

ADELAIDE
ZOO



Habitats



Acknowledgements

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For the Teacher

General Information

Welcome to Adelaide Zoo!

The Zoo is a great place for learning. Adelaide Zoo Education aims to support student learning by providing resources to assist classes to have educational and enjoyable experiences at the Zoo.

This booklet will provide a range of activities which may be undertaken by your students during their visit to the Zoo. A map and suggested order of activities is provided to give a logical circuit to travel during the visit.

Animal species change from time to time, and sometimes animals are “off limits” or out of sight during visits, so a flexible approach to completion of activities is recommended.

In planning, please consider whether

- ◆ you would like your class to regroup for lunch, animal feeds, the Discovery Zone or at the Entrance at the end of the visit. If so, relay the times and meeting places to students or supervisors (in writing if possible.)
- ◆ you would like to see the Pandas or use the Nocturnal House: if so, book a time when making the Zoo booking so your students are not disturbed by other school groups.
- ◆ you would like a session with a Zoo Education Officer to support your study theme. Lesson requests are met wherever possible, though at busy times of the year you may need to have a few options with dates to enable a time to be negotiated. Again, this time is arranged at the time of booking your class visit.

If your class is not booked in to a program involving an Education Officer, we will attempt to meet your class at the Entrance on arrival at the Zoo. At this meeting the group will be welcomed and given some information about the Zoo to assist their visit. General behaviour expectations will also be outlined.

Specific information relating to this Zoo Trail will follow for the teachers and for adult supervisors. Please ensure that supervisors have a copy of the relevant pages **before they come to the Zoo** so they can also be mentally prepared to maximise the learning for the students in their care.

Habitats Trail – Primary

TEACHER INFORMATION

Consider the amount of material in this trail, the time you will spend in the Zoo and the age and capacity of your students. You may like to put the activities in order of preference, make a selection from the activities for your class or share the activities amongst groups so each group does say 4 or 5 activities.

Pre-visit ideas

- Research an animal. Find out its natural habitat, predators, food sources and the adaptations it has to help it survive.
- Collect recycled materials and use them to construct habitats.
- Write letters to wildlife protection programs, local councils or newspapers.
- Look at the food chains of various regions and find out what happens if one of the species disappears.
- Design and implement a recycling program for the school/community/home.
- Group animals into the habitats that they come from.
- Write the diary of an animal in its natural habitat.
- Mark a map with the habitats of Australia / the world.

The following words and terms would be useful as prior knowledge to your visit to the Zoo:

- Threatened Species
- Habitat
- Adaptations

Post visit ideas

- Design an enclosure for a zoo animal, considering their needs and natural habitat. Construct the enclosure using recycled materials.
- Collect newspaper articles related to animals and habitats.
- Research what wildlife organisations and Zoos are doing to help Threatened Species.

Assessment Ideas

The questions and tasks in the trail are designed to encourage original ideas and thinking. There is not necessarily a correct answer for each question. In most cases answers should vary from group to group, indicating independent thinking.

Links to SACSA framework

Science- Earth and Space

- 2.1 Expresses ideas about changes that occur in their local environment and considers implications for sustainable environments
- 3.1 Describes the characteristics that sustain life on earth and changes to the characteristics and their impact over time
- 3.5 Explores the interrelationships between systems within living things, and between living things in ecological systems. They relate these ideas to the health of individuals and to threats to sustainability of ecological systems.

Society and Environment- Place, space and environment

- 2.6 Understands that people cause changes in natural and social environments and they act together in solving problems to ensure ecological sustainability.
- 3.4 Identifies and describes significant resources, explains the threats which endanger them and suggests strategies to combat threats.

Background notes for teachers and supervisors on the day.

This trail is designed for students to work individually, in pairs or in small groups.

Students visit a number of native and exotic species, looking at the habitats they live in and adaptations they have to help them.

Students are encouraged to use their observational skills, also to read signs and to talk to Zoo staff. Supervisors should encourage students to discuss ideas and express their own point of views.

