This assessment report is based on assessments for 2023. It may not reflect achievement standards that have been updated.



## 2023 NCEA Assessment Report

Subject: Science
Level: Level 1

Achievement standard(s): 91922, 91923

## General commentary

Candidates' responses across the two standards show an increased understanding of the nature of science strand. Candidates' literacy levels were clearly varied between AS91922 (exam conditions) and AS91923 (submitted report) suggesting the potential use of artificial intelligence and writing text tools in classroom-based report writing.

Candidates' ability to explain with reasons related to the supplied resources was at a foundational level in both achievement standards. Some candidates confused the need to critique claims or discuss science features across the two standards rather than focusing on the questions being asked in the separate standards.

## Report on individual achievement standard(s)

# Achievement standard 91922: Describe features of science that have contributed to the development of a science idea in a local context

#### Assessment

Candidates were provided with two topic resources and had to choose one resource from which a discussion of the science features could be made. The assessment task had three compulsory parts with questions that required short and long paragraph answers and were based on a combination of five features of science from the achievement standard. The five features for 2023 were signalled to schools in the assessment specifications. This assessment was carried out in examination conditions.

#### Commentary

The majority of candidates were able to identify and describe the features of science:

- the development of science ideas in response to new evidence or varied perspectives, such as Māori and Pacific knowledge systems
- responding to needs and opportunities
- the attributes of the people who carry out the science, such as curiosity, collaboration, creativity, and critical thinking
- · replicable, verifiable data collection
- using specific langage, symbols, and conventions.

Candidates who performed at higher levels made clear connections between the resource information and the features of science. Some candidates provided answers on features of science that were not asked for and could not receive credit for this information. There were instances where it was clear that candidates confused the two standards, with some candidates critiquing claims rather than discussing the science features. Some candidates did not refer to the resource material in their answers, which limited their achievement.

#### Grade awarding

Candidates who were awarded Achievement commonly:

- identified the science idea in the selected topic
- provided a brief description on the development of a science idea and how the features of science contributed
- identifed M\u00e4ori knoweldge systems
- recognised the scientific language, symbols, and conventions used in the topic resource
- identifed attributes of people who carried out the science.

Candidates who were awarded **Achievement with Merit** commonly:

- linked the significance of the features of science with why it was important to the development of a science idea
- gave reasons why the science idea was responding to needs and opportunities
- used examples from the selected topic resouce to support reasons.

Candidates who were awarded **Achievement with Excellence** commonly:

- discussed how the features of science interacted in a meaningful way to support the development of a science idea
- gave examples from the selected topic resouce where specific langage, symbols, and conventions had been used
- gave examples from the selected topic resource where replicable, verifiable data collection had been used by the people carrying out the science.

Candidates who were awarded Not Achieved commonly:

- identified a science idea that was not one of the provided topics
- wrote a description of a feature of science but did not link this to the context of a science idea
- one feature of science out of the five features of science was discussed
- · critiqued the resource information treating it as communicated science-related claims
- did not attempt all parts of the task.

## Achievement standard 91923: Demonstrate understanding of science-related claims in communicated information

#### Assessment

Candidates were provided with three resources that each had a different context and science-related claims. Candidates had to choose one resource from which the science claims could be discussed. Candidates were able to submit a written report following a period of

research using the resource in the classroom under teacher-supervised conditions. Teacher assistance with the report was not permitted.

#### Commentary

Where candidates had a clear understanding of reliability, validity, correlation, and accuracy, candidate performance was at a higher level of achievement. Candidates were encouraged to connect details from their chosen resource with their judgments on the claims. Candidates who rewrote the resource material and did not include any discussion limited their achievement.

Candidates were encouraged to remove information from their report that might identify them or their school.

#### Grade awarding

Candidates who were awarded **Achievement** commonly:

- stated the science-related claim
- idetified the source of the science-related calims in the selected topic
- · recognised the purpose of the communicated material and intended audience
- provided examples of relevant science language or conventions from the selected topic.

Candidates who were awarded **Achievement with Merit** commonly:

- explained how the science language and conventions supported (or did not support) the selected science-related claims
- used science language in explanations
- linked examples from the selected topic.

Candidates who were awarded **Achievement with Excellence** commonly:

- provided an evaluation of how / why the use of science language or conventions supported (or did not support) the claims and gave examples from the topic resource
- evaluated how important different science language or conventions were used to support or influence the claims communicatied information.

Candidates who were awarded **Not Achieved** commonly:

- rewrote the resource material and did not add any further information
- could not identify the key claim and the source's purpose in producing the material
- used different topics and communicated claims that were not provided
- wrote a research report on the general topic supplied, and did not include information on the claims from the resource
- did not refer to the resource material in the written report.