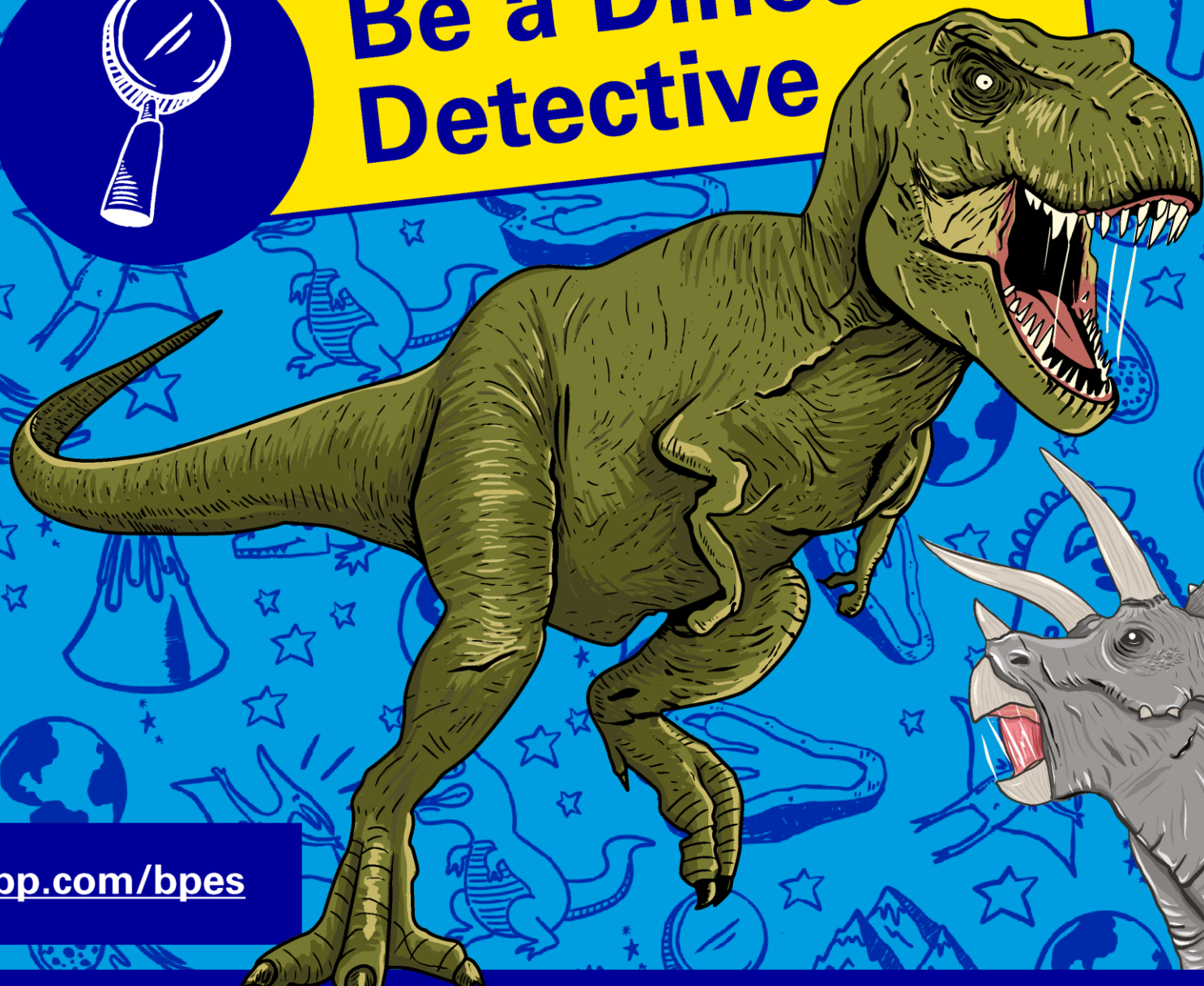




Be a Dinosaur Detective

You're going to take a close look at dinosaurs and their fossils, and discover how dinosaurs lived millions of years ago.



