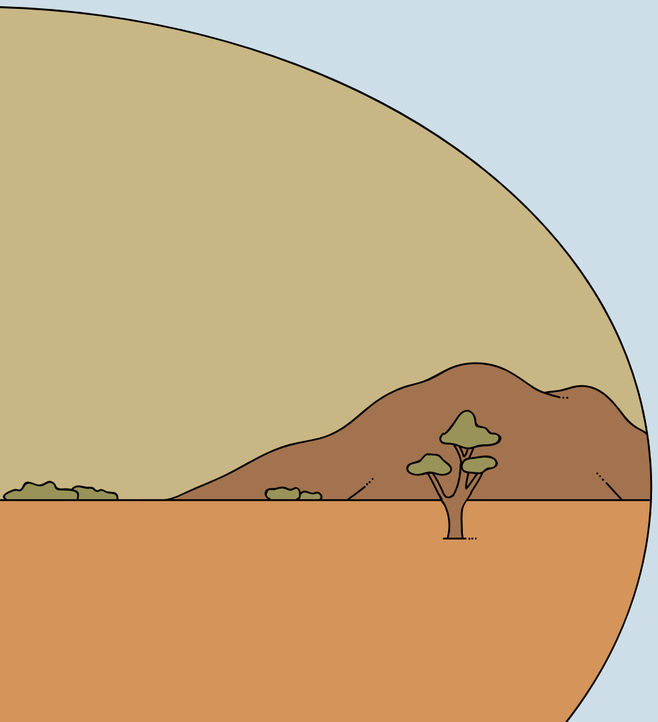
LET'S EXPLORE

HOT & COLD HABITATS

Hot Habitats

Physical and behavioural **adaptations allow animals and plants to survive in extremely hot and dry environments** in many places around the world.



Bighorn sheep are able to adapt in hot habitats such as Death Valley in the USA, as they can survive days without any water.

In the Arabian Desert the temperatures can reach greater than 50 degrees, a variety of plants and animals have been able to adapt to it.

How animals survive in Hot Habitats

Nocturnal Behaviour

Some animals are active at night to avoid the heat as the night brings cooler temperatures.

Heat Tolerance

Some animals have physiological adaptations to help them with high temperatures. Animals will pant or sweat.

Diets

Animals will feed on succulent plants or prey to stay hydrated.

Reduced Water Loss

Animals in hot areas urinate less to conserve water in their bodies.

Smart Moves

Animals will move into shade or dig underground to stay cool.

Dormant

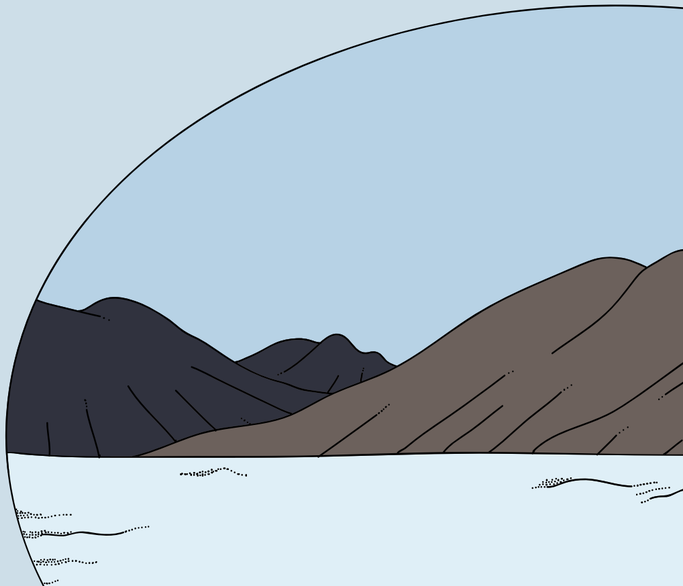
Some animals will become dormant during heat waves to conserve energy and for their survival.

Cold Habitats

Physical and behavioural **adaptations allow animals and plants to survive in extremely cold and harsh environments** in many places around the world.

Antarctica is the coldest places in the world. Because very few plants can survive there, most animals are carnivores.

Svalbard is in Norway, located closely to the Arctic Ocean. The animals that live there are the Arctic Fox, Walrus' and Polar Bears.



