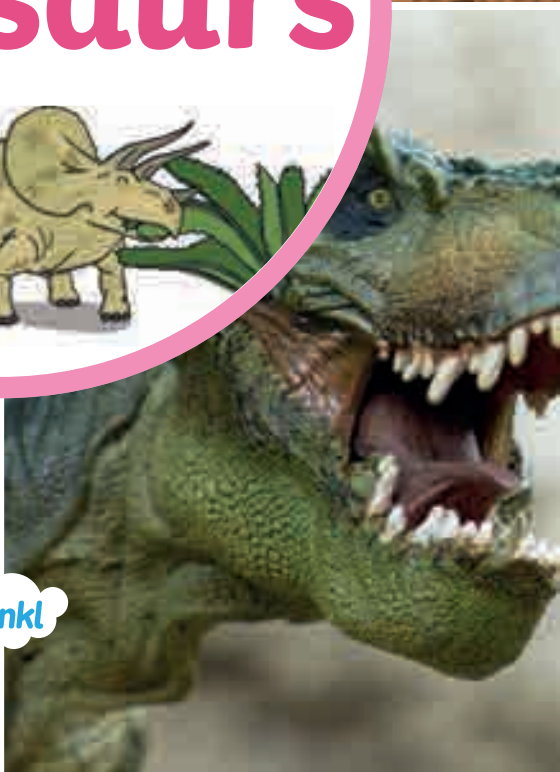




Discovery  
Squad

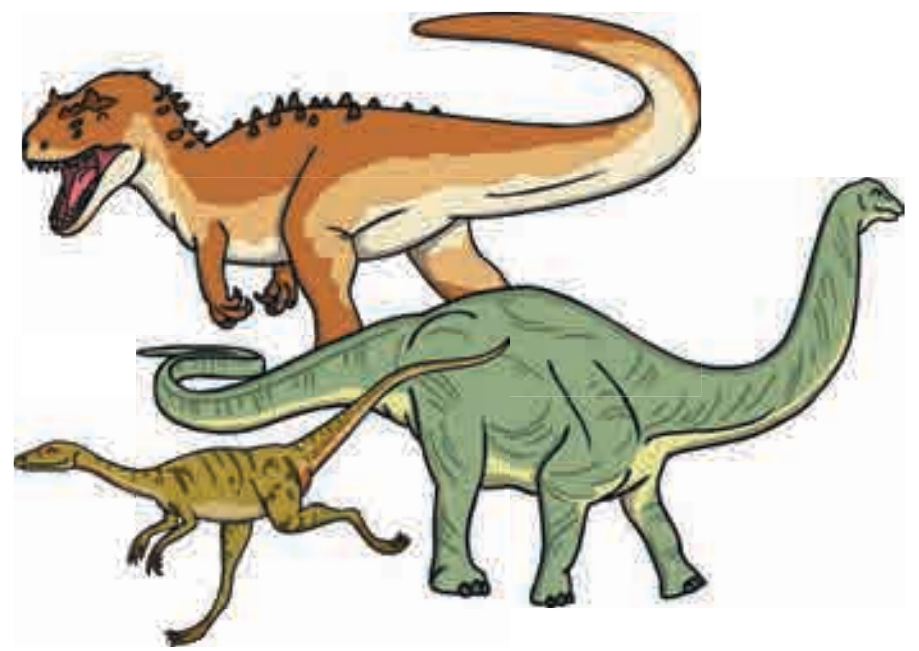


# Dinosaurs





# Dinosaurs



Harry

Aisha

Riz

Blake

Holly



Look out for Harry, Riz and Blake who will tell you lots of brilliant facts about dinosaurs. Have a go at the quiz at the end to see how many facts you can remember!



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# All About Dinosaurs

## When did dinosaurs live?

Dinosaurs lived on Earth over 200 million years ago. They were part of the **reptile** family and lived for over 160 million years.

They became **extinct** around 65 million years ago.

Some **scientists** say that the dinosaurs were killed when an **asteroid** hit Earth and others say they were killed by volcanoes.

Many dinosaurs were huge but some were only the size of a big bird.



Did you know...  
?



