



Get closer.



Name: _____

School: _____

Class: _____

ADAPTATIONS

During your visit to Currumbin Wildlife Sanctuary, you will meet up to four (4) different species of animals.

Write a profile for two of the animals:

1. a) Type (reptile, mammal etc)

b) Species name

c) List the physical adaptations which allow the animal to survive in its habitat

d) Describe how the animal behaved. What was it doing?

2. a) Type (reptile, mammal etc)

b) Species name

c) List the physical adaptations which allow the animal to survive in its habitat

d) Describe how the animal behaved. What was it doing?

ANIMAL ANTICS

Observing animal behaviour tells us a lot about their health, breeding patterns, survival and adaptations. Observe a mob of animals in the kangaroo paddock for 10 minutes. Each minute, record their behaviour in the chart below. Probability is calculated by dividing the individual frequency by the total frequency.

Forexample, scratching
All activities.

Record the time of day before beginning: am/pm

ACTIVITY	TALLY	INDIVIDUAL FREQUENCY	PROBABILITY
Sleeping / Resting			
Scratching			
Jumping			
Eating			
Drinking			
Playing			
TOTAL FREQUENCY			

What is the most common behaviour? _____

What is the least common behaviour? _____

Write a paragraph to identify reasons why you think a certain behaviour is most common;

Life and living things: A Wedge-tailed Eagle can carry prey of 7 to 8 kg in its talons.

CLASSIFICATION

Our modern system of classification was created by Carlos Linnaeus in the 1700's who wished to classify every plant and animal in the world. This system is not fixed as new animals need to be added as they are discovered.

Living things are classified by their appearance, external structure and internal structure. Animals' internal structures are just as important as their appearances, for example, bats are more like dogs than birds and whales are more like humans than fish. The animal kingdom is divided into vertebrates (having a backbone) or invertebrates (having no backbone). Vertebrates are then divided into classes. These are: Mammals, Birds, Reptiles, Amphibians and Fish.

Mammals

Mammals are made up of the following three groups:

Placentals:

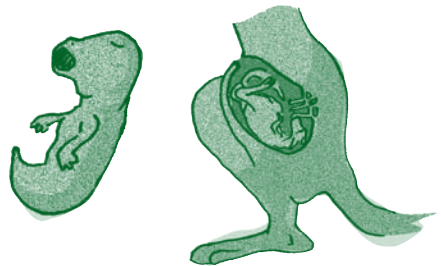
Unborn babies are attached inside the mother's womb by an organ called the placenta. When they are born they are quite well developed. Eg. Humans



Marsupials:

Babies are born very under-developed and continue to grow in their mother's pouch which contains teats for the young to suckle.

Eg. Kangaroos



Monotremes:

These are mammals that do not give birth to live young, they lay eggs. Monotremes also lack teats, rather, milk oozes onto the skin under the belly. There are only two types, both found in Australia.

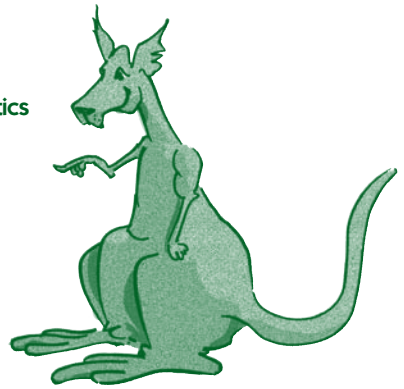
Eg. Platypus.



CLASSIFICATION

Mammalian Characteristics

1. Body covering of hair or fur
2. Constant body temperature - warm blooded
3. Feed young on milk from mother's body
4. Have a backbone
5. Have four limbs (including flippers)



Classify the following animals:

Common Name	Hair / Fur	Warm blooded	Young fed milk	Backbone	Four limbs	Placenta	Pouch	Egg	Type of Mammal
Tree Kangaroo	✓	✓	✓	✓	✓	✗	✓	✗	Marsupial
Sugar Glider									
Echidna									
Brush-tail Possum									
Dingo									

Reptilian Characteristics

1. Cold-blooded animals
2. Hatch from eggs
3. Have scales or bony plates on their limbs
4. Have short limbs or no limbs at all



Snakes and lizards are both types of reptile, however, there are some distinct differences between them. Complete the table using your observations of different species of snakes and lizards.

		Snakes		Lizards	
		Tick		Tick	
		Present	Absent	Present	Absent
Skeleton	Forelimbs				
	Hindlimbs				
	Robust lower jaw				
Organs	Moveable eyelids				
	Nictitating membrane <small>(moveable membrane under eyelid)</small>				
	Ear tympanum				
	Forked tongue				

Life and living things: A Wedge-tailed Eagle can carry prey of 7 to 8 kg in its talons.

