

All about



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Amazing animals



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More very important animals

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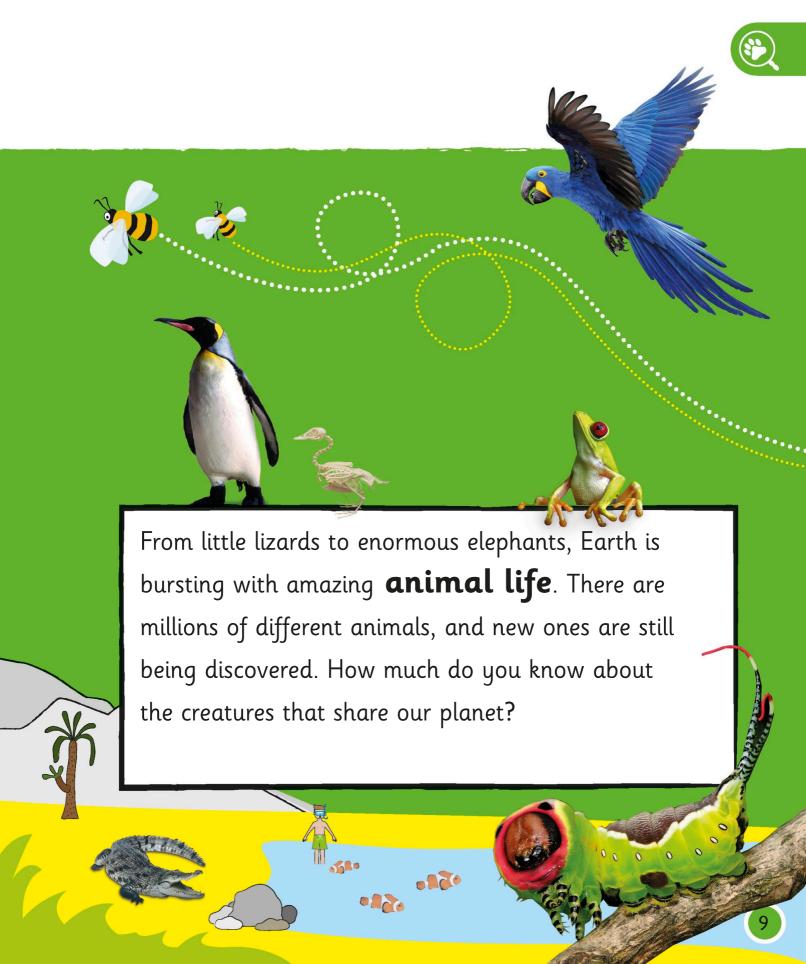
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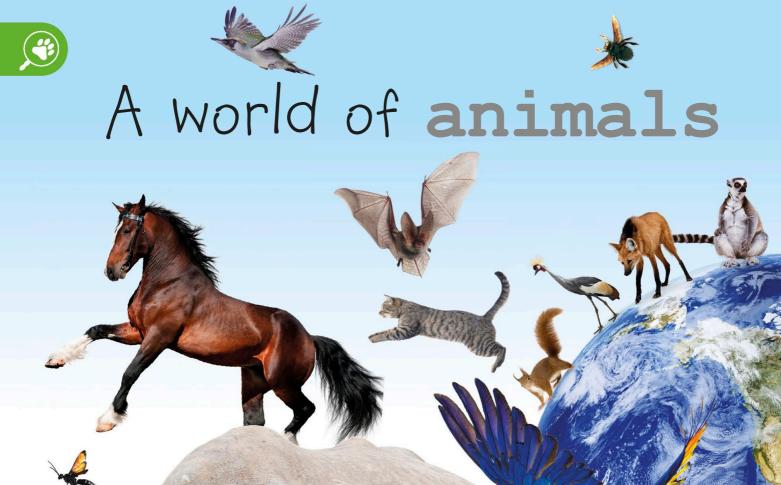
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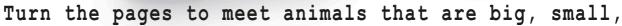
All about animals











Earth's land, seas, and sky are packed with incredible creatures. They can be very different from each other, but they're all **very important!**

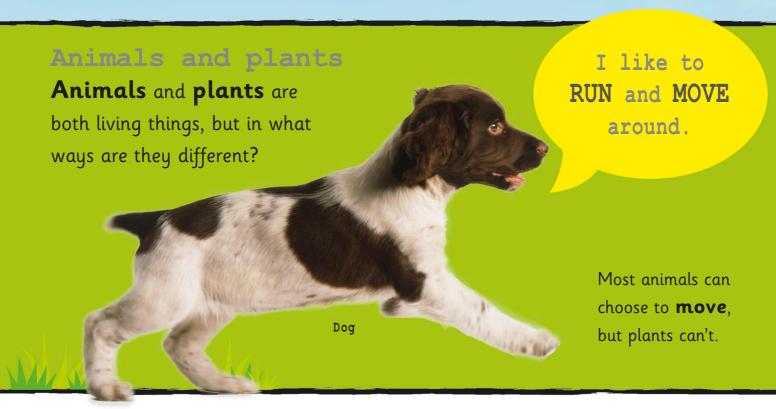


scaly, fluffy, spotty, friendly, deadly, and more!



What is an animal?

Whether they **swim**, **fly**, **slither**, or **hop**, all animals are amazing in their own special way. But how do we know what an **animal** is?



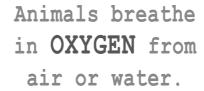
All animals are VERY IMPORTANT...

Types of animals

Animals come in all sizes, shapes, and colours. Animals that are the same are placed in **species**.



Unlike animals, I get my energy from the SUN.



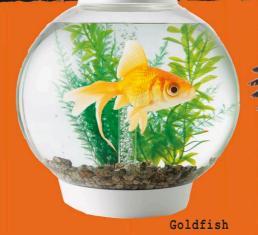


I use my EYESIGHT to look for food.



Sunflower

Animals need to eat to get their energy. Plants don't eat food.



All living things need to breathe. Plants take in air, but not the way animals do.



Animals have more developed **senses** such as smell, touch, and sight.

...and people are animals too!



Orangutan



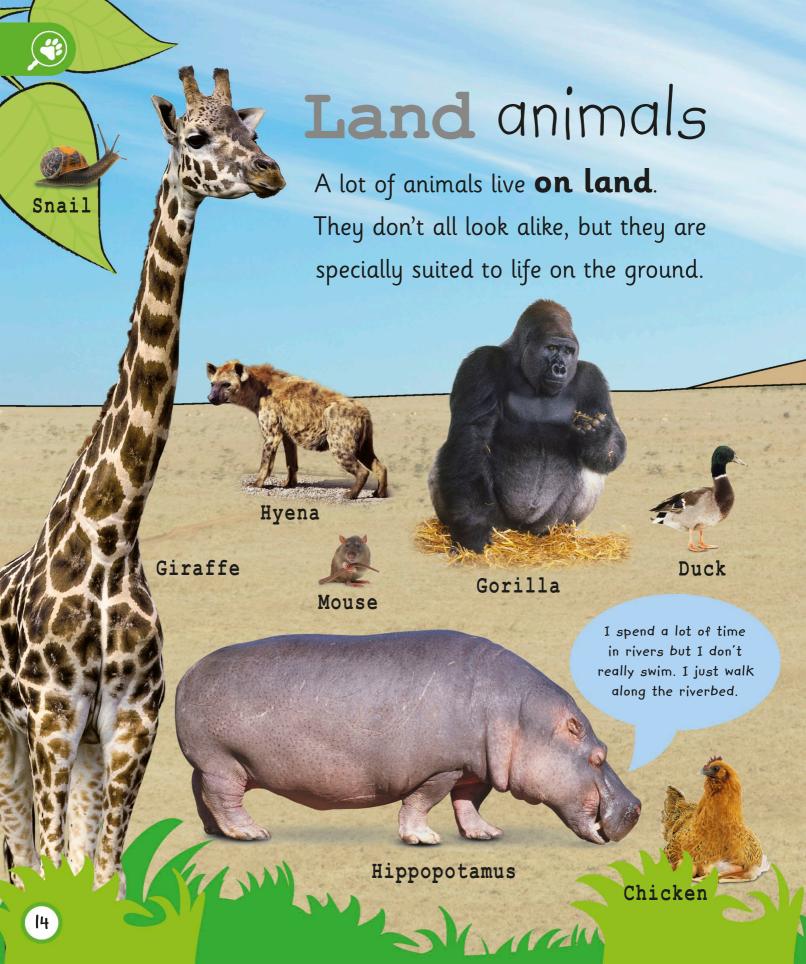


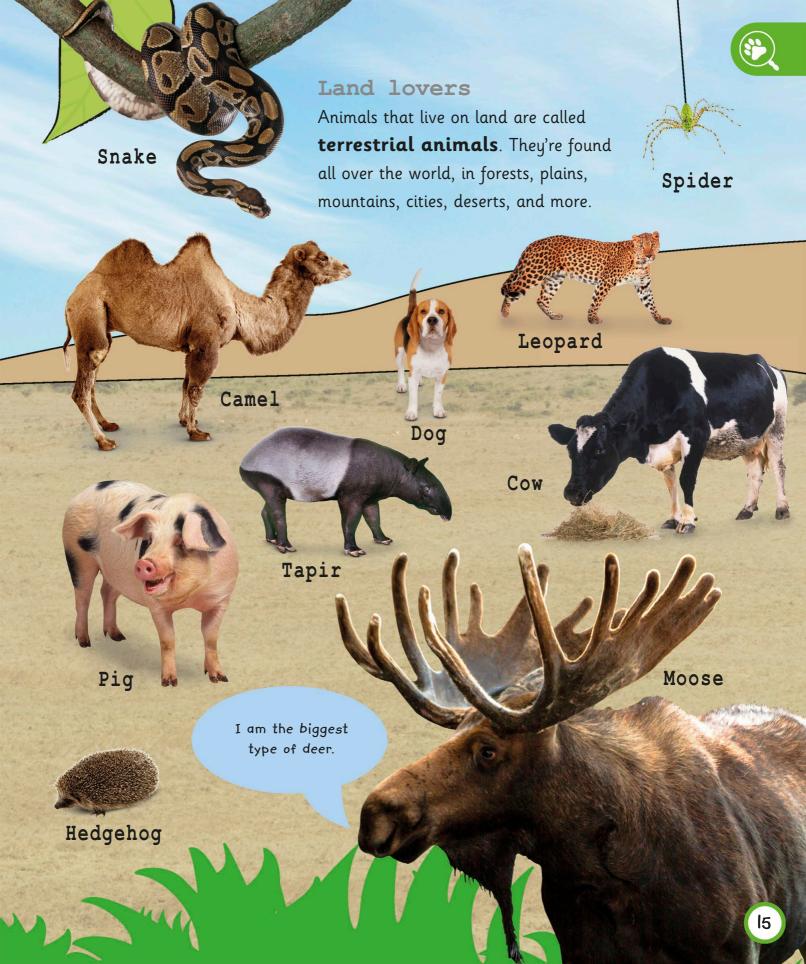










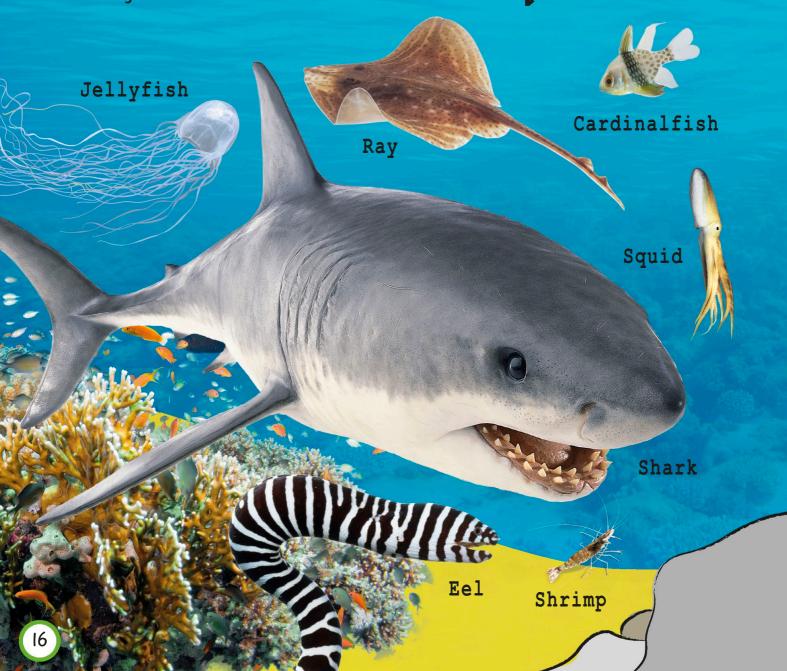




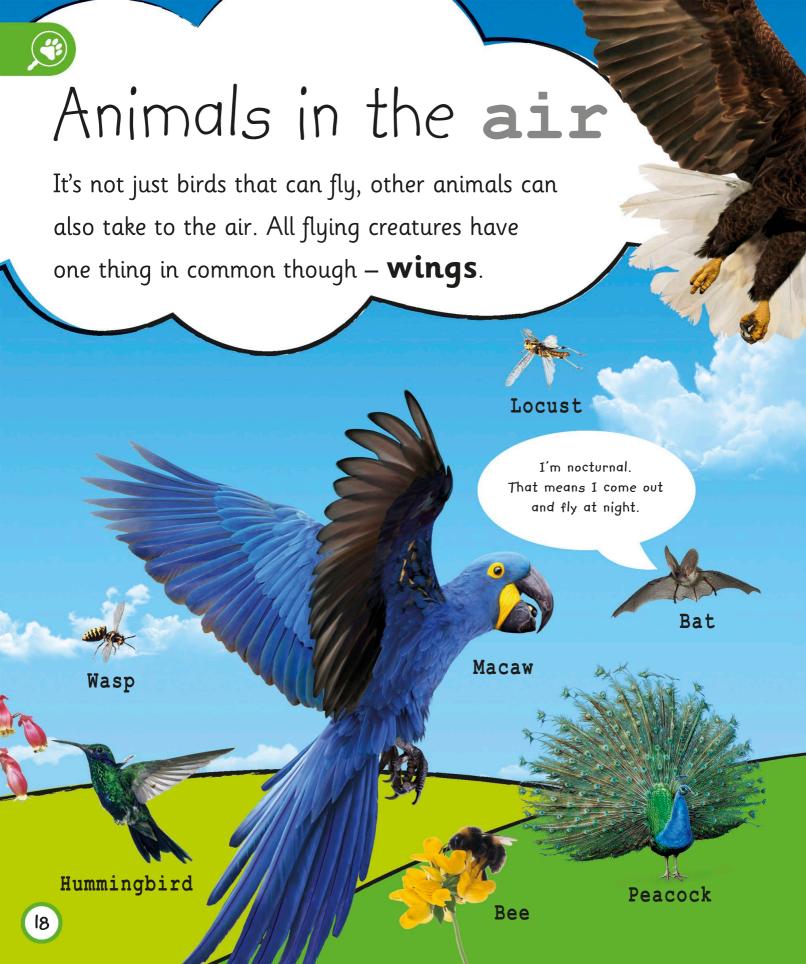
Flying

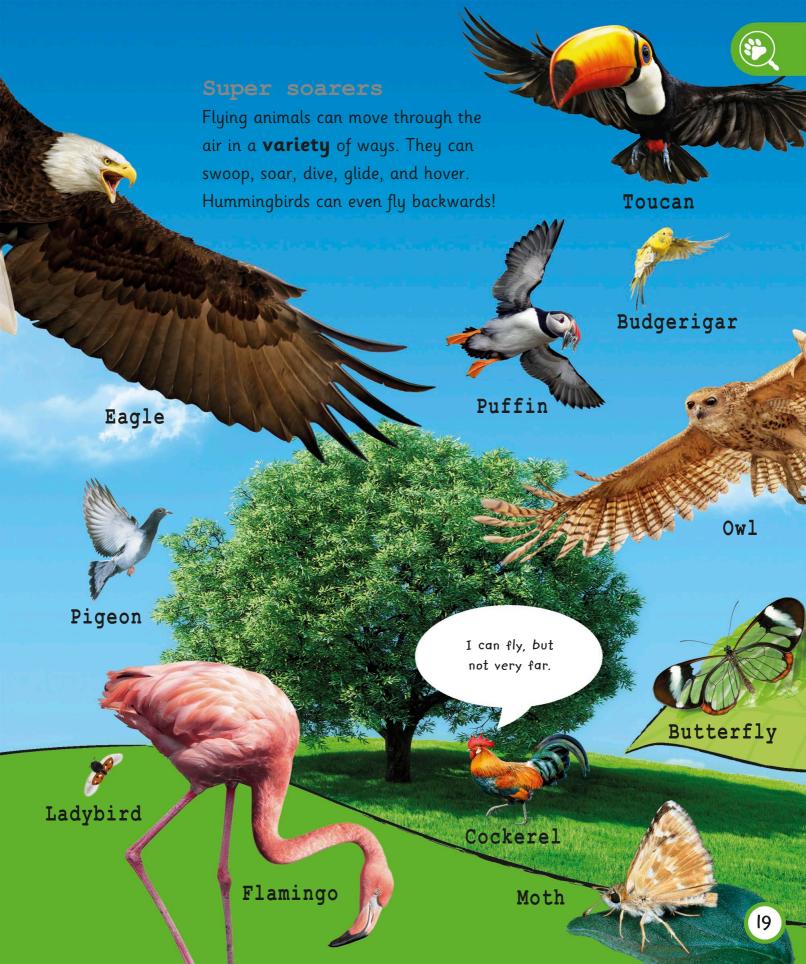
Aquatic animals

Lakes, rivers, oceans, and seas are home to lots of different animals. Creatures that spend all or most of their lives in water are known as **aquatic**.











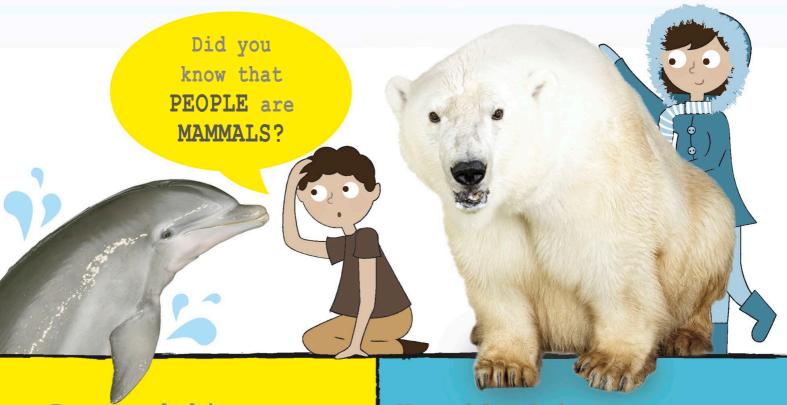
What makes

a mammal?

Mammals are a **group** of animals.

They come in many shapes and sizes,
but they do have a few things in common.

Am I really like a POLAR BEAR?

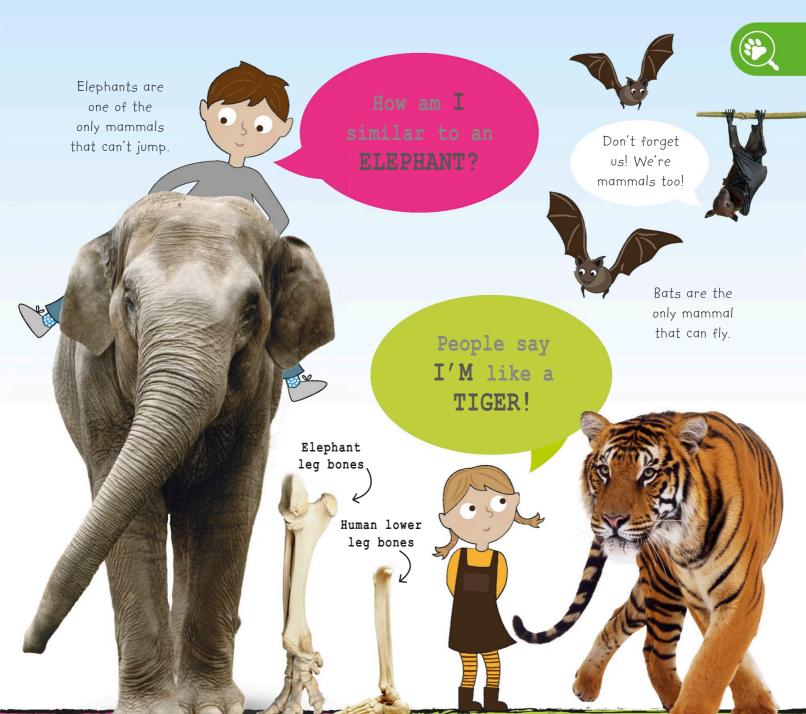


Born as babies

Whether they live on land or in water, almost all mammals are born instead of hatching from eggs like birds. Every baby mammal drinks **milk**.

Warm-blooded

All mammals are **warm-blooded**. This means that they keep a constant body temperature whether they're in a hot jungle or in the freezing snow.



Similar skeletons

Mammals can look very different, but they all have a bony **skeleton** on the inside. You have a backbone, and so do elephants. You don't have a trunk though!

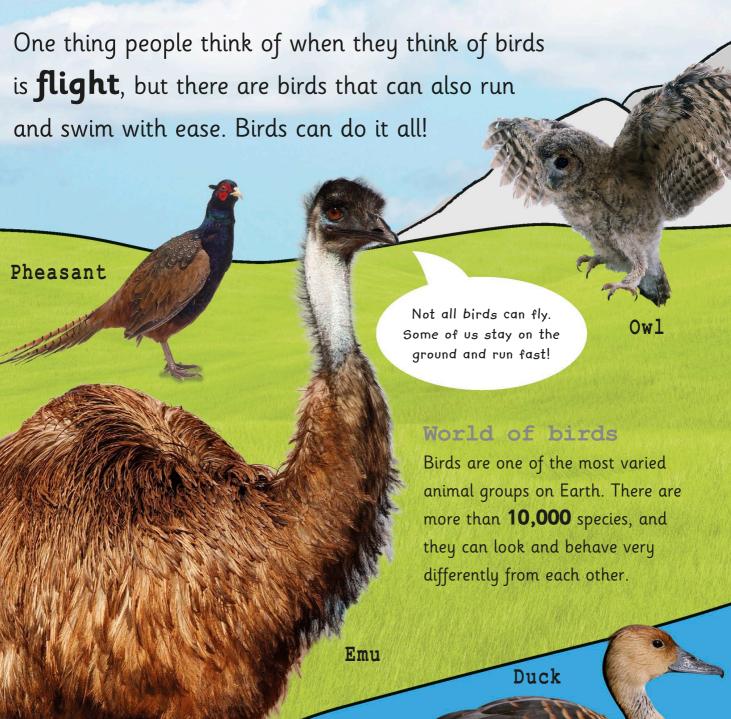
Furry friends

Some mammals are more fluffy than others, but almost all of them have **hair**. The hairs on your head are quite like the hairs on a tiger, only they're not stripy!



Brilliant birds









Fantastic fish

Whether they're in rivers, lakes, ponds, or seas, fish have lots of special features that helps them **live underwater**.

Angelfish

Seahorse

Butterfly fish

I look a little different, but I'm still part of the fish family.

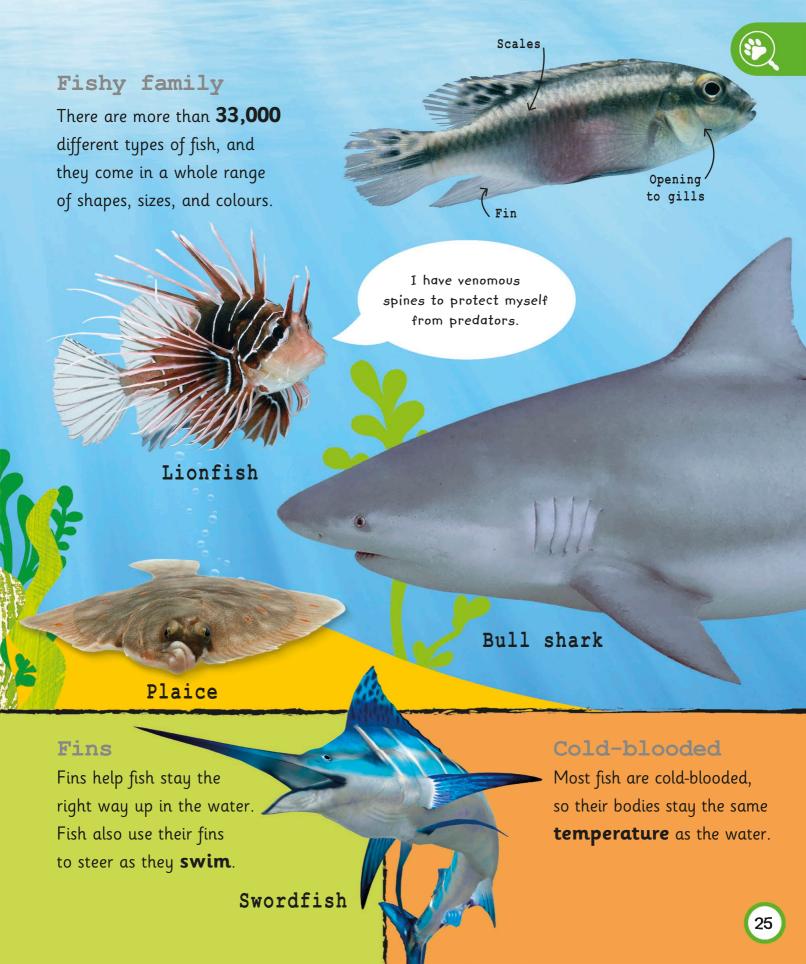
A group of fish is called a **school**. When fish swim together, it makes it harder for predators to pick out just one.

Gills

Instead of **breathing** with lungs like people, most fish use gills to get oxygen from water.

Gills allow / fish to breathe.

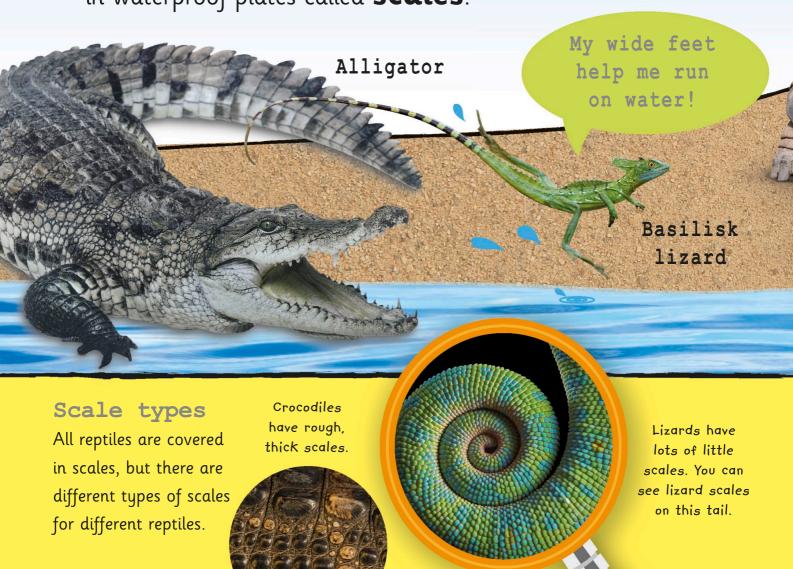
Most fish have scales. Scales protect the fish and make them more streamline in the water.





Remarkable reptiles

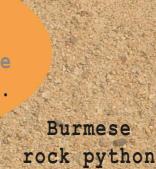
Reptiles are a group of animals with a special type of protection. Their bodies are covered in waterproof plates called **scales**.



Seeking the Sun

Unlike mammals, reptiles are **cold-blooded**. This means they need to sit out in the sun to warm up.

I live a long and slow life. I can live to be more than 100 YEARS OLD.





All reptiles will shed their skin from time to time to get rid of old scales. When snakes do this, it all comes off at once!



Giant

tortoise

Turtle

Snakes have smooth scales that overlap each other.



A tortoise's skin has small scales and its shell has large ones.



Little hatchlings

Most reptiles hatch from eggs.
A lot of reptiles lay their eggs underground to keep them safe.





All about amphibians

Amphibians are a group of animals with a special ability: most are perfectly able to live on **land** and in **water** as adults.



Frog

I'm growing up fast!

