LEARNING with LONGLEAT

Animal Adaptation

An introduction

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In this presentation, you can learn...

- about some words related to the topic of animal adaptation
- how features of an animal's body help them to survive where they live

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Let's start with some words...

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Which of these words have you heard before? Do you know what any of these words mean?

Habitat
Camouflage
Predator
Prey
Adaptation

Habitat

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A habitat is a place where an animal lives

There are many different types of habitat. Different habitats have different conditions. Polar habitats are cold, desert habitats are dry, rainforest habitats are full of lots of trees.

Camouflage

Camouflage is the use of things such as colour or pattern to blend into the surroundings.

Zebras can camouflage themselves with other zebras which makes them hard to see.

The pattern made by the scales of a royal python allow them to blend in with the leaves on the forest floor.

Bongos are a forest antelope, their markings reflect the light and dark shading in their habitat.

Predator

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A predator is any animal that catches and eats other animals.







Prey

Prey are any animals that are caught and eaten by other animals.






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Some animals are both predator and prey

Meerkats are eaten by jackals and birds of prey.

Meerkats eat small birds, insects and other invertebrates.

Adaptation

An adaptation is a feature an animal has that helps it survive in its habitat; where it lives.

We say animals are adapted to the habitat in which they live.

For example, a camel is adapted to live in the desert. They have many adaptations that help them to survive there.

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Let’s think more about what adaptations are, by looking more closely at a camel

Look closer at a camel

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They have long eyelashes and hairy ears to keep out the sand.

They can close their nostrils to keep out sand.

They have thick lips so they can eat prickly desert plants.

Fat is stored in their hump(s) so they can go without food for a long time.

They have wide feet to make it easier to walk on sand.

They have thick fur on top of their body to protect their skin from sun, but thin fur underneath to keep cool.

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Let's think more about what a habitat might be like

It might be a cold habitat

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The fur coat of wolves can be very thick, it has two layers to keep them warm and dry.

Reindeer have fur on the bottom of their hooves which helps stop them slipping on icy ground.

Red pandas use their long fluffy tails like a blanket, wrapping it around themselves to keep warm.

It might be a hot habitat

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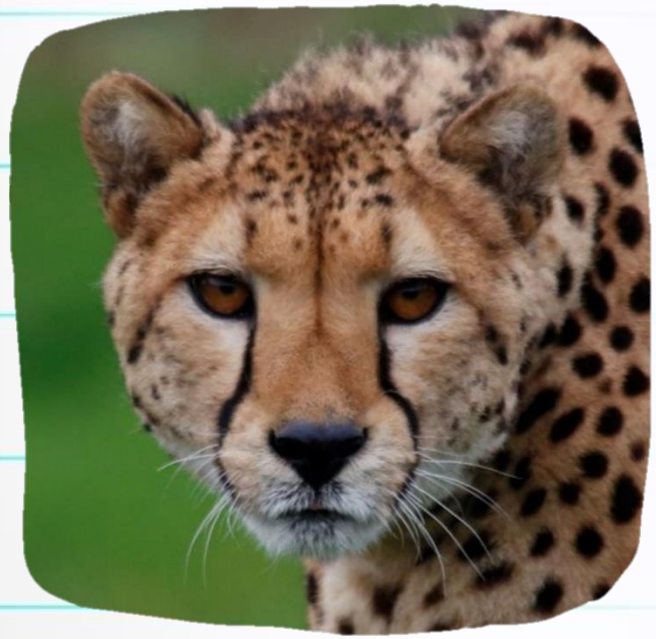
The black striped markings that run down a cheetah's face are said to reflect the glare of the sun away from the eyes, acting like a pair of sunglasses.



Ostriches can use their large wings to fan themselves to keep cool. They are also great for balance and running across the African savannah.

Fennec foxes have large ears that radiate the heat to help them keep cool.

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It is not just the conditions in their habitat, such as temperature, in which animals have to survive. They also need to be able to move around their habitat.

