Teacher Support Pack



Animal Adaptations Years 7-10

Overview - Students explore the amazing variety of ways that animals adapt to their environments to find and capture food, stay cool, avoid predators and ambush prey through the creation of their own unique species.

Lesson Logistics – Students take part in a fun interactive presentation that utilises audience response key pads to make decisions. It also includes live animal encounters and biological artefacts. One member of the group (student or adult) will be required to dress up in a costume to create a creature with adaptations that are chosen by the class. This session takes place in one of our indoor education experience areas.

Groups are encouraged to use our Student Activity Sheets during their Animal Adaptations presentation to complete the relevant questions. Additional questions are also designed to be answered through investigation by visiting specific Zoo exhibits.

Duration – 50 minutes

Conservation Message – Humans are changing the environment at a rate faster than some animals are able to adapt, therefore contributing to the extinction of many species. There are many things we can do to slow down the rate of change to help save wildlife.



Sumatran Tiger Panthera tigris sumatrae

	Science Understandings: Biological Science
Year 7	Interactions between organisms can be described in terms of food chains and food webs; human activity can
	affect these interactions (ACSSU112).
Year 8	Multi-cellular organisms contain systems of organs that carry out specialised functions that enable them to sur-
	vive and reproduce (ACSSU150).
Year 9	Ecosystems consist of communities of interdependent organisms and abiotic components of the environment;
	matter and energy flow through these systems (ACSSU176).

	Geographical Knowledge and Understandings: Unit 1 Environmental change and management
Year 10	The human-induced environmental changes that challenge sustainability (ACHGK070).

Cross Curriculum Priorities – Sustainability

	Organising ideas – Systems
01.2	All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and
	survival.
01.3	Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.
	Organising ideas – Futures
01.9	Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environ-
	ments.





PerthZoo SAVING 🖑 WILDLIFE

Before Your Zoo Visit

To get the most out of your excursion it would be great for your class to discuss the following topics prior to your *Animal Adaptations* experience.

Survival – What does an animal need to be able to do to survive? Consider their biology and behaviours.

Adaptations – Special structures, behaviours and body functions that enable species to survive in their environment.

Habitats – Discuss a variety of habitat types and their associated abiotic and biotic features.



Short-beaked Echidna Tachyglossus aculeatus



Little Penguin Eudyptula minor novaehollandiae

Back at School

Use your Zoo visit as a launch pad for investigations into adaptations of animals and plants in a variety of different habitats. Students can describe the ecosystem in terms of its abiotic and biotic components, identify the challenges to survival and then investigate the different adaptations displayed. Below is an example of an ecosystem description:

Challenge in the Savannah – Climatic changes and human activity have contributed to the development of savannah grasslands from forest habitats. The dry heat in savannahs requires organisms to be adapted to reduce water loss and body heat. Lack of cover and high population densities makes protection a priority. Reproduction and obtaining food also require specialised adaptations.

Current Trends – Consider a 'Tracking Change' bulletin board for students to bring in articles that highlight recent changes in habitats. Ask students to brainstorm all the potential issues for animals relating to that change.

Adaptation Art – Students dissect pictures of a range of animals to recreate a new species via collage.

Creative Presentation – As an alternative to a written report, students could research a particular species and incorporate the information in a form such as a documentary, TV game show or song lyrics .