**Brachiosaurus**  
(brack-ee-o-sor-us)  
could grow up to 30  
metres long.

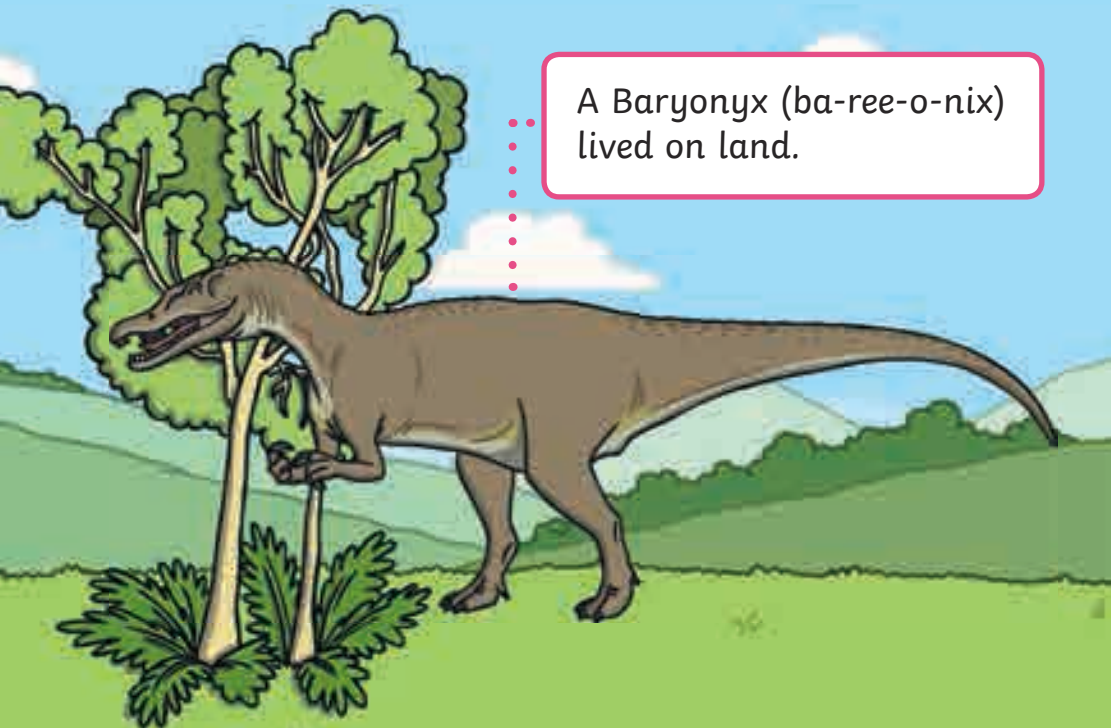


# Land, Sea and Air

Where did dinosaurs live?

## Land

Many dinosaurs lived on dry land. Some walked on their back legs and had a long tail to help them keep their balance. Other dinosaurs walked on all four legs.

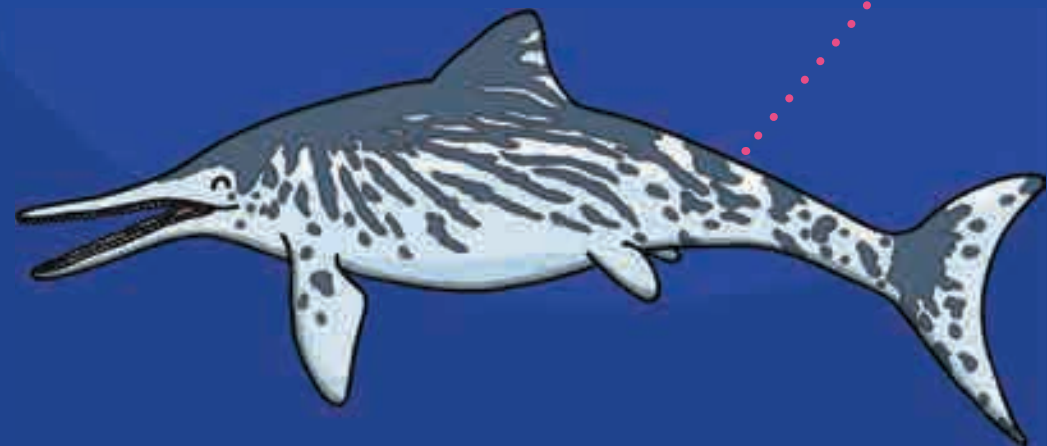


A Baryonyx (ba-ree-o-nix) lived on land.

## Sea

Over time, the legs of some dinosaurs **evolved** to become fins. These dinosaurs lived in the sea and were good swimmers.

This is the Ichthyosaurus (ick-thee-o-sor-us) or 'fish lizard'. It had large eyes for finding food and grew to the size of an adult man.



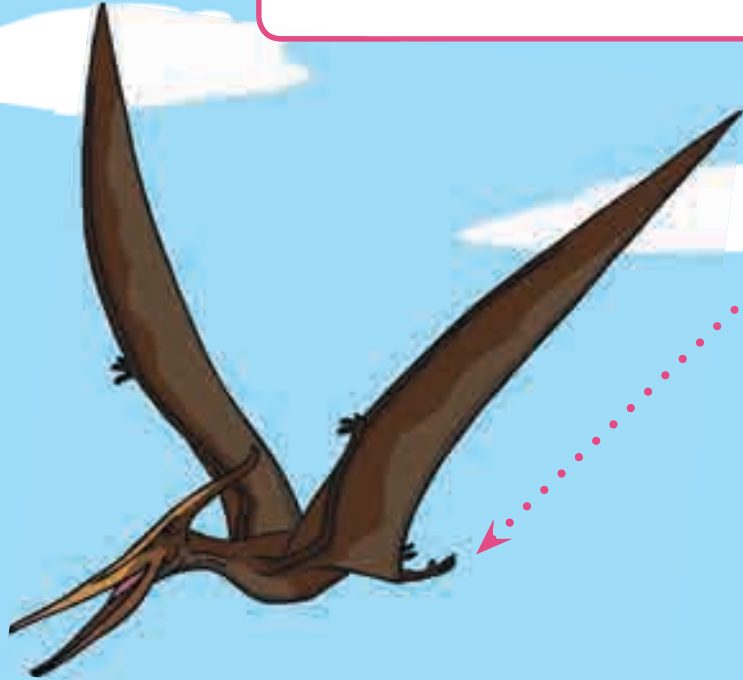
Ichthyosaurus (ick-thee-o-sor-us) fed on squid and fish.

