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Achievement Standard

Subject Reference Construction and Mechanical Technologies 1.20

Title Implement basic procedures using resistant materials to make a

specified product

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

Subfield Technology

Domain Construction and Mechanical Technologies

Status Registered Status date 20 January 2011

Planned review date 31 December 2014 Date version published 20 January 2011

This achievement standard requires the implementation of basic procedures using resistant materials to make a specified product.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Implement basic	Skilfully implement basic	Efficiently implement basic
procedures using	procedures using	procedures using resistant
resistant materials to	resistant materials to	materials to make a specified
make a specified product.	make a specified product.	product.

Explanatory Notes

This 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 using resistant materials to make a specified product involves:
 - following a set of techniques to make a product that meets specifications
 - undertaking a range of appropriate tests to demonstrate the product meets specifications
 - applying techniques that comply with relevant health and safety regulations.

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Skilfully implement basic procedures using resistant materials to make a specified product involves:

showing independence and accuracy in the execution of the techniques and tests.

Efficiently implement basic procedures using resistant materials to make a specified product involves:

- undertaking techniques and tests in a manner that economises time, effort and materials.
- 3 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, material/s and techniques to be used and a step-by-step guide need to be determined prior to the product being made. They may be teacher-given or developed in negotiation with the student.
- 4 Basic procedures are those that require the student to perform a sequence of techniques as instructed to make a product.
- 5 Resistant materials in this achievement standard may include but are not limited to wood, composites, metal, alloys, ceramics, plastics.
- 6 Techniques include:
 - one or more of measuring/marking out
 - one or more of sizing/shaping/forming
 - · one or more of joining/assembling
 - one or more of finishing/detailing/tuning.
- 7 Tests may include but are not limited to measurement of tolerances, performance testing, fitting, visual checks.
- 8 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 and AS91059 replaced unit standard 7522 and unit standard 7524.

This achievement standard replaced unit standard 7523.

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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.

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