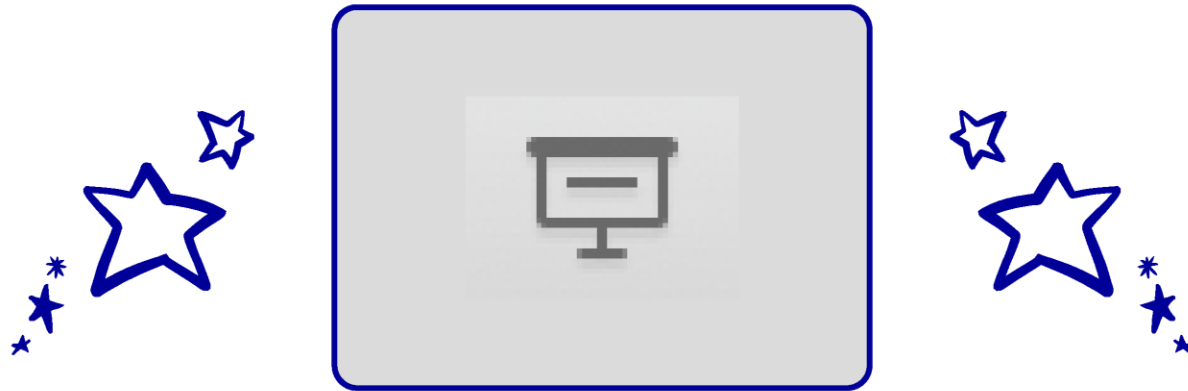
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Working scientifically, Animals, Living things and their habitat

Ages 4-7

Before you start

Make sure you are viewing this PowerPoint in 'Slide Show' mode.
Click on this icon on the bottom-right of your screen.



This will allow you to see the full resource and
to use any interactivity.



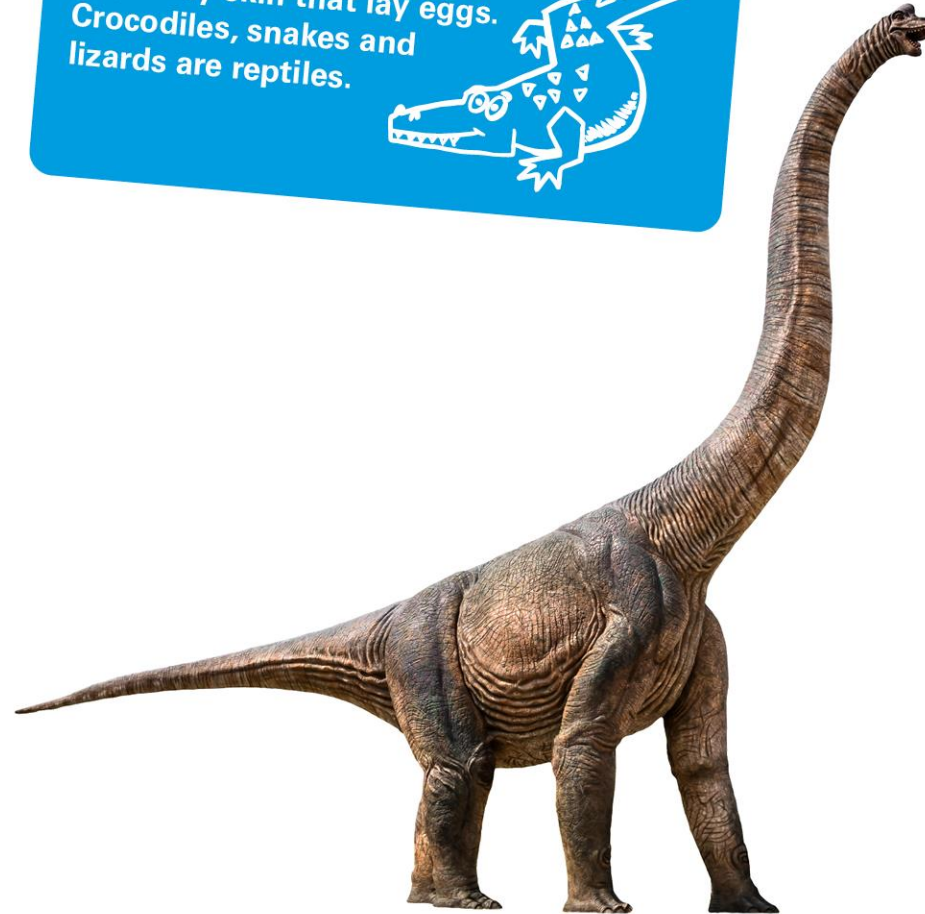
What's a dinosaur?

