b>Title</b>	Investigate an astronomical or Earth science event		
<b>Level</b>	1	<b>Credits</b>	4
		<b>Assessment</b>	Internal
<b>Subfield</b>	Science		
<b>Domain</b>	Science - Core		
<b>Status</b>	Registered	<b>Status date</b>	30 November 2010
<b>Planned review date</b>	31 December 2019	<b>Date version published</b>	20 November 2014

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

### Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> <li>Investigate an astronomical or Earth science event.</li> </ul>	<ul style="list-style-type: none"> <li>Investigate, in-depth, an astronomical or Earth science event.</li> </ul>	<ul style="list-style-type: none"> <li>Investigate, comprehensively, an astronomical or Earth science event.</li> </ul>

### Explanatory Notes

- 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](#).

- 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>
- 

### **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.