Life in trees

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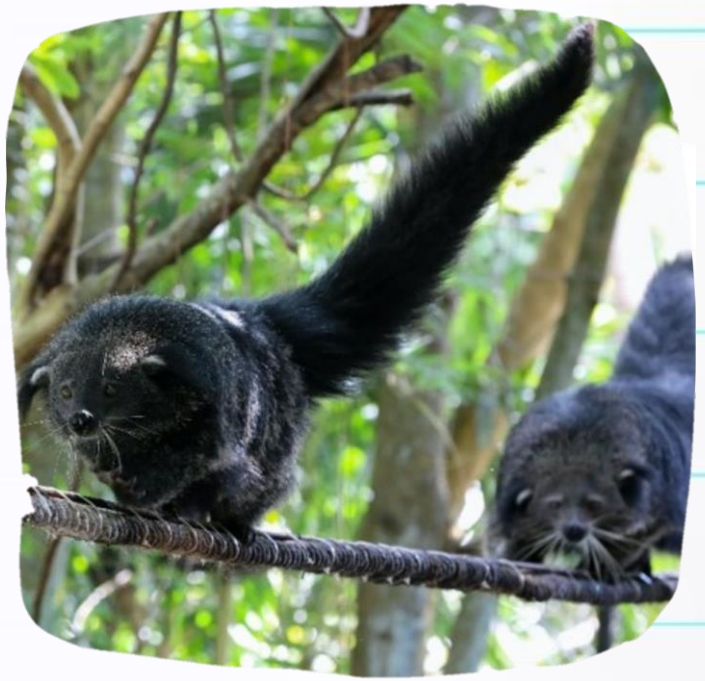
Chameleons' feet are designed to grip the branches of trees with ease.

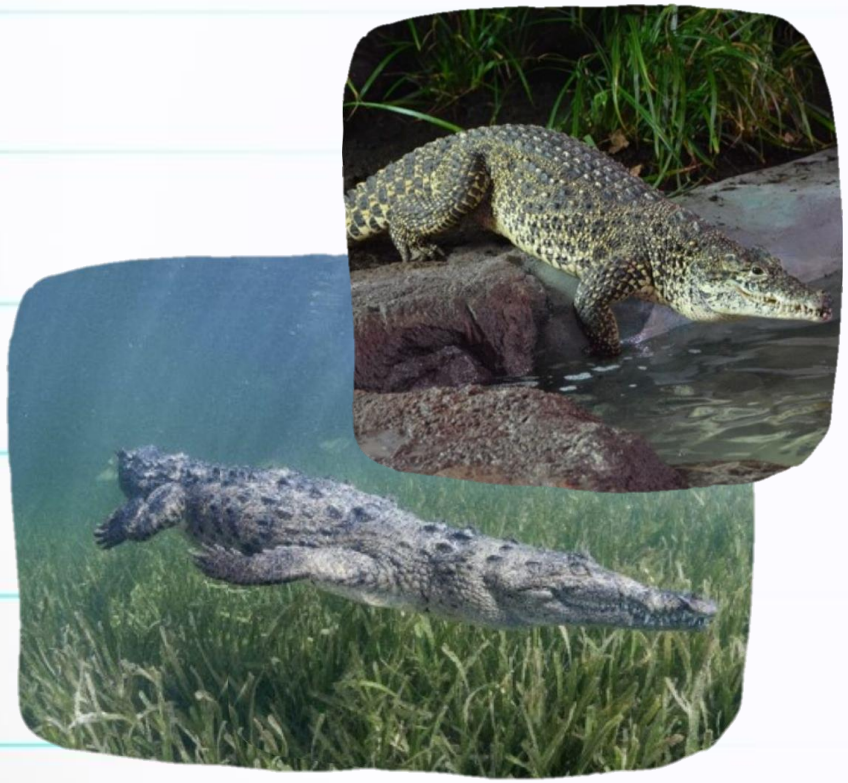
Koalas have a pad and extra thick fur on their bottoms that acts like a cushion, making it more comfortable to sit in trees all day long.

Bintourongs have a prehensile tail that can grasp branches as they move through the trees.