Dinosaurs are reptiles that lived on land millions of years ago. They are different from the **reptiles** alive today because of the position of their legs and how they stand.



Its legs stick out to the sides.

Reptiles are animals with dry, scaly skin that lay eggs. Crocodiles, snakes and lizards are reptiles.

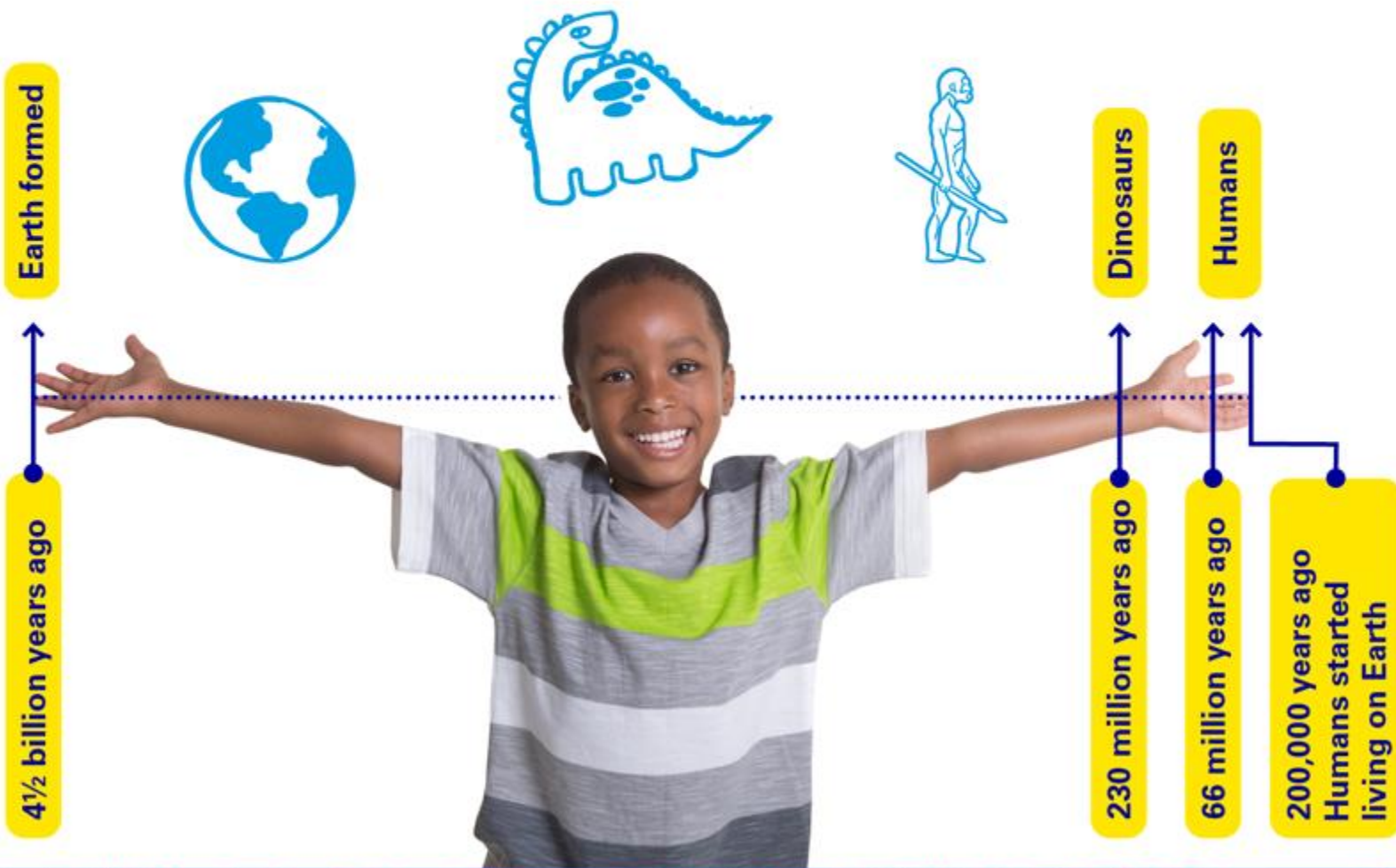


Its legs are under its body and it stands upright.

When were dinosaurs alive?



Dinosaurs lived on Earth between 230 and 66 **million** years ago. Humans have only been around for 200 **thousand** years. That means a human has never seen a dinosaur alive!



Try this to help you understand how long ago all of this happened.

1. Stretch out your arms.
This shows you how long the Earth has existed.
2. The tip of your right hand is when Earth formed (4½ billion years ago.)
3. The wrist of your left hand is when dinosaurs started living on Earth (230 million years ago).
4. The bottom of your middle finger (left hand) is when the dinosaurs died out. (66 million years ago).
5. Just below the tip of your middle finger (left hand) is when the earliest humans started living on Earth (200,000 years ago).

How do we know about dinosaurs?

We know about dinosaurs from **fossils**. When a dinosaur died, its body was covered in sand and mud. The soft parts of its body normally rotted away but the hard bits, like the skeleton, stayed behind and became part of the rock.

Fossils are the remains of animals and plants in rocks.



Some dinosaurs were huge!

This is a leg bone.



Some dinosaurs had sharp claws.

What do you think they used them for?



Dinosaurs laid eggs.

How many can you see?



This is a fossilised dinosaur poo (a coprolite). We can find out what the dinosaur ate by looking inside the coprolite for pieces of animal bone and plants.

Who finds fossils?

Anyone can find a dinosaur fossil! You just need to be patient, look in the right places and have the right equipment.



Rock hammer
For breaking rock
around the fossil.



Brush
For brushing away
the broken rock.



Chisel
Used with the hammer,
for breaking rock.



Magnifying glass
For looking closely
at the fossil.



Tape measure
For measuring
the fossil.



Hat
To protect you
from the Sun.

Scientists who
study fossils
are called
palaeontologists.

Would you
like to be a
palaeontologist?



Mary Anning
was a brilliant
palaeontologist
who lived more
than 200 years ago.
She found fossils
of dinosaurs that
had never been
discovered before.



