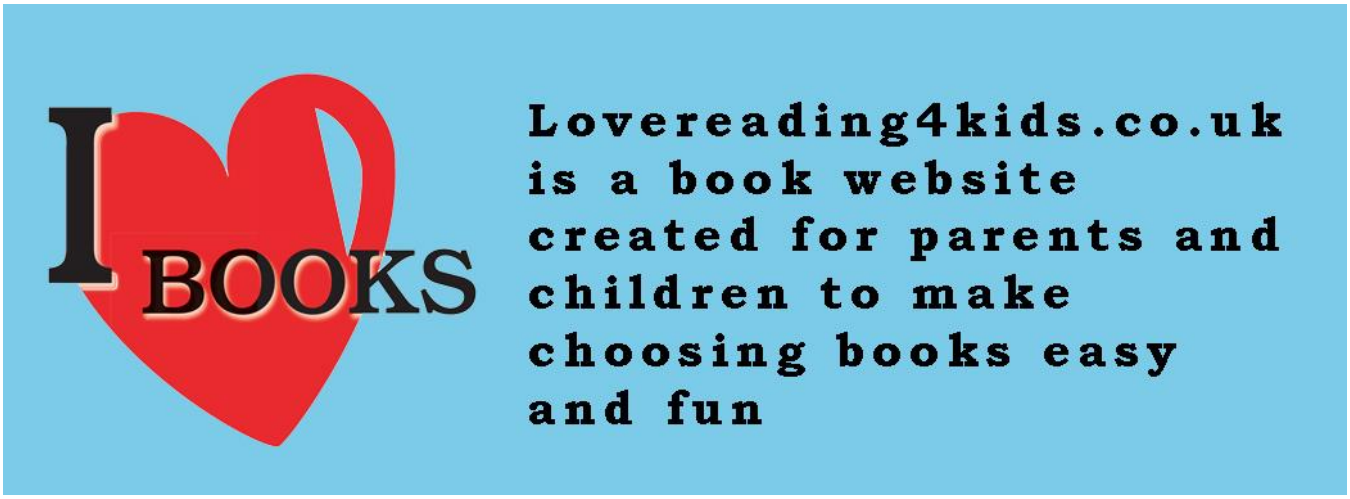


Opening extract from

The Amazing Dinosaur Detectives

Written & Illustrated by

Maggie Li

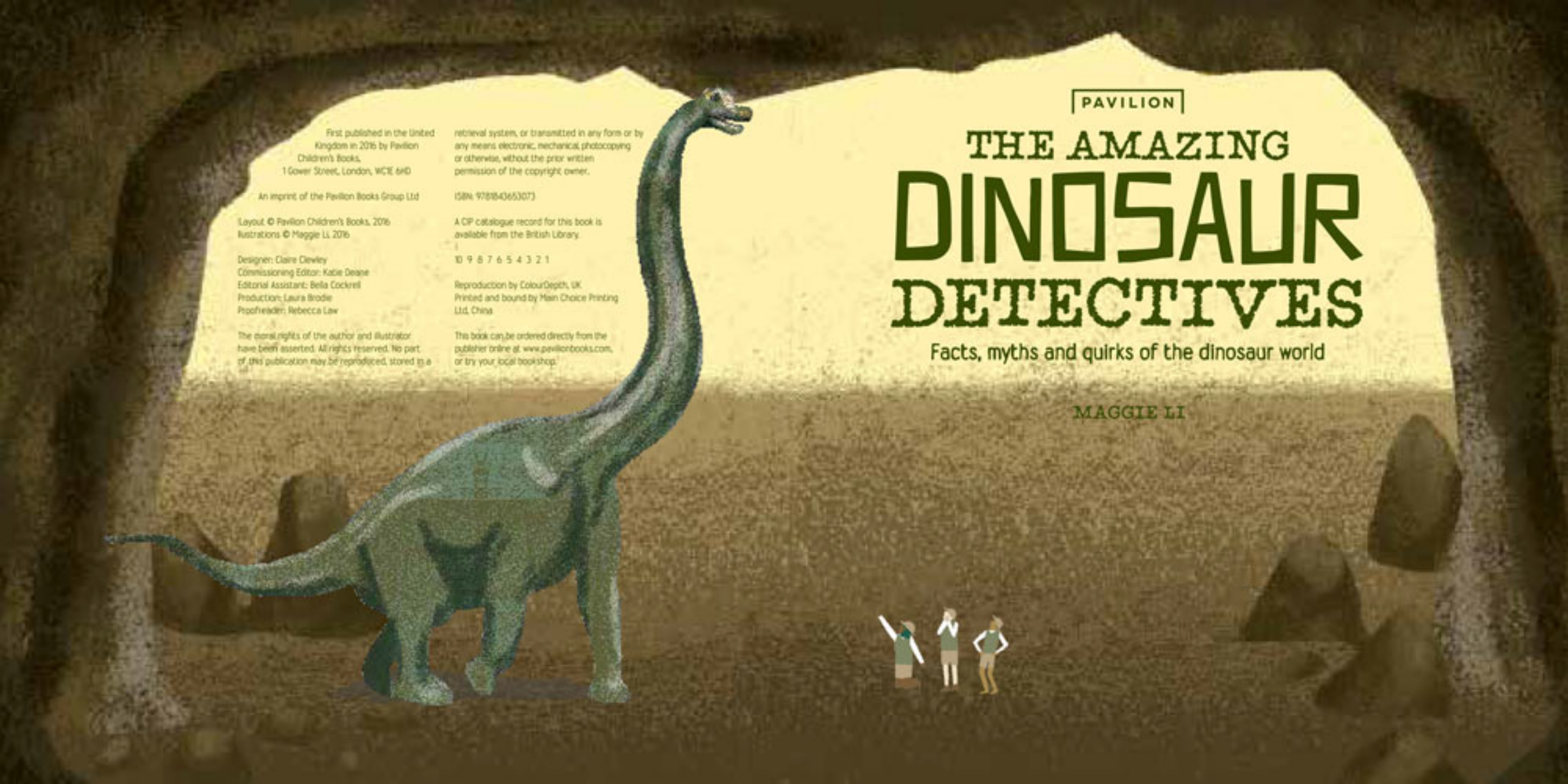
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PAVILION

THE AMAZING DINOSAUR DETECTIVES

Facts, myths and quirks of the dinosaur world

MAGGIE LI

HEAVY ARMOURY

Dinosaurs had to be tough to survive and some had special spikes and plates to prevent them being injured during battles with other dinosaurs.

TAKE A CLOSER LOOK

Some of these characteristics have been passed on to animals still living today. Have a look at crocodiles with their armoury, turtles with their shell backs to protect themselves and hide away in, crabs and their pincer claws, scorpions and the sting in their tail, horned animals like rhinos and the tusks on elephants.

Armour came in many forms from the thickness of the skin, to size of spikes, to the amount of bone surrounding the skull!

These great plates on the back were about the size of a dinner plate.

Not the cleverest dinosaur on the block!

The Stegosaurus had a very small brain — in fact, it was thought to be the same size as a ping pong ball.

The bony plates along its back may also have been used to absorb the heat from the sun and keep them warm.

The Stegosaurus didn't have teeth at the front of its mouth. Instead, it had a beak that helped it to eat vegetation, and then teeth further back in the mouth for chewing things.

STEGOSAURUS' STRENGTHS!


SPIKES


HELMET


SHIELD ARMOUR


LONG SPIKY TAIL

The Ankylosaurus is often compared to a tank — low lying and strong!

MEAN FIGHTING MACHINES

Battles between dinosaurs were to the death, or until surrender. The armour was intended not only to protect them, but also inflict damage to their opponent. Look at the ANKYLOSAURUS — the spike studded back stopped hungry dinosaurs sinking their teeth into the flesh, and the tail would swing around and take a great big thwack of the unsuspecting dinosaur.

