

Achievement Standard

Subject Reference	Generic Technology 1.7		
Title	Demonstrate understanding of the role of subsystems in technological systems		
Level	1	Credits	4
		Assessment	External
Subfield	Technology		
Domain	Generic Technology		
Status	Registered	Status date	20 January 2011
Planned review date	31 December 2020	Date version published	17 November 2016

This achievement standard involves demonstrating understanding of the role of subsystems in technological systems.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Demonstrate understanding of the role of subsystems in technological systems. 	<ul style="list-style-type: none"> Demonstrate in-depth understanding of the role of subsystems in technological systems. 	<ul style="list-style-type: none"> Demonstrate comprehensive understanding of the role of subsystems in technological systems.

Explanatory Notes

- 1 This achievement standard is derived from Level 6 of 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 at <http://seniorsecondary.tki.org.nz>.

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

Appropriate reference information is available in *Safety and Technology Education: A Guidance Manual for New Zealand Schools*, Ministry of Education at <http://technology.tki.org.nz/Curriculum-support/Safety-and-Technology-Education>, and the Health and Safety at Work Act 2015.

This standard is also derived from *Te Marautanga o Aotearoa*. For details of *Te Marautanga o Aotearoa* achievement objectives to which this standard relates, see the [Papa Whakaako](#) for the relevant learning area.

- 2 *Demonstrate understanding of the role of subsystems in technological systems* involves:
- identifying subsystems in technological systems
 - describing the role of subsystems in technological systems
 - describing how subsystems work together to allow technological systems to function.

Demonstrate in-depth understanding of the role of subsystems in technological systems involves:

- explaining how control and feedback allow subsystems to function in technological systems
- explaining the advantages and disadvantages of subsystems in technological systems.

Demonstrate comprehensive understanding of the role of subsystems in technological systems involves:

- discussing the advantages and/or disadvantages of subsystems used in particular technological systems
- discussing the implications of subsystems on the design, development and maintenance of technological systems.

- 3 The *technological systems* must have clearly identifiable subsystems and known functions.
- 4 *Technological systems* are often made up of *subsystems* which are 'smaller' technological systems with their own intended function. When subsystems act as components of a 'larger' technological system, they support that system's overall function.
- 5 Assessment Specifications for this achievement standard can be accessed through the Technology Resources page found at <http://www.nzqa.govt.nz/qualifications-standards/qualifications/ncea/subjects/>.

Quality Assurance

- 1 Providers and Industry Training Organisations must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Organisations with consent to assess and Industry Training Organisations assessing against achievement standards must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference

0233