



Classification & Adaptations **How Animals Are Grouped and Survive** **Teacher Guide Only**



Using WILD LIFE Sydney Zoo to Explore Classification / Adaptations Across K-6



HOW TO USE THIS GUIDE

This guide supports teachers to explore how animals are classified and how they adapt to survive in different environments.

**CLASSROOM
LEARNING**
Pages 3–8

It includes:

- classification of animals into groups
- structural and behavioural adaptations
- animal examples from WILD LIFE Sydney Zoo
- stage-based vocabulary and questions

**EXCURSION
-BASED**
Pages 10–15

Content can be adapted from Early Stage 1 to Stage 3.





WHAT IS CLASSIFICATION?



What is classification?

Classification is grouping living things based on their shared features. Scientists classify animals to better understand similarities and differences.

Zoo Examples

Kangaroo → mammal

Crocodile → reptile

Cassowary → bird



Vocabulary Progression

ES1: same, different

Stage 1: sort, group

Stage 2: classify, features

Stage 3: characteristics, classification



Teacher Questions

ES1: What is the same?

Stage 1: How can we group these animals?

Stage 2: What features do they share?

Stage 3: Why do scientists classify animals?

Teaching Focus

Classification helps us organise and understand living things.



ANIMAL GROUPS



Animal groups

Animals are often classified into groups such as:

- mammals
- birds
- reptiles

These groups share common characteristics.

Zoo Examples

Koala → mammal

Cassowary → bird

Crocodile → reptile



Vocabulary Progression

ES1: animal groups

Stage 1: mammal, bird

Stage 2: reptile, vertebrate

Stage 3: classification groups

Teacher Questions

ES1: What type of animal is this?

Stage 1: What group does it belong to?

Stage 2: What makes it part of this group?

Stage 3: How are groups different?

Teaching Focus

Animals in the same group share key features.



WHAT ARE ADAPTATIONS?

What are adaptations?

Adaptations are features that help animals survive in their environment.

These can be:

- physical (body parts)
- behavioural (actions)

Zoo Examples

Echidna → spines, tongue

Glider → gliding membrane

Kangaroo → strong legs

Vocabulary Progression

ESI: help survive

Stage 1: adaptation

Stage 2: physical, behavioural

Stage 3: structural adaptation

Teacher Questions

ESI: What helps this animal survive?

Stage 1: What is special about this animal?

Stage 2: How does this help it live?

Stage 3: Why are adaptations important?

Teaching Focus

Adaptations improve survival.



STRUCTURAL ADAPTATIONS

Body features

Structural adaptations are physical parts of an animal's body that help it survive.

Examples:

- claws
- wings
- teeth
- fur

Zoo Examples

- Echidna → spines for protection
- Crocodile → powerful jaws
- Cassowary → strong legs

Teacher Questions

ESI: What body parts can you see?

Stage 1: What do they do?

Stage 2: How do they help survival?

Stage 3: Why are these features important?

Teaching Focus

Body features support survival.



BEHAVIOURAL ADAPTATIONS

Behaviour

Behavioural adaptations are actions animals take to survive.

Examples:

- nocturnal activity
- hiding
- hunting

Zoo Examples

- Sugar glider → active at night
- Crocodile → ambush predator
- Koala → resting to conserve energy

Teacher Questions

ESI: What is the animal doing?

Stage 1: When is it active?

Stage 2: Why does it behave like this?

Stage 3: How does behaviour help survival?

Teaching Focus

Behaviour supports survival.



ADAPTATIONS & ENVIRONMENT

Environment and survival

Adaptations are suited to specific environments. If environments change, animals may struggle to survive.

Zoo Examples

Koala → eucalyptus trees

Glider → trees for movement

Crocodile → water environments

Teacher Questions

ESI: Where does it live?

Stage 1: Why does it live there?

Stage 2: How does this help it survive?

Stage 3: What happens if the environment changes?

Teaching Focus

Adaptations match environments.



The zoo provides a real-world example of the classification and adaptations of animals in action.

Students can:

- group animals
- identify features
- observe behaviours

Teaching Focus

Observation supports understanding of classification and adaptations.

ZONE: TRICKY TONGUES & TREETOPS

What Students Will See

Animals with specialised feeding adaptations, including echidnas and tree kangaroos.

Learning Focus

Specialised adaptations for feeding and movement.

Key Teaching Points

Animals have unique features for survival

Adaptations are linked to food sources

Some animals are highly specialised

Link to Concepts

Adaptations → feeding

Classification → mammals

Teacher Prompts

ESI: What is the animal eating?

Stage 1: How does it get its food?

Stage 2: What features help it survive?

Stage 3: How does specialisation affect survival?

Focus Animal: Echidna

Classification

Mammal (monotreme)

Adaptations

- Long sticky tongue
- Strong claws for digging
- Spines for protection

Life Cycle Notes

Echidnas lay eggs, which is unusual for mammals.

The baby (called a puggle) hatches from the egg and develops in the mother's pouch.

Protection during early life stages increases survival.