Tadpoles

Frogspawn

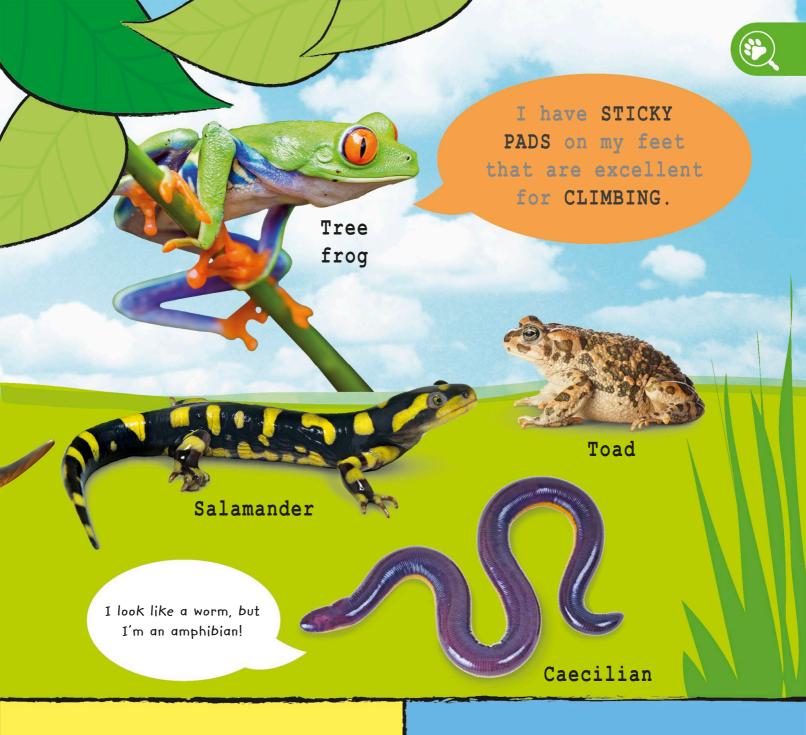
Newt

Life cycles

Amphibians lay eggs in water. The tadpoles that hatch from the eggs **change** as they grow, eventually growing legs and coming onto land.

Land and water

Most amphibians spend part of their lives on **land** and part in **water**. But there are some that prefer one more than the other.



Cold-blooded

Amphibians are **cold-blooded** and cannot control their body temperature. They get hotter or colder depending on the weather and their surroundings.

Slippery skin

Most amphibians have smooth, moist skin with no scales or hair. But what's most special about their skin is that it allows them to **absorb oxygen**.

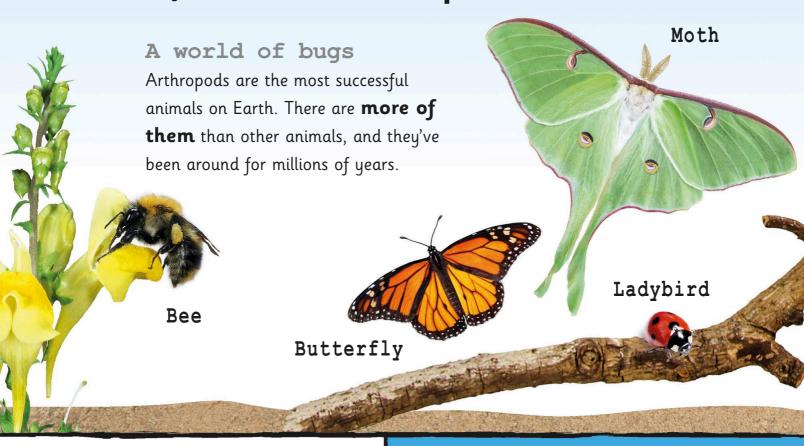


Fly

Dragonfly

Minibeasts

Creepy-crawlies such as flies, ants, spiders, and crabs, all belong to a large group of animals called **arthropods**.



Types of arthropod

Earth's thousands of different arthropods are split into different groups. Here are the main ones.



INSECTS

Bees, ants, flies, and beetles are insects. Insects have **six legs** and three body sections. Most of them have wings.



Ants





legs, and don't have wings.

Harvestman

crustaceans. They usually have 10 or more legs.

called claws.

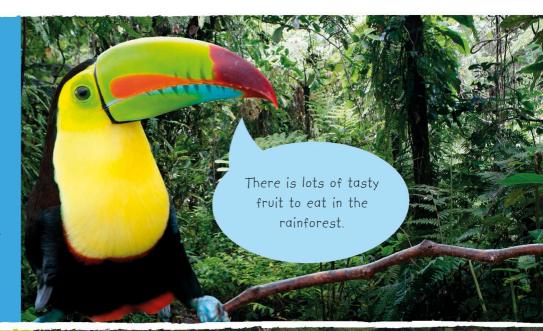


Homely habitats

Animals live in lots of different places around the world. These places are called **habitats**, and each one has animals that are specially suited to live there.

Rainforests

These rainy tropical forests are rich with plants and animals. They're very **hot** and humid, and almost half the world's animal and plant species live there.



Wetlands

Wetlands are places that link land with water. They can be very **swampy** and are usually filled with all kinds of animals, such as fish, birds, reptiles, and amphibians.





While rainforests are hot and humid. there are other forests that usually have warm summers and cold winters.



Grasslands

Many of the animals that live in grasslands travel in herds. They are usually on the move looking for new grass to graze on.



Other habitats

Animals are very adaptable, and can be found in almost every corner of the Earth. Here are a few other places that animals call **home**.







Coral

reefs





Extreme habitats

There are some places where animals live that are hard for people to visit. But the animals in these places are **specially suited** to thrive there.

Oceans

The world's oceans are filled with **all sorts** of animals, including fish, mammals, and more.

Most of them live near the surface as the depths are dark and cold.



Deserts

Places where it hardly ever rains are called deserts. Since there's very **little water**, it's tough to survive, and not many animals live there.



Mountains

There isn't much soil on mountains so there aren't many **plants** for animals to eat. It can also get very cold there.



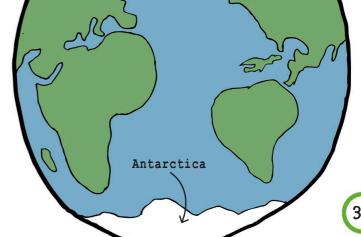
Polar regions

The top and bottom of our planet are the polar regions (the Arctic and Antarctica). They're **cold** and **dry**, and it's hard to find food there.

I'm a walrus. The fat in my body helps me stay warm in the cold.

Different deserts

Most deserts are sandy or rocky, and extremely hot. But Antarctica, which is the **coldest place on Earth**, is a desert too.

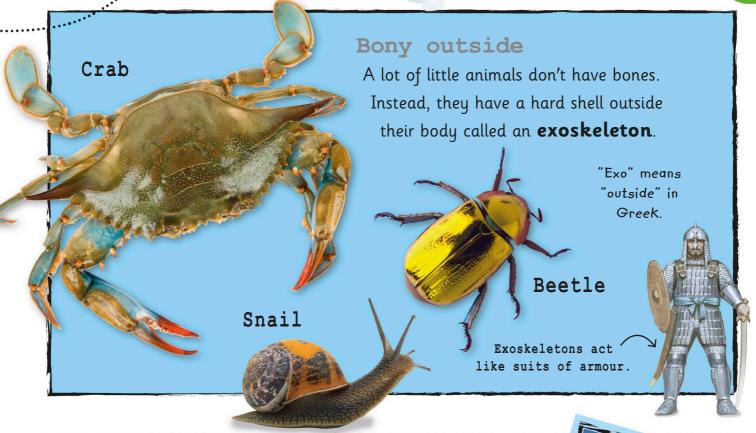




Shape support









Some animals don't have bones on the inside **or** outside. Instead, they have liquid insides, and their muscles help them move.

Anemone

You can see my rings of muscles. They surround my liquid insides.

Earthworm

Jellyfish

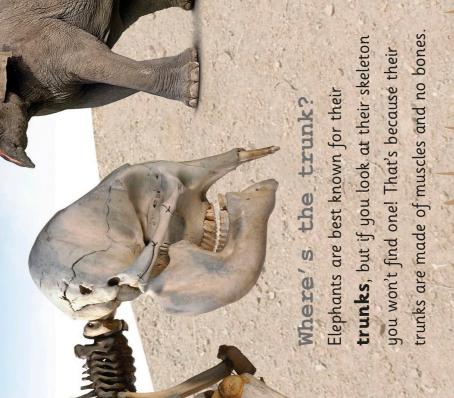
Jellyfish use their muscles to push water in and out of their bodies. This makes them move.





Animals have different types of skeletons based on their **needs**. Some are strong, whereas others can be light or flexible.

Elephant





Here are some other animal skeletons.



Frog

In order to jump long distances, frogs have toes and hind limbs. long bones in their



Snake

The reason snakes are they've got so many so bendy is because bones in their back.



Giraffe

Surprisingly, a giraffe's neck has seven bones, amount as a human's. which is the same



Tortoise

bones on both the inside and outside of their bodies. Tortoises have





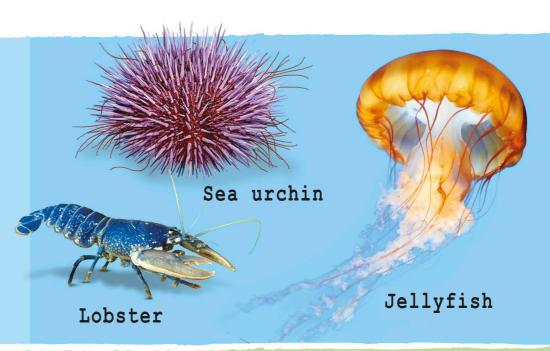
Spineless

Most of Earth's animals are **invertebrates**, which means they don't have a backbone. Where can you find invertebrates? Almost everywhere!



In the water

Rivers and **seas** are full of invertebrates. That includes snippy lobsters with a hard outer shell, and soft, squishy jellyfish.



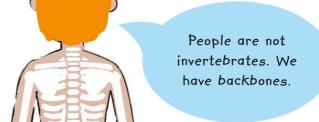
On the ground

Take a look beneath you. There are millions of invertebrates living on or below the **soil**, such as worms, woodlice, and lots of different beetles.



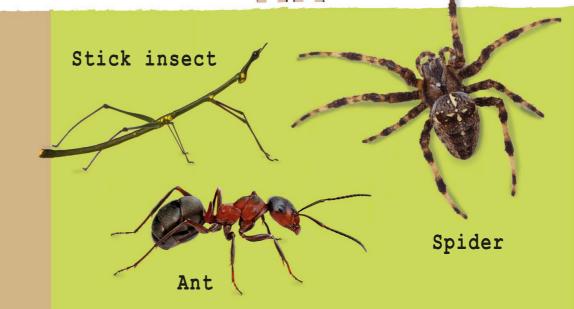


A backbone acts like a big beam in a skeleton to **support** an animal's body. Invertebrates don't have internal skeletons. Instead, they have a hard outer shell or a body filled with liquid.



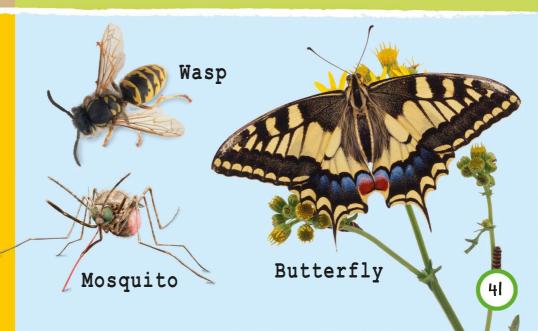
On plants

If you look at **plants** and **trees**, many of them are crawling with creatures. Ants, stick insects, and spiders are all invertebrates.



In the sky

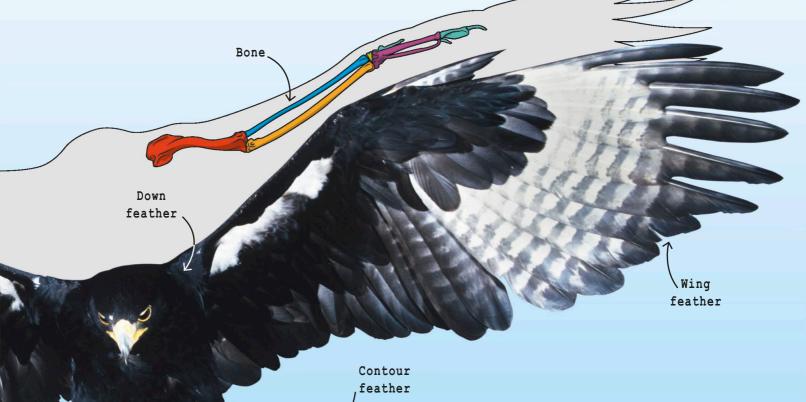
Other than birds and bats, most animals that **fly** are invertebrates. This includes bees, wasps, flies, butterflies, moths, and mosquitoes.





Feathered friends

Birds can look very different from each other, but they all have **wings**, **feathers**, and **beaks**, and they all **lay eggs**. They can't all fly though.



Hollow bones

Most birds have bones full of little air pockets. This makes birds **light** enough to fly. The skeleton of most birds weighs less than all their feathers.



Feathers

Birds have different feathers for different jobs, such as flying or staying warm. Feathers are made from **keratin** — the same material as our fingernails.

Eggs

Baby birds hatch from eggs. Eggs can be different **shapes, sizes,** and **colours**. Birds usually lay their eggs in a nest before they hatch.

Beaks

Birds' beaks are different shapes depending on what the bird **eats**. Hooked beaks are good for picking up seeds, and long beaks are better for catching fish.





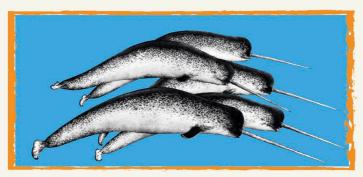






Mythical animals

Tales of magical lands full of strange animals have been passed down for generations. Did these curious creatures ever exist, or were they a case of **imagination** and mistaken identity?

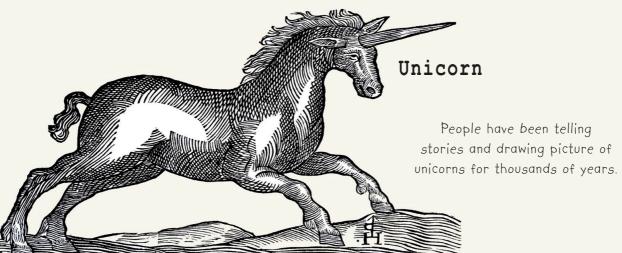


Narwhal

Unicorns

According to legend, these white horses with a **single horn** had magical healing powers.

Years ago, people used to sell narwhal tusks and pretend they were unicorn horns.

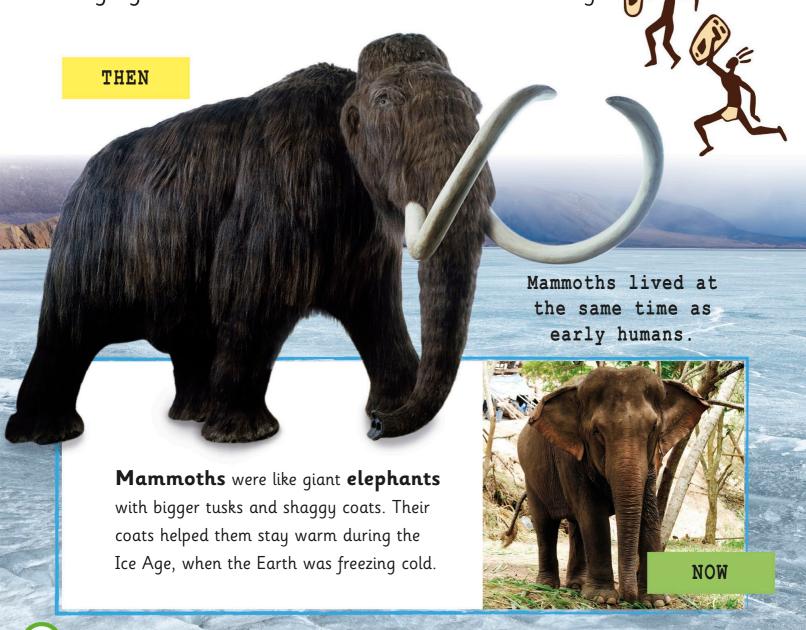






Animal relatives

The Earth is very old, and many animals have **changed** over time. But some animals that lived long ago look a lot like the animals still here today.





WOW that's big!

The archelon was a massive **sea** turtle. It was about as long as a giraffe is tall!



relative of the archelon.

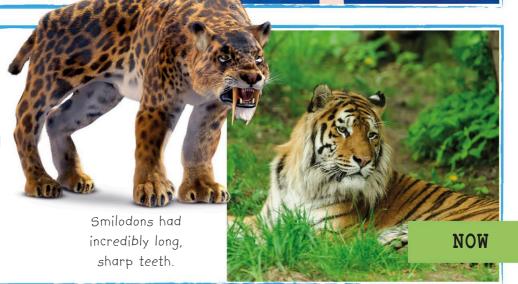
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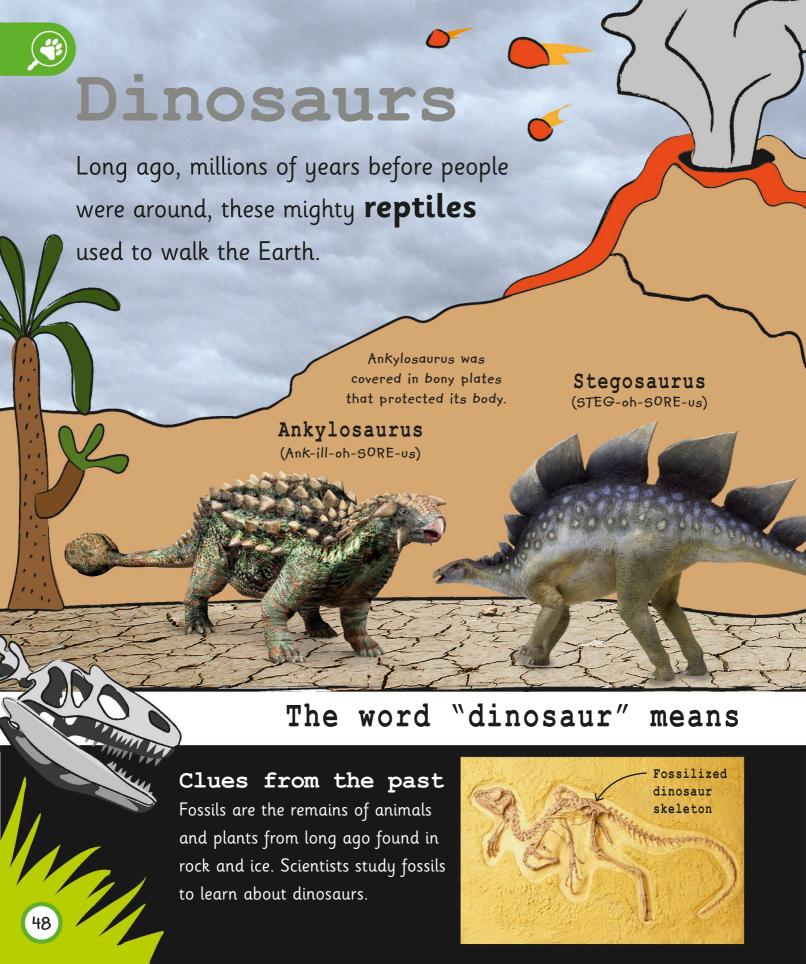
The **megalodon** was a deadly shark three times bigger than a **great white shark** – the deadliest shark alive today.

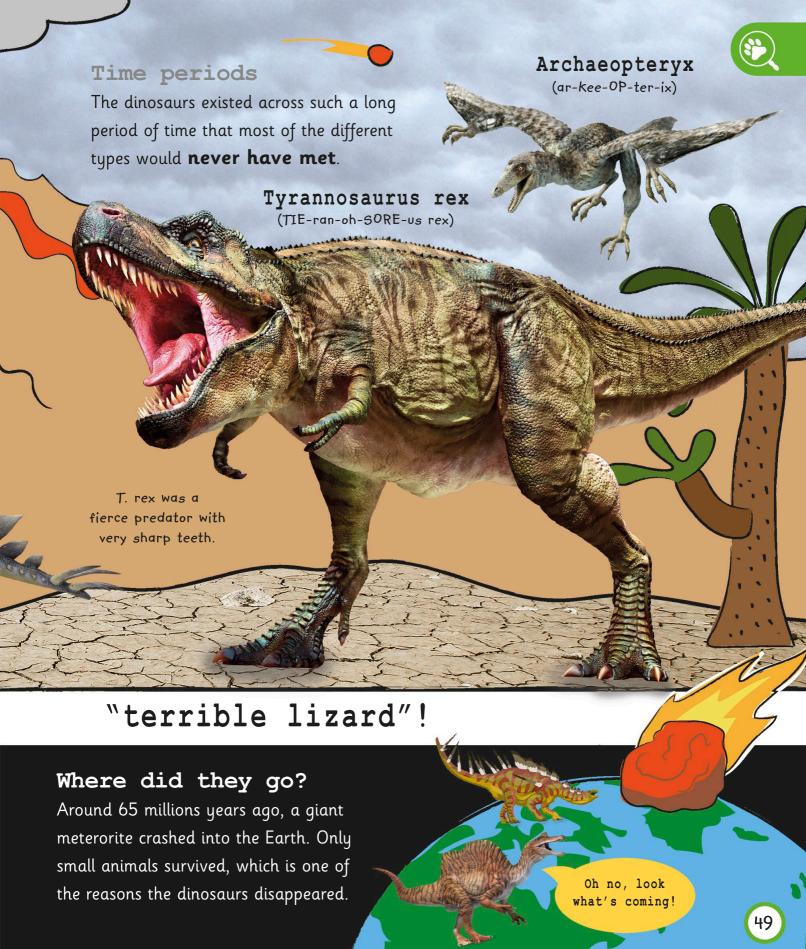


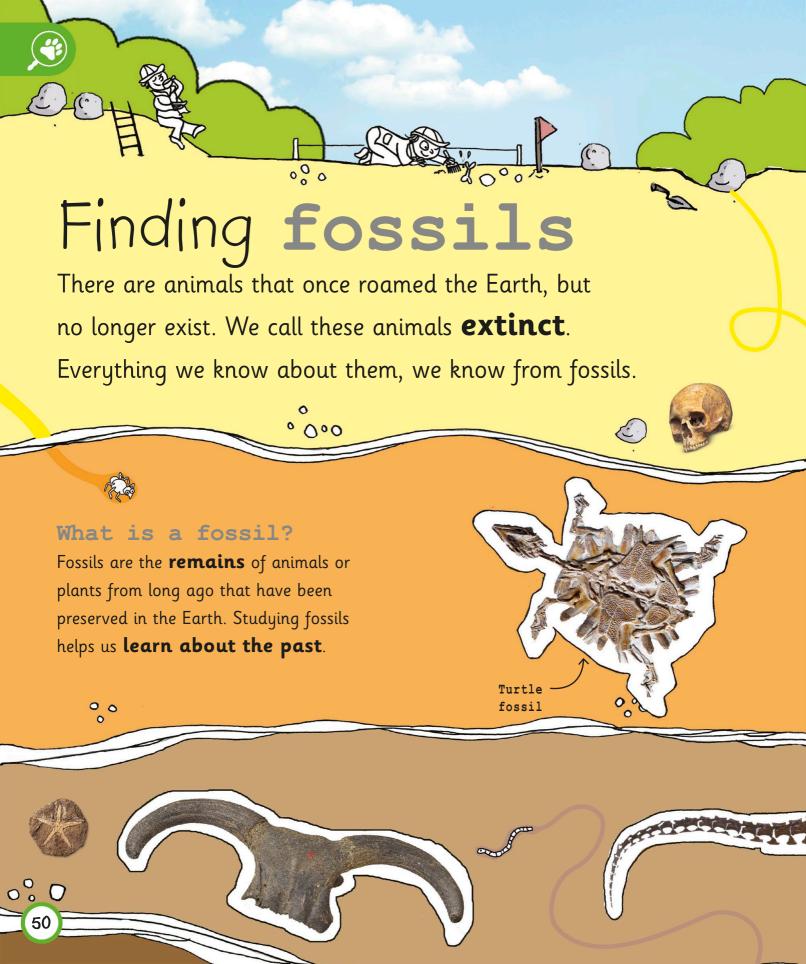
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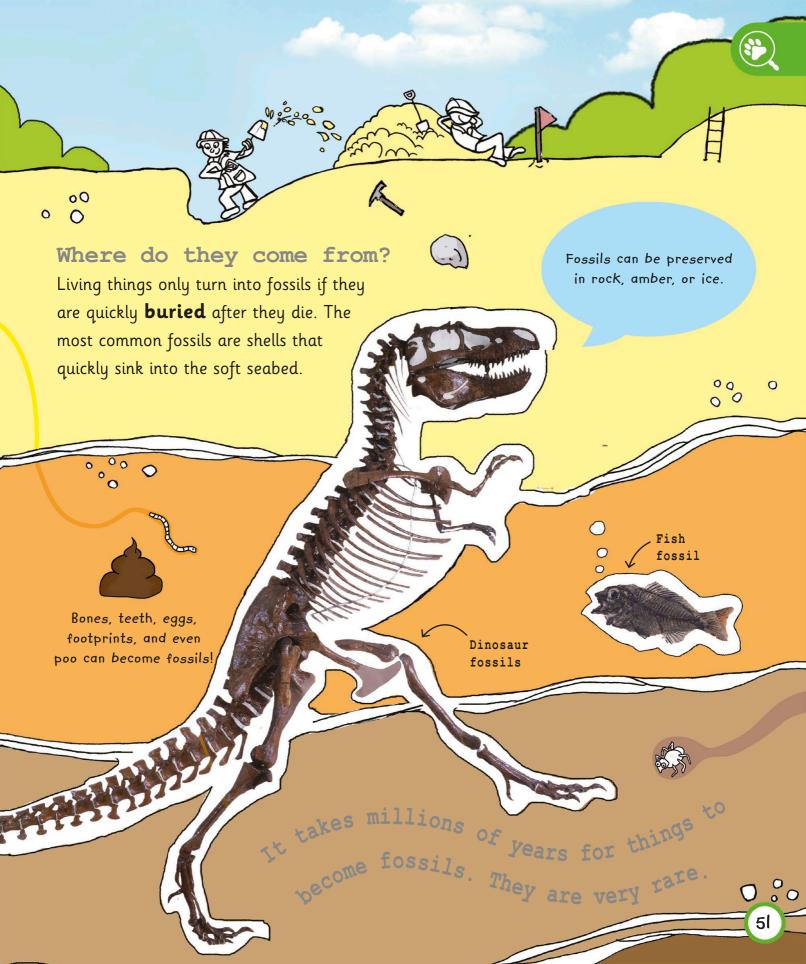
Smilodons look a lot like big tigers or jaguars with long teeth, but they aren't related to any cats still around today.







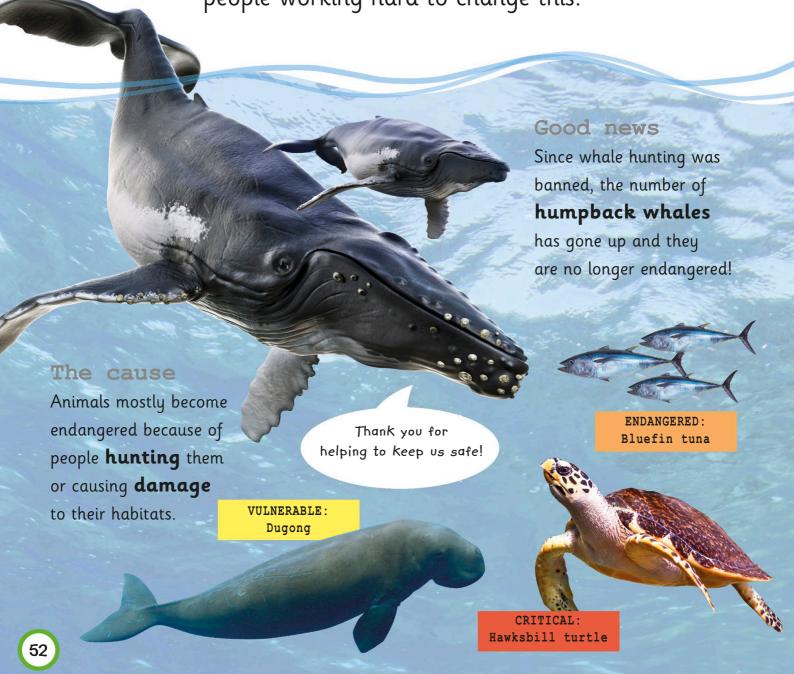






Endangered animals

Sadly, some animals are endangered, which means there aren't many of them left in the wild. But there are people working hard to change this.





CRITICAL

These are examples of animals in danger of becoming **extinct**.

Unless something is done, there may not be any left soon.

Mountain gorilla

wild dog

Northern bald ibis

Sumatran tiger



These are some animals that could become extinct if we are not careful.

Their numbers in the wild are already **very low**.

Galapagos penguin New Zealand sea lion

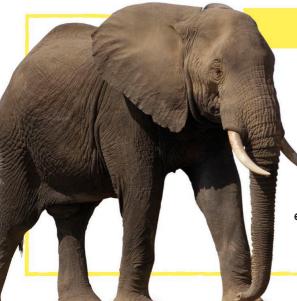


VULNERABLE

These are examples of vulnerable animals. Their numbers in the wild are low enough to start being a **concern**.