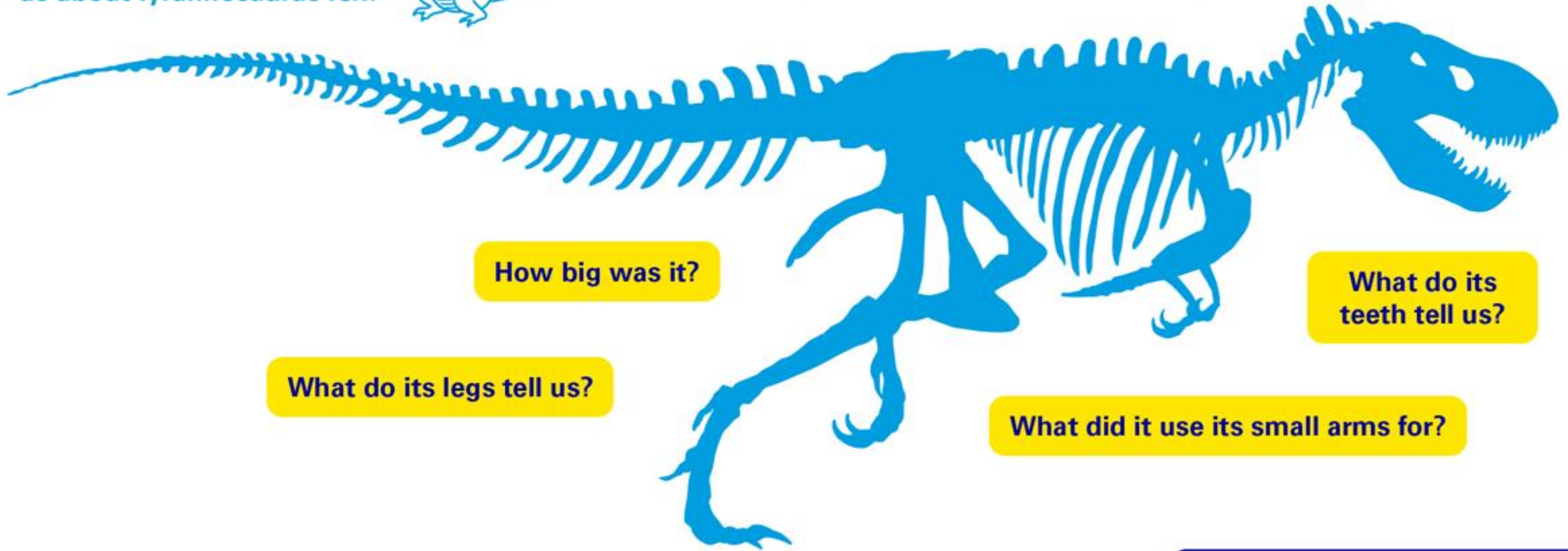
You are going to be a dinosaur detective!



Look at the clues.
What does this fossil tell
us about Tyrannosaurus rex?



Why did it have such big eyes?



How big was it?

What do its
teeth tell us?

What do its legs tell us?

What did it use its small arms for?

Go to the next slide to find out

What do the clues tell us about Tyrannosaurus rex?



T.rex was about 12 metres long and 6 metres tall.

A predator is an animal that hunts and kills another animal for food.

T.rex is a predator. Its large eyes helped it to see its prey.

It used its 60, sharp teeth to crush the bones of other dinosaurs. T.rex was a **carnivore**.

Prey is an animal hunted and killed by another animal for food.

A **carnivore** is an animal that eats meat.

Its long, straight back legs tell us that it could run after its prey.

Scientists think it used its arms to hold on to other dinosaurs, to eat food or to push itself up from the ground.

Look at how small you are compared to a Tyrannosaurus Rex!