How animals survive in Cold Habitats

Coverings

Many animals in cold habitats have either thick fur or feathers to keep them warm.

Hibernation

Other animals can hibernate when it's cold to help them conserve energy and survive on less food.

Behaviour

Animals such as Penguins will huddle together in large groups to share body warmth.

Fat reserves

Some animals can build up extra fat in their bodies to convert into energy during winter.

Blubber

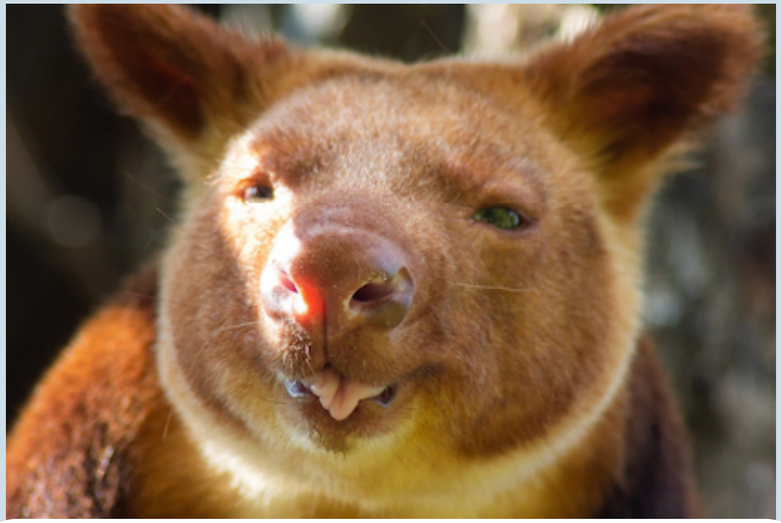
Marine animals have a thick layer of blubber under their skin to act as insulation which keeps them warm in icy waters.

Circulation

Arctic Foxes have adaptations in their blood circulation to leep their feet warm and prevent frostbite.

Australian Habitats

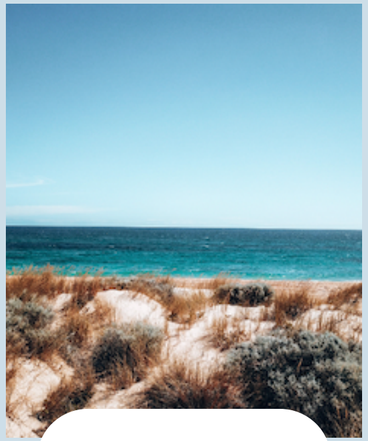
Australia consists of a variety of environments. Each environment is home to many species of animals that have adapted to living in their specific habitat.



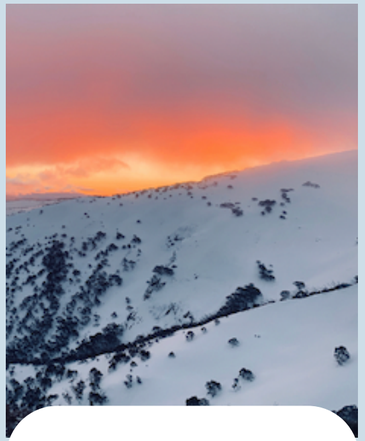
The Tree Kangaroo has adapted to its habitat by having feet with long curved claws and rubbery soles that can grip easily. They eat plants, fruit and insects.

Based on its adaptations, which habitat do you think the Tree Kangaroo lives in?

Tropical Rainforest



Coastal Dunes



Alpine (Snowy Mountains)

Australian Habitats

Australia consists of a variety of environments. Each environment is home to many species of animals that have adapted to living in their specific habitat.

The water-holding frog has adapted to its habitat by storing water and hibernating underground until the rain arrives, this can last for months or years at a time.

Based on its adaptations, which habitat do you think the Water-Holding Frog lives in?