African elephant







Polar

bear

Amazing animals



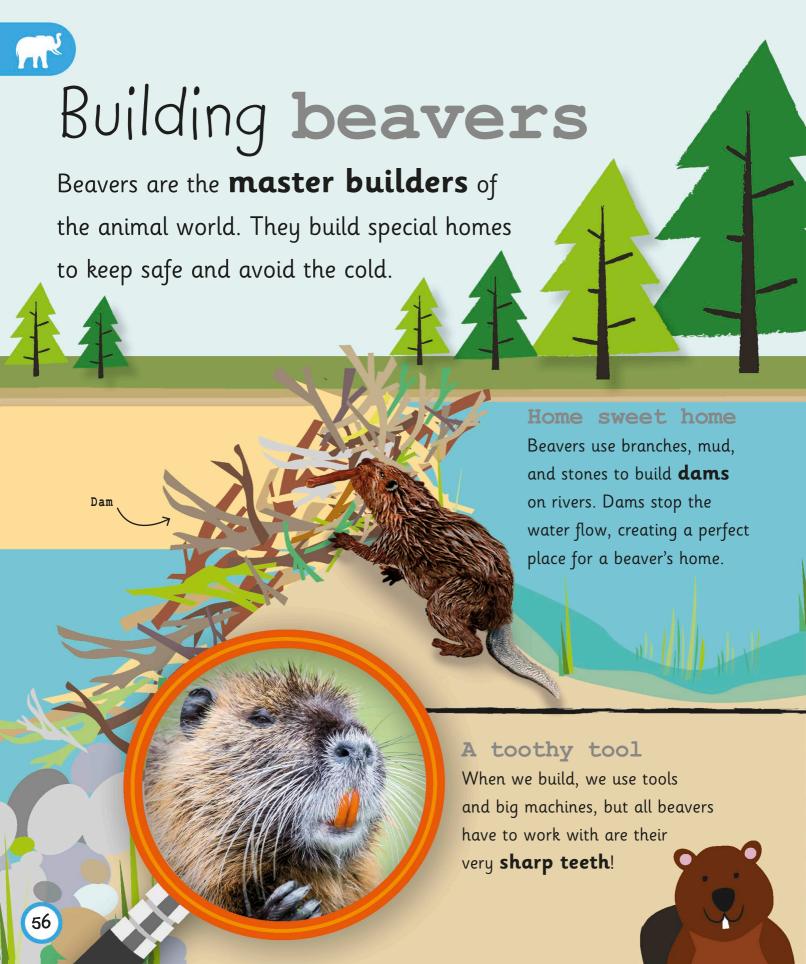








Whether they're feathered or furry, smooth or scaly, or friendly or fierce, everyone has their **favourite animals**. Turn the pages to learn fun facts about lots of incredible creatures. You might even discover a new favourite while you're at it!



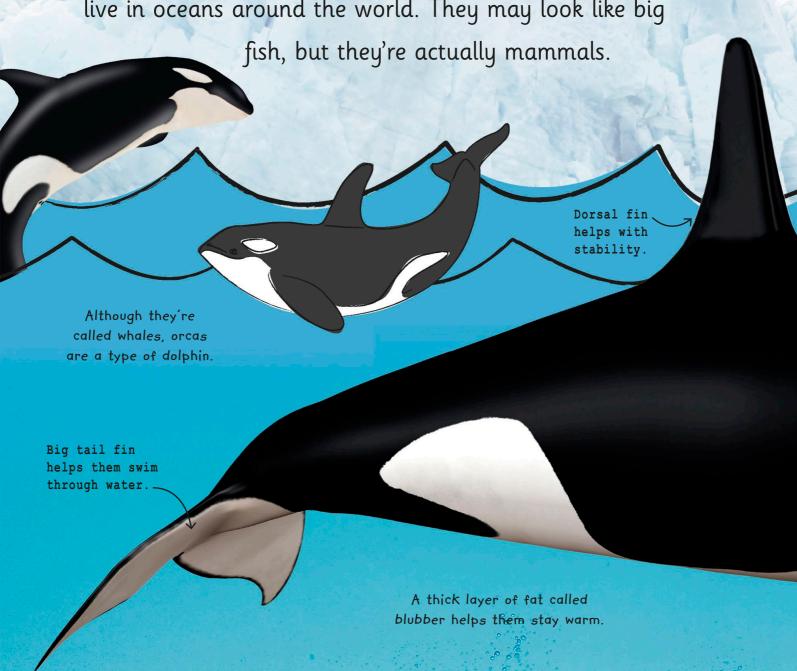


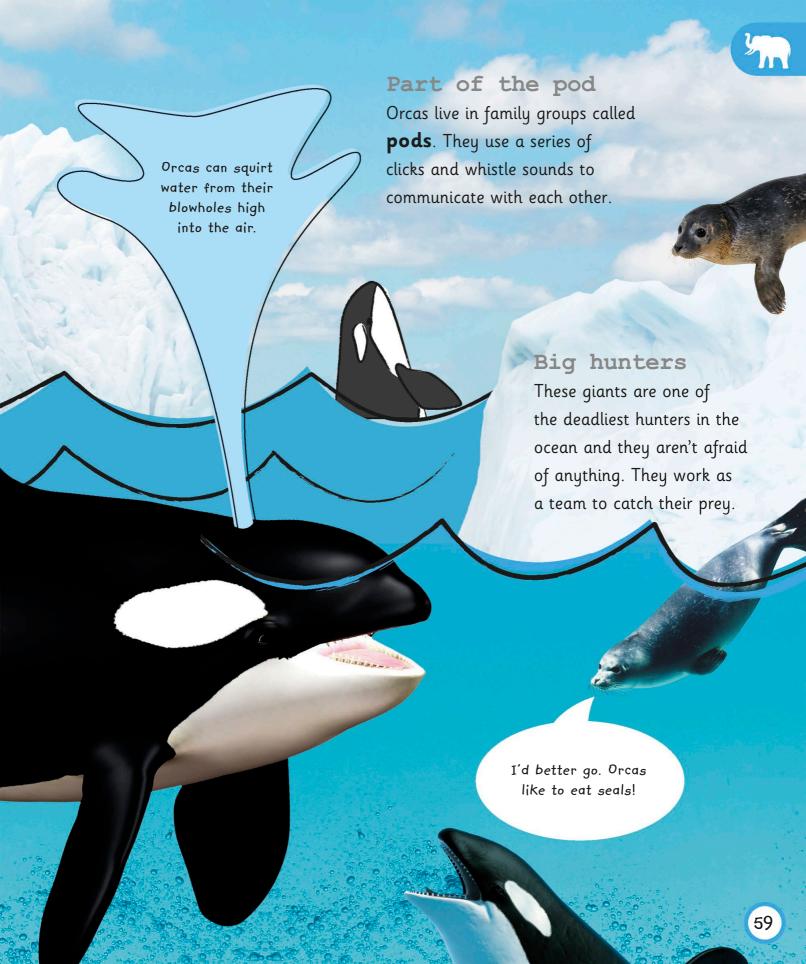




Ois for orca

Also known as **killer whales**, these intelligent giants live in oceans around the world. They may look like big



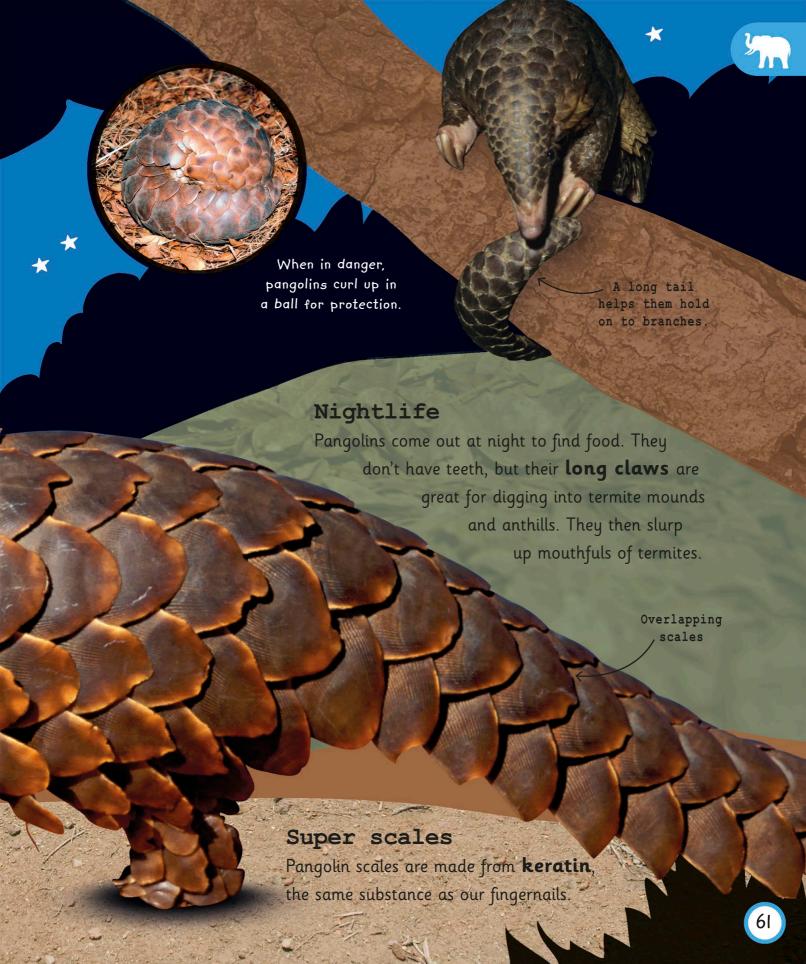




Suit of scales

Is that a walking pine cone or a spiky anteater? No, it's a super-scaly **pangolin**! It's the only mammal in the world with scales.



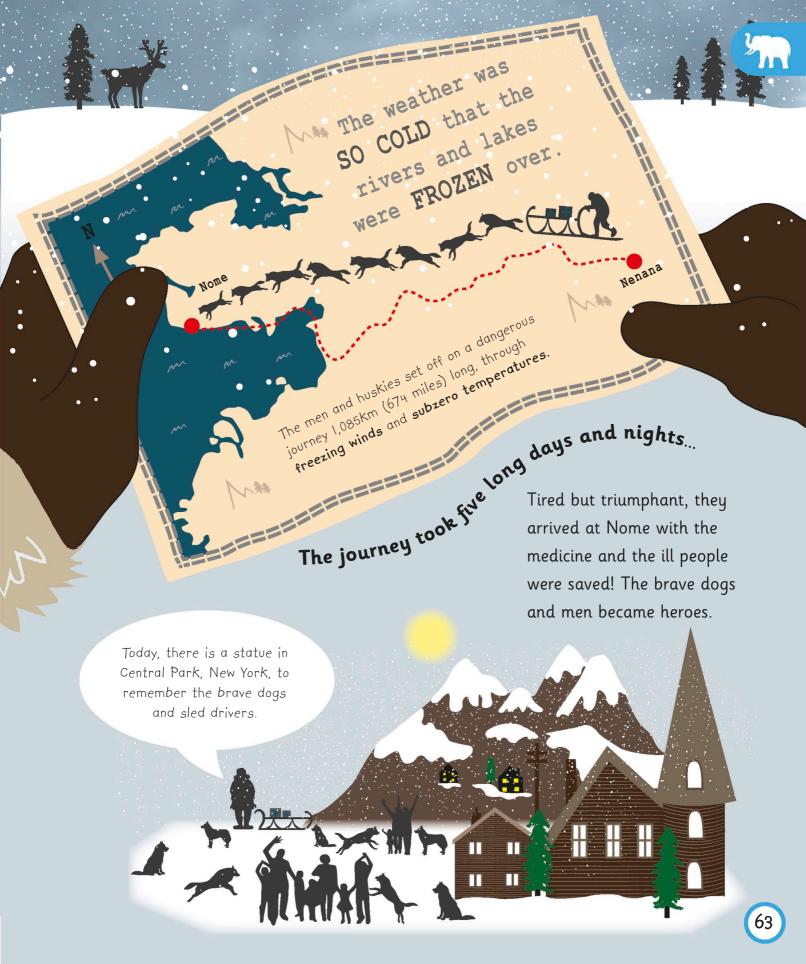




Heroic huskies

This true story of heroic dogs that risked it all to save a town is a great example of why dogs are known as **man's best friend**.











Polar bears



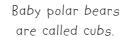
These big, tough bears live in the Arctic where it is very, very **cold**. Polar bears are specially adapted to survive in the freezing conditions.



I'm one of the biggest and strongest land animals in the world. I'm not afraid of the cold!

Super swimmers

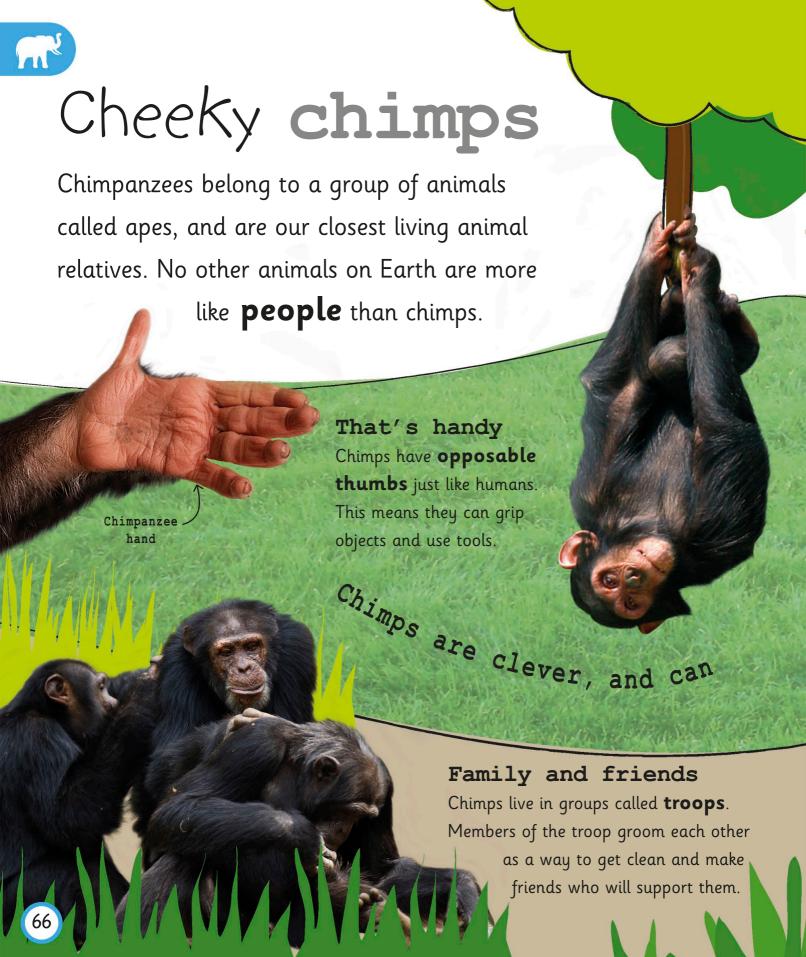
Polar bears are good swimmers. They dive into icy water to get between different areas of the sea ice.



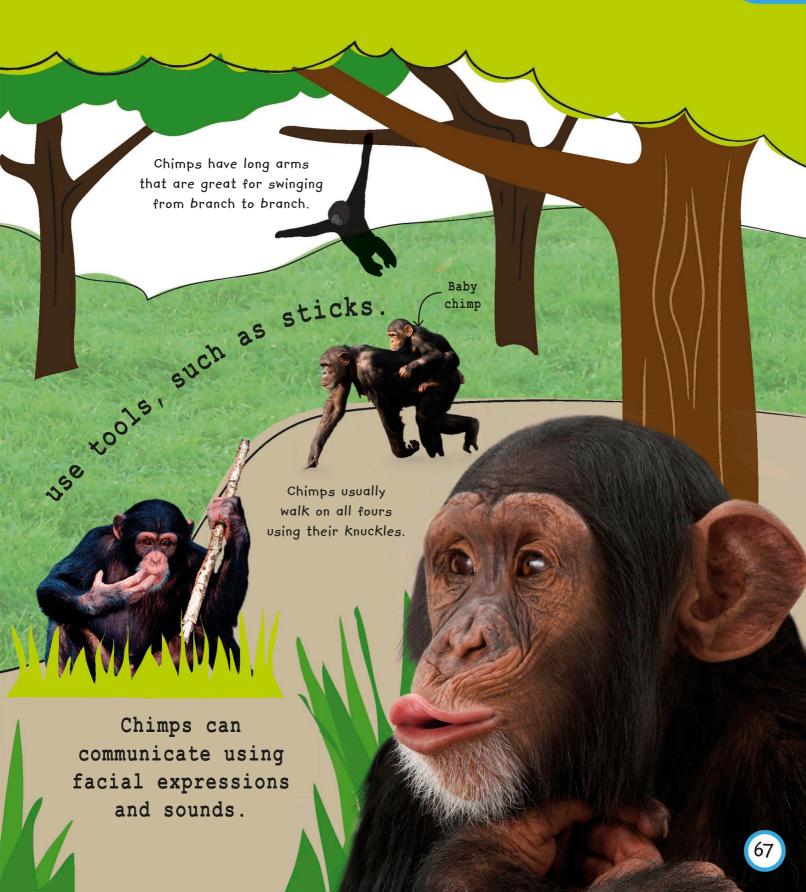
LOOK OUT! Those bears look HUNGRY,

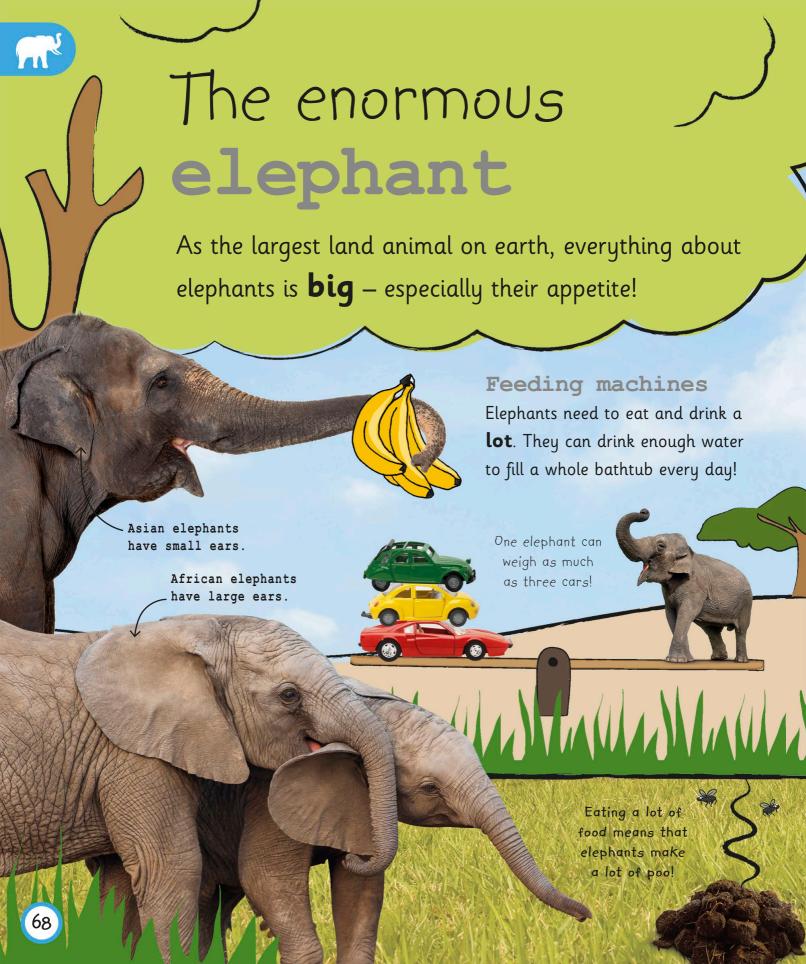
White coat keeps them hidden while hunting on the ice.

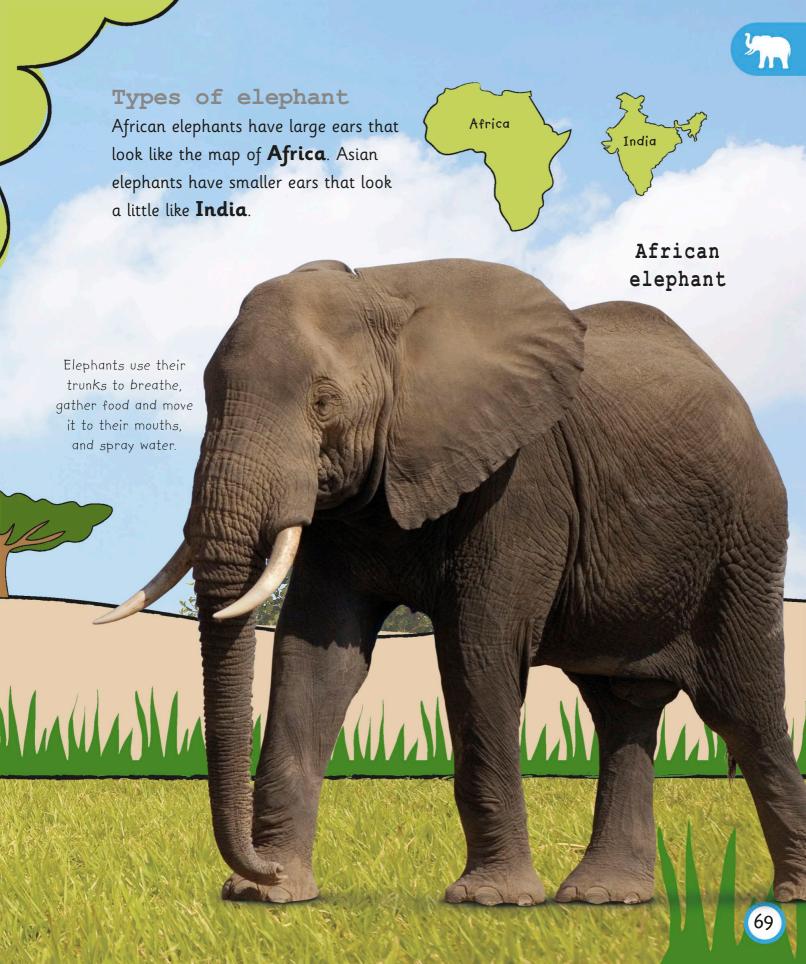














Giant anteater

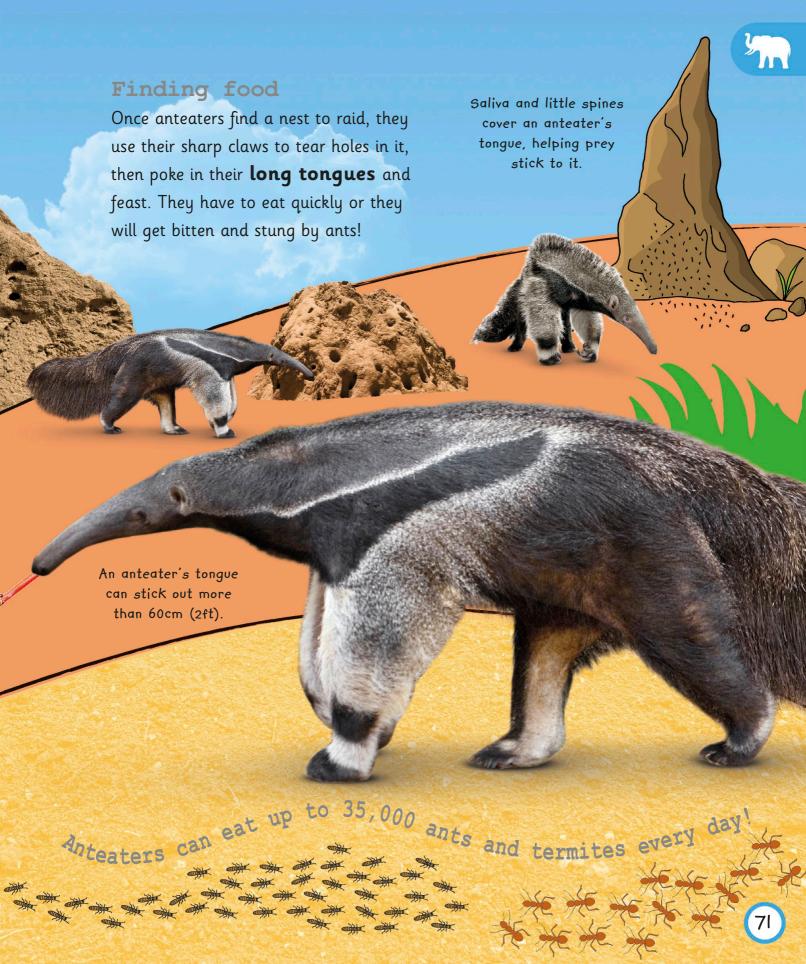
These hungry creatures use their big noses to sniff out ant and termite **nests**. Finding a nest is good news for an anteater, but bad news for their prey!



Anteaters are careful not to destroy any nests they find. Instead, they wait for the nests to be **repaired** so they can go back for more!

Grrr! Leave our nest alone. We've only just repaired it.

Anteaters don't have teeth. They swallow their meals whole!



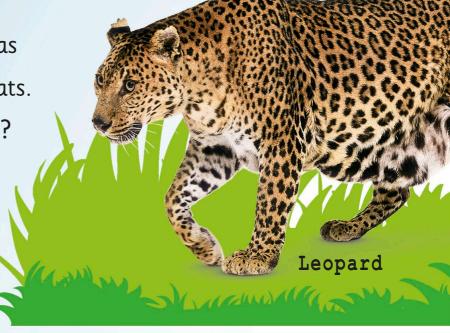


Big cats

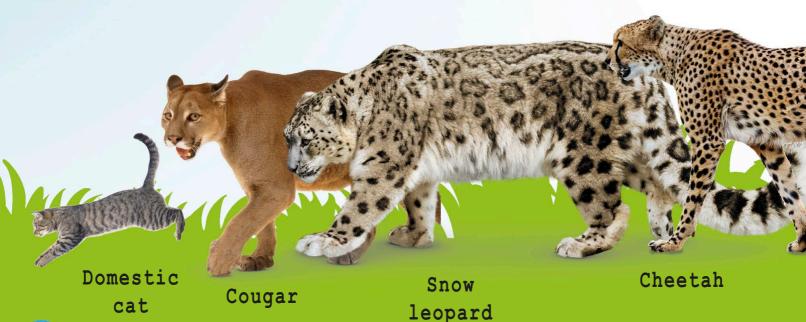
Our cute and fluffy pet cats come from the same family as lions, tigers, and other big cats. Can you spot the similarities?

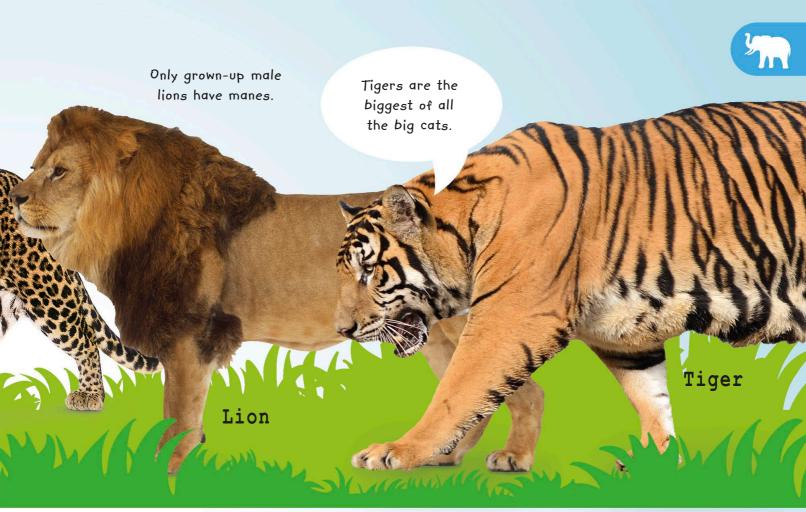
Family of cats

All cats eat meat, so they are adapted to **hunt**. They all have a strong bite to grab their prey, pointy teeth to rip through meat, and very sharp claws.



tall. They are the fastest land animal on Earth.









Many bats hang upside down from branches and rocks while they sleep.



In the bat cave

Although some mammals can glide, bats are the only ones that can **fly**. Not only that, they have a special way of finding their way around in the dark.



Bat colonies can have more

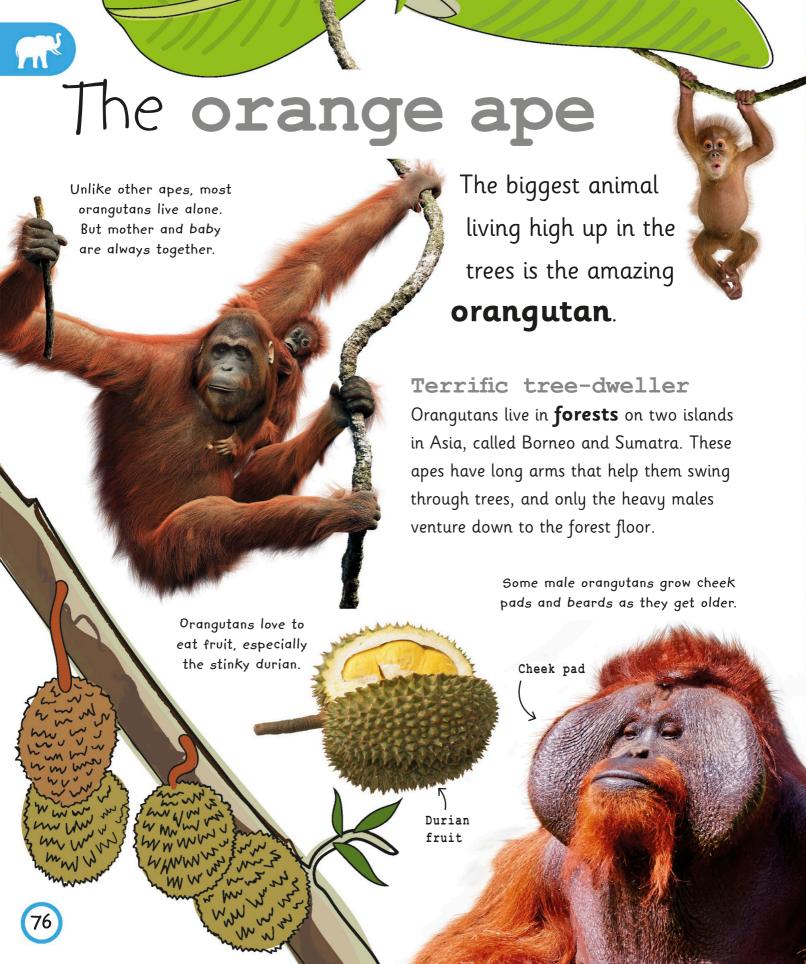
Some bats are sociable and gather in

Blind as a bat

Bats sleep during the day, and many of them live in dark caves. Most bats don't have good eyesight, but make up for it with great hearing and something called echolocation.