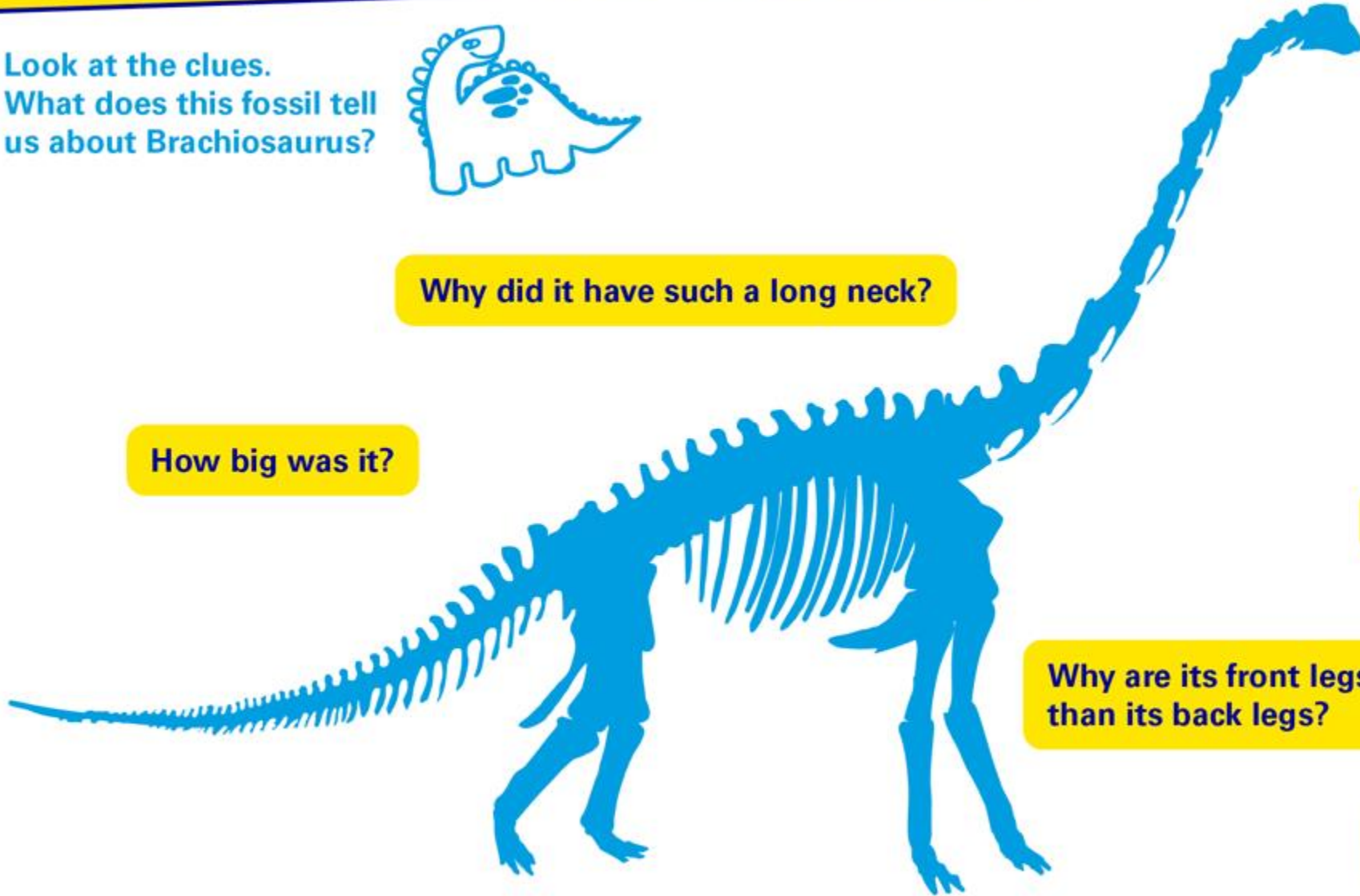
You are going to be a dinosaur detective!

Look at the clues.
What does this fossil tell
us about Brachiosaurus?



Why did it have such a long neck?

How big was it?



What do its teeth tell us?



Why are its front legs longer
than its back legs?

Go to the next slide to find out



What do the clues tell us about Brachiosaurus?