Key Facts for Teachers

One of only a few egg-laying mammals (monotreme)

Uses a long sticky tongue to eat ants and termites

Has sharp spines to protect itself from predators, and digs to find food

Link to Learning

Shows how unique adaptations support survival.



ZONE: DAINTREE RAINFOREST

What Students Will See

Dense rainforest habitat with animals such as the cassowary.

Learning Focus

Classification of birds and adaptations to rainforest environments.

Key Teaching Points

Birds share common features such as feathers

Adaptations suit the environment

Structure influences movement and diet

Link to Concepts

Classification → birds

Adaptations → movement and diet

Environment → rainforest

Teacher Prompts

ESI: What does the animal look like?

Stage 1: What group does it belong to?

Stage 2: What features help it survive here?

Stage 3: How do its adaptations suit the rainforest environment?

Focus Animal: Cassowary

Classification

Bird

Adaptations

- Strong legs for movement
- Large body for seed dispersal
- Sharp claws for defence

Life Cycle

Male incubates eggs and raises chicks

Key Facts for Teachers

Flightless bird

Important for rainforest ecosystems

Eats fruit and spreads seeds

Link to Learning

Shows how structural features support survival in a specific environment

What Can We Do?

- Protect rainforest habitats
- Support conservation organisations



ZONE: KANGAROO WALKABOUT

What Students Will See

Kangaroos moving, grazing and interacting in an open environment.

Learning Focus

Classification of mammals and movement adaptations.

Key Teaching Points

Mammals share key features

Movement adaptations support survival

Environment influences body structure

Link to Concepts

Classification → mammals

Adaptations → movement

Environment → open habitat

Teacher Prompts

ESI: How does the animal move?

Stage 1: What body parts help it move?

Stage 2: How do these features help survival?

Stage 3: How does movement influence classification and survival?



Focus Animal: Kangaroo

Classification

Mammal (marsupial)

Adaptations

Powerful hind legs for hopping

Tail for balance

Pouch for raising young

Life Cycle Notes

Joey develops in pouch before becoming independent

Key Facts for Teachers

Herbivore

Moves efficiently across large distances

Lives in groups (mobs)

Link to Learning

Shows how physical adaptations support movement and survival

ZONE: NIGHTFALL

What Students Will See

Nocturnal animals such as sugar gliders climbing and gliding in low light environments.

Learning Focus

Behavioural adaptations and classification of mammals.

Key Teaching Points

Some animals are active at night (nocturnal)

Behaviour is an adaptation

Adaptations influence survival

Link to Concepts

Adaptations → behaviour

Classification → mammals

Environment → night activity

Teacher Prompts

ESI: When is the animal awake?

Stage 1: What is it doing?

Stage 2: Why is it active at night?

Stage 3: How does behaviour support survival and classification?

Focus Animal: Sugar Glider

Classification

Mammal

Adaptations

- Gliding membrane for movement
- Nocturnal behaviour
- Strong grip for climbing

Life Cycle Notes

Joey develops in pouch before independence

Key Facts for Teachers

Arboreal (tree-dwelling)

Omnivorous diet

Moves between trees by gliding

Link to Learning

Shows how behavioural and structural adaptations work together



ZONE: KOALA ROOFTOP

What Students Will See

Koalas resting and feeding in eucalyptus trees.

Learning Focus

Specialised adaptations and classification of mammals.

Key Teaching Points

Some animals rely on specific food sources

Adaptations affect behaviour

Specialisation links to survival

Link to Concepts

Classification → mammals

Adaptations → diet

Environment → trees

Teacher Prompts

ESI: What is the animal eating?

Stage 1: Where does it live?

Stage 2: How does its diet affect survival?

Stage 3: Why does specialisation increase dependence on habitat?

Focus Animal: Koala

Classification

Mammal

Adaptations

Specialised eucalyptus diet

Strong claws for climbing

Low-energy behaviour

Life Cycle Notes

Joey develops in pouch and depends on mother.

Key Facts for Teachers

Koalas eat only specific species of eucalyptus leaves

Their low-energy diet results in long periods of rest

They rely on trees for both food and shelter

Link to Learning

Shows how specialised adaptations affect survival.



ZONE: CROCODILE BILLABONG

What Students Will See

A freshwater crocodile resting or moving in a water-based habitat.

Learning Focus

Classification of reptiles and predatory adaptations.

Key Teaching Points

Reptiles share common characteristics

Predators have specialised features

Adaptations support hunting and survival

Link to Concepts

Classification → reptiles

Adaptations → predators

Environment → aquatic

Teacher Prompts

ESI: Where is the animal?

Stage 1: What does it eat?

Stage 2: What features help it hunt?

Stage 3: How do adaptations influence its role as a predator?

Focus Animal: Crocodile

Classification

Reptile

Adaptations

Strong jaws for catching prey

Camouflage in water

Eyes and nostrils on top of head

Life Cycle Notes

Eggs laid → hatchlings → few survive to adulthood

Key Facts for Teachers

Carnivorous predator

Spends most time in water

Uses ambush hunting

Link to Learning

Shows how structural adaptations support survival in aquatic environments