The lion and the mouse

If I'm very quiet, maybe the lion won't wake up.

One day while out for a walk, a little mouse came across a huge **lion** blocking her path.

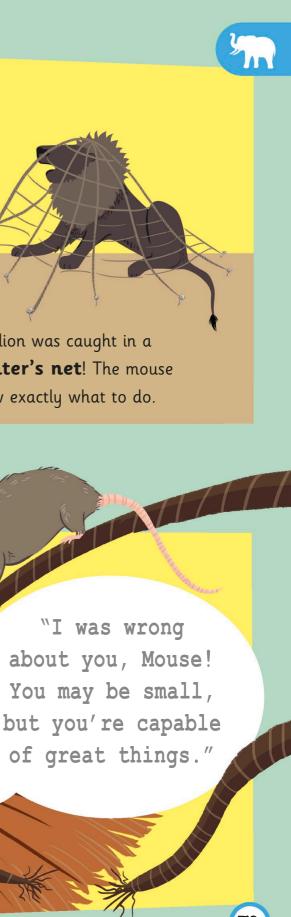
The mouse had no choice but to climb over the sleeping lion. Suddenly, the lion woke up and grabbed the mouse by her tail!

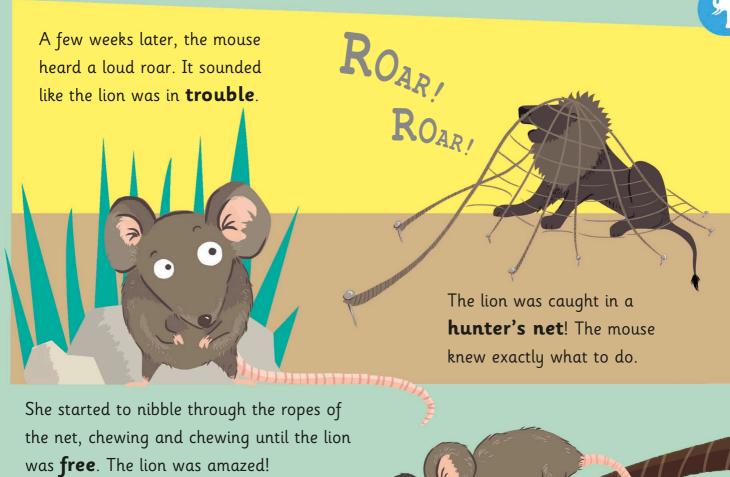


"Tell me, Little Mouse, why shouldn't I eat you?" said the lion.

> "Because if you don't, I promise to help you one day." said the mouse.

The lion found this so funny, he decided to let the mouse qo. "A tiny mouse like you would never be able to help a great big lion like me!" he laughed.







Barn owl

Owls are one of the master hunters of the bird world. Follow the pictures and see how a little egg turns into such a skilled hunter.

After a few weeks the owls

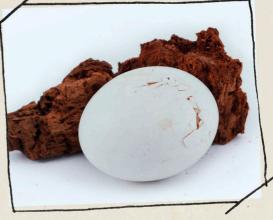
become fluffy fledglings.

to keep warm, then a little while

later they develop flight feathers.

First, they develop down feathers

Soon, owls develop enough size, strength, and balance to be able to leap from their nests and take flight.

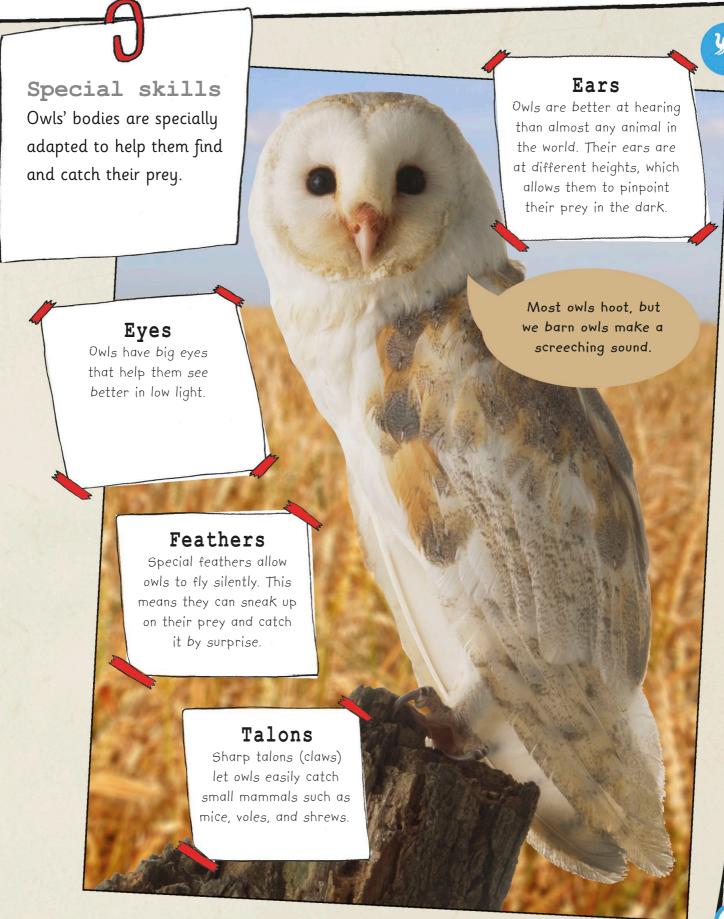


Like all birds, owls hatch from eggs. When they're ready to come out they use a special tooth on their beak to break the shell.



Despite their name, barn owls don't all live in barns. But they do like to nest indoors.



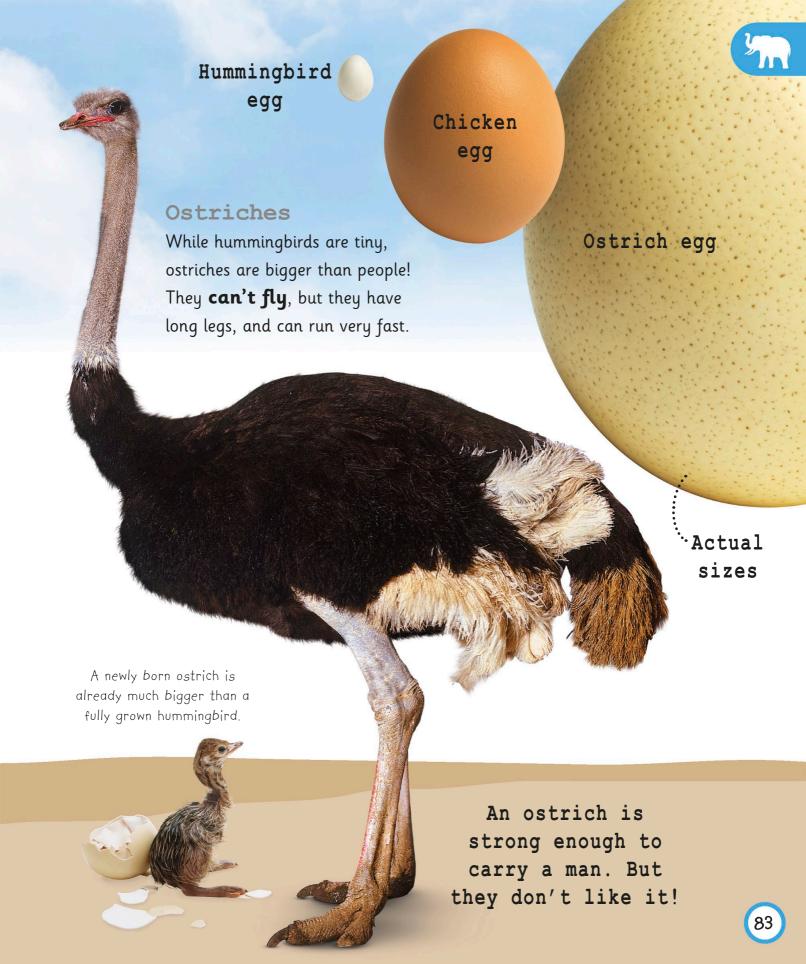




Little and large

All bird species lay eggs and have feathers, wings, and beaks. But they can be very **different**. There's no better example of this than looking at a hummingbird and an ostrich.









These funny birds mostly live in very **cold** places, but they have a few tricks to help them stay warm.

Keeping warm

A penguin's feathers are packed closely together.
This **traps air** and stops the penguin getting too cold.

When it gets very cold, emperor penguins huddle together for warmth.

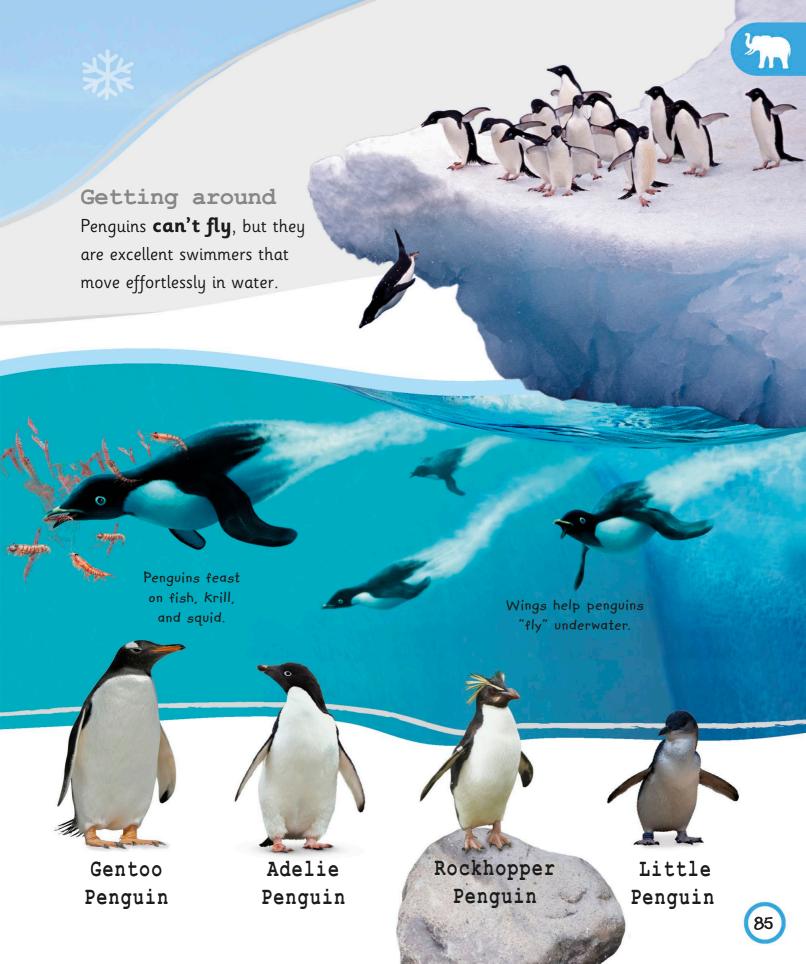
Types of penguin

There are 17 different species of penguin. Little penguins, the smallest species, are only a little bit taller than this book!



Emperor Penguin







Golden eagle

When people think of a master hunter, their first thought might be a lion, tiger, or shark. But nobody should forget about the **master of the skies**.

Fully outstretched, a golden eagle's wingspan is longer than a person.



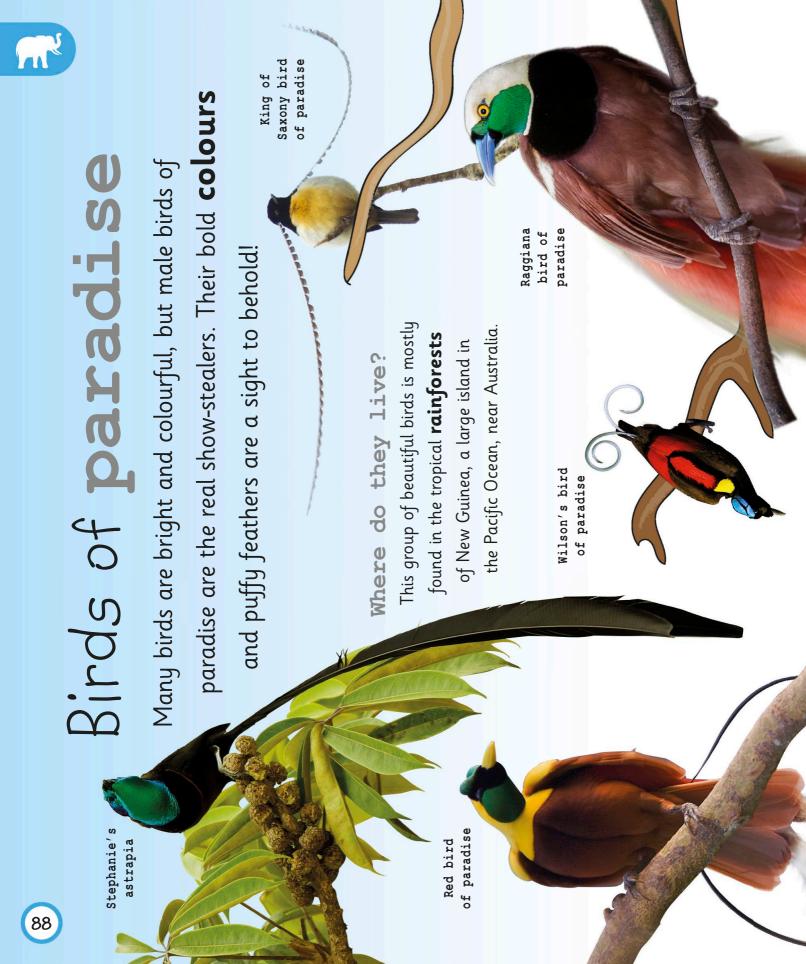
With their soaring speed,

powerful talons (claws), and incredible eyesight, golden eagles are amazing hunters. One of the only things they need to be afraid of is other eagles.

\ Strong,
hooked beak

Golden eagles are named for the golden feathers on their crown.





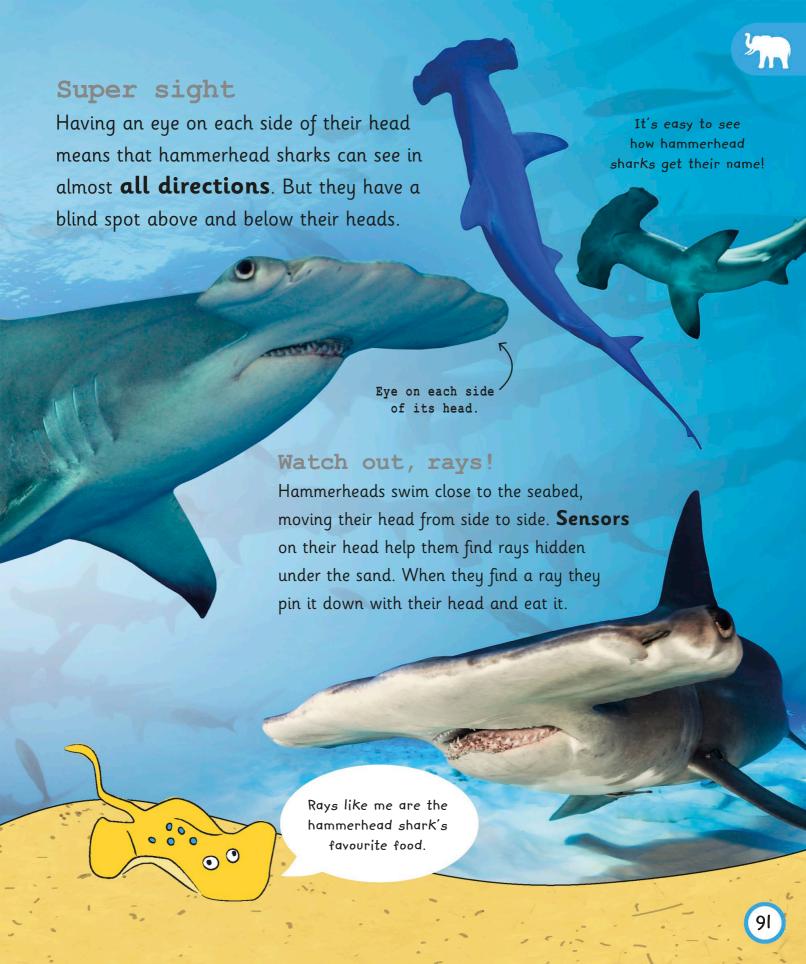




Hammerhead

This shark may look a little strange, but its wide head and unusual eye position mean it has excellent **vision**. Hammerheads live in warm, tropical waters.

I swing my head around near the seabed to find food.



M

Sea soarers

Manta rays are **giants** of the sea. As they gracefully flap their huge fins, it looks like they're **flying** through the water.



Manta rays sometimes leap out of the sea.



Gentle giants

Fin tip to fin tip, manta rays are wider than a **giraffe is tall!** Something that big might look scary, but manta rays aren't dangerous to most animals. They only eat tiny creatures called plankton.



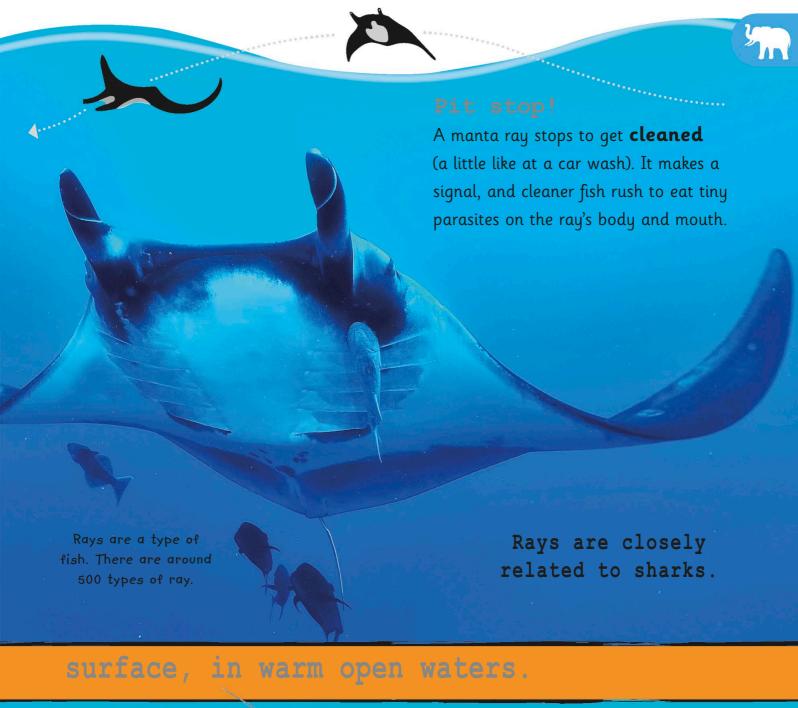
Manta rays swim near the sea's

Small stingers

Manta rays are just one member of the ray family. Other rays are smaller and often have painful stings.













Fearsome fish

Piranhas are toothy fish that live in the rivers of South America. This red-bellied

piranha is the fiercest type.

A gruesome grin

Piranhas have sharp teeth and strong jaws. Some only eat fruits and nuts, but red-bellied piranhas eat insects, bigger animals, and even each other!

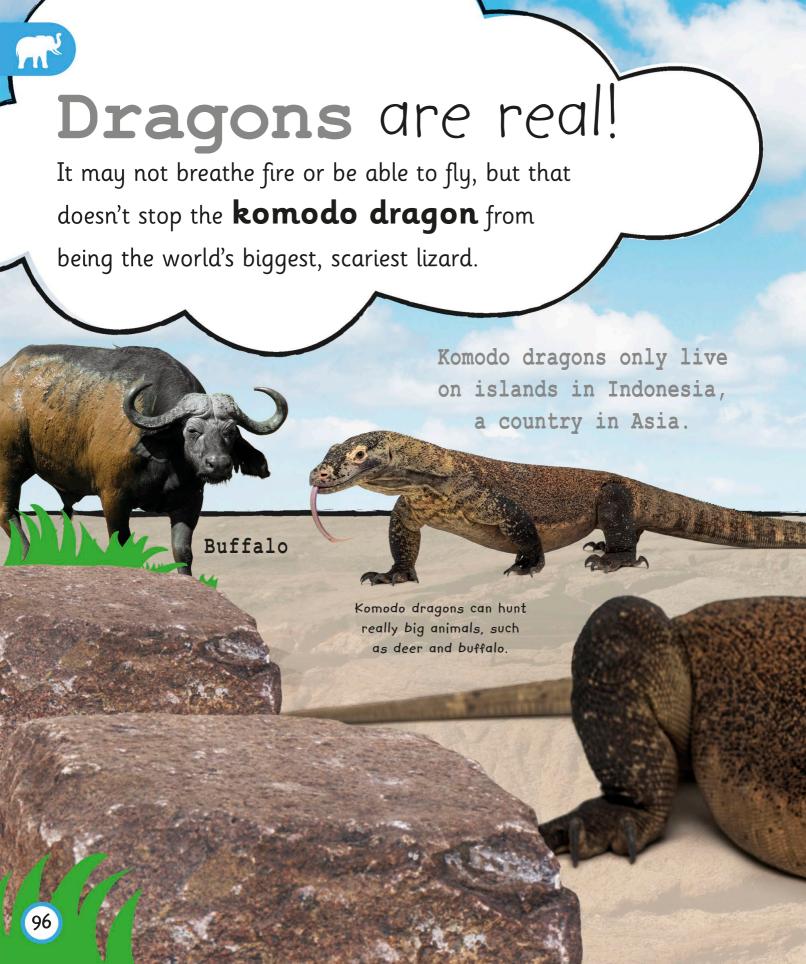
Piranha means

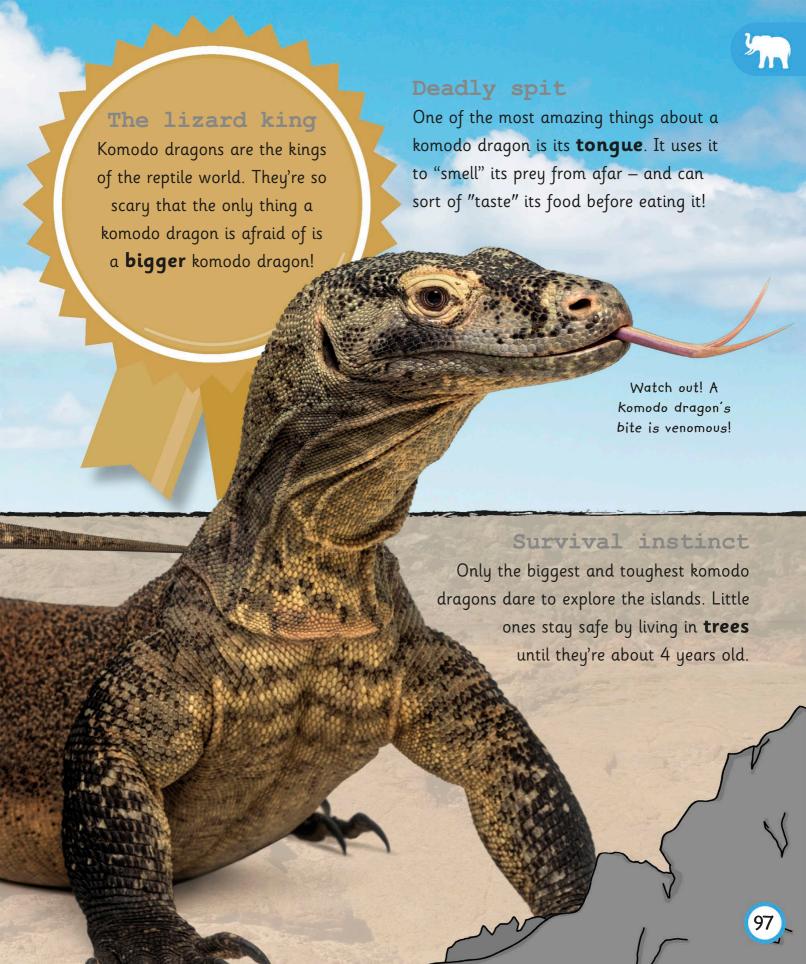
Feeding frenzy

A group of red-bellied Diranhas can eat an If red-bellied piranhas are starving they can **swarm** on weak prey that enters the water and eat it right down to the bone!



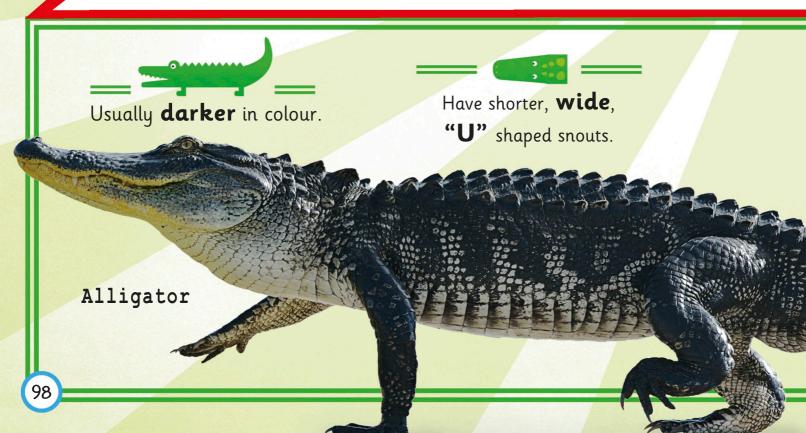








Crocodile or







"V" shaped snouts.



their mouths are closed.

They live in **freshwater** and **saltwater**.

Crocodile



alligator?



Their bottom teeth are hidden when their mouths are closed.

I'm an alligator.

They live in **freshwater**.

Which is deadlier?

Both crocodiles and alligators are dangerous hunters, but crocodiles are more aggressive, have a stronger bite, and are usually bigger than alligators.

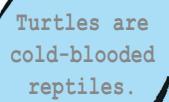


Sea turtles

Like tortoises, turtles are **reptiles**.

But unlike tortoises, sea turtles live most of their life in the sea, and only come

onto land to lay their eggs.





Baby turtles have to move quickly unless they want to be an easy meal for crabs and birds.





During nesting season, female turtles swim ashore at night and dig a hole for **their eggs**. Then they swim back to sea and leave the eggs behind.



A female turtle crawls across the beach to find a safe spot to dig a nest for her eggs.



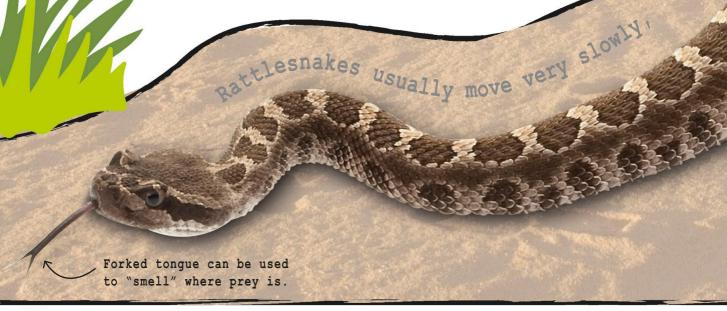






Rattlesssssnakes

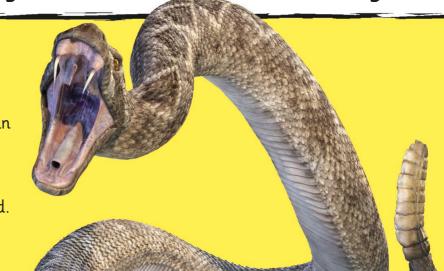
These sneaky snakes have a shaking "rattle" at the end of their tails to warn enemies to **stay away**. Enemies that don't, might receive a very nasty bite!



A rattlesnake's guide to hunting

1 Ssssseek out

Snakes don't have ears like we do, so they can't listen for prey. But they can feel **vibrations** around them, and even detect nearby heat. They use these special skills to track down food.







Clingy geckos

Geckos are little lizards with a very **sticky skill**. Can you run up walls or hang upside down from the ceiling? Geckos can!