Key



Observe carefully



Discuss and share ideas with your group



Write down your thoughts

Coastal Habitats - Little blue penguin

The water near a coastal habitat is salt water. Little Blue Penguins sleep in nests made in dug out caves and rock crevices on the coast. They get shelter in these caves and under rocks and plants. Little Blue Penguins eat a variety of fish that they catch in the seawater. They get the material for their nests from the coastal plants. Emperor Penguins live in the cold arctic habitats and have adaptations to allow them to survive in these harsh areas. The Adelaide temperatures would make them very uncomfortable.

Coastal Habitat - Sealion

Sealions are mammals therefore they are covered in hair (or fur). Their fur is very thick which helps them stay warm in the cold waters. Sealions eat fish and other crustaceans that they catch in the seawater.

Unfortunately, sealions are often injured by fishing tackle, plastic bags, ropes and other rubbish that is discarded in the water.

Australian Woodlands - Koala

The trees are very important to the Koalas. It is where they sleep, hide from predators and find their food. Koalas usually get plenty of moisture from the leaves in the trees, so they don't need to venture down to find water to drink. Therefore they can stay in the trees for long periods of time.

Tropical Rainforest - Siamang

Siamangs like to stay in the trees for shelter, to hide from predators and it is also where their main food source of fruit and leaves is found. To move around in the trees, Siamangs use their two long arms with slender fingers and their feet to grip onto branches. Using all limbs means they can't hold onto their young while on the move. Therefore the young must cling to the adults soon after they are born.

Having the trees so close together means the Siamangs can move from one tree to the next without having to go down to the potentially dangerous rainforest floor. Siamangs like to eat fruit, leaves, seeds, nuts, insects, eggs and small birds.

Tropical Rainforest - Cassowary

A tropical rainforest is hot, wet, humid and lush. The cassowary has powerful legs and a casque (helmet) on its head to help push through the plants.

African Grasslands habitat

The giraffe and African Wild dog are African animals that have patterns on their bodies. These patterns help them to camouflage. The patterns blur the outline of the animal and therefore blend them in with the background and each other. Herd animals can move together easily over the grasslands. The dense vegetation of the rainforest would make it difficult for herd animals to stay together.

Australian Woodlands - Echidna

Echidnas spend their time on the floor of the woodlands, amongst the plants and rocks. (Compared to a Koala that spends most of its time in a tree). Living in different layers of the woodlands means that they would not have to compete for food. Echidnas eat insects such as ants and termites and these animals are seen in the woodlands all year round.

Temperate Forest – Panda

Giant Pandas live in thickly forested mountainous areas at altitudes of 1200 to 14,000 meters in South Central China. These forests contain evergreen bamboos and deciduous trees as well as ferns and other flowering plants. Giant Pandas move around their habitat area in search of bamboo groves where they feed. Bamboos are large grasses with woody stems known as culms. Pandas eat the stems (culms), leaves and shoots.

Habitats Trail

A B F J L M N O P Q R S T U V W X Y Z

- 1 Leopard
- 2 Lion
- 3 Lyrebird
- 4 Malay Tapir
- 5 Mandrill
- 6 Meerkat
- 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18

- 19 African Wild Dog
- 20 Aldabra Tortoise
- 21 Baboon
- 22 Barbary Sheep
- 23 Binturong
- 24 Brazilian Tapir
- 25 Cassowary
- 26 Colobus
- 27 Dusky Langur
- 28 Emu
- 29 Fennec Fox
- 30 Flamingo
- 31 Giant Panda
- 32 Giraffe
- 33 Hippopotamus
- 34 Kangaroo
- 35 Koala
- 36 Loris
- 37 Tasmanian Devil
- 38 Tiger
- 39 White-cheeked Gibbon
- 40 Wallaby
- 41 Water Dragon
- 42 Westpac Envirodome
- 43 Wombat

- 44 African Wild Dogs
- 45 Siamangs
- 46 Lions
- 47 Nocturnal House - Echidna
- 48 Koalas and Echidnas
- 49 Giraffe

