



THERE ARE  
**REPTILES**  
EVERYWHERE

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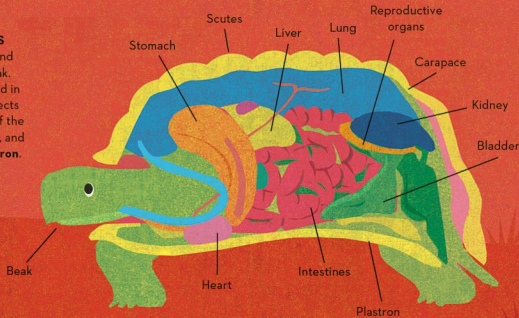
BRITTA TECKENTRUP

# IT'S A REPTILE! (SO WHAT IS THAT?)

Reptiles don't have fur or feathers. Instead, their skin is covered in scales or bony plates, or both. Most reptiles lay eggs, but some of them give birth to their babies, like mammals do.

## TURTLES AND TORTOISES

Instead of teeth, turtles and tortoises have a hard beak. A tough, bony shell covered in plates, called **scutes**, protects their soft bodies. The top of the shell is called the **carapace**, and the flat bottom is the **plastron**.



## COLD BLOOD

Reptiles are cold-blooded. This means that they can't keep their bodies at a steady temperature, like we do. Instead, they have to bask in the sun to warm up. When they get too hot, they have to move into the shade to cool down again.

## LUNG POWER

The lungs of marine turtles are a bit like inflatable armbands. When their lungs are full of air, the turtles can swim near the surface of the sea.



## CROCODILIANS

There are 25 species of crocodilians, the large reptiles in the crocodile family. They have long bodies covered in bony scales and long jaws for snapping up fish. This family includes crocodiles, alligators, caimans and the rare gharial, which has a skinny snout lined with sharp teeth.



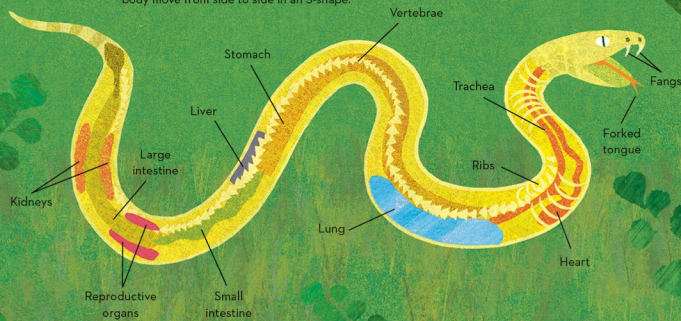
## LIZARDS

Lizards have four legs and a tail and most of them are speedy movers. Many lizards have sharp claws, but geckos have sticky toes for gripping onto branches, or wobbled feet that they use like hang gliders to 'fly' through the air.



## SNAKES

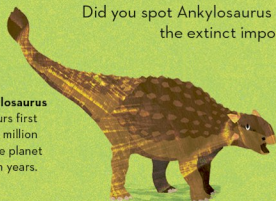
A snake has no legs, but it can slither and slide using its uniquely shaped body. The scales on its underside grip the ground like the sole of a shoe, so it can push itself forwards with its muscles. These muscles move in waves, making the body move from side to side in an S-shape.



## IT'S A BIG FAMILY!

Did you spot Ankylosaurus and Pteranodon, the extinct imposters?

Dinosaurs such as **Ankylosaurus** were reptiles. Dinosaurs first appeared around 240 million years ago and ruled the planet for the next 174 million years.



**Pteranodon** was a huge flying reptile with long, toothless jaws. Pteranodon wasn't a dinosaur - it belonged to a different group of reptiles called pterosaurs.



The **crocodilians** are the closest relatives of Ankylosaurus and Pteranodon. Like Ankylosaurus, they have bony plates on their bodies.



You can still see dinosaur-like features in modern reptiles. **Jackson's chameleons** have three horns, which make them look a bit like **Triceratops!**



# REPTILES HAVE BEEN AROUND FOR AGES

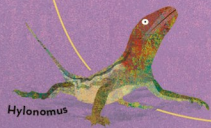
Reptiles have been around for 312 million years, long before furry or feathered animals appeared. To put this into perspective, modern humans have only been on the planet for about 200,000 years!