Electric blue gecko



A gecko's clinging ability comes from thousands of **tiny hairs** on its toes. The hairs aren't sticky, but they're so small that they get caught up with

Geckos don't





Northern spiny-tailed gecko



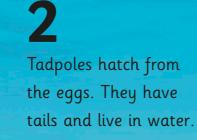






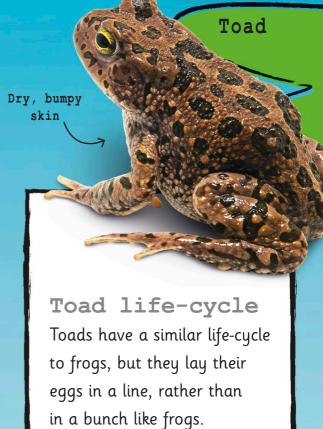
bumpy, dry, skin.

I don't mind dry skin, so I can live further away from water than a frog.



Tadpoles 3

Over time, tadpoles
grow into froglets,
which have stubby legs
and a small tail.



M

Red-eyed

*tree frog

These friendly-looking frogs are found in hot tropical forests. They're **brightly coloured**, but also very good at hiding.

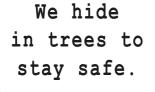


Red-eyed tree frogs lay their eggs on leaves.



Red-eyed tree frogs are only active at night. During the day they tuck their arms and legs close to their bodies and **shut their eyes** so their bright colours don't give their location away.







Sticky pads on their toes help them grip leaves and branches.

Escape tactics

Sleeping red-eyed tree frog

These clever creatures are masters of the **quick getaway**. If a predator comes close, they quickly open their bright red eyes, surprising their enemies just long enough for them to hop to safety.

Bright colours

There are lots of frogs that live in trees. They are some of the most colourful animals in the world.



Fringe tree frog



Dyeing poison frog



Red poison dart frog

Look at me.
I'm teeny tiny!



Awesome

axolotl

Most amphibians look different as adults than they do when they're born (think of frogs and tadpoles). But axolotls **don't change** – they just get bigger.



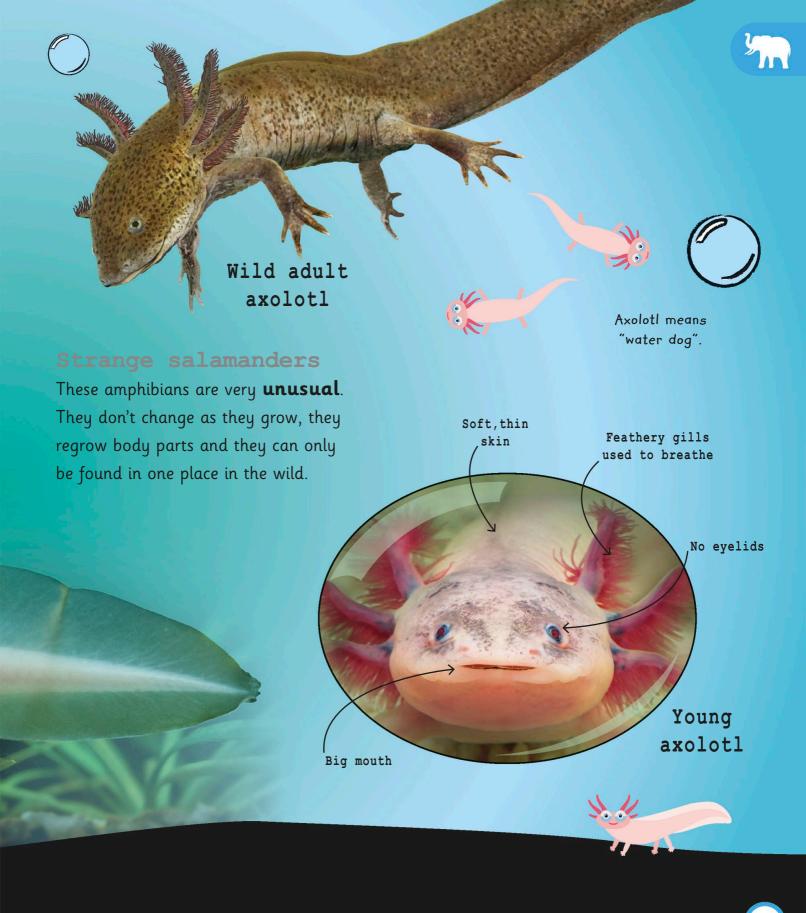
Baby axolotl

Amazing ability

While lots of amphibians can **grow new limbs**, axolotls go one step further. They can also regrow their spines, organs, and even their brains.

Axolotls don't go on land like other amphibians. They enjoy the water too much.

Most axolotls grow to be about my size.





Praying mantis



These curious creatures have nifty ninja moves.

They **pounce** on their prey so **quickly** that it's hard to see them doing it!

Orchid mantis

Living traps

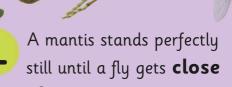
Mantises are the **deadly hunters** of the insect world. They blend into their surroundings and then strike in an instant to take down prey.



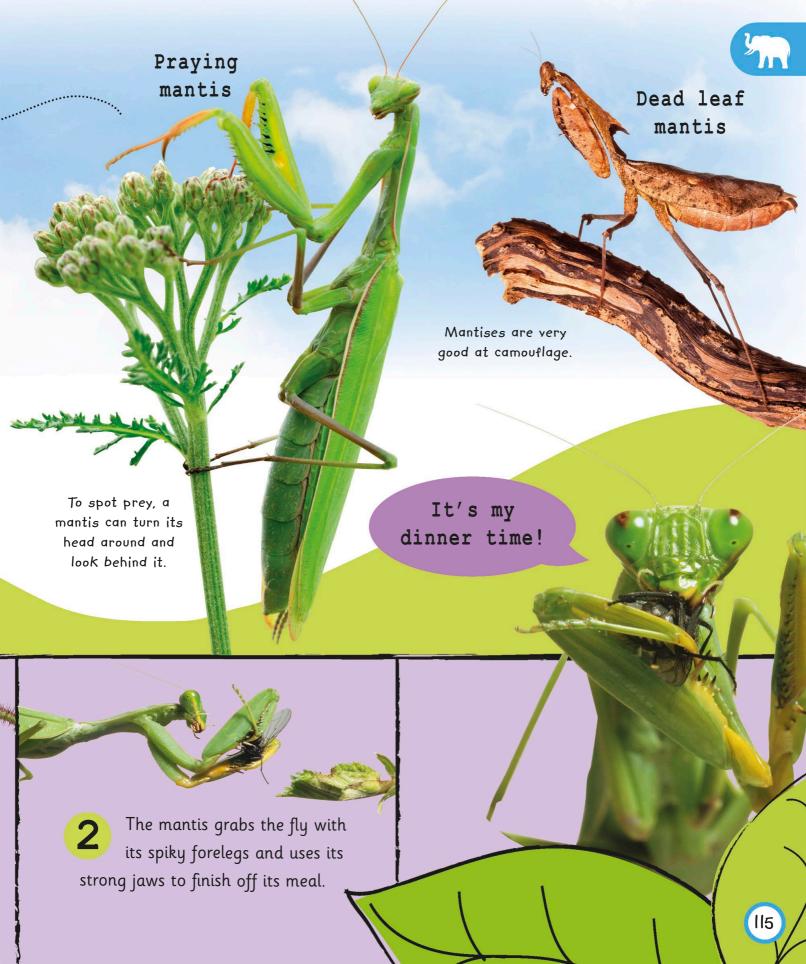
On the hunt

A mantis uses its **huge eyes** to spot its prey. Then it finds a hiding spot and waits for insects, spiders, mice, frogs, or lizards, to get close enough to ambush.





enough for it to pounce.



Life in a hive

Honeybees live together in groups called colonies. They have homes called **hives**, which are very busy places full of of bees buzzing around.

Drones are the only males in the hive. They help the queen make eggs, and never leave the hive.

Drone

The boss of the hive is the **queen bee**. She is the only bee that can lay eggs. Worker bees clean and feed her.

Worker bees are the busiest of all!
They build the hive and help protect it from any attackers.





The leaf that walks

Is that leaf moving? No, it's actually a sneaky **leaf insect** using clever camouflage to avoid being eaten!



More leaf pretenders

Leaf insects aren't the only animals that look like leaves. Here are some other animals it would be **hard to spot** in a forest.

Asian leaf frog

This frog spends most of its time on the **forest floor**, so looking like dead, brown leaves helps it stay hidden.





A light in the dark

What would you do if you were out in the dark and couldn't find any light? Well, if you were a **firefly**, you could just make your own!

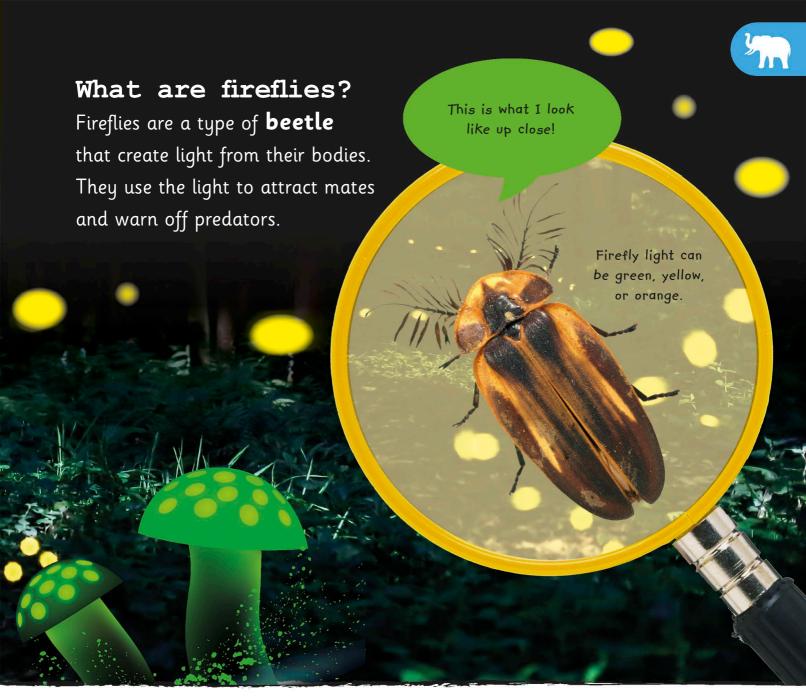
Fireflies contain special chemicals in their bodies. When the chemicals mix together it generates a quick flash of glowing light.

There are around 2,000 types of firefly,

Great glowers

Although fireflies are the most well-known animals that **create light**, other animals do this too. Most of them live in dark caves or in the ocean.

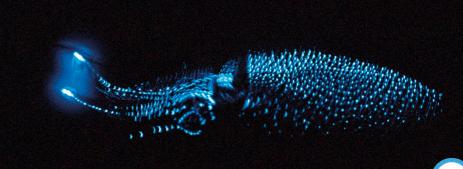




but not all of them can produce light.

Spectacular firefly squids can light up different parts of their bodies in a series of patterns.

They can use their light to communicate with each other.



The marvellous monarch

Every year, some monarch butterflies go on an amazing journey to escape the winter cold. But the butterflies who come home are not the ones who left.

Living longer

Most monarchs only live for two months, but the ones born just before winter on the east coast of North America live for seven months. They need this time to make the journey.

Migration





We navigate

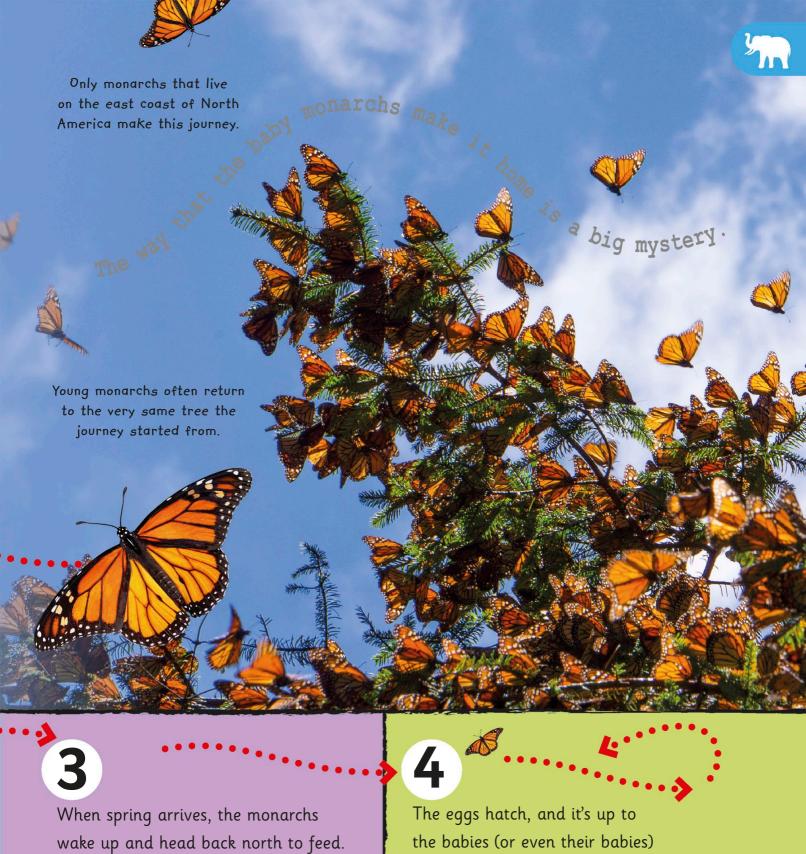
using the Sun.

When it gets cold, the monarchs set off from Canada and head south towards Mexico, where it is warmer.

It's a long journey that can take two months. When the butterflies arrive they have a nice long sleep.







to finish the long journey home.

On the way they lay eggs and die.

123

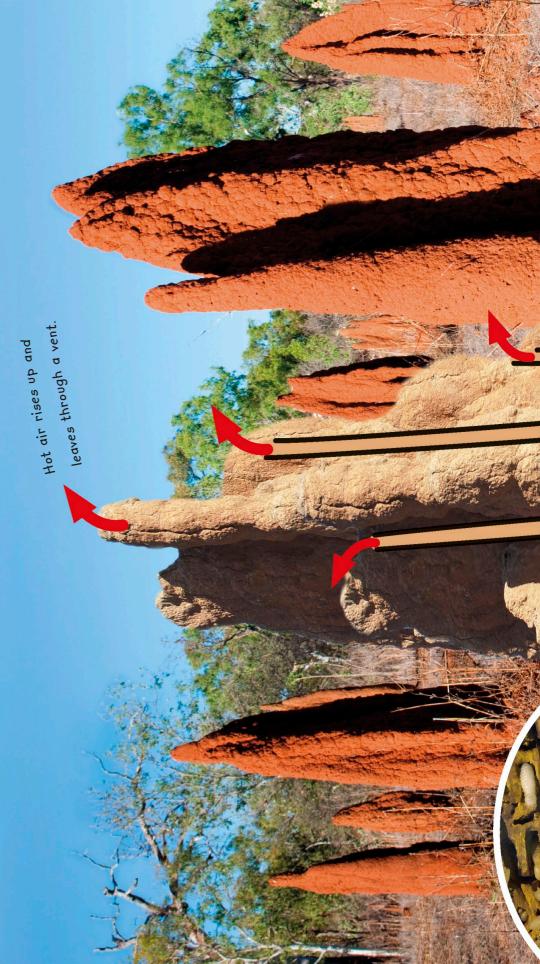


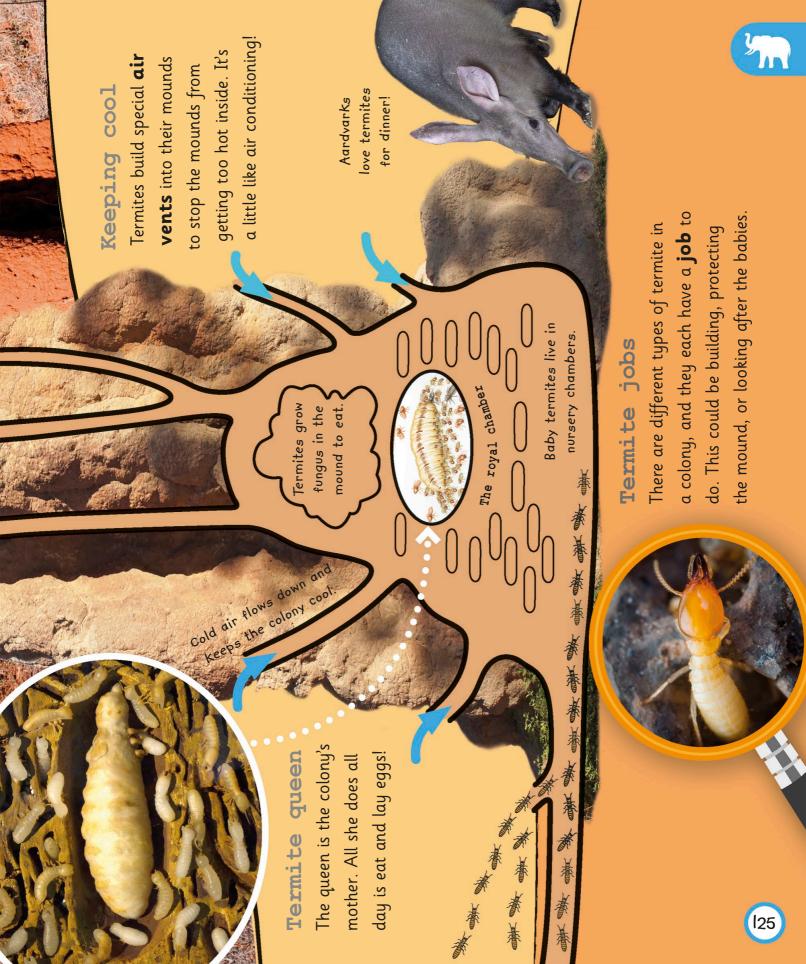
Buggy builders

Termites are tiny insects, but they're also master builders. They work together to build huge earth mounds full of tunnels.

Massive mounds

Termites live in huge groups, called **colonies**. A colony lives together in an earth mound. Termites are tiny, but their mounds can be as tall as a giraffe!







Tarantulas are **big spiders** with fuzzy legs and bristly bodies. Unlike many other spiders, they don't spin webs, and most of them burrow under the ground.

Are they deadly?

No – tarantulas are hairy, not scary!

They carry **venom** in their fangs, but it usually isn't strong enough to hurt people.

imes Fang

The Mexican red-kneed tarantula is generally docile. However, if it feels threatened, it flicks spiky hairs at attackers, which can sting them and get in their eyes.



Octopus alert

With eight arms, these **unusual** underwater animals are easy to recognize. But they're hard to spot because they're good at hiding.

Caribbean reef octopus

Staying hidden

hiding by changing colour and shape to blend in with the sea floor. Others lurk in holes, crevices, and caves.

Mimic octopus

Common

The blue-ringed octopus is tiny, but it's one of the deadliest animals on earth.

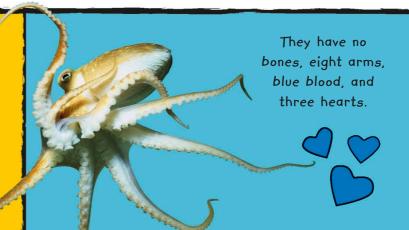


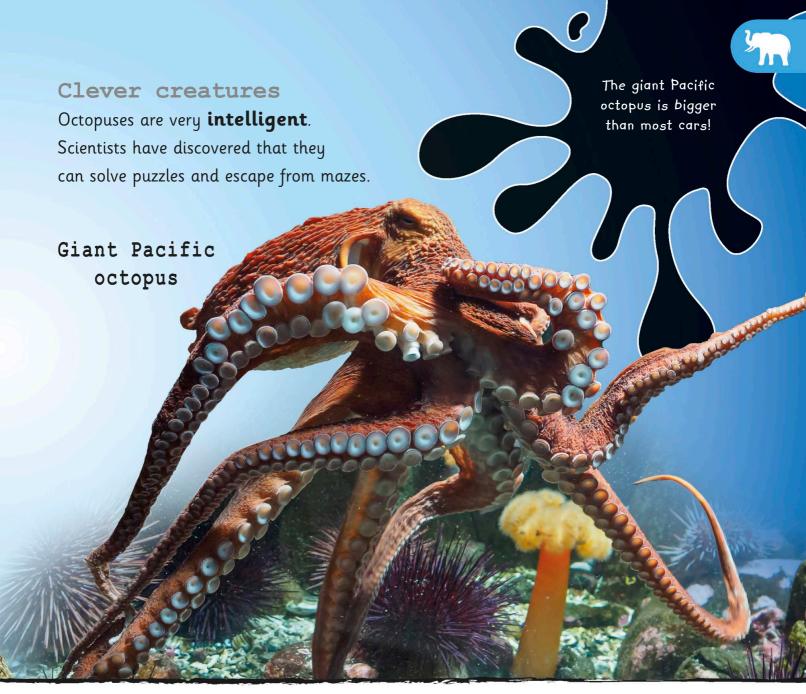
Blue-ringed octopus

Octopuses don't have any bones, so they can

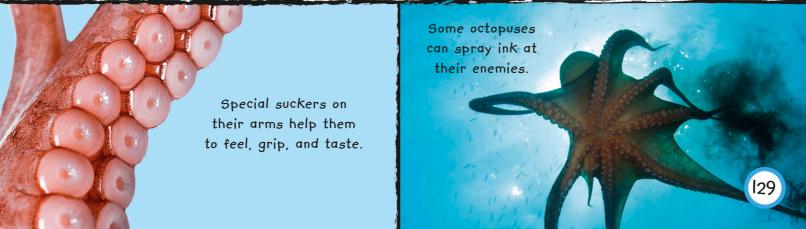
Super strange

There are several **unusual** things about octopuses that make them very special animals. What are they?





squeeze their bodies into even the tiniest of holes.





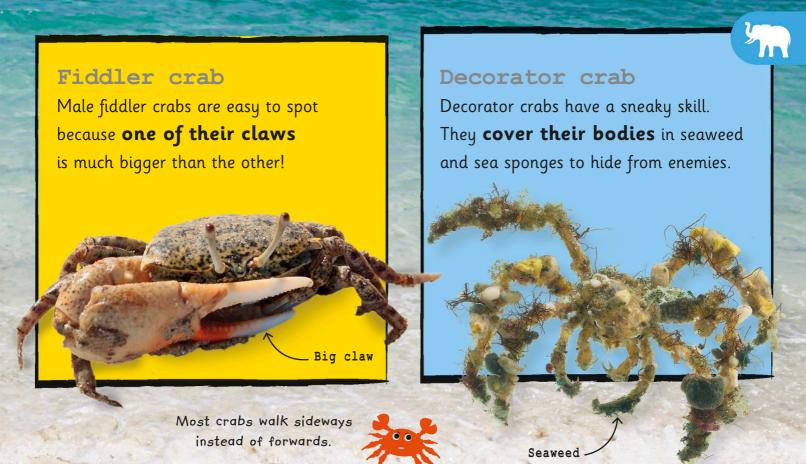
Feeling crabby

These shelled creatures look like ocean insects, but crabs are **crustaceans** like lobsters and shrimp.

Most crabs can live on land and in water.

Hard shell' protects a soft inside.









Portuguese man-of-war

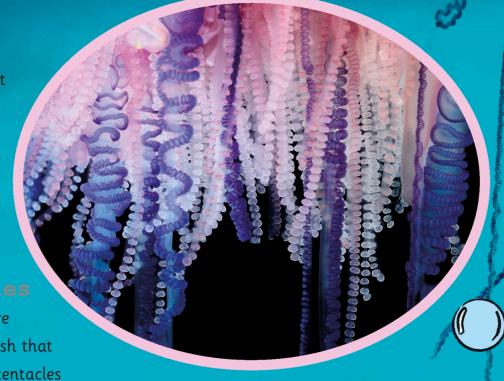
Sometimes called the "floating terror", the Portuguese man-of-war is a floating stinging machine. Watch out for its tentacles!

One or many?

It may look like a jellyfish, but this strange-looking creature isn't one animal at all — it's a **colony of animals** that live and work together.

Stinging tentacles

The man-of-war's tentacles are **venomous**, and paralyze fish that get tangled up in them. The tentacles are usually about 9m (30ft) long, but they can grow to be five times longer.



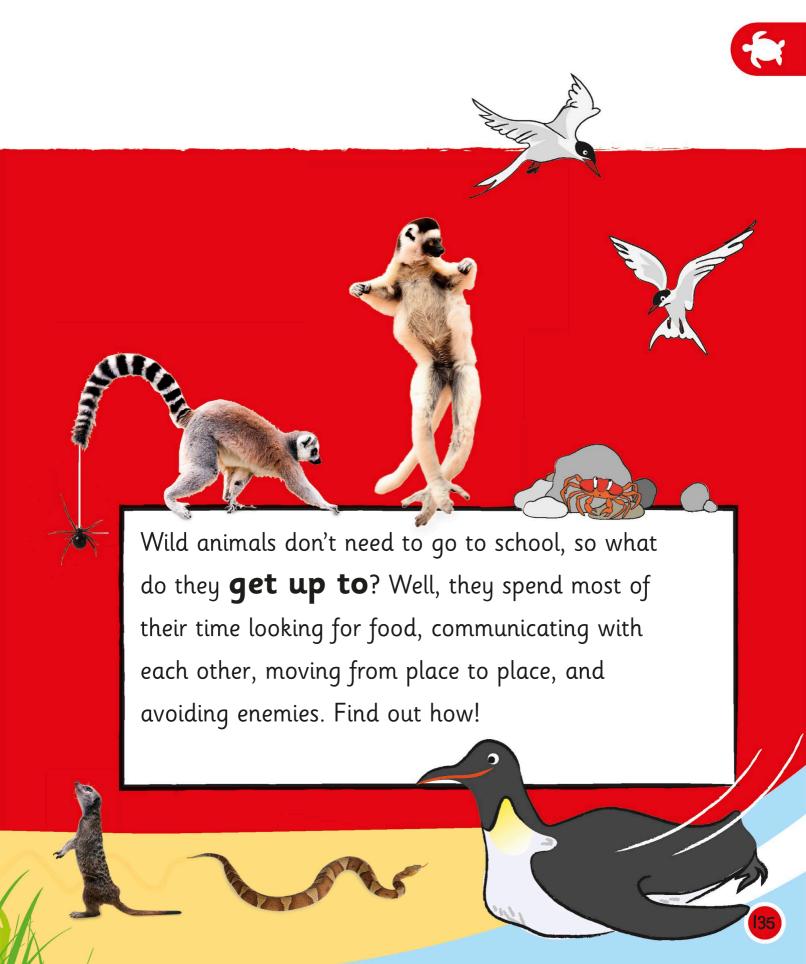






Animal antics

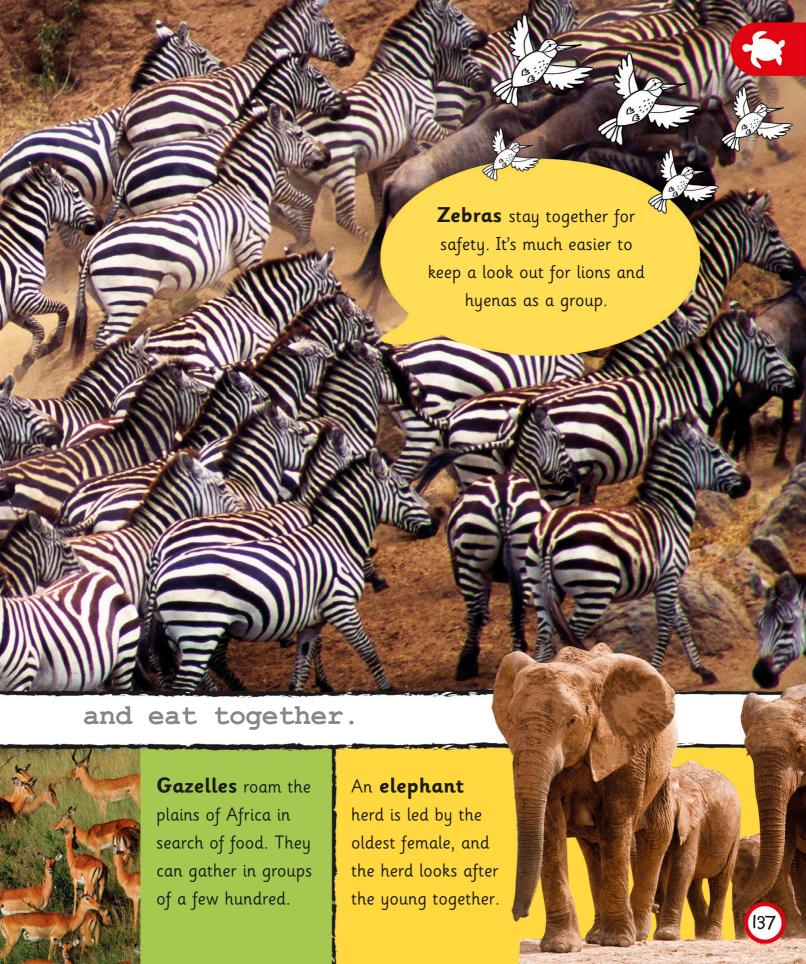












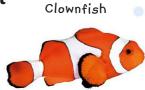


Unlikely friends

Although lots of animals stick to their own kind, sometimes two **very different**

animals will help each other out.

Sea anemone tentacles can cause a painful sting. But **clownfish** aren't affected by it. The clownfish keep the anemone clean, and the anemone keeps the clownfish safe.