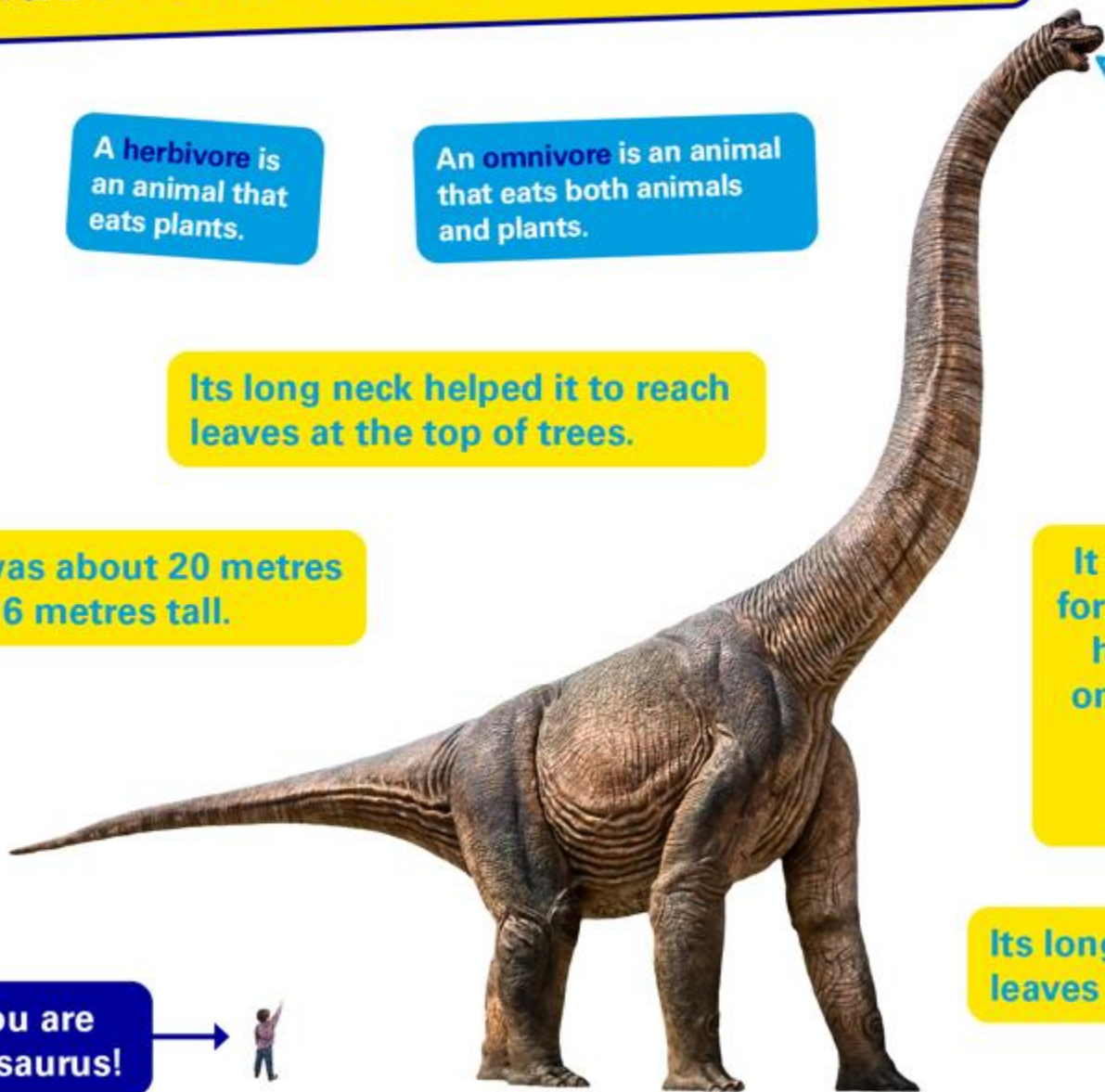
A **herbivore** is an animal that eats plants.

An **omnivore** is an animal that eats both animals and plants.

Its long neck helped it to reach leaves at the top of trees.

Brachiosaurus was about 20 metres long and up to 16 metres tall.

Look at how small you are compared to Brachiosaurus!



It had blunt teeth that were perfect for stripping leaves from trees. Some herbivores had flat teeth (like the ones at the back of your mouth) for grinding plants.

Brachiosaurus was a **herbivore**.

Its long front legs helped it to reach leaves high in the trees.



Were all dinosaurs huge?

No. Some dinosaurs were about the same size as you and some were much smaller. Look at this fossil of an Oculudentavis dinosaur. It's so small, you could hold it in your hand. This tiny dinosaur was trapped in the sticky sap of a tree before it became a fossil.



It was a carnivore.

It probably ate insects.

Are you a brilliant Dinosaur Detective?



True or false? Click to see the answers.

If you get them all correct you are a brilliant Dinosaur Detective!

TRUE

Dinosaurs are reptiles
that lived on land.



FALSE - Dinosaurs were on Earth
between 230 and 66 million years ago.

Dinosaurs were on Earth
200 thousand years ago.



TRUE

Fossils are
found in rock.



TRUE

Tyrannosaurus rex
was a carnivore.



FALSE
Brachiosaurus was a herbivore.

Brachiosaurus
was an omnivore.



FALSE
A palaeontologist studies fossils.

A palaeontologist
studies birds.





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