Moving in water

Crocodiles have a streamlined flat body and a long, flexible tail that allows them to move and turn easily in water.



Giant otters/European otters have webbed feet, which they use as paddles to propel them quickly through water.

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Closely related animals may have different adaptations depending on the habitat they live in.

Closely related animals

Sea turtles live in water. hey have flattened shells so their body is more streamlined and can move through the water with ease. They have flippers to help propel them through the water.

Tortoises live on land. Their shell is domed. Their stout legs and feet lift their body off the ground as they walk along. They have claws on their feet to help with digging.

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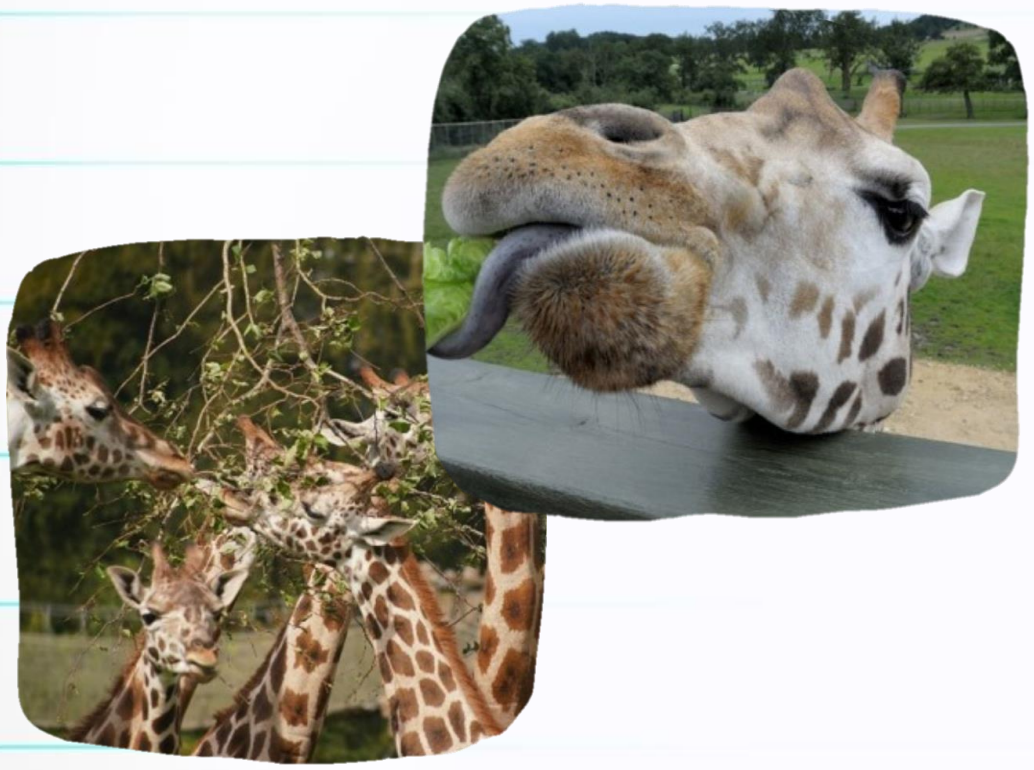
Animals also have adaptations that are related to feeding.

Feeding adaptations



Giraffe use their long tongues to eat the leaves of the thorny Acacia tree.

Lions' light sandy coloured coats blend in with the dry savannah grasses. This helps them to stay hidden as they stalk their prey. Can you think of any other adaptations lions have to help them catch their prey?

Bird beaks are adapted differently depending on the food they eat.

