

Learning Session

Animal Adaptations

Year

Learning Outcome + Session Outline

Curriculum Links

9-10

- ✓ Explain the different types of adaptations: structural, physiological and behavioural adaptations (and how they work together).
- ✓ Describe how different adaptations make the animal suited for its habitat including its interspecific relationships.
- ✓ Describe the importance of variation in a changing environment.

How do animals survive? What features help them find food, avoid predators, and reproduce? Students will explore the relationship between animals' habitats and the different types of adaptations (structural, behavioural and physiological) and how natural variation and habitat change can encourage or discourage particular adaptations.

Ecology Level 3-4: Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

Level 5: Investigate the interdependence of living things (including humans) in an ecosystem.

Evolution Level 3-4: Explore how the groups of living things we have in the world have changed over long periods of time and appreciate that some living things in New Zealand are quite different from living things in other areas of the world.

Level 5: Describe the basic processes by which genetic information is passed from one generation to the next.

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- ✓ Identify mammal consumers as herbivore, carnivore or omnivore and elucidate differences in digestion.
- ✓ Relate mammals' structural features to their way of life and ability to survive.

How do mammals find, process and digest their food? Students will examine adaptations of mammal consumers, whether they are herbivores, carnivores or omnivores, and find out how these adaptations help them survive in the wild.

Living World - Life processes Level 6:

Relate key structural features and functions to the life processes of plants, animals, and micro-organisms and investigate environmental factors that affect these processes.

Related NCEA Standards:

Biology 1.5: AS90929: Demonstrate understanding of biological ideas relating to a mammal(s) as a consumer(s). (3 credits, External)

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- ✓ Identify and explain structural, physiological and behavioural adaptations in response to life processes.
- ✓ Understand how adaptations relate to physical habitat, reproductive strategies and relationships with other organisms.

Observe how animals adapt their way of life in relation to their life processes, habitat and relationship with other organisms.

Living World - Life processes Level 7:

Explore the diverse ways in which animals and plants carry out the life processes.

Living World - Ecology and evolution

Level 7: Explain how the interaction between ecological factors and natural selection leads to genetic changes within populations.

Related NCEA Standards:

Biology 2.3: AS91155: Demonstrate understanding of adaptation of plants or animals to their way of life. (3 credits, Internal)