## Air

Some reptiles grew wings and feathers. They were called Pterosaurs (te-ra-sors) and were the first animals to fly. They were not dinosaurs.



Their wings grew from their last finger to their back legs.



Pterodactyls (te-ra-dact-ul) had long beaks with around 90 sharp teeth.

## Dinosaur Diets

### What did dinosaurs eat?

Dinosaurs and other animals can be put into three main groups if we look at their **diet**.



#### Herbivores

animals that only eat plants, such as flowers, trees, nuts and grass



#### Carnivores

animals that only eat meat



#### Omnivores

animals that eat both meat and plants



Think about what you eat. Which group do you belong to?



# Meet the Herbivores

## Which dinosaurs were herbivores?

The first dinosaurs were herbivores or plant-eaters. They were short and wide. Later, other dinosaurs developed long necks which let them eat the leaves and branches from the tallest trees.

Did you know...  
?



The **Argentinosaurus** (ar-jen-teen-o-sor-us) was the largest plant-eating dinosaur ever to live.



Think about herbivores today. Can you think of one which has a long neck?

Diplodocus  
(dip-lod-o-cus)

Brachiosaurus  
(brack-ee-o-sor-us)

Apatosaurus  
(a-pat-o-sor-us)

Iguanodon  
(ig-warn-a-don)



These dinosaurs were all herbivores.