330-340 MILLION  
YEARS AGO



Balanerpeton

All reptiles evolved from a group of animals called amphibians, like **Balanerpeton**. It laid its eggs in water, just like modern frogs and toads.



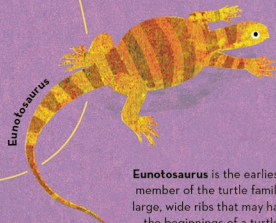
Hylonomus

**Hylonomus** was probably one of the first types of reptile to evolve, about 312 million years ago. It had sharp teeth for eating bugs and it laid its eggs on land.



Protosuchus

The first crocodylians, such as **Protosuchus**, looked like long-legged lizards and they were probably fast movers both on land and in the water. They had strong jaws and hunted their prey alongside dinosaurs.



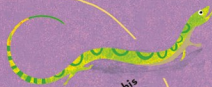
Eunotosaurus

**Eunotosaurus** is the earliest known member of the turtle family. It had large, wide ribs that may have been the beginnings of a turtle shell.



Proganochelys

By 210 million years ago there were reptiles with bony shells, but **Proganochelys** looked much scarier than modern turtles. It had rows of spikes around its neck and a spiky tail that ended in a club - useful for walloping any predators that wanted to eat it.



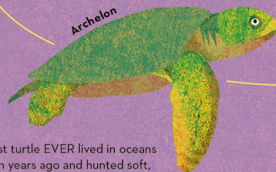
Tetrapodophis

A very strange-looking snake with four tiny legs lived 120 million years ago. **Tetrapodophis** had a long body for squeezing its prey to death, just like modern constrictor snakes.



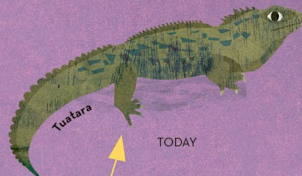
Sarcosuchus

**Sarcosuchus** was a mighty meat-eating monster as long as a bus. This mega-croc had giant jaws that were lined with more than 120 teeth. It lived 112 million years ago.



Archelon

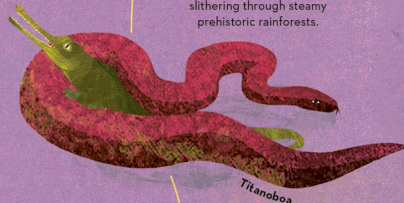
The largest turtle EVER lived in oceans 70 million years ago and hunted soft, squishy jellyfish, squid and octopuses. **Archelon** grew to 4 metres long - that's the length of an elephant.



Tuatara

TODAY

Amazingly, some reptiles did survive. Six million years after the asteroid crashed into Earth, enormous snakes like **Titanoboa** - up to 14 metres long - were slithering through steamy prehistoric rainforests.



Titanoboa

Around 66 million years ago, an enormous ball of burning rock came from space and slammed into the planet. It caused huge fires and clouds of deadly smoke to fill the sky. Three-quarters of all animals and plants went extinct.



# WHERE DO REPTILES LIVE?

Reptiles prefer warm places, but they can make their home almost anywhere. All they need is something to eat, somewhere to warm up, and somewhere to shelter when they need to rest, hide or cool down.

## CUNNING CAVE SNAKES

A dark and gloomy cave is not the ideal hunting ground for most reptiles, but Kantemó Cave in Mexico provides a delicious meal for **yellow-red rat snakes**. As the sun rises, they simply hang upside down from the cave roof and wait for supper to arrive. At dawn, hundreds of bats return to the cave to sleep - only to be gobbled up by these ravenous suspended snakes.

Yellow-red rat snake

## SALTY SEA SNAKES

The **yellow-bellied sea snake** spends its whole life at sea, using its flat, paddle-shaped tail to swim. When it finds a tasty fish, it swims backwards to get its fangs in the perfect position, then it strikes with its deadly venom.