- 50 Sea lions
- 51 Little Blue Penguins
- 52 Giant Panda

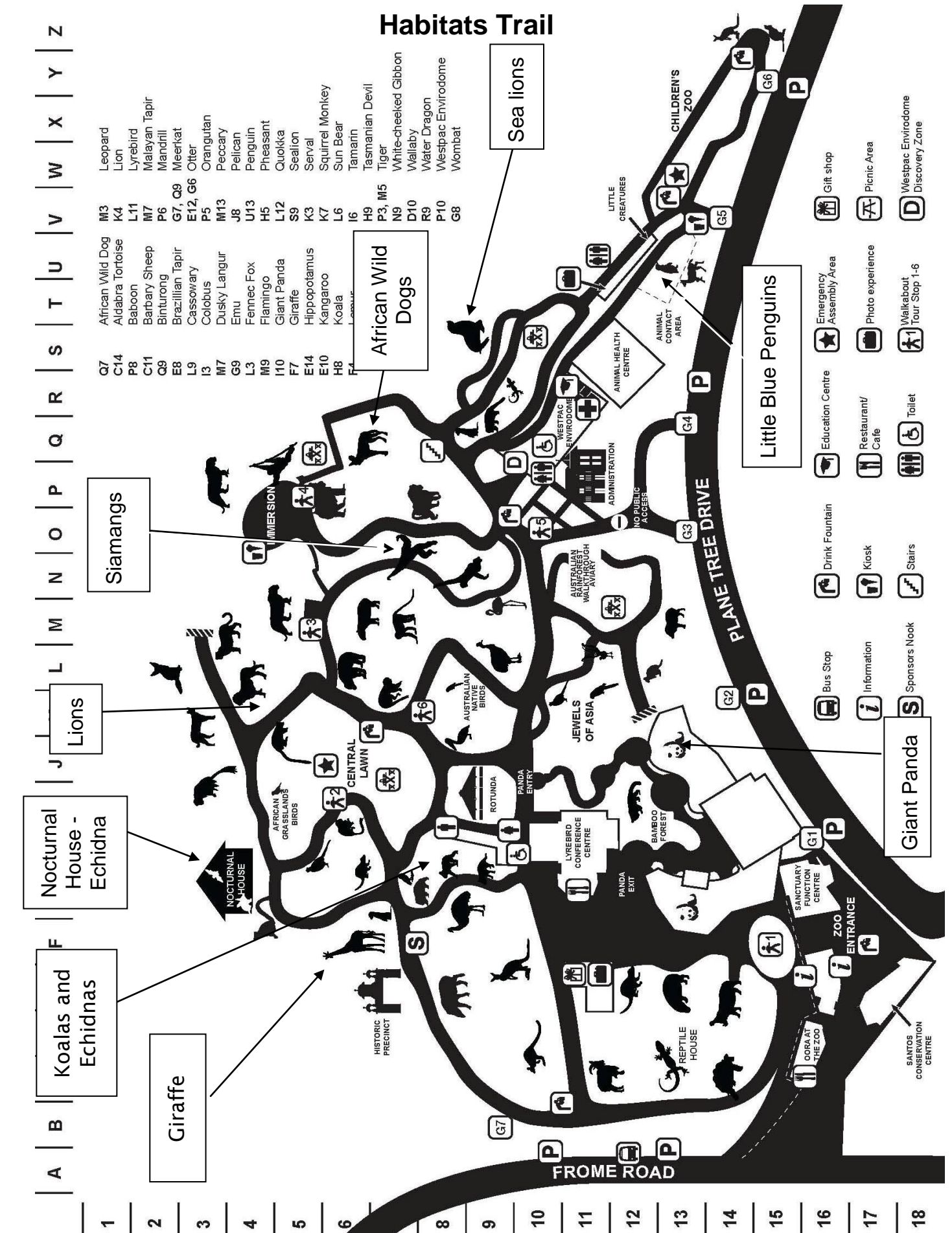
- 53 African Wild Dogs
- 54 Siamangs
- 55 Lions
- 56 Nocturnal House - Echidna
- 57 Koalas and Echidnas
- 58 Giraffe

- 59 Sea lions
- 60 Little Blue Penguins
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- 70 Giant Panda

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- 75 Koalas and Echidnas
- 76 Giraffe