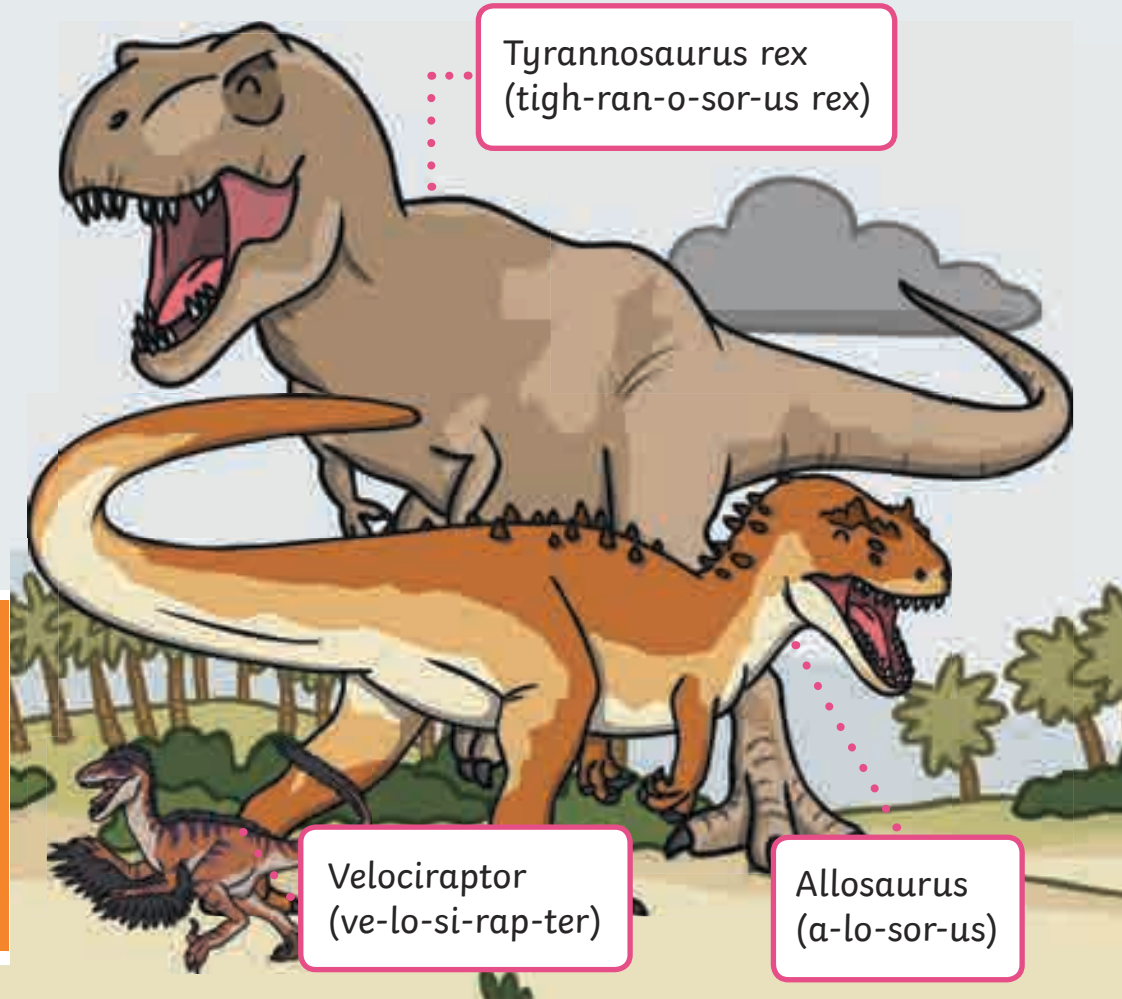
# Meet the Carnivores

## Which dinosaurs were carnivores?

The carnivores (meat-eaters) were fierce **predators**. Many had large jaws with sharp teeth to help them tear meat. They were very fast and powerful, which helped them to catch other dinosaurs to eat.



Think about carnivores today. Can you think of one that is very fast?

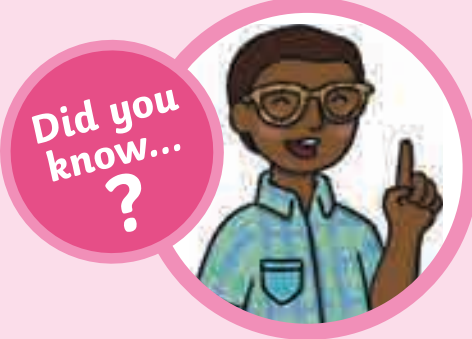
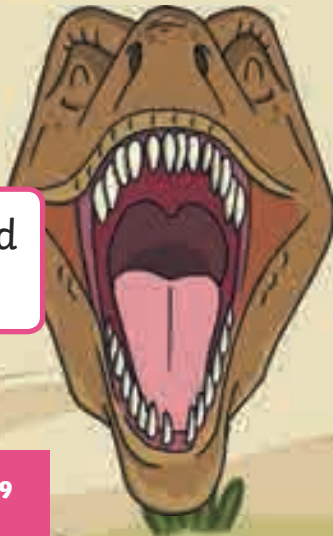


Tyrannosaurus rex  
(tigh-ran-o-sor-us rex)

Velociraptor  
(ve-lo-si-rap-ter)

Allosaurus  
(a-lo-sor-us)

Carnivores had strong jaws.



The Compsognathus (comp-sog-nath-us) was one of the smallest carnivores. It grew to about the size of a turkey. It ate small animals and insects.





# Meet the Omnivores

## Which dinosaurs were omnivores?

There weren't many dinosaurs that were omnivores. The Ornithomimus (or-ni-thom-i-mus) and the Oviraptor (o-vi-rap-ter) were both omnivores. They were bird-like dinosaurs with feathers and beaks. They had long legs to make them fast runners.



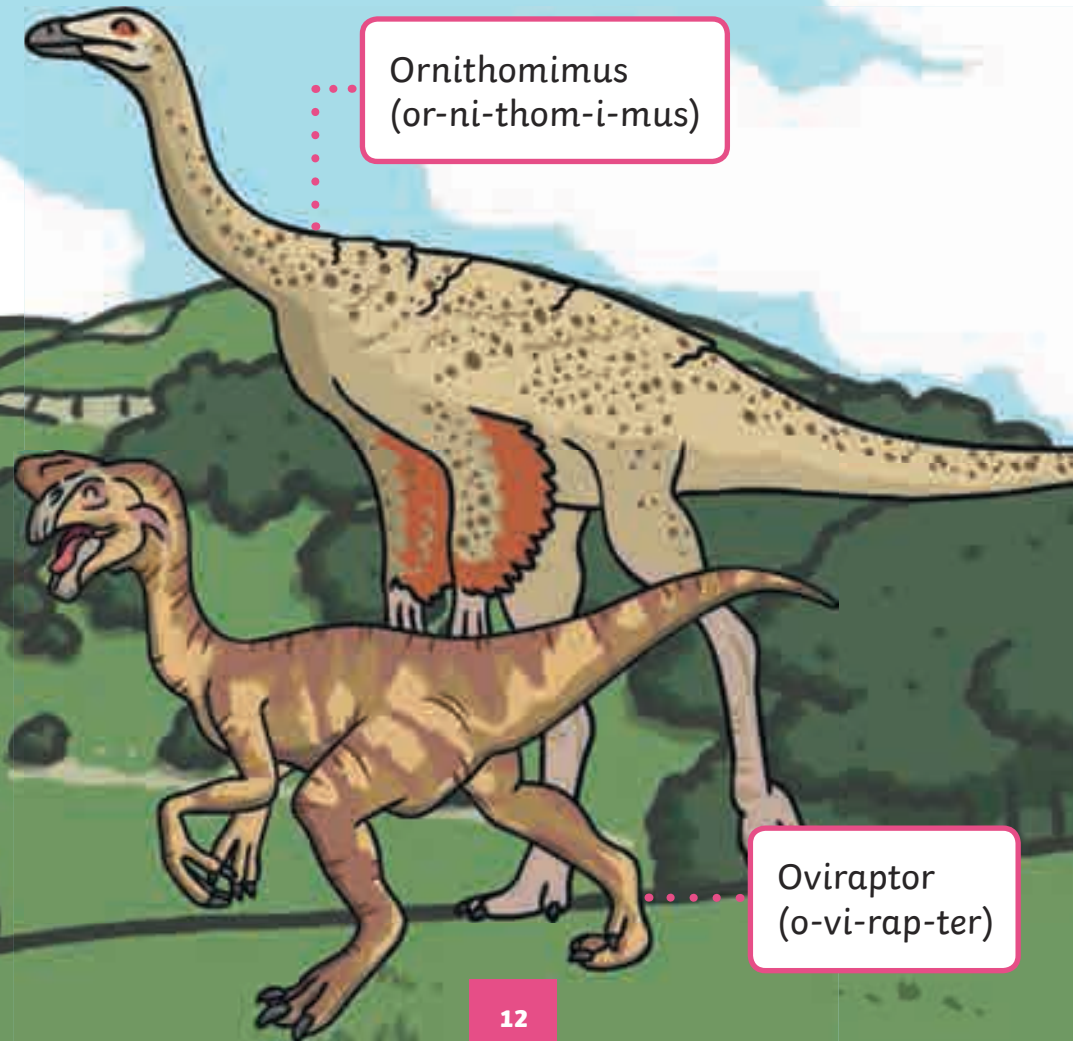
They ate plants, eggs, insects, small mammals and reptiles.