Yellow-bellied sea snake

Marine iguana

## DEEP-SEA DIVERS

**Marine iguanas** live on the Galápagos Islands off the coast of Ecuador, and take a daily plunge into the Pacific Ocean. They hold their breath for up to 40 minutes while they swim to the seabed and nibble on seaweed.

## CHILLY LIZARDS

On New Zealand's Stewart Island, the weather can turn wet and windy in the winter. **Harlequin geckos** have a clever way of coping with the cold. Their bright skin turns dark, because darker colours soak up sunlight faster than light colours can.

Harlequin gecko

# DESERT REPTILES

Reptiles rule in hot, dry deserts, where it rarely rains and few plants can grow. Snakes and lizards bask in the strong desert sun, which quickly warms up their muscles so they can chase bugs and scorpions.

## SIDEWINDERS

Most snakes struggle to move across deserts. All those tiny grains of sand keep moving, making it difficult to grip onto the ground. To solve this problem, **Mexican desert sidewinders** scoot across the slippery sand by throwing their bodies into S-shaped coils. Only two parts of their body touch the hot sand at a time, so it's a cool way to travel - and speedy, too.

Mexican desert sidewinder

## COOLING DOWN

The Sonoran Desert in North America is baking hot in the day, but becomes very nippy at night. **Desert tortoises** dig burrows so they have somewhere to hide from the sun and stay snug at night. Their feet are spade-shaped, so they're perfect for digging through soft sand.

Desert tortoise

## ANT-EATERS

Spiky-skinned **thorny devils** live in Australia's Great Sandy Desert. They lap up passing ants with their sticky tongues, gobbling up hundreds at a time.

A spiny body is handy when it's time for a drink. Overnight, the desert cools down and dew collects on the lizard's back. The water runs along little grooves between its spikes and pours into its mouth.

Thorny devil

# RAINFOREST REPTILES

This is Borneo, a large island in Southeast Asia, and it's a reptile's paradise. From the longest snake in the world to a flying dragon, more than 250 species of reptile live happily in the steamy heat of the rainforest. It's nice and warm, there's plenty of food and there are lots of places to hide.

Asian forest tortoise

The fearless **Asian forest tortoise** protects her eggs by piling a mound of leaves on top. If a predator comes snooping around, she'll quickly add more leaves and stand on top to guard her babies.

Draco lizard  
(flying dragon)

Watch out - this **Draco lizard** is on the move! Thin sheets of skin between its ribs act like a parachute as it glides to the next tree. Gliding is much faster than climbing up and down.

Wise **spiny terrapins** stay on their guard. They may have a hard, sharp-edged shell, but that's no defence against force neighbourhood predators like the saltwater crocodile.

Spiny terrapin

A **saltwater crocodile** lurks in the shadows.

Its nostrils and eyes are on top of its head, so it can stay out of view while watching for something tasty to cruise by - like a nice, crunchy spiny terrapin...

Saltwater crocodile

## CAN YOU FIND?

Small and dainty, the **green crested lizard** scuttles through the trees. Its bright green skin blends in with the background, but it turns brown when it's scared. There are six green crested lizards hiding, but how many of them are feeling frightened?

Beware a hungry **blue coral snake**! Its bright orange head and tail are a warning that it's very dangerous, with venom that can kill in minutes. Luckily, its favourite food isn't people, but other deadly snakes!

Blue coral snake

False gharial

A strange sound can be heard in the rainforest. It's a colourful **tokay gecko**, named after the male's loud call of "to-kay, to-kay". He's calling out to attract a mate.

Tokay gecko

Anyone brave enough to put their head inside a **false gharial's** mouth would be able to count more than 80 razor-sharp, pointy teeth.

The **salfin lizard** has a miraculous talent. When it takes fright, it heads to the river and runs across the water. It doesn't sink straight away because it runs so quickly and has big, wide feet that trap air beneath them.

Salfin lizard

The world's longest snake is about to take a dip. It's a **reticulated python** and it can grow to a monstrous 10 metres long. Female pythons lay their eggs in hollow trees and look after them until they hatch.

Reticulated python