Eucalyptus Forest

Tropical Rainforest

Arid Lakes and Rivers

Australian Habitats

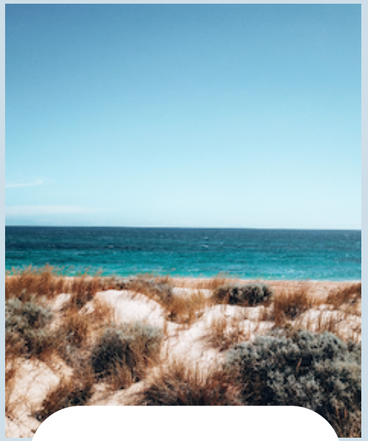
Australia consists of a variety of environments. Each environment is home to many species of animals that have adapted to living in their specific habitat.

The Yellow-Billed Spoonbill has adapted to its habitat with its long legs and flat spoon-like bill that sweeps shallow water for prey, such as aquatic insects.

Based on its adaptations, which habitat do you think the Yellow-Billed Spoonbill lives in?

Eucalyptus Forest

Freshwater Wetlands



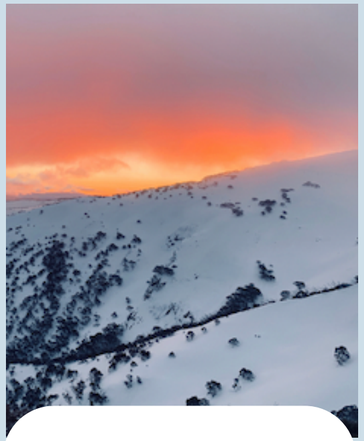
Coastal Dunes

Australian Habitats

Australia consists of a variety of environments. Each environment is home to many species of animals that have adapted to living in their specific habitat.

The Bare-Nosed Wombat has adapted to its habitat with its powerful limbs and sharp claws that dig burrows and its thick coat of fur that keeps it warm.

Based on its adaptations, which habitat do you think the Bare-Nosed Wombat lives in?

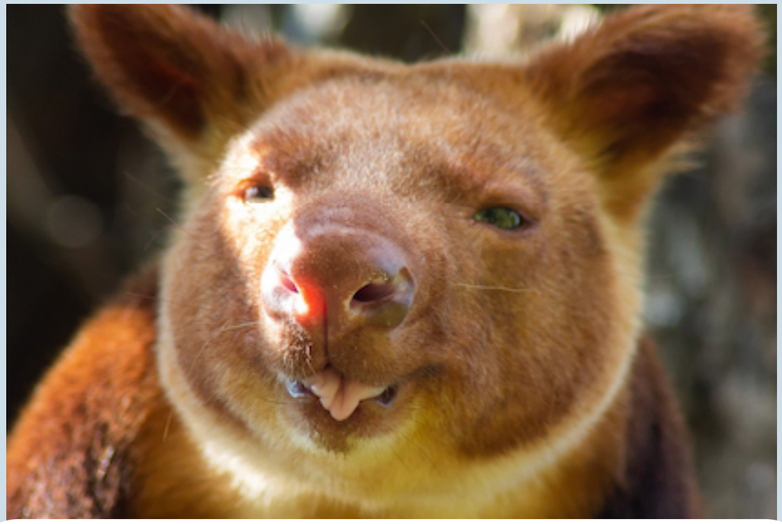


Alpine (Snowy Mountains)

Arid Lakes and Rivers

Freshwater Wetlands

ANSWER IS....



The Tree Kangaroo has adapted to its habitat by having feet with long curved claws and rubbery soles that can grip easily. They eat plants, fruit and insects.

Tropical Rainforest

ANSWER IS....

The water-holding frog has adapted to its habitat by storing water and hibernating underground until the rain arrives, this can last for months or years at a time.

FUN FACT:
Arid means little to no rain and is too dry or barren to support vegetation.

Arid Lakes and Rivers

ANSWER IS....