CLASSIFICATION

A FROG or a REPTILE?

The following comparison chart has details about frogs.
 Complete the information for the Reptile in the chart.

A FROG	A REPTILE
Egg emerges in jelly	Egg has tough shell
Egg laid in moisture	
Egg fertilised outside female's body	
Tadpole (larva) hatches from egg to become adult	
Tadpole undergoes big changes	
Frog has moist, glandular skin	
Frog has no tail, 4 limbs	
Frog breathes through lungs inside of mouth, skin	
Frog eat insects and other animals	

CLASSIFICATION

BIRDS

Observe the raptors at the Free Flight Bird Show and in the sanctuary.

Describe the unique adaptations that raptors have which allow them to hunt prey and function effectively.

Feathers and Bone Structure: _____

Talons: _____

Beak: _____

Eyes (Owls in particular): _____

Hearing (Owls in particular): _____

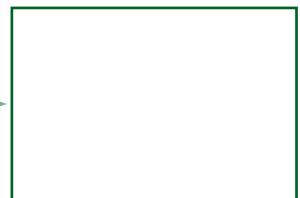


Cassowaries

Plants often depend on animals for seed dispersal. One such relationship is the _____ cassowary and Blue Quandong, the fruit of which contains very large seeds. Draw or describe the dispersal process.

This relationship is vital to the survival of each party. Explain why. _____

Draw or describe the dispersal process in three steps.



ANIMAL ADAPTATIONS

Animals develop special characteristics which help them function best in their natural habitat. These can be colouring, structural, reproductive, behavioural or functional (internal).



Find these animals in the Sanctuary and complete the table.

Characteristic	Type of adaptation	Reason for adaptation
Tail of Shingleback Lizard	Functional	Stores fat for times of food shortage
Spur on the Cassowary		
Colouration of the Tawny Frogmouth		
Koalas sleep for 18-20 hours everyday		
Owls produce a casting		
Female kangaroos can hold development of embryos		

Life and living things: A Wedge-tailed Eagle can carry prey of 7 to 8 kg in its talons.

HABITAT DESTRUCTION

The greatest cause of a living organism becoming endangered is the removal of its habitat. Habitats are destroyed, but it is also a process of habitat alteration. Complete the table below.

Habitat is altered for	The products and services this provides	Some native animals this has an impact on	Ways we can lessen the impact
Grazing of Cattle	Meat and milk	Bilbies Echidnas Possums	Eat less meat Drink milk Alternatives
Food Crops			
Urban Development and Transport			
Mining			
Timber Harvesting			

DISCUSSION POINTS

1. When feeding carnivores at Currumbin Wildlife Sanctuary, we are not permitted to feed out animals which are alive (unless they are invertebrates). This is an established rule which we follow. Why do you think such a rule exists in zoos?

2. If you were the Chief Executive Officer of Currumbin Wildlife Sanctuary, what animal species would you choose to protect and what programs would you implement for its conservation?

Point of trivia: Biodiversity is the variety of all living things, including plants, animals, micro organisms and their inter-relationships.

HOW CAN YOU MAKE A DIFFERENCE TO AUSTRALIA'S WILDLIFE?



At Currumbin Wildlife Sanctuary...

While you're visiting the Sanctuary, help us make sure you and the animals stay safe and happy by:

- listening to your teachers
- behaving safely on the train (keep limbs inside the train and do not disembark / board the train while it is still in motion)
- avoid all train tracks
- showing respect for all animals and other people at Currumbin Wildlife Sanctuary
- showing you understand that animals need a quiet, calm and safe environment.

At Home and at School...

You, your family and friends can do many things in your own environment to make a positive difference by:

- putting rubbish in the bin
- turning the tap off when cleaning your teeth to save water
- turning off lights and fans when not in use to save power
- reducing waste. For example, say "No" to plastic bags, reuse bottles and plastics as much as possible
- planting native plants.
- telling an adult and/or Currumbin Wildlife Sanctuary when you see an injured Australian native animal !
- getting involved. Have you thought about a career in working with animals? Currumbin Wildlife Sanctuary offers hands-on courses aimed at teaching community members about caring for sick, injured or orphaned wildlife. Eight week night time courses run throughout the year. Phone 1300 886 511 for details or visit www.cws.org.au

TOGETHER WE CAN MAKE A DIFFERENCE.



Get closer

FREE CHILD PASS
(with an accompanying adult)

We hope to see you again at the
Currumbin Wildlife Sanctuary