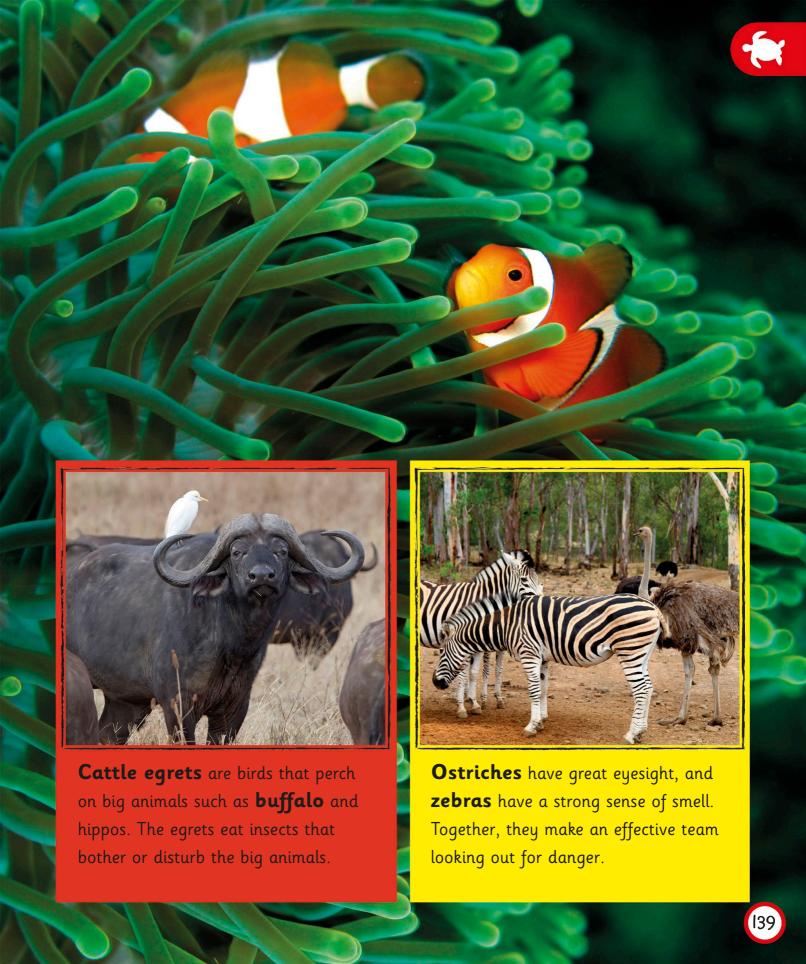


Sea anemone

When **aphids** suck sap from plants, they produce something called honey dew. **Ants** love honey dew so much that they protect the aphids.



Remoras are fish with suckers on their heads that stick to **sharks**. The sharks get cleaned, and the remora gets to eat any food left by the sharks.





A penguin story

Life isn't always easy for emperor penguins.

Adult penguins have to struggle through bitterly cold winters to raise their chicks.

During the autumn mating season, a female penguin lays a single egg.

The male takes the egg and looks after it. He keeps it **warm** by holding it between his feet and a special fold of skin.

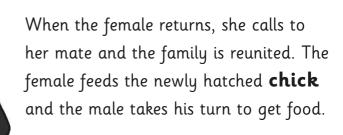
The female leaves for around two months in winter to **find food**. She has to walk for miles to reach the sea, where she eats as many fish as she can.





It gets so cold that the male penguins all **huddle** together to keep warm. They take it in turns to be in the middle of the group where it is warmest.









Time to sleep

Just like people, animals need to **rest**.

And while some creatures only take short naps, others sleep almost all day long!

Animals sleep more in zoos than

The eucalyptus leaves

koalas eat don't give

them much energy, so

koalas need a lot of rest.

They can sleep for up

to 18 hours a day!

Bats sleep upside down.

When they wake up they drop into the air and fly away.



eyes, so it's hard to know

when a snake is asleep!

Dolphins never go into deep sleep because they need to be awake to breathe. So when a dolphin sleeps, half of its brain stays awake.

ZZZZZZ

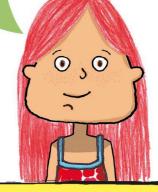
Whale rested

Sperm whales take short naps through the day. They sleep upright near the water's surface so they can breathe.

I sleep for a night.

about 10 hours

We hardly ever stop to sleep!



in the wild.

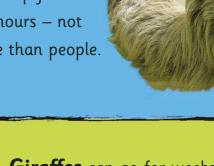
Armadillos

are usually active at night. During the day they curl up and sleep for up to 16 hours.

or take short naps through the day.

Ants are hard workers. They only rest

Although **sloths** can seem like real sleepyheads, in the wild they sleep for about 10 hours - not much more than people.



Pigs are social animals. When they sleep, they like to huddle together.

Giraffes can go for weeks without sleeping! They usually sleep standing upright, but they can also curl their necks and rest their heads on their bodies.



A winter's sleep

Some animals, such as hedgehogs, mice, and chipmunks, sleep all winter. This is because the weather gets cold, and it's hard to find food. This is called **hibernation**.





Some birds fly to warmer places instead of hibernating.

A summer's sleep

Some desert animals, such as desert frogs, insects, and snails, sleep most of summer - when it gets too hot for them.

Many bears sleep for most of the winter, but they can wake up quickly, so it's not a true hibernation.



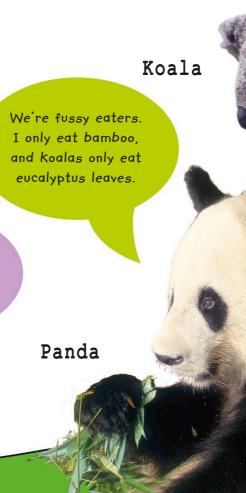


All living things need to **eat** food to get the energy they need. But different animals need to eat different things.

Types of diet

Many animals only eat **plants**, but others only eat **other animals**. Some animals
(including people) eat both.

I eat meat,
vegetables, and fruit.
Some of my friends
don't eat meat.





Meat eaters

Animals that eat other animals are carnivores. Many have sharp claws or teeth to help them hunt.

> I eat teeny-tiny insects.

Ladybird



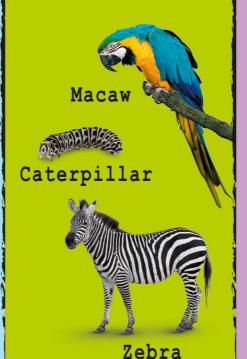
Alligator



Shark

Plant eaters

Herbivores are animals that only eat plants. They usually have strong jaws for chewing or cracking.





Elephant

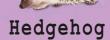


Both!

The animals that eat both meat and plants are called omnivores. Most people are omnivores.



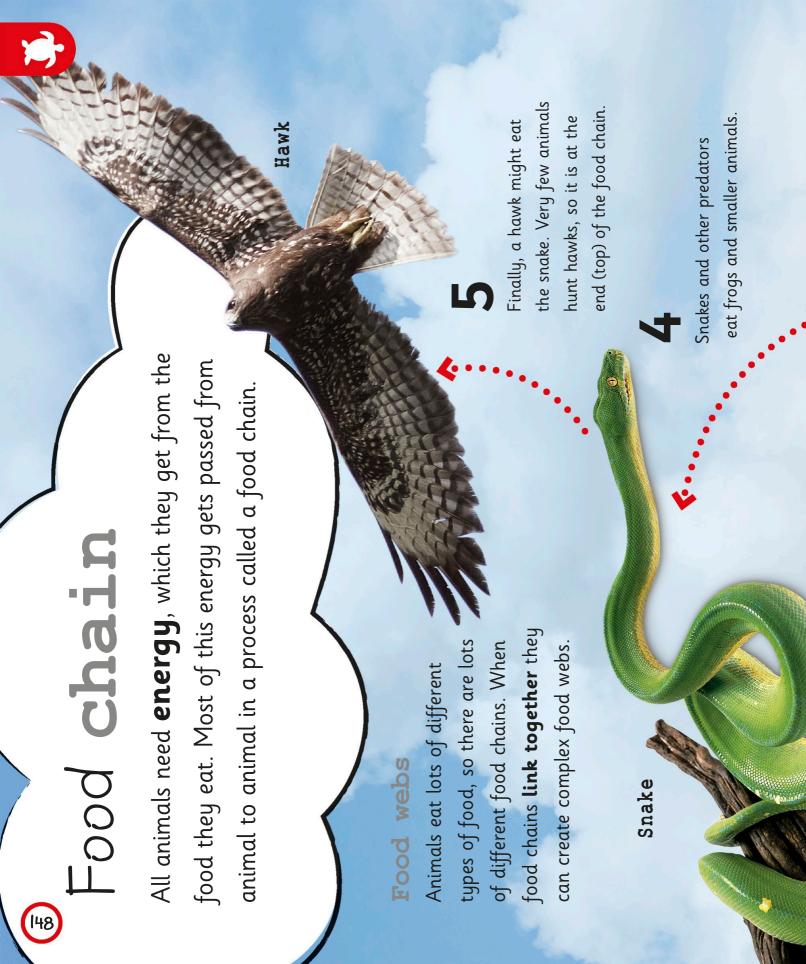


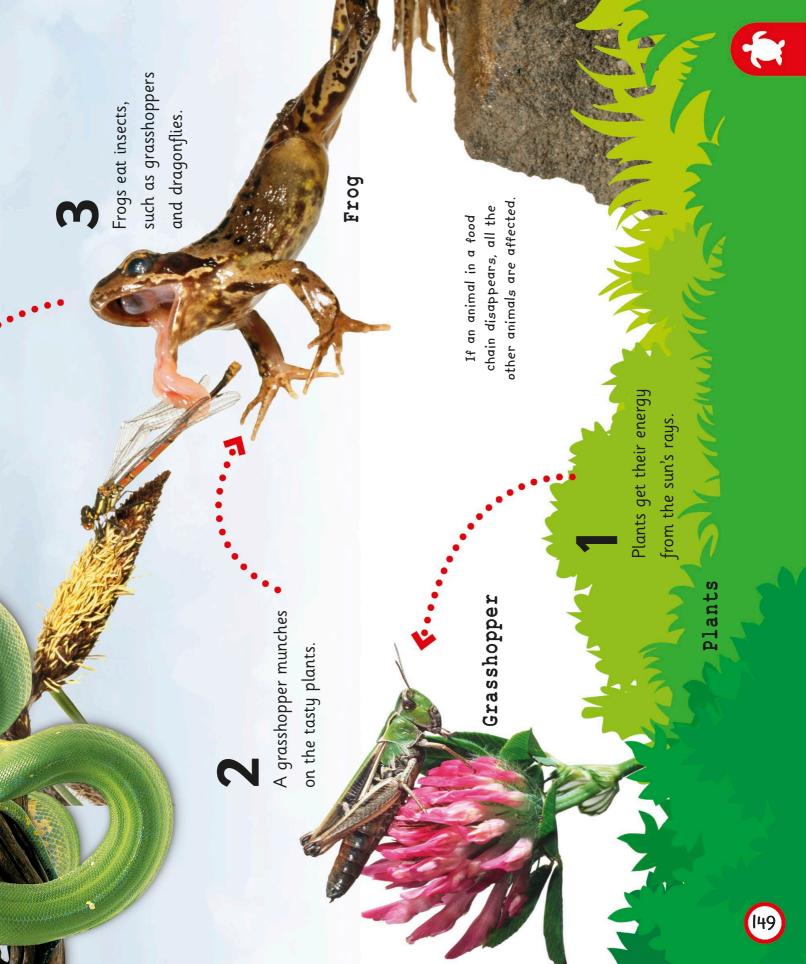


I like to eat insects and berries.

> Black bear







Taking a trip

Many animals make **long journeys**to escape bad weather, find food, and breed.
These journeys are called **migrations**.

Arctic tern

Start: The Arctic
Finish: Antarctica

These birds fly from the Arctic to Antarctica — all the way on the **other side of the world** — to mate. Then they fly back again!



Arctic terns travel further than any other animal.

Red crab

Start: The forest End: The ocean

Each year, millions of red crabs on **Christmas Island**, near Australia, travel from the forest to the ocean to lay their eggs.



Roads on the island are closed to let the crabs cross.







Owl perched on a tree.

Twit-twoo! I'm hiding. What other animals are hiding on these pages?

Hide and seek

Bush cricket that looks like a brown leaf.

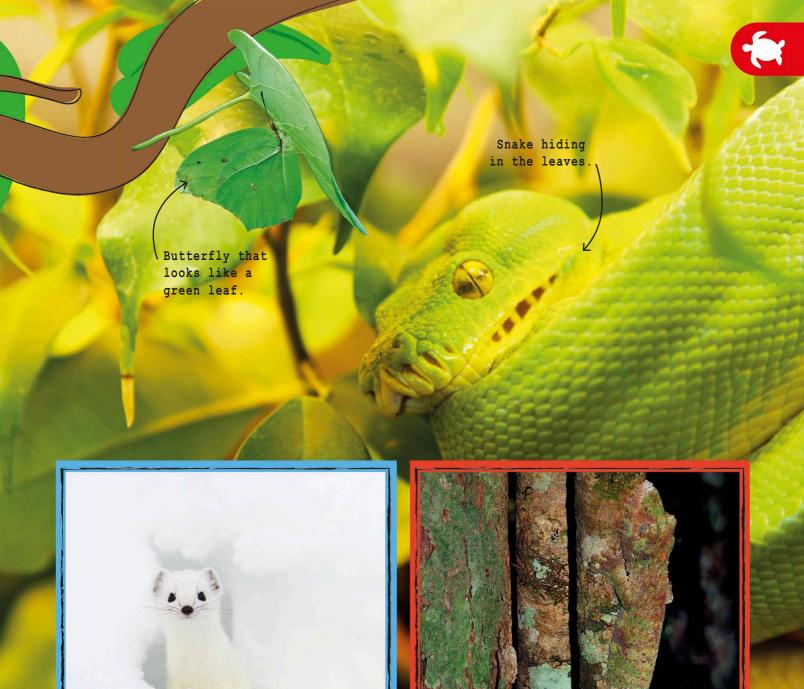
Some animals are masters at blending in with their surroundings. This is called **camouflage** and it's a useful skill for hunting or for hiding.



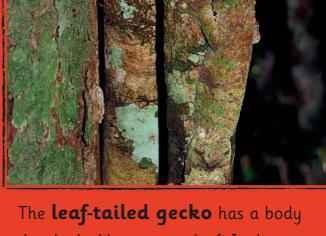
The stripy pattern on a **tiger** doesn't just look impressive. It helps the tiger stay hidden amongst tall grass, and sneak up on unsuspecting prey.



Stick insects can hide amongst sticks. They look so much like twigs that when they stand still none of their enemies can tell the difference!



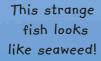
Animals such as **stoats** and **polar** bears that live in places with cold, snowy winters often have white fur to blend in with the snow.



that looks like a rotten leaf. It clings to branches, and blends in with the bark and leaves to avoid being eaten.

Underwater camouflage

The ocean is a mysterious place. Living there can be tough, so these animals have adapted to **hide** in **plain sight**.





Stonefish can look just like coral or the seabed. It uses its camouflage to hunt — it lies still and waits to attack.



The **mimic octopus** has a unique form of camouflage. It can change shape to look like other animals!



On defence

What do animals do when a predator is nearby? Well these animals have impressive ways of **protecting** themselves.

Scaly plates protect **armadillos** like armour.

Some armadillos can

roll themselves up

into a tight ball.

Pufferfish inflate their bodies with water.
This makes them too big and spiky for predators to swallow them.

Prairie dogs stand guard to watch out for enemies. If they see any, they make noise to warn others of the danger.

Strong armour

Change size

Alarm system



Venom or poison?

Sharp teeth and claws aren't the only ways animals can be **deadly**. They can also be poisonous or carry a nasty venom. What's the difference?

I'm a scorpion. My tail has a sting with a strong venom.

The **black widow** is a spider with a very venomous bite.

The deathstalker scorpion has one of the strongest venoms in the world.



Venom

Animals that **inject** a deadly substance by biting, stinging, or scratching are venomous. They do this to catch food or defend themselves from attackers.

The **king cobra** is the world's largest venomous snake. It injects venom through its sharp fangs.



*

Let's move!

As well as **running**, **swimming**, and **flying**, animals can get around in lots of other interesting ways.





Fleas are great jumpers. They can jump up to 100 times their height!

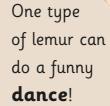
Flea

Many monkeys and apes use their long arms to **swing** from branch to branch.

Alpine ibex

Penguins have short legs and big feet so they waddle around on land. They can **slide**, too!

Gibbon



Lemur

Penguin



The jerboa uses its hind legs to **hop**, and lands on its front paws.

Mudskipper

The mudskipper fish can leave water and **drag** itself on land using its fins as arms.

thanks to its special hooves. Geckos have special hairs on their

The alpine ibex is

an expert **climber**.

It can climb steep cliffs

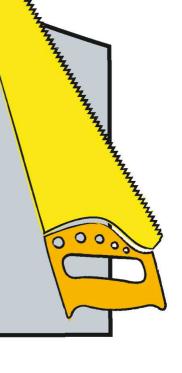
feet for climbing.





Using tools

Some animals have **learned** how to use tools to get food, protect themselves, or just make their lives a little bit easier.





Sea otters use rocks to smash open the hard shells of crabs, clams, oysters, and sea urchins before they eat them.



Anemones sting, so pom-pom crabs sometimes pick up an anemone in each claw and use them as weapons.





Finches on the Galapagos islands poke cactus spines into trees and cacti to fish insects out of their hiding places.



Veined octopuses make a shelter from empty coconuts and seashells so they can hide from any attackers.



Elephants use branches to scratch their backs. They also use leaves to fan away flies that buzz around them.



Gorillas check if a river or lake is safe to cross by poking a long stick in the water to test how deep it is.

Sounds of the wild

One way that animals communicate is with sound, and they can be very **noisy**. Meet some of the loudest and find out what all the racket is about!



A **lion's** roar is one of nature's most impressive sounds. Lions roar to warn off rival males. The sound is so loud, it can be heard from 8 km (5 miles) away.

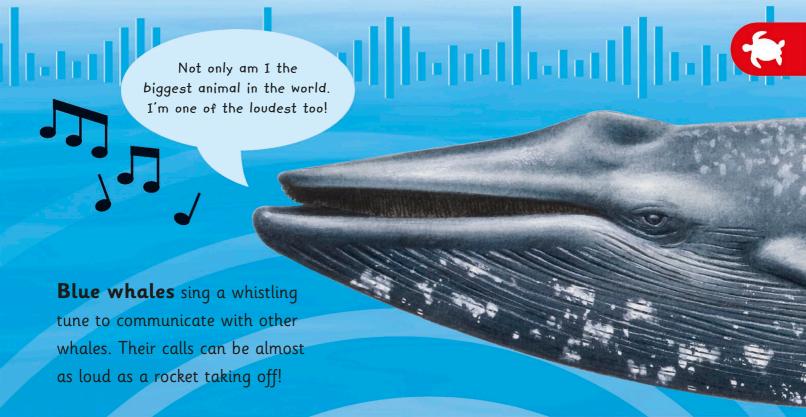
chirp





The shrieks of a **howler monkey** are as loud as a passing motorbike.

Just imagine what it sounds like when they get together with their friends!

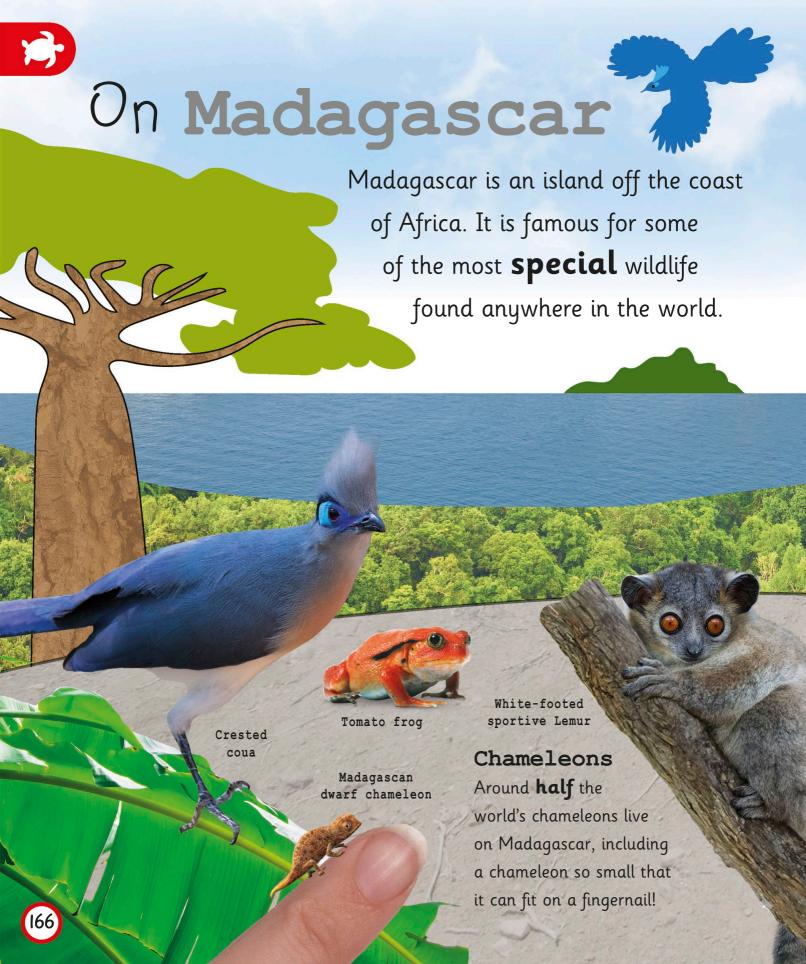




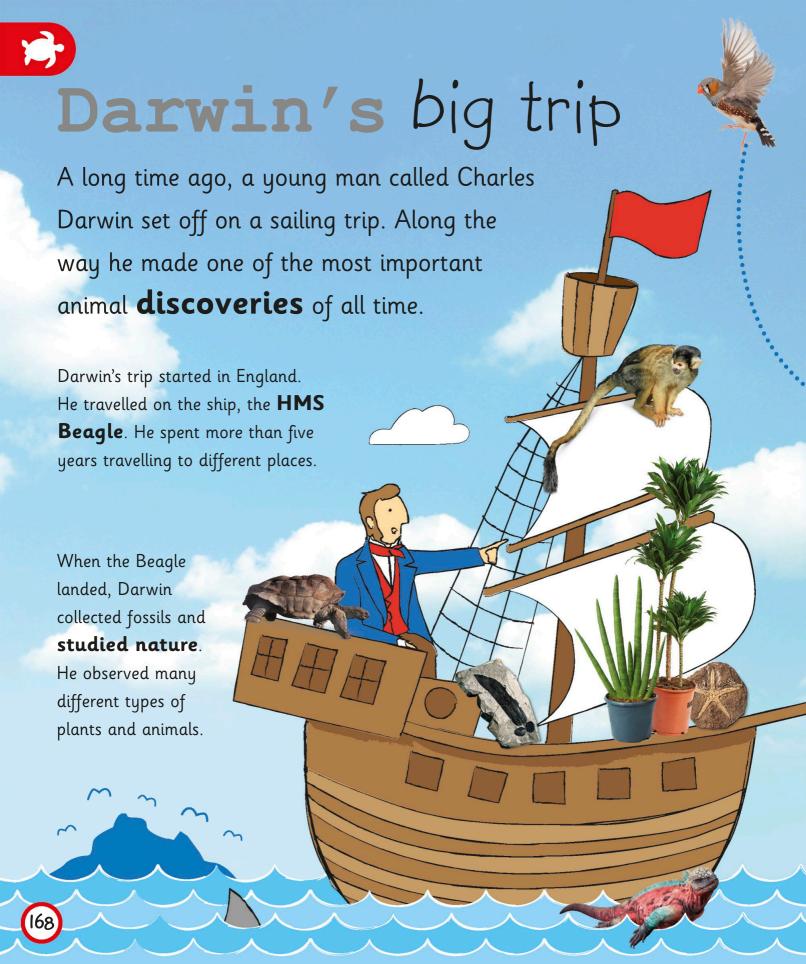
Cicadas are insects that make a chirping, buzzing sound. A single cicada isn't very loud, but when they gather in their millions the noise is deafening!



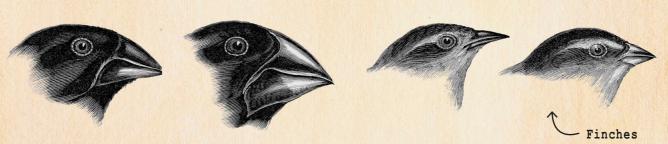
Elephants make trumpeting sounds when they're excited, warning others of danger, or being aggressive. They can be heard 9 km (6 miles) away.



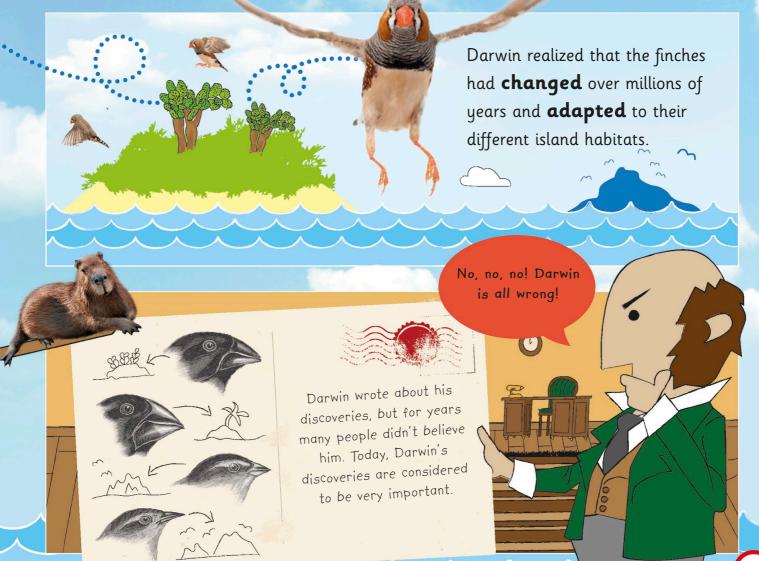








Darwin's most important discovery came when he visited the **Galapagos Islands**, near South America. He noticed that animals such as finches and mockingbirds were slightly **different** on each island.







Birds lay **eggs**. Chicken eggs are the most popular, but people also eat duck eggs, huge ostrich eggs, and tiny quail eggs.



In hot
weather, sheep,
goats, and alpacas'
fleeces are sheared off
and turned into **wool**. We
make clothes from the wool.





Milk can also be used to make cheese. Many animals make **milk**. Cows milk is popular, but many people drink goat, buffalo, camel, and horse milk as well.





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There are some **jobs** that animals are good at helping us with. Luckily, our animal friends are around when we need them.

Some animals, such as this police horse, have jobs. Just like people!



Guide dogs are trained to help people who can't see very well. They can help people to cross the street, find where they're going, and use buses and trains.



Carrier pigeons can find their way home — even if they're far away.

People attach notes to their legs and let them fly off to deliver the messages.



through the desert.





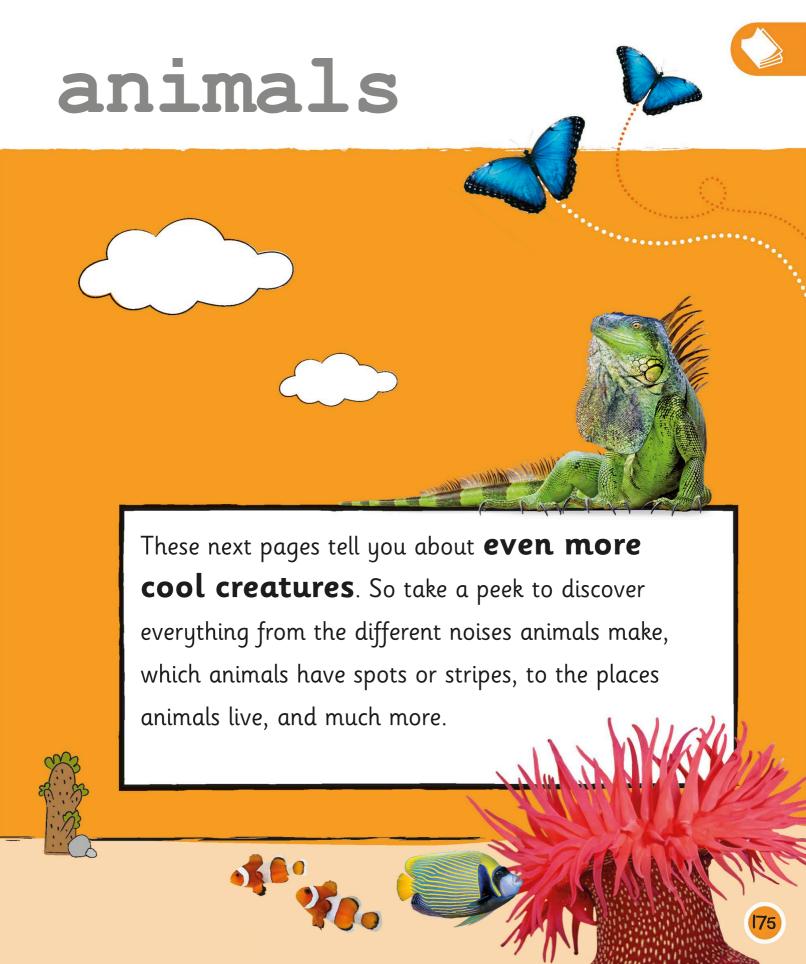


Before we had cars, people relied on animal power. Horses, camels, and donkeys are faster and stronger than us, and can pull or carry heavy things.