Did you know...  
?



The name 'Oviraptor' means egg-taker.

Ornithomimus  
(or-ni-thom-i-mus)



Oviraptor  
(o-vi-rap-ter)

Think of animals that are alive today. Can you think of any that are omnivores?

# Spikes, Scales, Horns and Tails

## What did dinosaurs look like?

Dinosaurs **adapted** to become better at surviving in the wild. Over time, they evolved to grow bigger and faster, finding it easier to hunt for food and catch their **prey**.



They also became better at **defending** themselves against **predators**. They had different features to protect themselves and to attack any dinosaurs that were hunting them.

## Ankylosaurus

The enormous Ankylosaurus (an-kil-o-sor-us) was covered in hard plates like a suit of **armour**.



It had a big **club** on its tail to hit other dinosaurs with.

hard plates

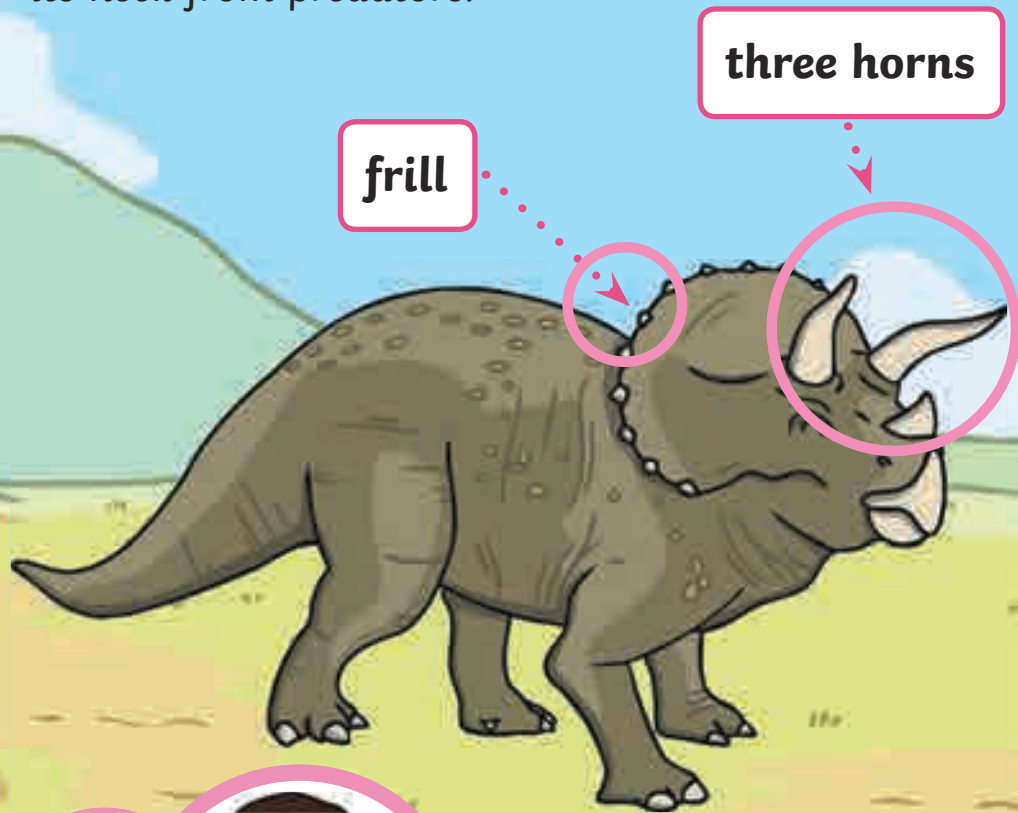
tail club



## Triceratops

The Triceratops (trigh-se-ra-tops) had three horns on its head to fight off other dinosaurs.

