

Achievement Standard

Subject Reference Biology 2.3

Title Describe genetic variation and change

Level 2 **Credits** 3 **Assessment** External

Subfield Science

Domain Biology

Status Expiring **Status date** 17 November 2011

This achievement standard is expiring. Assessment against the standard must take place before the expiry date set out below.

Expiry date 31 December 2011 **Date version published** 17 November 2011

This achievement standard involves describing biological concepts and processes that relate to genetic variation and change.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Describe biological concepts and processes that relate to genetic variation and change. 	<ul style="list-style-type: none"> Explain biological concepts and processes that relate to genetic variation and change. 	<ul style="list-style-type: none"> Discuss biological concepts and processes that relate to genetic variation and change.

Explanatory Notes

- This achievement standard is derived from *Biology in the New Zealand Curriculum*, Learning Media, Ministry of Education, 1994, pp. 20-26, achievement objective 7.2.
- Biological concepts and processes relating to *genetic variation* will be selected from:
 - genetic biodiversity - allele frequencies, gene pools
 - mutations as a source of variation
 - independent assortment, segregation, and recombination during meiosis
 - dihybrid inheritance.

- 3 Biological concepts and processes relating to *genetic change*, ie where the gene pool is affected, will be selected from:
- natural selection
 - migration
 - mutation
 - genetic drift
 - founder effect
 - bottleneck effect.
- 4 Terms:
- *Describe* requires the student to define, give characteristics of, or an account of.
 - *Explain* requires the student to provide a reason as to how or why something occurs.
 - *Discuss* requires the student to show understanding by linking biological ideas. It may involve justifying, relating, evaluating, comparing and contrasting, or analysing.
-

Replacement Information

This achievement standard and unit standard 6308 were replaced by AS91157.

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

0226