A **sheep dog** is trained to control sheep and tell them where to go. The dog runs around the sheep, but never harms them. This is called "herding".







Lots of spots

All kinds of animals, whether they live in the sea, sky, or on land, can have **spots**. Some animals use their spots to hide, and others use them as a warning.

Magpie moth









The greater spotted woodpecker has spots on its wings. You can see them when it flies. Spotty bird

Spotty fish





Spotty insect

Ladybirds

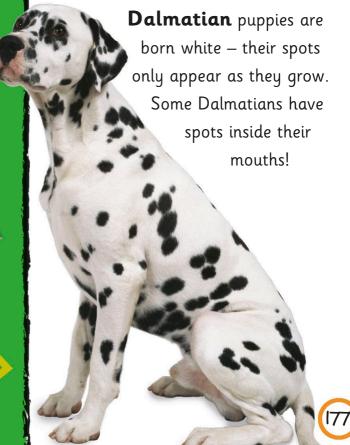
Spotty dog



Blue-spotted stingray

Harlequin sweetlips fish

grouper

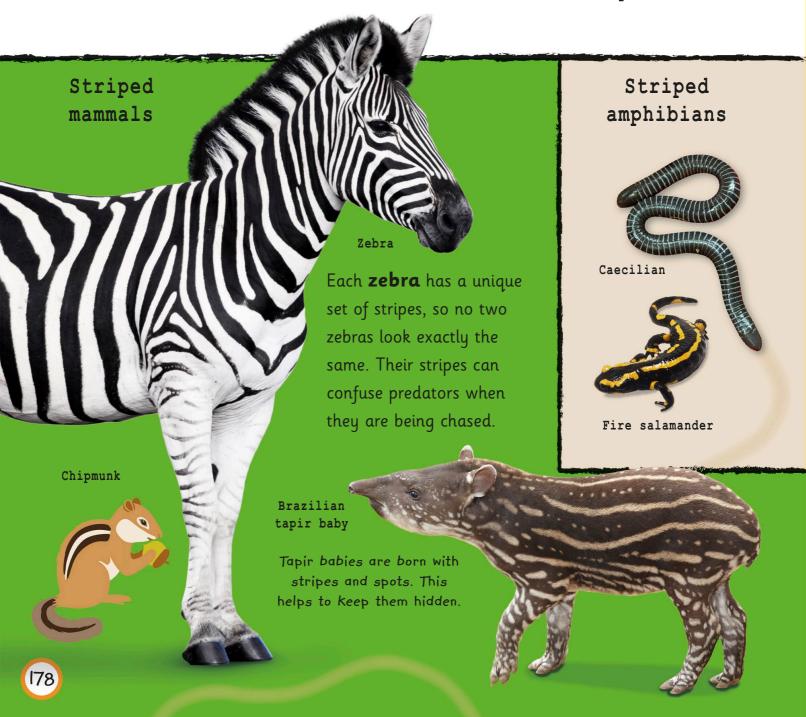


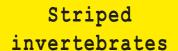


Lots of stripes



Spots aren't the only pattern that animals can have — many of them are covered from head to toe in **stripes**.







Striped millipede



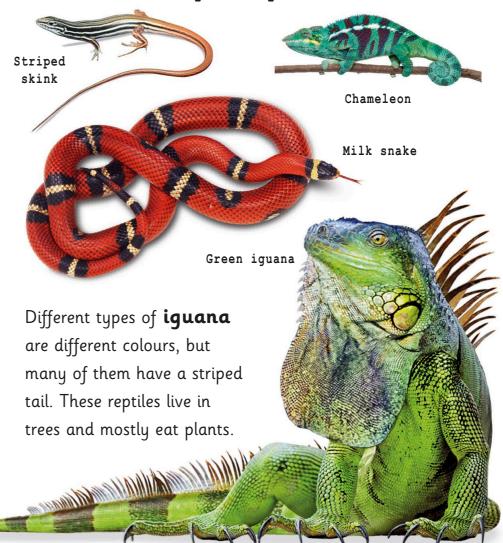


Striped fish

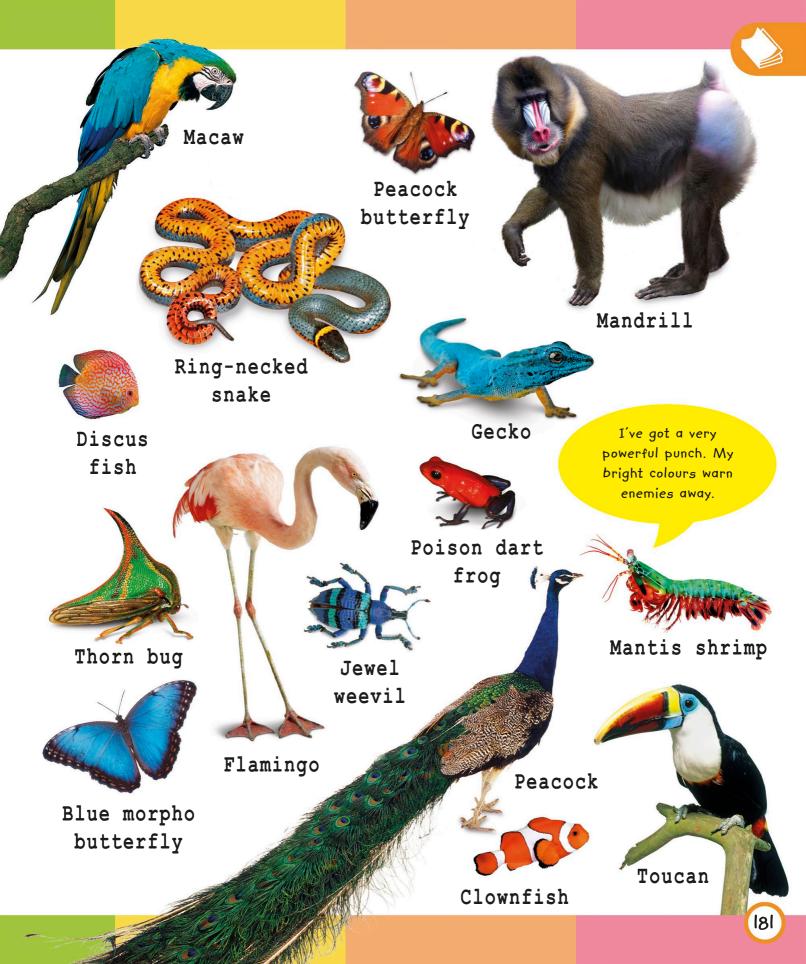


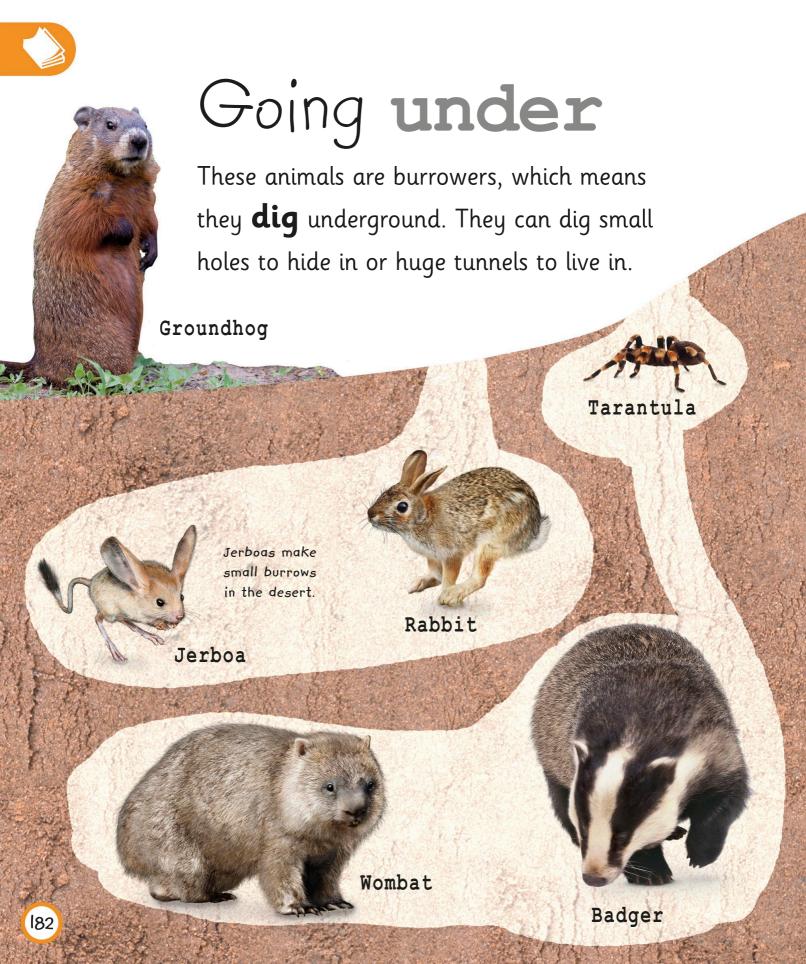
Striped marlins have silver and blue bodies and purple stripes.

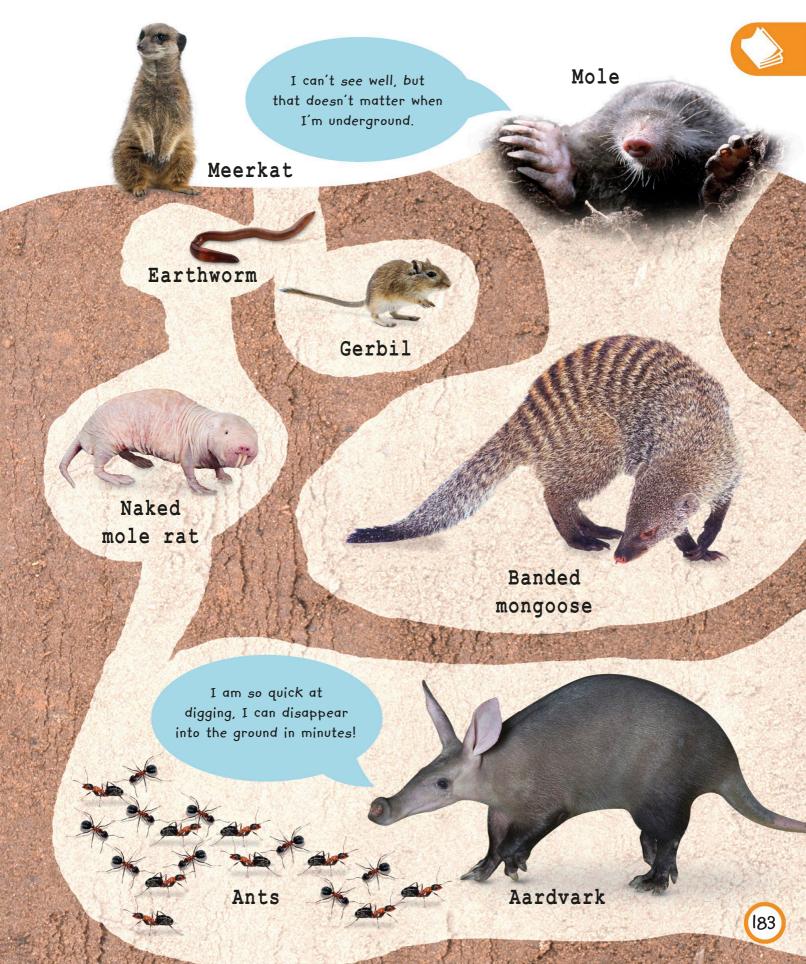
Striped reptiles







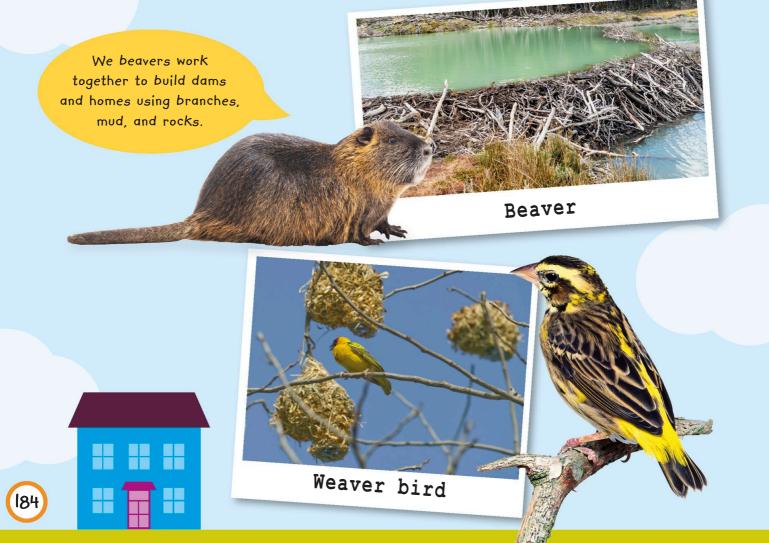




Brilliant builders

Some talented animals can make their own structures. Whether it's a safe nest to raise a family, or a warm winter hideout, these animals are **super builders**.









Divers

What do these animals have in common?

They spend a lot of their time diving

into the sea, but none of them

can breathe underwater.



Cape gannet

The Cape gannet dives into water at huge speeds, then uses its wings to "swim" underwater.

Bottlenose dolphin

South American fur seal

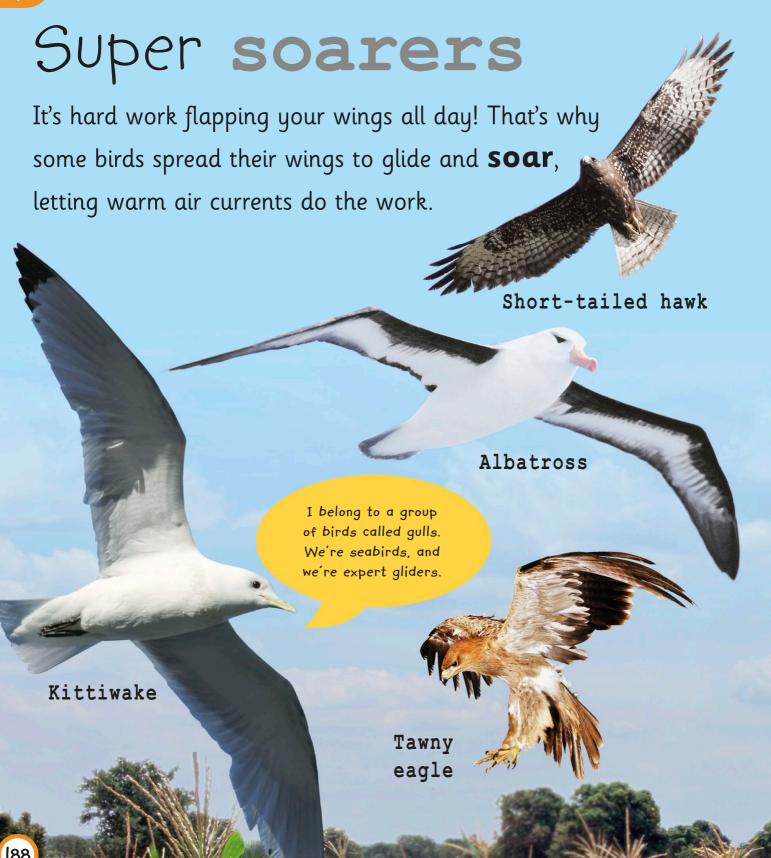


I can dive deeper than almost any other mammal in the world.

Sperm whale



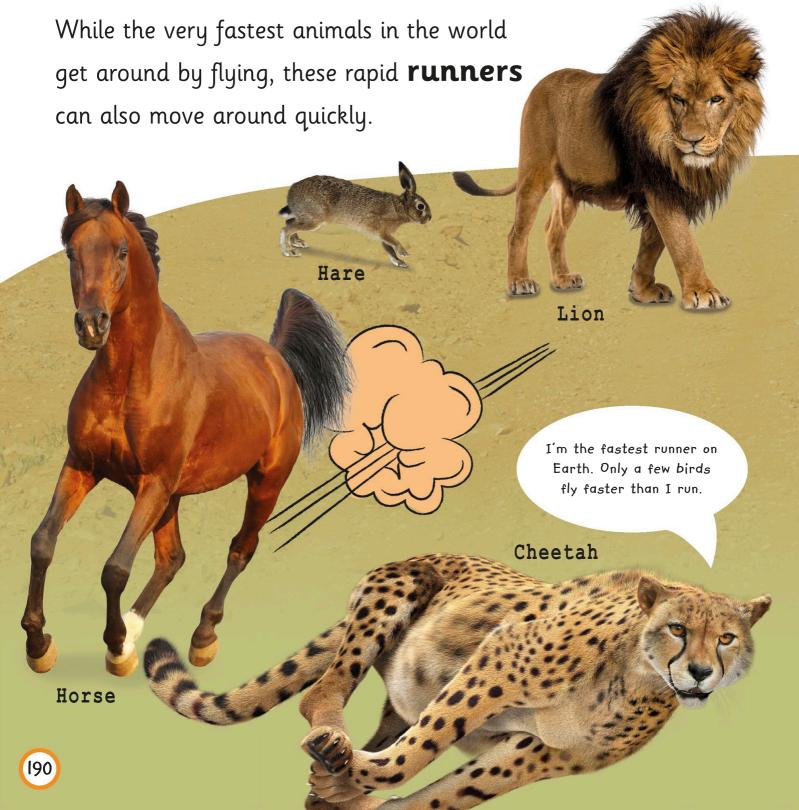




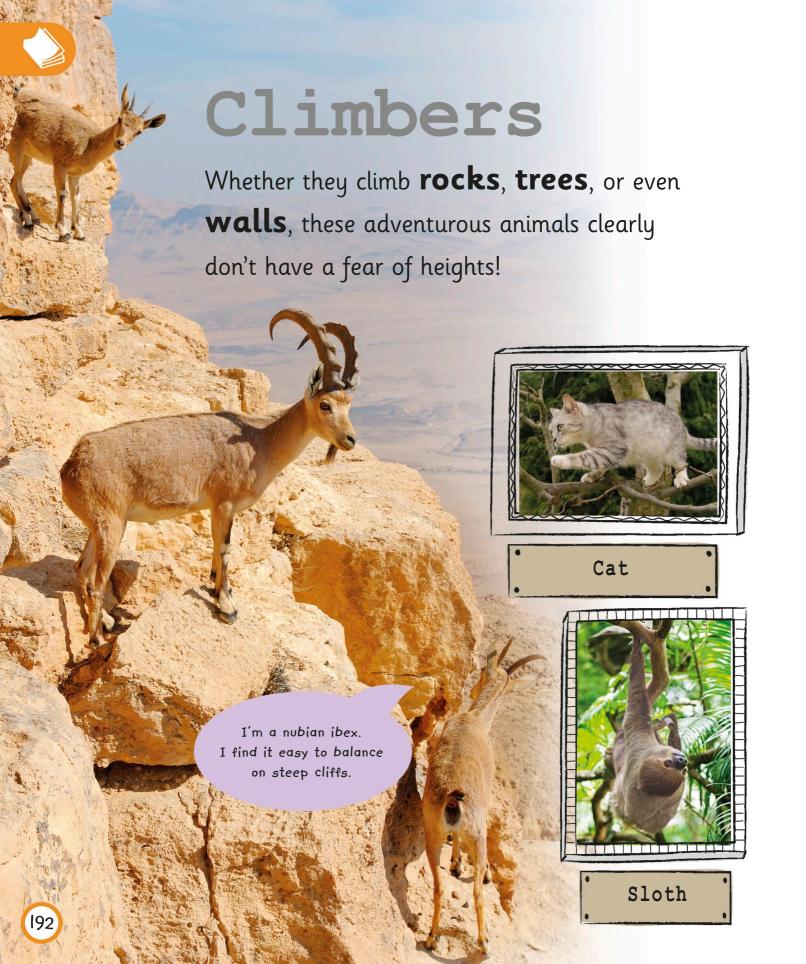




Built for speed











Snake



Snail



Crabs





Geckos can cling to almost any surface.





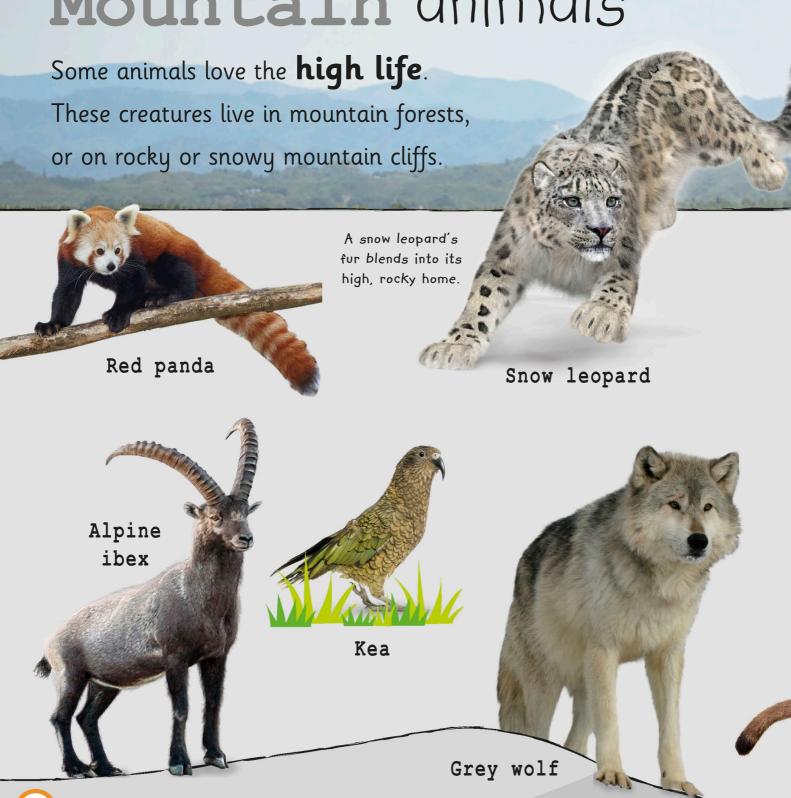
Squirrel

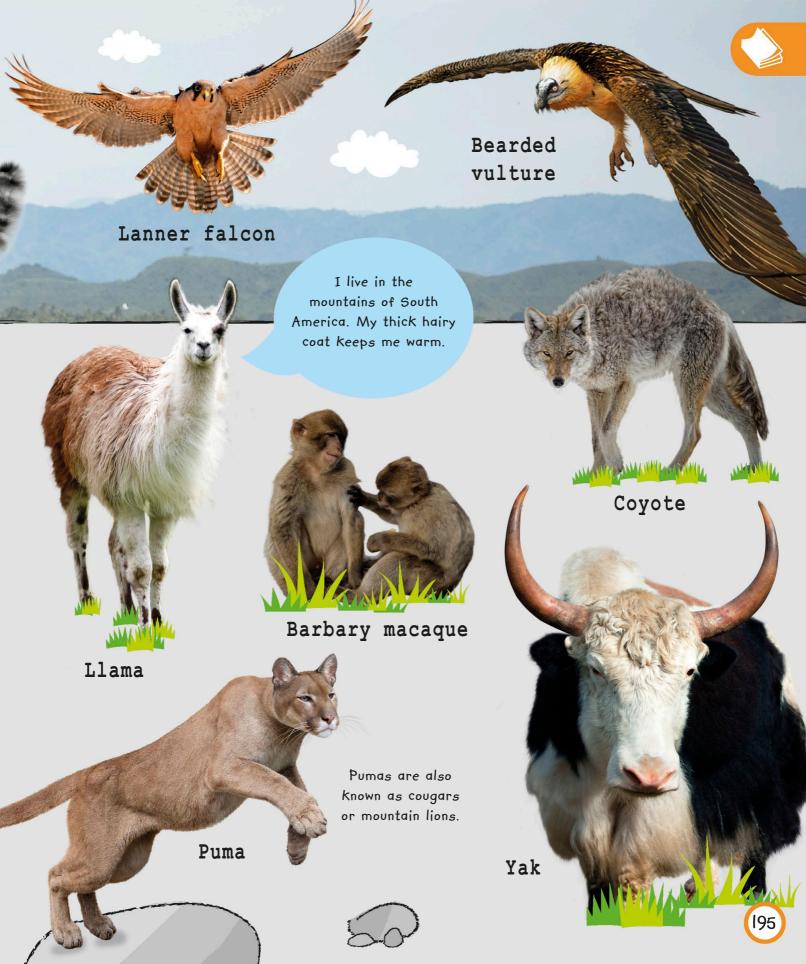


Orangutans



Mountain animals





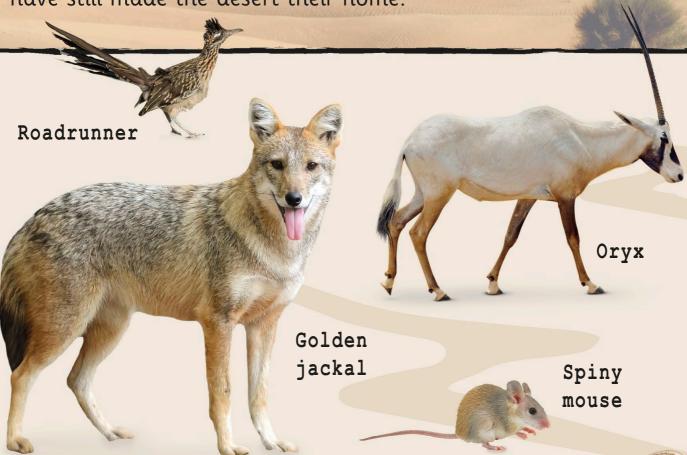


Desert dwellers

Deserts are places with very little water.

It's hard to survive there, but these creatures

have still made the desert their home.



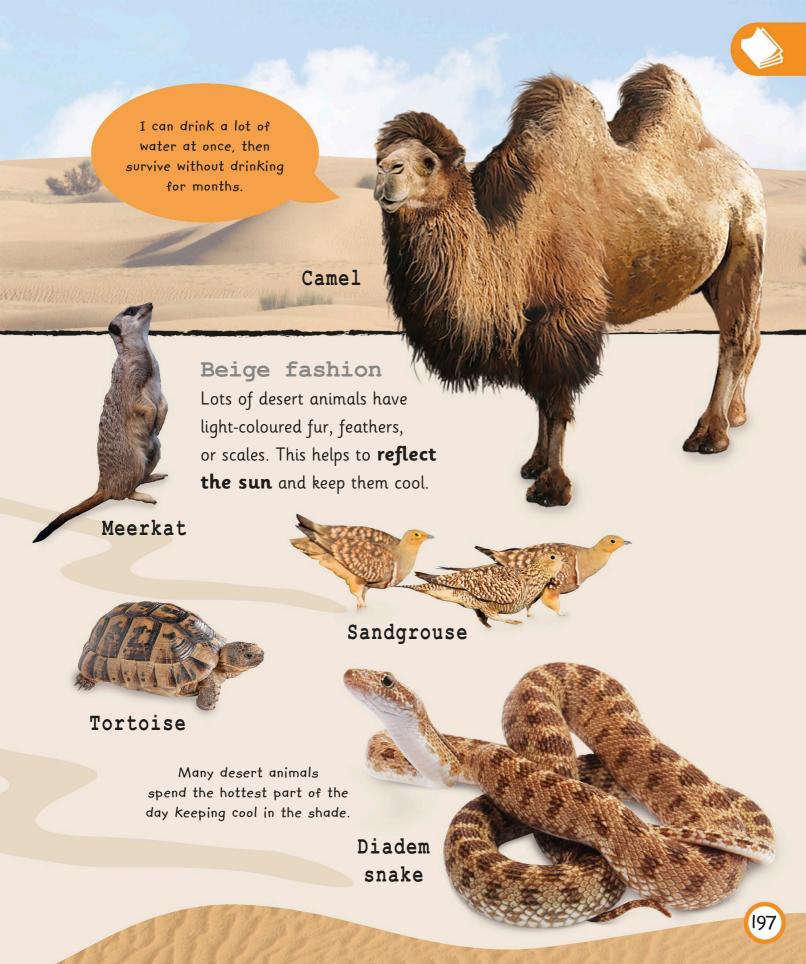


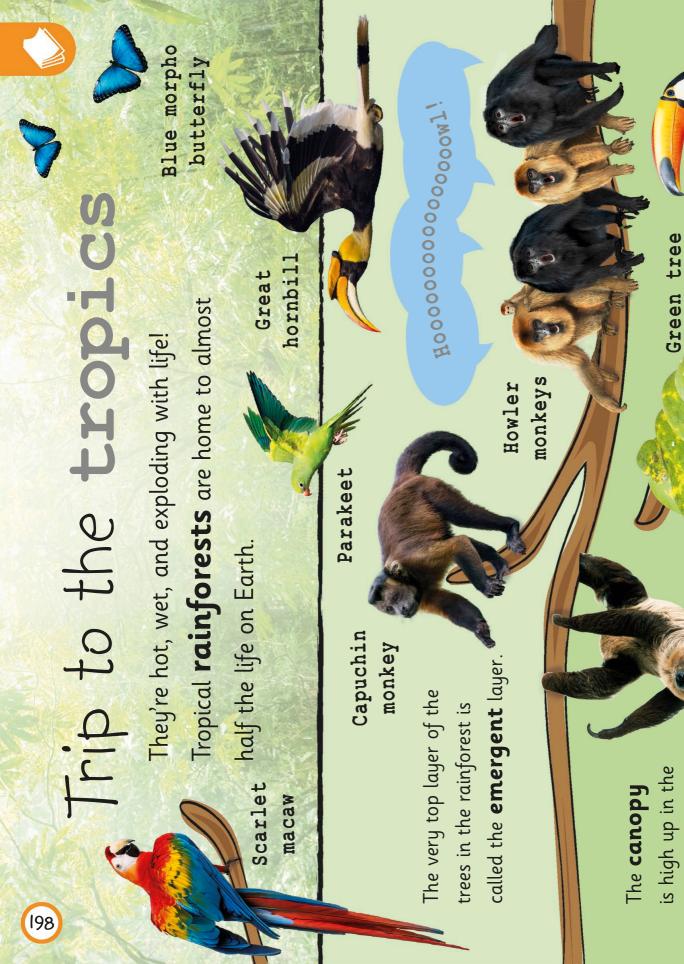
There isn't much food in the desert. So it's a good thing I can go for months without eating.