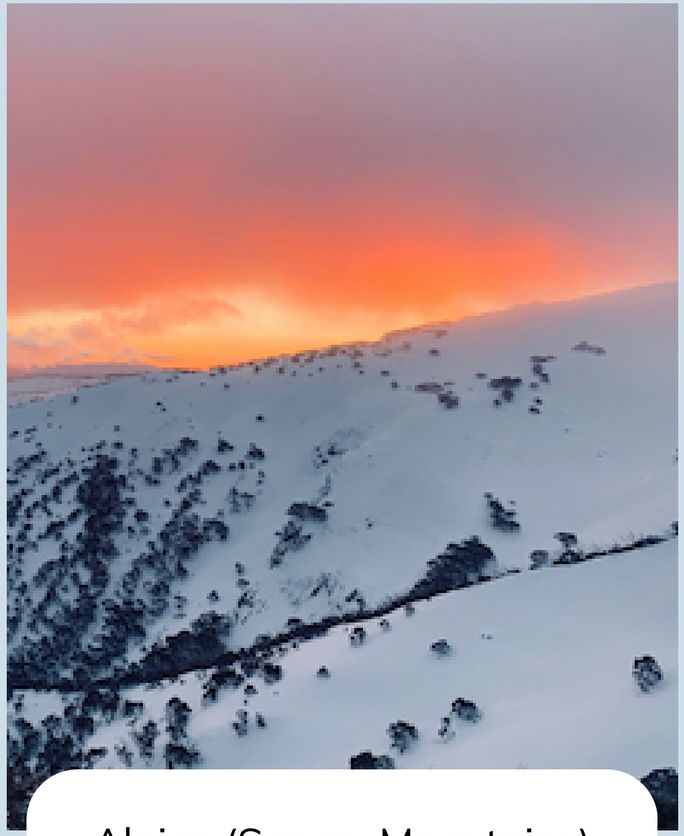
The Yellow-Billed Spoonbill has adapted to its habitat with its long legs and flat spoon-like bill that sweeps shallow water for prey, such as aquatic insects.

Freshwater Wetlands

ANSWER IS....

The Bare-Nosed Wombat has adapted to its habitat with its powerful limbs and sharp claws that dig burrows and its thick coat of fur that keeps it warm.

FUN FACT:
Alpine relates to high mountains. These Wombats live in South-Eastern Australia.

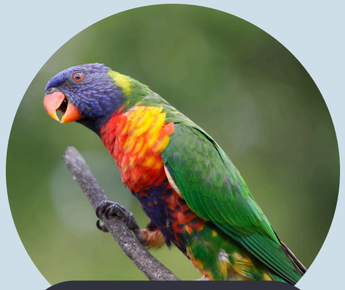


Alpine (Snowy Mountains)

Living in HOT Habitats

Physical and Behavioural adaptations allow many animal to survive in Australia's hot environments, including grasslands, bushlands and deserts.

Can you match each animal to its adaptation?



Lorikeet

Thorny Devil

Quokka

Kangaroo

A. Stores fat in their tail to convert energy.

C. Licks their forearms to cool their blood.

B. Pants to push out heat from their lungs.

D. Absorbs moisture through their skin.

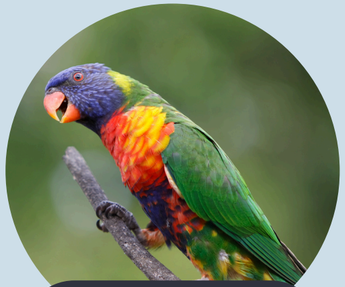
ANSWER IS....

Quokka

A. Stores fat in their tail to convert energy.

Kangaroo

C. Licks their forearms to cool their blood.



Lorikeet

B. Pants to push out heat from their lungs.

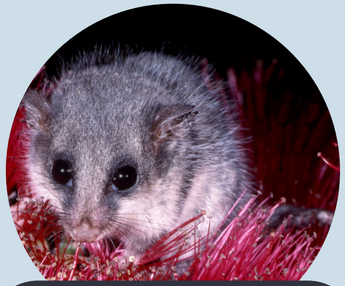
Thorny Devil

D. Absorbs moisture through their skin.

Living in COLD Habitats

Physical and Behavioural adaptations allow many animal to survive in Australia's cold environments, including alpine regions and temperate forests.

Can you match each animal to its adaptation?



Pygmy Possum

Wombat

Koala

Tiger Snake

A. Has thick woolly fur that keeps them warm.

C. Stays warm in burrows.

B. Hibernates for up to 7 months under the snow.

D. Lays in sunlight or huddles in hollow logs.

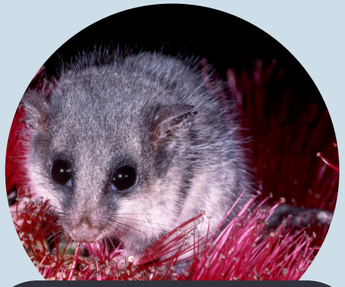
ANSWER IS....

