

Achievement Standard

Subject Reference	Biology 3.5		
Title	Describe processes and patterns of evolution		
Level	3	Credits	3
Subfield	Science		
Domain	Biology		
Registration date	1 November 2005	Date version published	1 November 2005

This achievement standard involves the description of processes and patterns of evolution.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none">Describe processes and patterns of evolution.	<ul style="list-style-type: none">Describe processes and explain patterns of evolution.	<ul style="list-style-type: none">Describe processes and discuss patterns of evolution.

Explanatory Notes

- 1 This achievement standard is derived from *Biology in the New Zealand Curriculum*, Learning Media, Ministry of Education, 1994, p. 28, achievement objective 8.2 (b).
- 2 *Processes of evolution* are limited to
 - ways in which speciation occurs (sympatric, allopatric)
 - reproductive isolating mechanisms that contribute to speciation (geographical, temporal, ecological, behavioural, structural barriers, polyploidy)
 - the role of natural selection.
- 3 *Patterns of evolution* will be selected from: convergent evolution, divergent evolution (including adaptive radiation), co-evolution, punctuated equilibrium, gradualism.
- 4 Terms
 - *Describe* requires the student to define, use annotated diagrams, 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 students in justifying, relating, evaluating, comparing and contrasting, and analysing.

Quality Assurance

- 1 Providers and Industry Training Organisations must be accredited by the Qualifications Authority 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

0226