It also had a frill around its head which protected its neck from predators.



Did you know...  
?

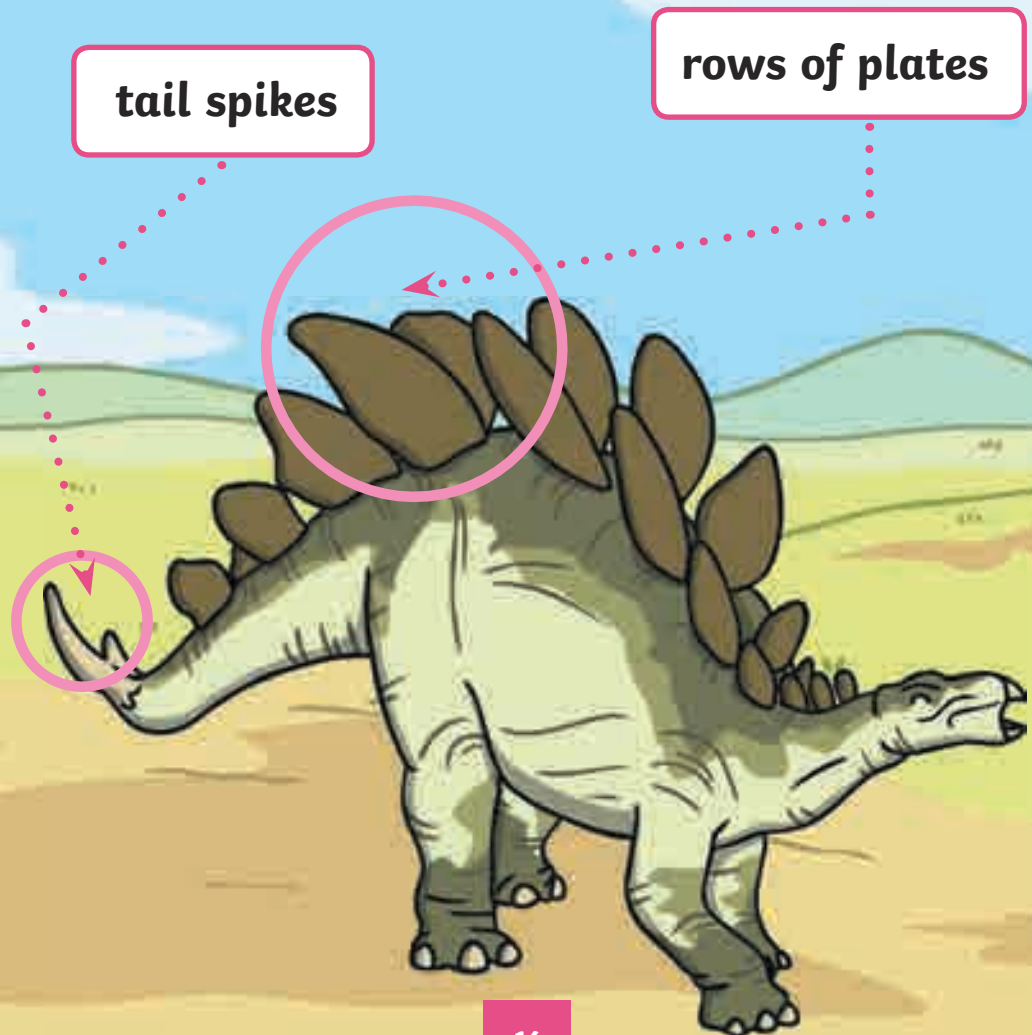


The name 'Triceratops' means three-horned face.

## Stegosaurus

The Stegosaurus (steg-o-sor-us) was a nine-metre-long giant. Its tail had spikes which could grow up to almost one metre.

It also had big plates made of bone that grew along its back.