1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18

A B F J L M N O P Q R S T U V W X Y Z

AFRICAN WILD DOGS
SIAMANGS
LIONS
NOCTURNAL HOUSE - ECHIDNA
KOALAS AND ECHIDNAS
GIRAFFE
SEA LIONS
LITTLE BLUE PENGUINS
GIANT PANDA

FROME ROAD
PINE TREE DRIVE
ZOO ENTRANCE
CORBAT THE ZOO
SANTOS CONSERVATION CENTRE

HISTORIC PRECINCT
AFRICAN GRASSLANDS BIRDS
CENTRAL LAWN
ROTUNDA
PANDA ENTRY
LYREBIRD CONFERENCE CENTRE
JEWELS OF ASIA
AUSTRALIAN NATIVE BIRDS
AUSTRALIAN WALKTHROUGH AVIARY
ADMINISTRATION
ANIMAL HEALTH CENTRE
ANIMAL CONTACT AREA
LITTLE CREATURES
CHILDREN'S ZOO
GIFT SHOP
EMERGENCY ASSEMBLY AREA
EDUCATION CENTRE
RESTAURANT/CAFE
PHOTO EXPERIENCE
PICNIC AREA
WESTPAC ENVIRODOME DISCOVERY ZONE

NO PUBLIC ACCESS
BUS STOP
DRINK FOUNTAIN
EDUCATION CENTRE
EMERGENCY ASSEMBLY AREA
GIFT SHOP
KIOSK
PHOTO EXPERIENCE
PICNIC AREA
RESTAURANT/CAFE
TOILET
WALKABOUT TOUR STOP 1-6
WESTPAC ENVIRODOME DISCOVERY ZONE


Coastal habitat - Little Blue Penguins

At the Zoo, we have animals from many different habitats from all over the world. The Little Blue Penguin lives in the coastal habitats around Southern Australia.

The water near a coastal habitat is:



Fresh water or Salt water?

 Look at the Little Blue Penguins' enclosure. Where would the penguins:

Sleep? _____



Find shelter? _____

Find food? _____

Find material for nests? _____

Another type of Penguin is the Emperor Penguin that lives in the "arctic" Habitats of Antarctica. We do not have any Emperor Penguins at the Adelaide Zoo.




Why wouldn't Emperor Penguins like living in Adelaide? _____

Draw a picture of the habitat of an Emperor Penguin



Coastal Habitats - Australian Sealion


 You can watch the sealions being fed each day at 11:45am.


 Sealions are mammals. This means they are covered in:

 **feathers** **scales** **hair**


How would this covering help them in the cold waters of their coastal habitat?

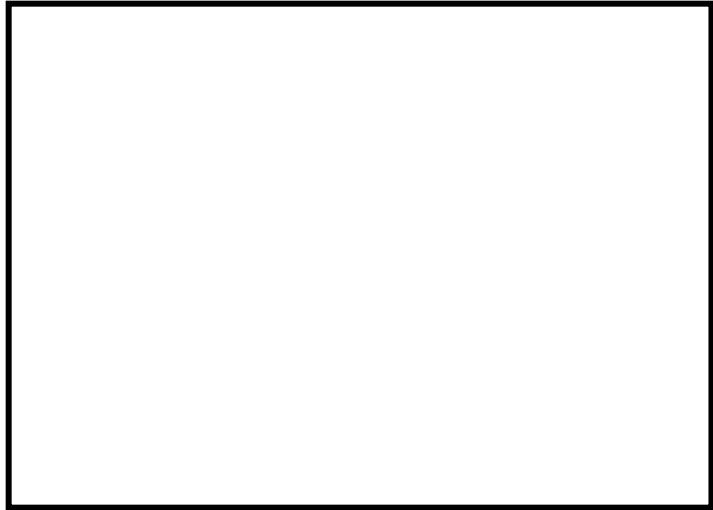
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 _____

Draw something that sealions would find to eat in their natural habitat? 



 Sadly, many sealions are killed or injured each year due to pollution and rubbish in their water. Draw some things that could end up in the water and cause injury to a sealion.



 **In your group, discuss what you could do to help keep the coastal habitats clean and safe for the animals that live there.**

Australian Woodlands – Victorian Koala

Victorian Koalas are a uniquely Australian marsupial that is found in the woodlands of South Eastern Australia.

