

<b>Title</b>	<b>Write a scientific report based on results of a scientific process in an industrial or research laboratory</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	<p>This unit standard is for people who wish to gain practical experience to show competency working in an industrial or research laboratory.</p> <p>People credited with this unit standard are, in an industrial or research laboratory, able to: apply scientific skills to execute a scientific process; record the data and results from the performance of a scientific process; and write a scientific report based on the recorded data and results of the scientific process performed.</p>
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<b>Classification</b>	Science > Science - Core
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<b>Available grade</b>	Achieved
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### Guidance Information

- All work must be carried out in accordance with the quality management system, documented protocol system or Standard Operating Procedures (SOP) typically acceptable in a research or an industrial laboratory or with a technical International Accreditation New Zealand (IANZ) accredited agency or an equivalent accreditation.
- Health and Safety practices must conform to Australian/New Zealand Standard AS/NZS 2243 – *Safety in Laboratories* Parts 1, 2, 3, 7, and 10 available at <http://www.standards.co.nz> and <http://infostore.saiglobal.com/store>.
- Legislation applicable to this unit standard includes:  
Health and Safety at Work Act 2015;  
Hazardous Substances and New Organisms Act 1996.
- This unit standard is designed to enable candidates to apply theory and skills; and to carry out, analyse, and evaluate processes, through practical experience. This unit standard requires candidates to have practical experience working in an industrial or research laboratory as a laboratory assistant or technician. The credits allocated to this unit standard reflect a recommended 100 hours in an industrial or research laboratory, of which 25 hours must be practical laboratory work.
- The scientific report may be submitted on a template which the assessor has provided to the candidate.

- 6 A *scientific process* is one that is undertaken and/or observed at the industrial or research laboratory.
- 7 Glossary  
*Scientific skills* are those that are undertaken and/or observed at the industrial or research laboratory.  
*Presentation* is an oral presentation of the report to peers, not to exceed 10 minutes in length.  
*Laboratory procedures* refer to documented systems or processes of operation, which may be found in a SOP manual, quality management system or protocol system documentation. These procedures are external and/or internal laboratory requirements governing laboratory work.

## Outcomes and performance criteria

### Outcome 1

Apply scientific skills to execute a scientific process in an industrial or research laboratory.

#### Performance criteria

- 1.1 Scientific skills are applied and the scientific process is performed in accordance with laboratory procedures.
- Range may include – written communication, oral communication, accuracy, quality, repeatability, equipment installation and maintenance, technical, computer technology, error anomalies.

### Outcome 2

Record the data and results from the performance of a scientific process in an industrial or research laboratory.

#### Performance criteria

- 2.1 Data and results are recorded in accordance with laboratory procedures.
- Range may include but is not limited to – report log, notes, diary, summaries, data, references for the procedures, legislation, standards.

### Outcome 3

Write a scientific report based on the recorded data and results of the scientific process performed in an industrial or research laboratory.

#### Performance criteria

- 3.1 The scientific report is written consistent with recorded data and results, and in accordance with the requirements of the industrial or research laboratory.
- Range clarity, relevance, succinctness, structure.

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<b>Planned review date</b>	31 December 2023
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 2010	N/A
Rollover	2	27 January 2015	N/A
Review	3	27 September 2018	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0113
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact NZQA National Qualifications Services [nqs@nzqa.govt.nz](mailto:nqs@nzqa.govt.nz) if you wish to suggest changes to the content of this unit standard.