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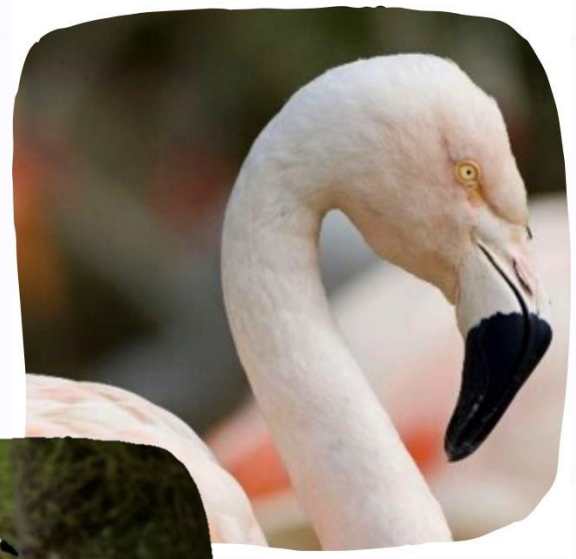
Spoonbills catch their food (small invertebrates) by sweeping their flat, open beak from side to side in the water and snapping it shut when prey passes in between.



Ibis have long beaks they can use to probe mud and soil in search of food.

Flamingo beaks act like a sift, separating mud and silt from the algae and shrimp they eat.

Closely related animals may have different adaptations depending on their habitat *and* what they eat.

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White rhinos graze grasses. They have very wide, square lips and keep their head low to the ground as the eat.

Black rhinos browse bushes and trees. They have a strong, pointed upper lip that helps them to pull the leaves off.

Summary

All animals are adapted to their habitat. They have special features that help them to survive.

All animals also have adaptations for feeding.

To understand about adaptations you should think about the habitat an animal lives in, and what it eats.

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Activities to try

Pick an Animal

Choose an animal that you are familiar with.

What habitat does your animal live in?

What is the habitat like?

Draw a detailed picture of your animal.

Can you identify any adaptations that help them survive in their habitat? Label these on your picture.

Hints

Think about the conditions in their habitat.

Think about how your animal moves around their habitat.

Look closely at their hands/feet.

Think about how it gets food.

Word Meanings

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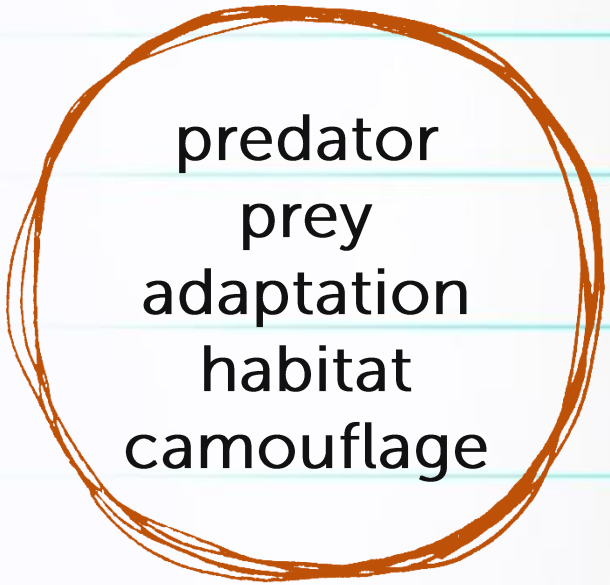
Complete the sentences below using the words in the circle

1. _____ is the place where an animal lives.
2. A _____ is any animal that catches and eats other animals.
3. _____ are any animals that are caught and eaten by other animals.
4. _____ is the use of things such as colour or pattern to blend into the surroundings.
5. An _____ is a feature an animal has that helps it survive in its habitat; where it lives.



Design an Animal

Design an animal to suit a habitat of your choice. Give it adaptations to help it survive there.

What habitat does your animal live in?
What is the habitat like?

Draw a detailed picture of your animal.
Label any adaptations that help them survive in their habitat on your picture.

Hints
Think about the conditions in their habitat.
Think about how your animal moves around their habitat.
Look closely at their hands/feet.
Think about how it gets food.

Write an animal talk

Imagine you're an animal keeper. A keeper will often give a talk about an animal they look after. Using what you have learnt about adaptations, write a talk to tell visitors more about one of the animal species you could see at Longleat.

Hints

Start by introducing yourself.

Include information on what habitat the animal comes from and what that habitat is like.

Draw attention to adaptations that help the animal to survive in their habitat.

Talk about feeding adaptations – you might even choose to feed your animal if you were doing it for real, so point out any adaptations the visitors may see in action.