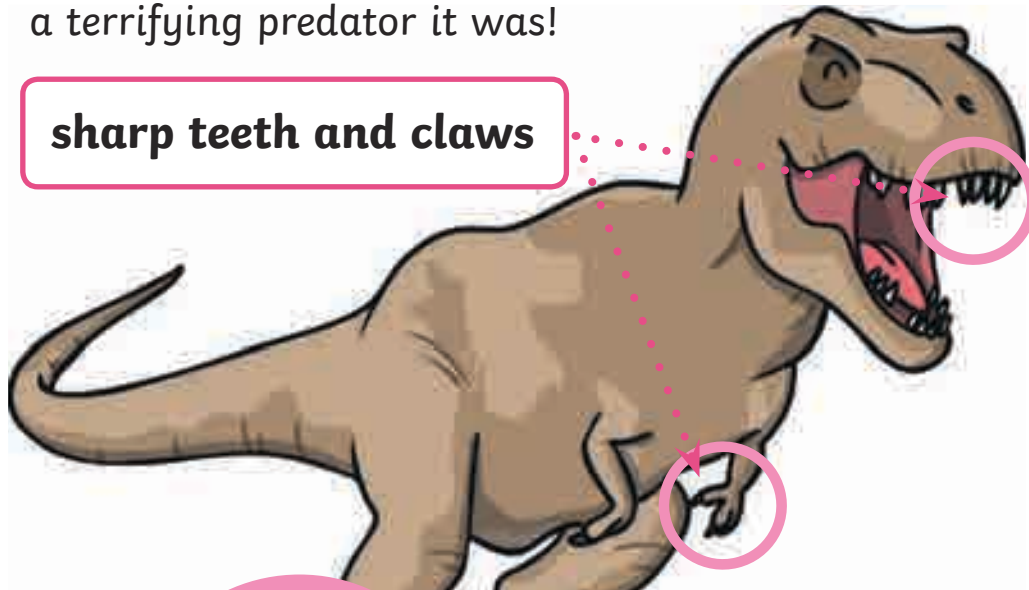


## Tyrannosaurus Rex

The Tyrannosaurus rex (tigh-ran-o-sor-us rex) had a very large head and lots of pointed teeth. Each tooth was up to 20cm long.



It had two short arms with sharp claws. Its powerful, long back legs made it a fast runner. What a terrifying predator it was!



Did you know...  
?



The bite of a Tyrannosaurus rex was three times stronger than the bite of a great white shark.

## Fossil-Finders

### How do we know about dinosaurs?

Dinosaurs were alive millions of years before humans, so how have we found out all of these facts?

Scientists study animal and plant **fossils** to find out about the past. The proper name for these scientists is **palaeontologists** (pay-lee-un-tol-o-jists).



Palaeontologists have found the **remains** of dinosaur bones and eggs all around the world. This gives us important information about:

how they looked

when they lived

how they moved

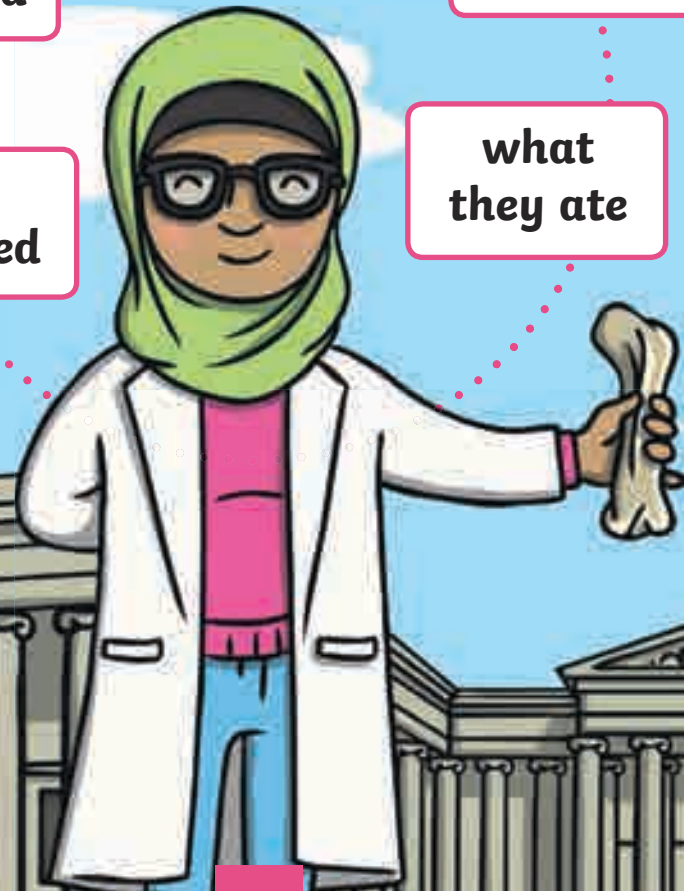
where they lived

what they ate

Dinosaur teeth on display in a museum in America.



Allosaurus fossils found in America.



# Mary Anning

## Who was Mary Anning?

Mary Anning was a famous fossil-finder. She was born in 1799 and lived in Lyme Regis in the south of England. Mary would walk along the beaches and cliffs near this town looking for fossils with her brother and father.



The beaches and cliffs where Mary Anning found her wonderful fossils are now known as the Jurassic Coast.

Did you know...?



Mary was an excellent fossil hunter and became well known for her amazing finds. She found the complete fossil of an Ichthyosaurus, the fossil of a Plesiosaur (plee-see-o-sor) and many more.

Did you know...?



Mary Anning is still remembered today for her important work as a palaeontologist. There is a special sign on her home and a museum all about her in Lyme Regis.



"Rhomaleosaurus & Mary Anning plaque NHM" by Ballista is licensed under CC BY 2.0.

