

Achievement Standard

Subject Reference Materials and Processing Technology 1.2

Title Experiment with different materials to develop a Materials and Processing Technology outcome

Level 1 **Credits** 6 **Assessment** Internal

Subfield Technology

Domain Construction and Mechanical Technologies

Status Approved **Status date** December 2023

Planned review date December 2028 **Date version published** December 2023

Purpose Statement

Students are able to experiment with different materials to develop a Materials and Processing Technology outcome.

Achievement Criteria

| Achievement | Achievement with Merit | Achievement with Excellence |
|--|--|---|
| <ul style="list-style-type: none"> Experiment with different materials to develop a Materials and Processing Technology outcome | <ul style="list-style-type: none"> Examine different materials to develop a Materials and Processing Technology outcome | <ul style="list-style-type: none"> Evaluate different materials to develop a Materials and Processing Technology outcome |

Explanatory Notes

1 *Experiment with different materials to develop a Materials and Processing Technology outcome* involves:

- exploring the properties of different materials through experimentation
- creating a purposeful outcome informed by the exploration.

Examine different materials to develop a Materials and Processing Technology outcome involves:

- investigating the properties of different materials through ongoing experimentation incorporating stakeholder feedback
- refining the use of materials in the creation of the purposeful outcome informed by the investigation.

Evaluate different materials to develop a Materials and Processing Technology outcome involves:

- analysing the properties of different materials for the creation of the purposeful outcome
- justifying the use of materials in the creation of the purposeful outcome.

2 The term *materials* encompasses all items, ingredients, and components that a Materials and Processing Technology outcome could be made from.

3 In Materials and Processing Technology, *experimentation* refers to trying out new ideas or methods for the purpose of discovery.

Examples of experimentation with different materials include:

- transforming by altering the structure
- combining by mixing materials
- manipulating materials without changing their structure or composition
- forming to create a new material.

4 For the purpose of this achievement standard, *stakeholder feedback* is used to inform the exploration and selection of materials for a purposeful outcome.

Stakeholder feedback is documented verbal or written information sourced first-hand. Sources of stakeholder feedback could include the end user, or people or groups that have expertise, experience, or a combination of both in this area. More than one stakeholder must be consulted.

5 A *purposeful outcome* has to meet a need or opportunity identified for a person, whānau, or community.

6 Refer to the NCEA [glossary](#) for Māori, Pacific, and further subject-specific terms and concepts.

7 This achievement standard is derived from the Technology Learning Area at Level 6 of *The New Zealand Curriculum*: Learning Media, Ministry of Education, 2007.

Replacement Information

This achievement standard, AS92012, AS92014, and AS92015 replaced AS91044-AS91056.

Quality Assurance

1 Schools and institutions must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.

2 Schools and institutions with consent to assess must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233