

## Achievement Standard

**Subject Reference** Materials and Processing Technology 1.3

**Title** Demonstrate understanding of sustainable practices in the development of a Materials and Processing Technology design

**Level** 1 **Credits** 4 **Assessment** External

**Subfield** Technology

**Domain** Construction and Mechanical Technologies

**Status** Approved **Status date** 27 November 2025

**Planned review date** 31 December 2029 **Date version published** 9 December 2025

### Purpose Statement

Students are able to demonstrate understanding of sustainable practices in the development of a Materials and Processing Technology design.

### Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> <li>Demonstrate understanding of sustainable practices in the development of a Materials and Processing Technology design</li> </ul>	<ul style="list-style-type: none"> <li>Examine sustainable practices in the development of a Materials and Processing Technology design</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate sustainable practices in the development of a Materials and Processing Technology design</li> </ul>

### Explanatory Notes

- 1 *Demonstrate understanding of sustainable practices in the development of a Materials and Processing Technology design* involves:
- using sustainable practices in the development of a purposeful design for a person, whānau, or community.

*Examine sustainable practices in the development of a Materials and Processing Technology design* involves:

- refining the use of sustainable practices in the development of the purposeful design for a person, whānau, or community.

*Evaluate sustainable practices in the development of a Materials and Processing Technology design* involves:

- evaluating decisions about sustainable practices in the development of the purposeful design for a person, whānau, or community.
- 2 As part of the evidence provided, students must include discussion of kaitiakitanga in the context of applying sustainable practices for the environment during the development of a design. Examples of ways students can fulfil their responsibility towards the environment include:
- the selection of materials
  - the economic use of materials
  - the appropriate disposal of waste materials.
- 3 *A Materials and Processing Technology design* does not need to result in a final outcome.
- 4 The design will be developed using a design process.
- A design process* can involve:
- ongoing research
  - developing initial concept designs
  - stakeholder consultation
  - refining the initial concept designs during the creation of the design.
- 5 Refer to the NCEA [glossary](#) for Māori, Pacific, and further subject-specific terms and concepts.
- 6 This achievement standard is derived from the Technology Learning Area at Level 6 of *The New Zealand Curriculum*: Learning Media, Ministry of Education, 2007.
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## Replacement Information

This achievement standard, AS92012, AS92013, and AS92015 replaced AS91044-AS91056.

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## 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

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