Koala

A. Has thick woolly fur that keeps them warm.

Wombat

B. Stays warm in burrows.



Pygmy Possum

C. Hibernates for up to 7 months under the snow.

Tiger Snake

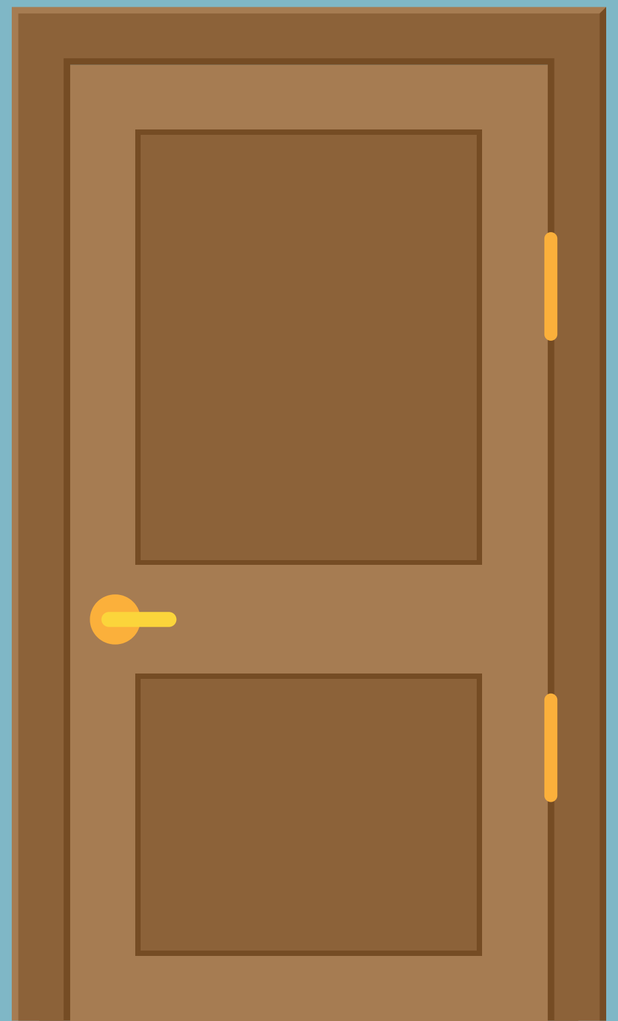
D. Lays in sunlight or huddles in hollow logs.

GUESS WHO?

Use the adaptation clues to work out which animal is behind the door.

My thick blubber (fat) allows me to spend a lot of time icy waters.

I use my long tusks to haul my heavy body onto the ice or land.



I am most often found in shallow waters near the Arctic Circle.

Because, I am so large, my only predators are orcas and polar bears.

ANSWER IS....

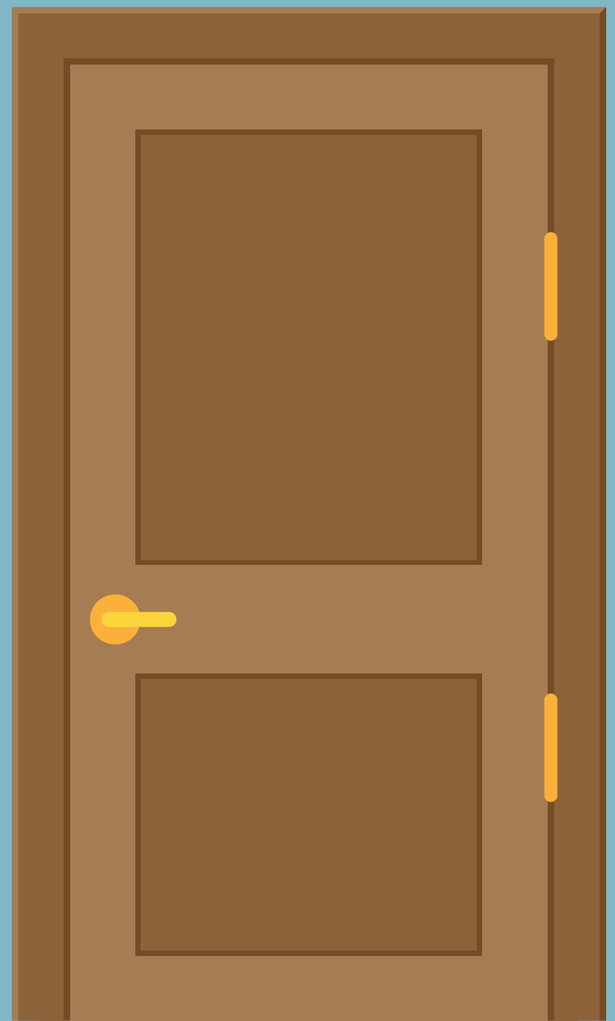
I am a WALRUS!