 **What can you see the Koalas doing?**

Eating in the trees

Eating on the ground

Sleeping in the trees

Sleeping on the ground

 Sitting in the trees

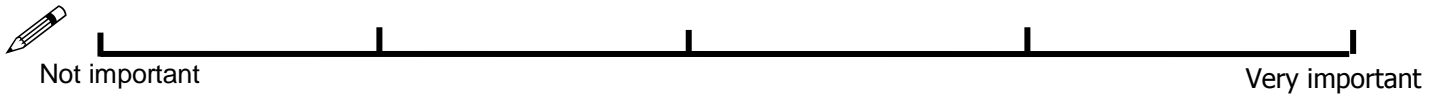
Sitting on the ground

Climbing


Crawling on the ground


Other

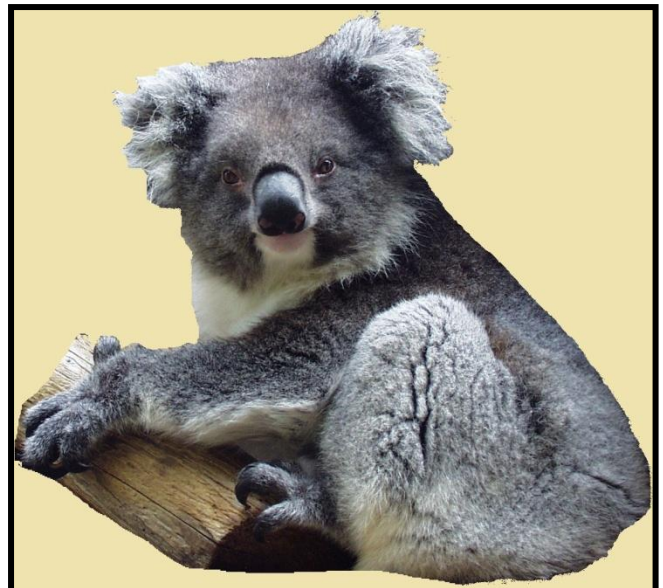
 **How important do you think the trees are to the Koala? (tick on the scale)**



Before the City of Adelaide was built the Kurna Aboriginal people inhabited the area. **What do you think the habitat would have been like then?**

 _____

 _____



Tropical Rainforest - Siamang

Siamangs spend almost all of their time in the trees of the South East Asian Rainforest.



Can you think of two reasons why animals like the Siamang like to stay up in the trees?



1. _____

2. _____



The Adelaide Zoo has successfully bred Siamangs in the past. Within hours of their birth, they are able to cling tightly to their mothers' bellies.

Why would this be very important?



The trees in a rainforest are so close together that the branches often touch each other.

How would this help animals like the Siamang?



Draw some food that the Siamangs could find in the rainforest.



Look at the Siamangs' enclosure. In your group discuss what would happen if the Siamangs could swim!

Tropical Rainforest - Cassowary

The Double-wattled Cassowary inhabits the tropical rainforests of Northern Queensland. They like to live alone.



Tick the words that best describe a tropical rainforest habitat.



Hot

Dry

Cold

Sandy

Wet

Lush

Humid

Barren



With some dot points describe the Cassowary enclosure? Look at the trees, plants and the ground.





In a tropical rainforest the trees can grow very close together. **Can you see anything on the Cassowary that would help it to move safely through the plants and trees?** Draw it here



Grasslands - African

We have some animals at the Zoo whose natural habitat is the African grasslands. Many of these animals have patterned fur.

 Find 2 animals that are from the African grasslands and draw the pattern on their fur.



 How could these patterns help the animals?