Web-footed gecko

Scorpion





Toucan

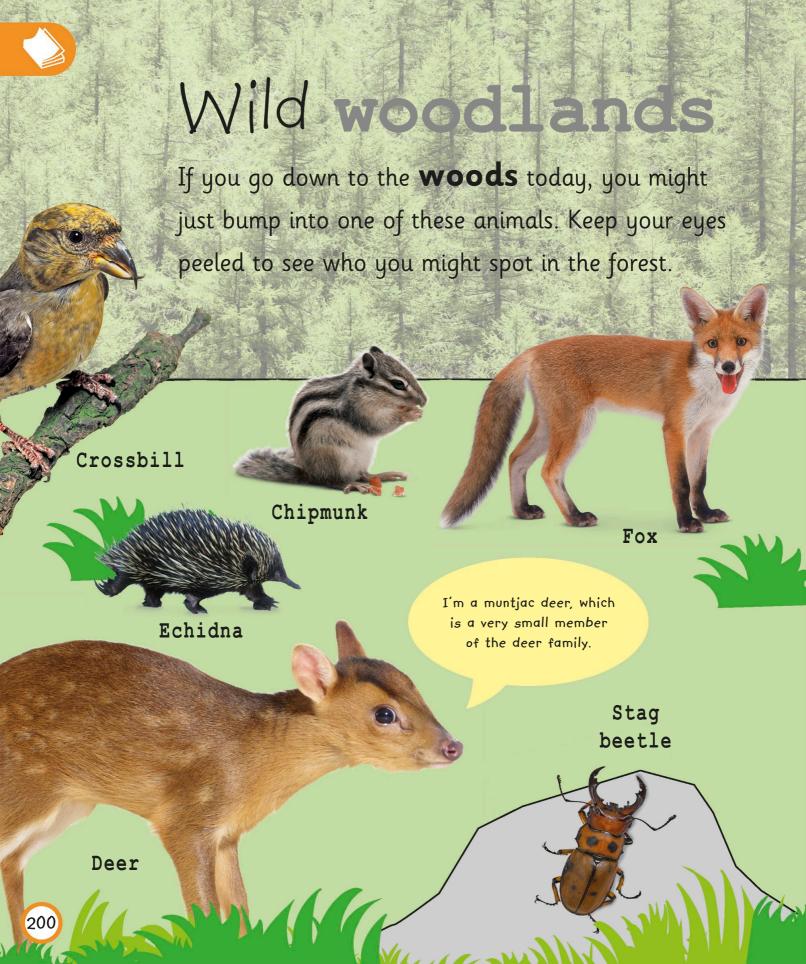
python

Sloth

are lots of branches.

trees, where there









The coral reef

Coral reefs are like the rainforests of the sea.

They're only a small part of the oceans, but more



Sea krait

I eat the algae that lives on coral then poo out white sand!

Sea sponge

Sea turtle

Parrotfish

Open anemone

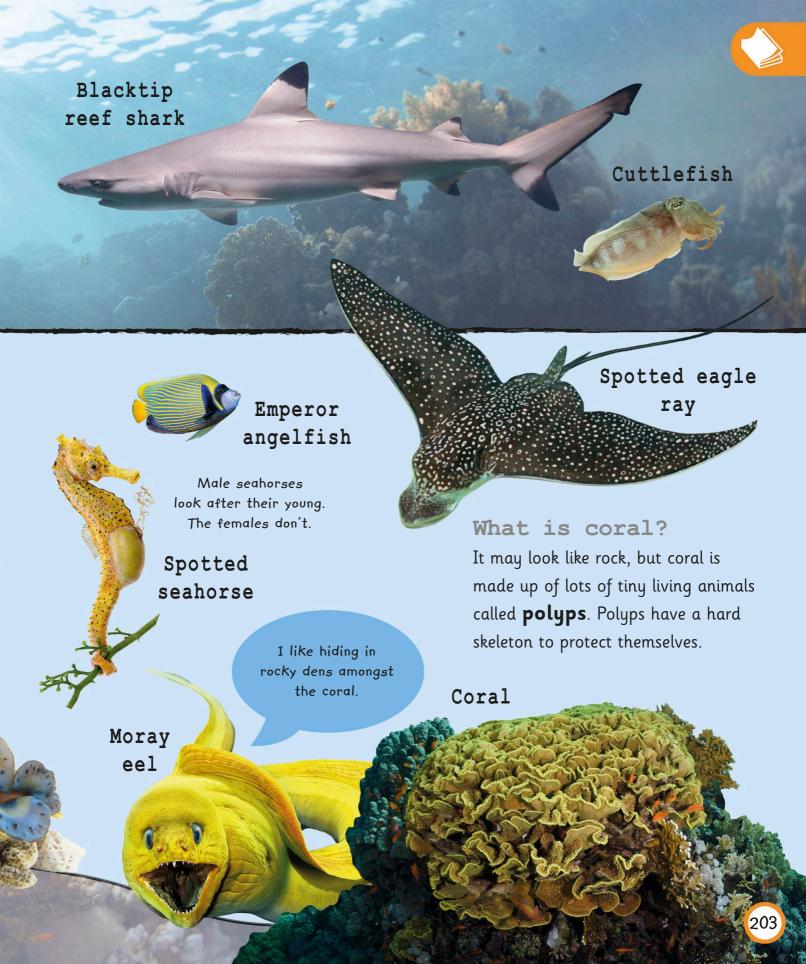
Clownfish

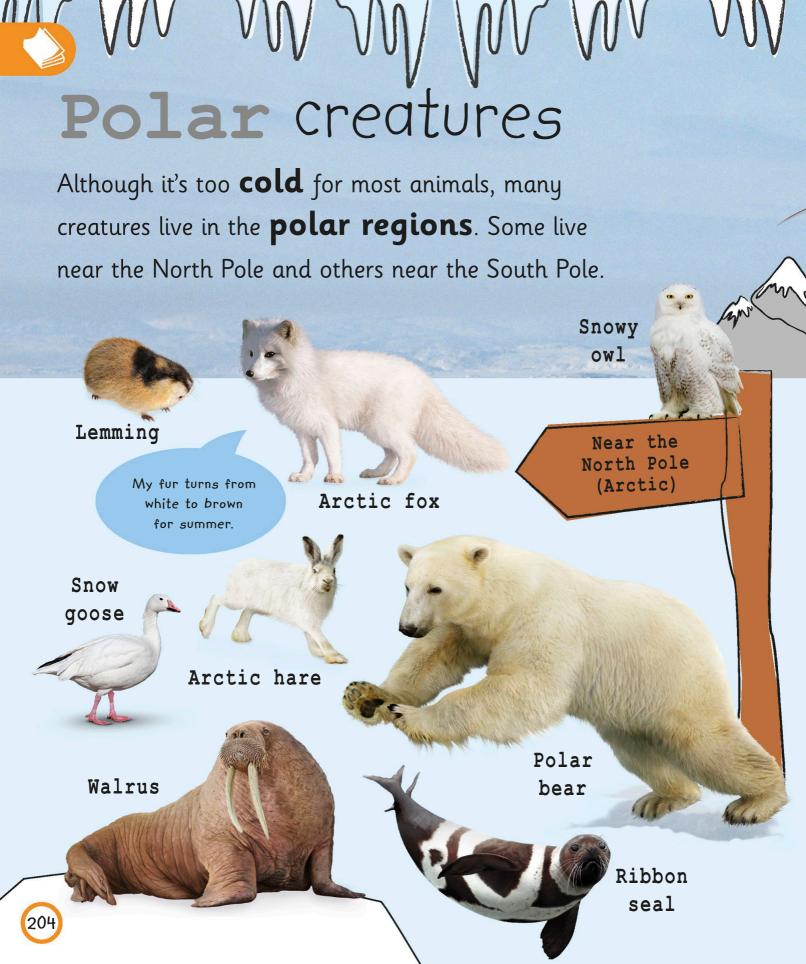
Closed anemone

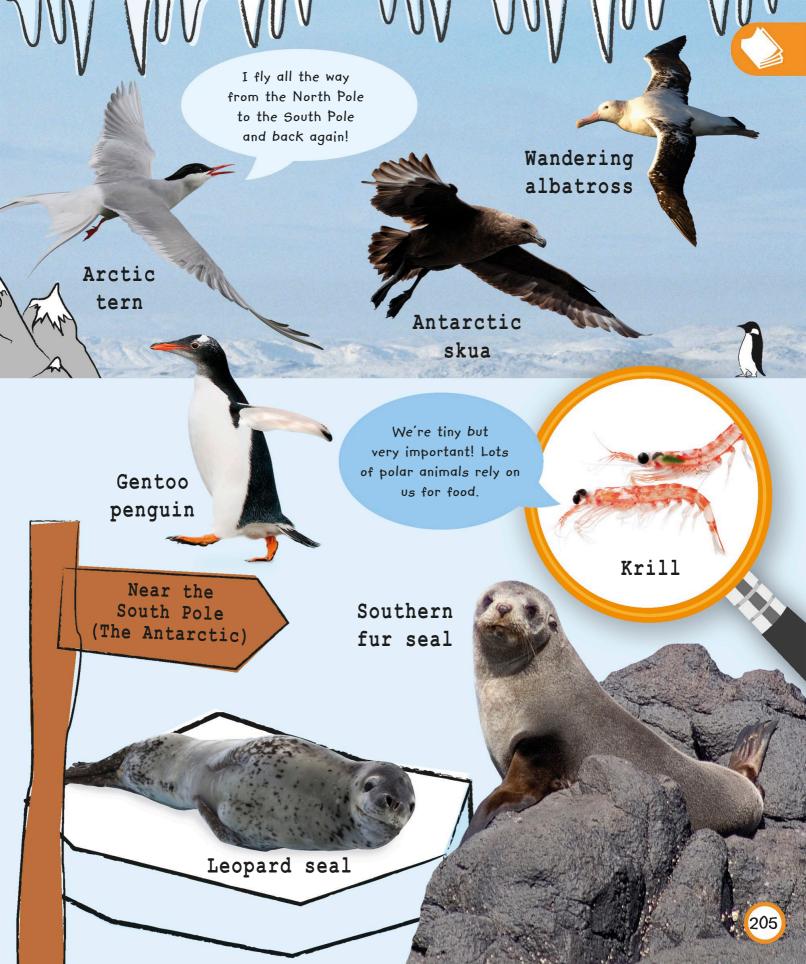
Strawberry anemone

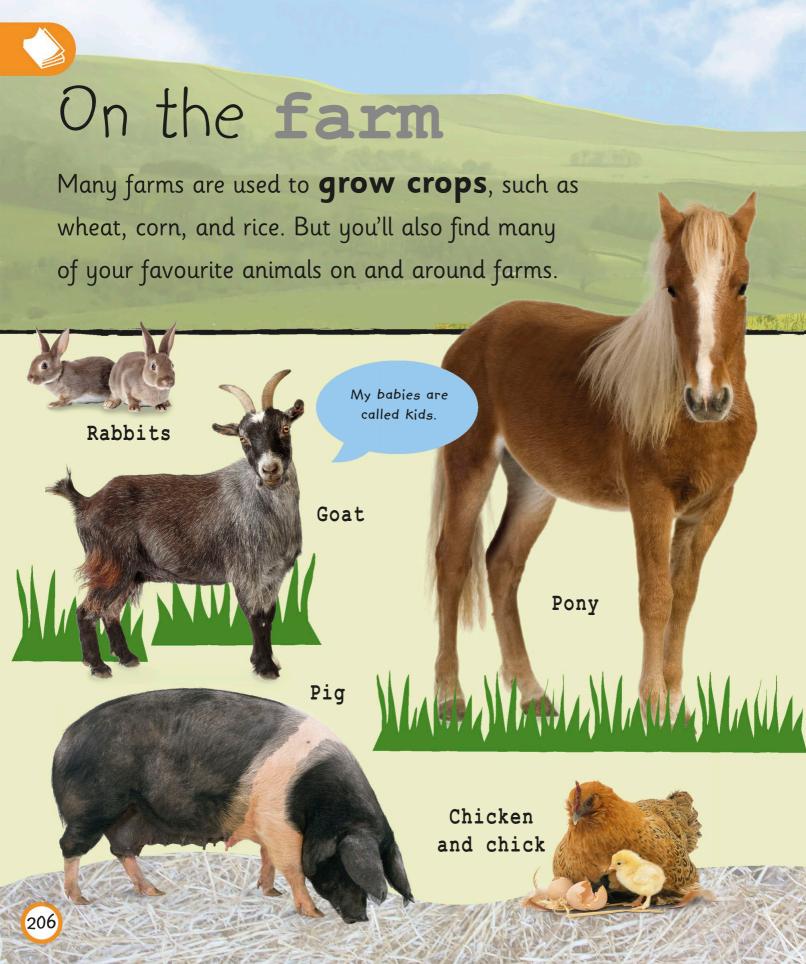
Giant clam

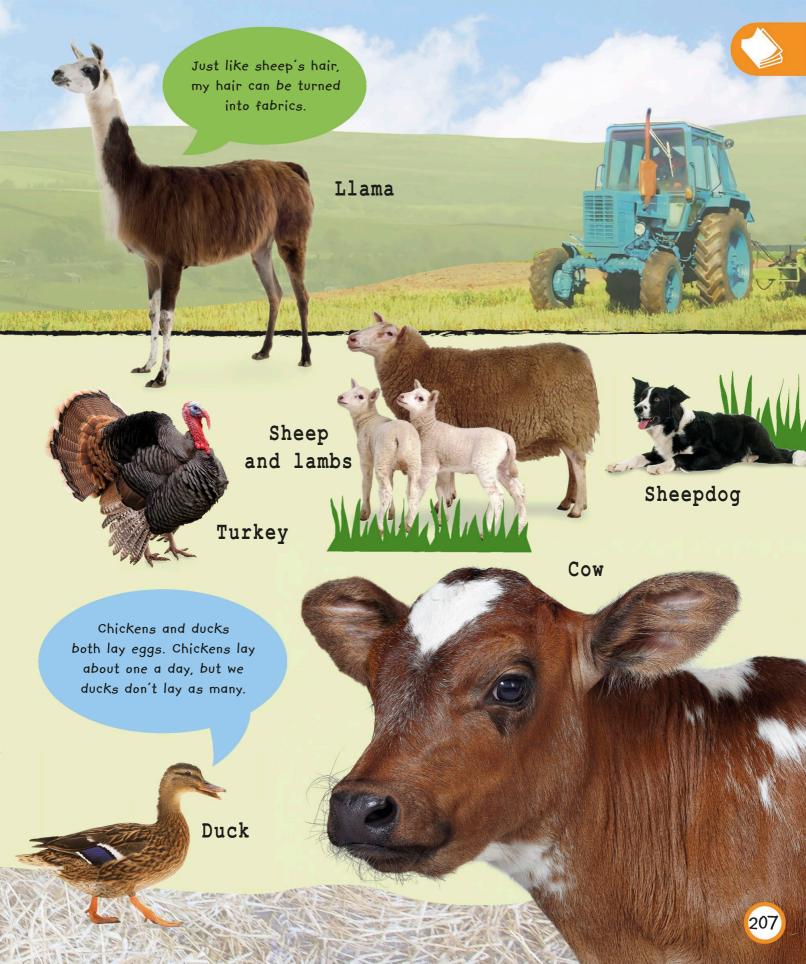
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On safari



The **grasslands** of Africa are full of amazing animals. You never know what wildlife might be peeking out from behind the tall grass.





Buffalo

Rhinoceros

I'm a male lion. I have a thick, hairy mane.

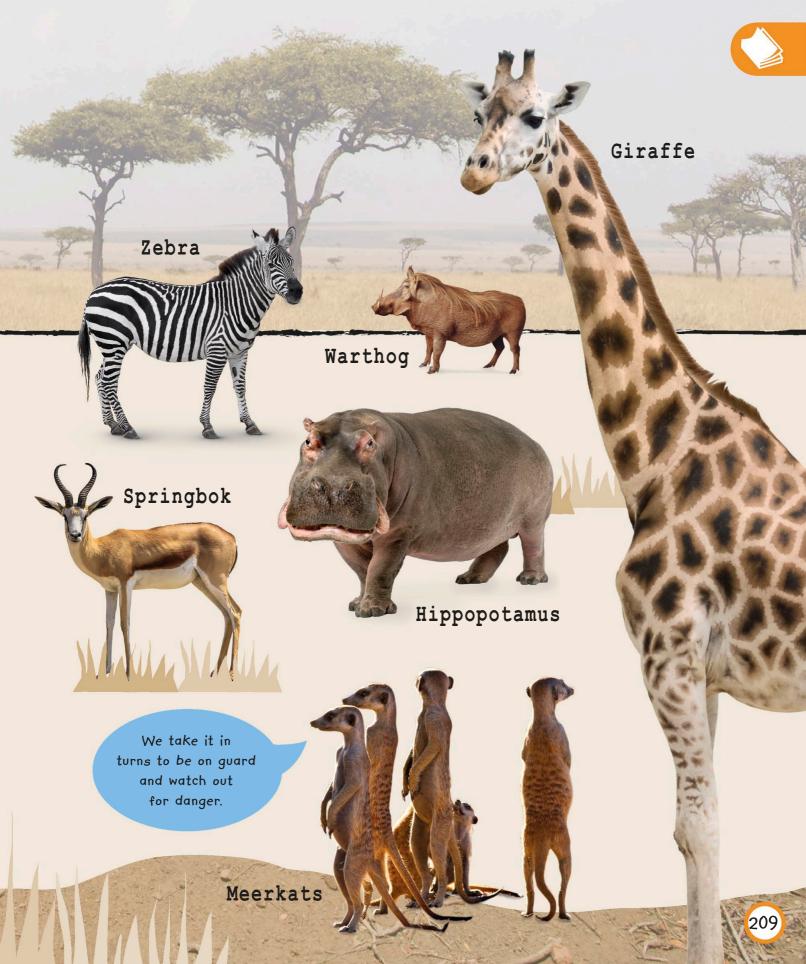






Vulture







Dazzling dinos

They haven't lived for a long time, but there were once many **different dinosaurs** on Earth. Can you say their names?

We were around for millions of years, so we didn't all live at the same time.

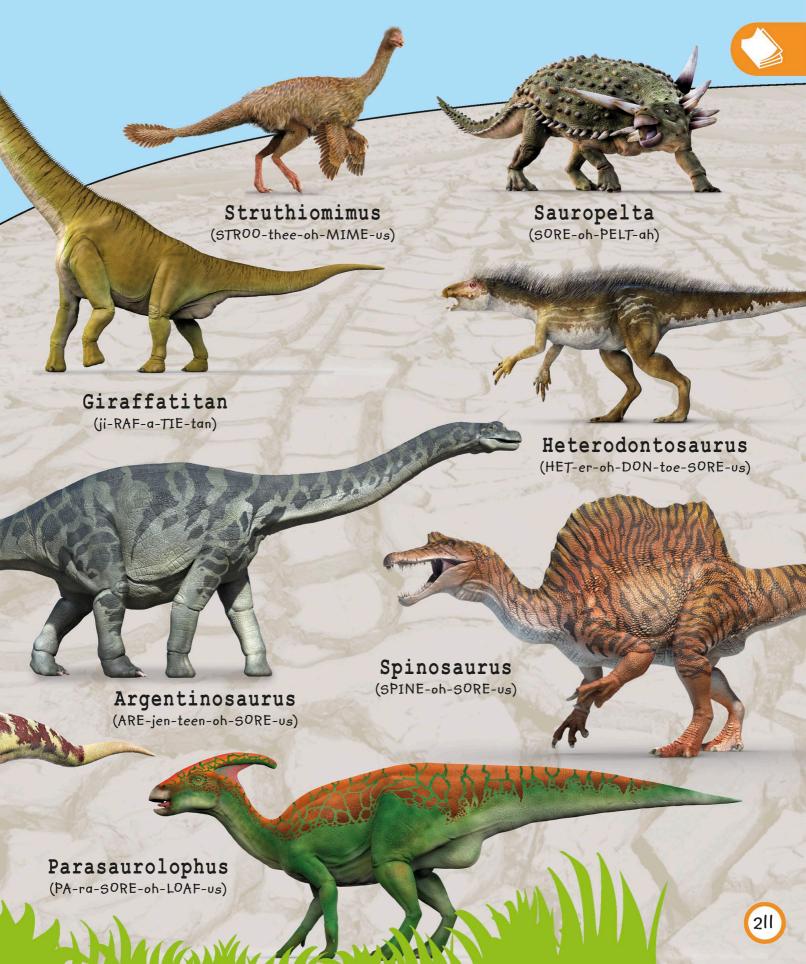
New discoveries

Everything we know about dinosaurs comes from their **fossilized remains**. Scientists keep studying the fossils so we can learn even more about these creatures.

Sinosauropteryx (SIGH-no-sore-OP-ter-ix)

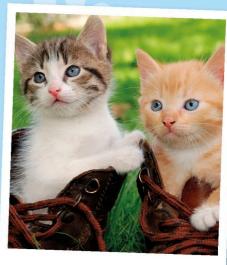
Tyrannosaurus (TIE-ran-oh-50RE-us)

Iguanodon
(ig-GWAH-no-don)



Perfect pets

Although some animals are wild, others make friendly **companions** that live in our homes. Here are some popular pets.

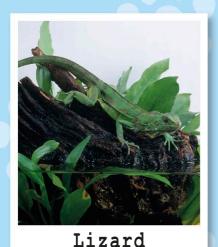


Cats

Keeping pets

All pets need to be well **looked after** and cared for. It's important for pet owners to understand what their pets need.









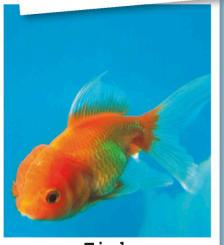


We like living together. One rabbit will get lonely on its own.





Guinea pig



Fish



Bird



I need a special lamp to keep me hot when it gets cold outside.





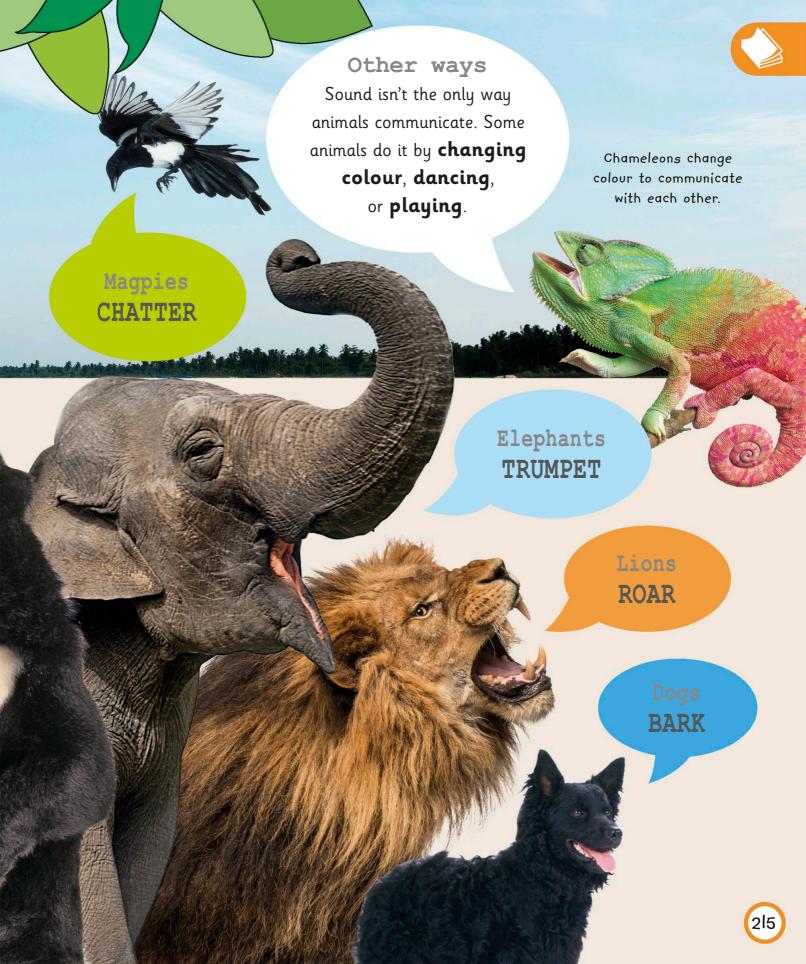
Ferret



Animals can't talk the way people can, but they can **communicate** with each other. One way is by making sounds. How many animals noises do you know?

Bats SCREECH

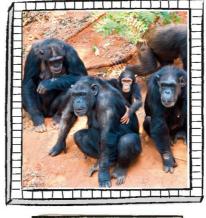






What's in a name?

Lots of animals like to spend time together. Groups of animals can have special names.



BAND BLOAT of hippos of gorillas





FLAMBOYANCE of flamingos



GAGGLE of geese

PACK of wolves



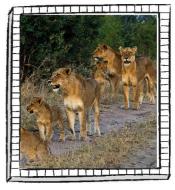








DAZZLE of zebras



PRIDE of lions

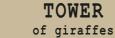




PARLIAMENT of owls

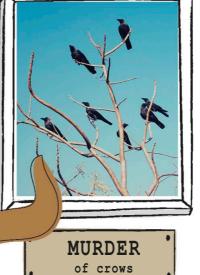


PRICKLE of porcupines



SCHOOL of fish



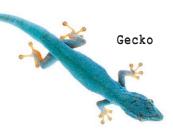




AURORA of polar bears



Animal words



Geckos are reptiles.

A lot of **important** animal words appear in this book. If you ever get stuck, here's what they mean.

Aquatic An animal that spends most or all of its life in water. Also a plant that grows in water.

Amphibians A group of cold-blooded animals that can live in water and on land.

Birds A group of warm-blooded animals that hatch from eggs, have feathers, and a beak.

Bone A hard material that makes up the internal skeleton of most vertebrates.

Camouflage Colours or patterns on an animal's body that help it to hide.

Carnivore An animal that only eats meat.

cold-blooded An animal that can't control its body temperature by internal means.

Colony A group of animals of the same species that live together.

Echolocation A special way that some animals can use reflected sound (echoes) to see.

Endangered An animal at risk of becoming extinct.

Endoskeleton
An internal skeleton.

ExoskeletonAn external skeleton.

Extinct When there are no more animals in a species left.

Fish A group of mostly cold-blooded aquatic animals that live in water.

Many have scales.

Fossil Evidence of past life of a plant or animal that has been preserved in the Earth.

Habitat An animal's natural home environment.

Endanat risk

Red pandas are endangered. There are not many of them left.





Red panda Herbivore An animal that only eats plants.

Hibernation When an animal goes into a deep sleep over winter, where its body temperature and heart rate fall to a low level.

Invertebrate An animal that doesn't have a backbone.

Mammals A group of warm-blooded animals that have hair and drink their mother's milk as babies.

Migration A seasonal movement where animals travel from one place to another and return.

Nocturnal An animal that is active at night.

Omnivore An animal that eats plants and meat.

Poison A harmful substance that can be deadly if touched or eaten.

Baby orangutan

Predator An animal that hunts other animals for food.

Prey An animal that is hunted for food.

Primates A group of mammals including monkeys, apes, lemurs, and humans.

Reptiles A group of cold-blooded animals that hatch from eggs and have scales.

rigid plates seen on animals such as insects, fish, reptiles, birds, and one mammal (pangolin).

Scavenger An animal that eats dead and dying animals. Some animals today also scavenge human rubbish.

Orangutans are primates.

species A group
of similar animals
that share the same
features and can
have babies together.

Venom A harmful substance that can be injected into an animal through a bite or a sting.

Vertebrate An animal that has a backbone.

Warm-blooded An animal that can control its body temperature.



Hermit crab

Vultures are scavengers.



Crabs have

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