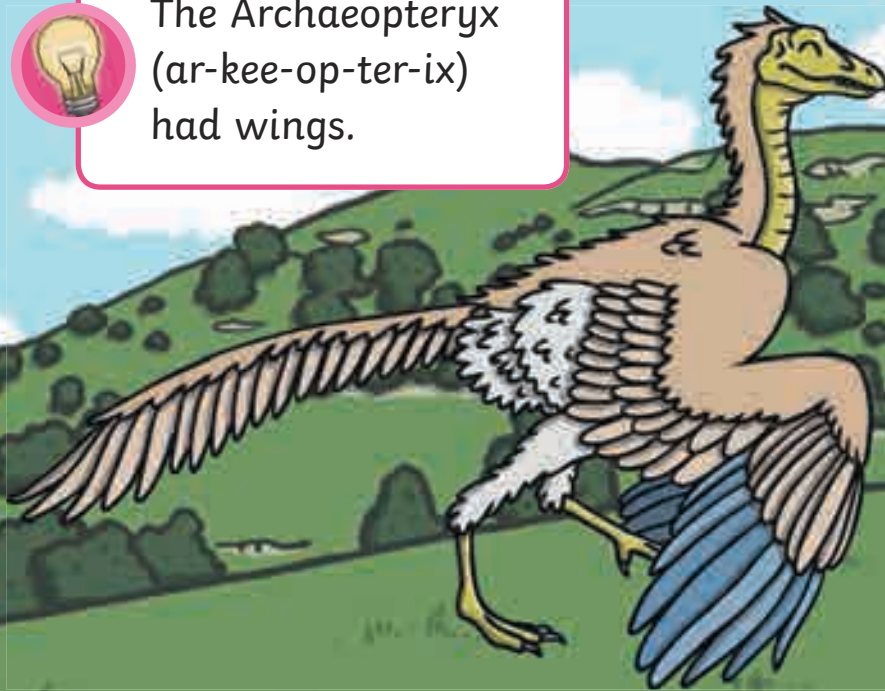
# Living with Dinosaurs

## Are any dinosaurs still alive?

Fossils of more than 20 different dinosaurs with wings, feathers and a beak have been found. Many scientists think that birds are related to dinosaurs.



The Archaeopteryx (ar-kee-op-ter-ix) had wings.



Next time you are feeding the sparrows in your garden or spotting seagulls at the seaside, remember that they may have evolved from dinosaurs that lived millions of years ago.



# Quiz



How well do you remember all the amazing dinosaur facts?

1. How long could the Brachiosaurus grow?
2. Why the Diplodocus and Apatosaurus have long necks?
3. Can you name a dinosaur which was a carnivore?
4. What does the name 'Oviraptor' mean?
5. What does the word 'Triceratops' mean?
6. How much stronger than a great white shark's bite was the Tyrannosaurus rex's bite?
7. What is the name of scientists who study fossils?
8. What is the name of the beaches and cliffs where Mary Anning found the fossils?



# Glossary

<b>adapted</b>	something which has changed to suit its surroundings
<b>armour</b>	a suit made of metal to protect the body
<b>asteroid</b>	a chunk of rock and metal in space that orbits the sun
<b>club</b>	a heavy weapon
<b>defend</b>	to stop someone or something getting hurt
<b>diet</b>	what an animal eats and drinks
<b>digest</b>	to break down food to be used by the body
<b>evolve</b>	to develop or improve over time
<b>extinct</b>	no longer living

<b>fossils</b>	the remains of an animal or plant that have been left in the rocks for a very long time
<b>palaeontologist</b>	a person that studies fossils to find out about life in the past
<b>predator</b>	an animal that hunts and kills other animals
<b>prey</b>	an animal that is hunted and killed by another animal
<b>remains</b>	what is left after an animal has died
<b>reptile</b>	a cold-blooded animal with dry scales or hard plates covering its body that lays eggs



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# Have you met our non-fiction characters?



## Riz

Riz is never still! He zips around on his skateboard and loves adventures and extreme sports. He has visited lots of different places in the world and is always full of tales about the amazing things he has done. He can't wait to work on a ship when he grows up so he can carry on seeing the world.



## Holly

Holly likes to be the leader. She can be a bit bossy but her friends know this is because she likes to get a job done properly. She loves art and DT and her pockets are always full of pens, paper and glue, ready to sketch, stick or sculpt anything. Holly likes to follow the rules and isn't afraid to remind others to do the same.



## Blake

This is Blake. He is a great thinker about life now and in the past – he would love to chat for hours about history! When he is with his friends, he enjoys sharing what he has discovered.



## Aisha

Meet Aisha. She has a big, brave heart and will stick up for herself and her friends. She is interested in finding out about beliefs, traditions and cultures from around the world, which makes Aisha good at understanding other people's feelings.



## Harry

Harry is fun and energetic with a kind, gentle side. He adores animals and is fascinated by science. He is always asking questions and investigating to find answers.



## The Story Continues!

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Harness the excitement by using detailed lesson plans, creative and differentiated reading activities, assessments, and more - all linked to this story.



See other planning resources to support your teaching at [twinkl.com/planit](https://www.twinkl.com/planit)





Millions of years ago, our world was full of dinosaurs. Some were huge and some were tiny. Some had feathers and some had horns.

Have you ever wondered which dinosaurs were meat-eaters or why the Diplodocus had such a long neck? Find out in this brilliant, fact-filled eBook!