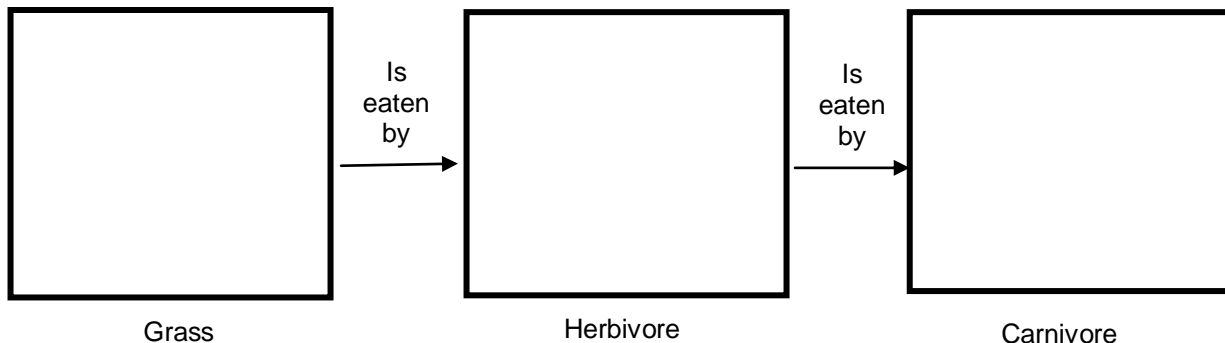


Some of the predators of the African grasslands hunt as a group.

 Why would this be easier to do in the grasslands than in the tropical rainforests?




Draw pictures to complete this food chain of the African grasslands.

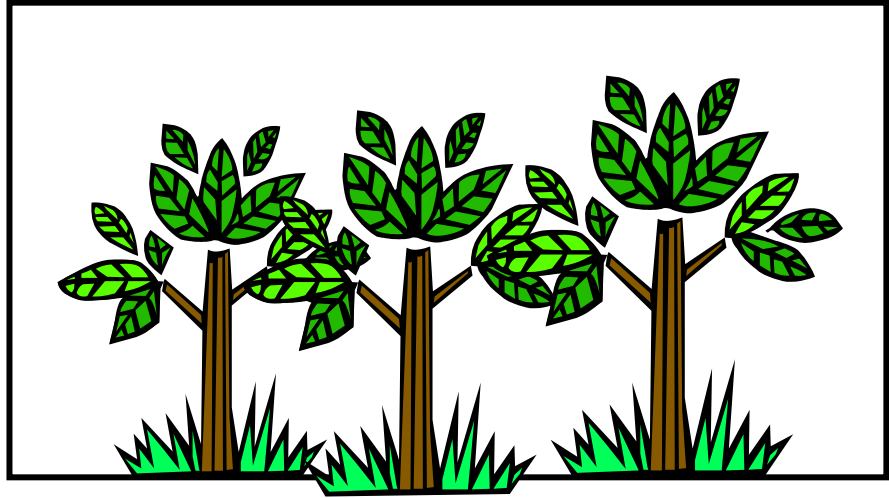


Australian Woodlands- Echidna

Look for the Echidnas in the Koala Exhibit or in the Nocturnal house.

 **Where would you see an Echidna in the woodlands?**

Draw an Echidna and a Koala in the woodlands where you would most likely see them.



Would echidnas and koalas have to compete for food?



Yes

No

In the woodlands the weather changes with the seasons. In the summer it is hot and dry and in the winter it is cooler and wetter. This means there is different food growing on the trees at different times of the year.

What do Echidnas eat?

Would they be able to find this food all year round?

Draw an Echidna in the woodlands.



Discuss with your friends about what the Echidna has to protect itself.



Temperate Forest – Giant Panda



Look around at the plants in the bamboo forest. Some of them are the same plants that you would find growing in China in the temperate forests where giant pandas are found.



You can read the names of the plants from the labels at the base of the plants. The plants can provide food and shelter for animals.

Did you know that there are different sorts of bamboo?
Pandas will eat different kinds of bamboo.

Write the name of two kinds of bamboo growing in the bamboo forest.





It rains a lot in the temperate forests where pandas live; there are many plants and trees as well as rocks, rivers, waterfalls and even caves. Pandas rely on all of these things for their survival.

See if you can find some of these things in the panda's enclosure.

How do you think some of these things such as; trees, bamboo, waterfalls and caves help the panda to survive in the wild?

Trees _____

Bamboo _____

Waterfall _____

Cave _____



Draw one of the animals from the bamboo forest.