GUESS WHO?

Use the adaptation clues to work out which animal is behind the door.

I am often found in Africa's deserts and tropical rainforests.

My eyes move independently of one another to spot predators and prey.



My long tongue shoots out to catch insects, such as beetles and crickets.

I warn predators to stay away from me by changing colours.

ANSWER IS....

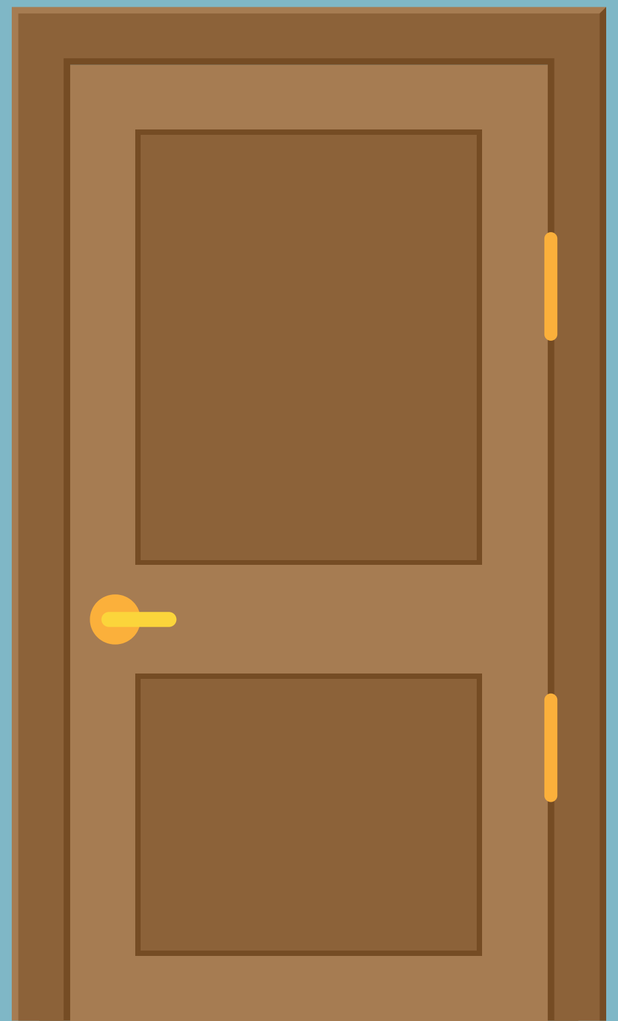
I am a CHAMELEON!

GUESS WHO?

Use the adaptation clues to work out which animal is behind the door.

My species is known to survive in hot and cold deserts.

My tough mouth can chew dry grass and thorny plants.



My long eyelashes protect my eyes during sandstorms.

I store fat to help me survive when there is limited food and water.

ANSWER IS....

I am a CAMEL!

Butterfly Activity

Butterflies usually rest with their wings together on their backs and remain motionless. As a result, they are less likely to be seen. Only when they move can you detect their presense and real shape. Some butterflies rest like moths with their wings spread out. They disguise themselves as either living or decaying learning, blending in with their environment. This is a behavioural adaptation known as camouflage.

YOUR TASK:

1. Pick a space around the room where you want your butterfly to live. This space needs to have more than one colour for the butterfly to camouflage against.

2. Colour in your butterfly to match where you will be placing it.

3. Make sure your butterfly is camouflagued or a predator may snatch it!

Summary!

What did you take from today’s lesson?