

## Achievement Standard

<b>Subject Reference</b>	Processing Technologies 1.60		
<b>Title</b>	Implement basic procedures to process a specified product		
<b>Level</b>	1	<b>Credits</b>	4
		<b>Assessment</b>	Internal
<b>Subfield</b>	Technology		
<b>Domain</b>	Processing Technologies		
<b>Status</b>	Registered	<b>Status date</b>	20 January 2011
<b>Planned review date</b>	31 December 2014	<b>Date version published</b>	20 January 2011

This achievement standard requires the implementation of basic procedures that are suitable for use with a range of materials when processing a specified product.

### Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> <li>Implement basic procedures to process a specified product.</li> </ul>	<ul style="list-style-type: none"> <li>Skilfully implement basic procedures to process a specified product.</li> </ul>	<ul style="list-style-type: none"> <li>Efficiently implement basic procedures to process a specified product.</li> </ul>

### Explanatory Notes

- 1 This achievement standard is derived from the Level 6 achievement objectives from the Technology learning area in *The New Zealand Curriculum*, Learning Media, Ministry of Education, 2007, and is related to the material in the *Teaching and Learning Guide for Technology*, Ministry of Education, 2010 at <http://seniorsecondary.tki.org.nz>.

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools*, Learning Media, Ministry of Education, 1998; and The Health and Safety in Employment Act 1992.

Further information can be found at <http://www.techlink.org.nz>.

- 2 *Implement basic procedures to process a specified product* involves:
- following a set of processing operations to make a product that meets specifications
  - undertaking a range of appropriate tests to demonstrate the product meets specifications
  - applying processing operations that comply with relevant health and safety practices.

*Skilfully implement basic procedures to process a specified product* involves:

- showing independence and accuracy when executing processing operations and tests.

*Efficiently implement basic procedures to process a specified product* involves:

- undertaking processing operations and tests in a manner that economises time, effort and materials.

- 3 *To process* refers to the combining of materials to make a product.
- 4 *Specified product* refers to a product and its relevant specifications, including material specifications. The specifications must be of sufficient rigour to allow the student to meet the standard. The specifications need to be agreed prior to the product being made. They may be teacher-given or developed in negotiation with the student.
- 5 *Basic procedures* are those that require the student to perform a linear sequence of operations, as instructed, to make a product. The material/s and operations to be undertaken, and a step-by-step guide must be determined by the teacher.
- 6 Materials may include but are not limited to – food ingredients, plant extracts, micro-organisms, concrete, fibreglass, woodchips, recycled materials, resins.
- 7 Products may include but are not limited to – fermented or non-fermented foods and beverages; biologically active products; composts; household chemicals; toiletries; cosmetics; wood composites; dyed fibre and/or cloth; paper; moulded concrete, resin or fibreglass products.
- 8 Processing operations for this standard include:
  - one or more of – measuring, shaping, or finishing  
eg weighing, counting, grinding, slicing, moulding, and laminating.
  - one or more of – contamination prevention or disposal  
eg hygienic handling of materials, sanitising, working aseptically, safe disposal of biologically active materials.
  - one or more of – mixing, extracting, separating or growing  
eg liquid mixing, blending, agitating, mechanical peeling, sieving, washing, juicing, crushing, culturing by plating.
  - one or more of – heating, cooling or reacting  
eg liquid heating, heating a solid, maintaining temperature for growth, steam setting, acidifying, controlling of enzymes.
- 9 Tests may include but are not limited to – testing for pH, temperature, colour, size and shape, ripeness, and whether the product is cooked, set or matured.
- 10 Conditions of Assessment related to this achievement standard can be found at <http://www.tki.org.nz/e/community/ncea/conditions-assessment.php>.

**Replacement Information**

This achievement standard, AS91083, and AS91084 replaced unit standard 13392 and unit standard 13397.

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**Quality Assurance**

- 1 Providers and Industry Training Organisations must be accredited by NZQA before they can register credits from assessment against achievement standards.
- 2 Accredited providers and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Accreditation and Moderation Action Plan (AMAP) reference

0233