JUST IMAGINE

If you want to imagine what the Ankylosaurus' tail did, think of a bulldozer with a wrecking ball, knocking a block of flats down. You wouldn't want to get in the way of that, would you?

It had two rows of spikes along its back.

PARP!

The Ankylosaurus produces huge amounts of gas because of its diet.

Bony plates covered the eyes to protect them.

ANKYLOSAURUS' STRENGTHS!


SPIKES


HELMET


SHIELD ARMOUR


CLUB TAIL

The only way to defeat the Ankylosaurus was to flip it over — but that wasn't an easy thing to do!

CARNIVORES

Carnivore is the name given to a dinosaur that feeds on meat. They were fierce and frightening creatures!

T-Rex had a very keen sense of smell and good eyesight — making it hard for prey to hide and get away!

LARGEST CARNIVOROUS DINOSAUR AWARD

Budge over T-Rex! Winner is SPINOSAURUS

2 1 3

Even though the arms are small (only 2 ft long or so), they were still very strong.

SMALL BUT MIGHTY

The T-Rex was over 20ft tall, 40ft long — that's the length of a tennis court!

Nobody knows if the tail was too heavy for the T-Rex to lift. It may have been dragged along the floor leaving a trail to be scared of!

The T-Rex was able to move quickly because of its massive legs and huge toes. It could reach speeds of around 25mph.

SCARIEST DINOSAUR AWARD

KING OF THE DINOSAURS?

The name Tyrannosaurus Rex means 'Tryant Lizard King' — and it was called this because it was one of the largest, meanest and most terrifying carnivores of the time!

They had huge claws on their back legs for huhting with.

WHO YOU CALLING CHICKEN?

Velociraptor's had feathers, not scaly skin like most dinosaurs. It was also the same size of a large chicken. But mean...

FACT OR FICTION

The Spinosaurus was the first dinosaur to learn how to swim.

Look under the rock for the answer!

FACT!

Velociraptor means 'SPEEDY THIEF'.

CALLING ALL DINOSAUR DETECTIVES

Are you ready to discover the world of dinosaurs and uncover all their astonishing facts? Learn how to dig for bones, what parts of which dinosaur made them great and the reasons why (most of them!) are not roaming our lands today.



LAYERS OF EARTH

NOW!

yesterday

5 years ago

10 years ago

150 years ago

1 million years ago

2 million years ago

3 million years ago

WHAT'S A... PALAEONTOLOGIST ?

Is a person just like you who studies bones and fossil remains. They piece together clues about how the extinct animal lived, looked like and behaved. Each fossil or bone tells only a tiny piece of each story, so it is a bit like putting together a jigsaw with lots of little pieces.

YOUR KIT BAG

These are some of the tools that are used to uncover the treasures lying beneath us in the ground and rock.



THE BONE WARS

Not only dinosaurs fought! So did the palaeontologists years ago in a battle that became known as THE BONE WARS!



BUT WHAT WERE THE BONE WARS?

Our two palaeontologists, called Cope and Marsh, were busily finding out as much as they could about dinosaurs. It became a competition between them to see who could find out new and interesting things first.



WHOOPS-Y-DAISY

Even these clever paleontologists made mistakes. Each year we gather more and more information from new fossils and finds across the world. This means that we may believe one thing then have it proved wrong — and have to update our records.

WHAT'S A... FOSSIL ?

A fossil is a bit of an animal, fish or plant that has been preserved in the earth's surface for millions of years. Everything we know about dinosaurs comes from finding and understanding these fossils.



But I don't understand how a bit of a plant BECOMES a fossil?



1. Here's a squid swimming in the sea millions of years ago.

2. When the squid dies, its body sinks to the sea floor. Other sea animals will eat the skin and flesh, leaving only the bones.

3. Some of these bones will disintegrate leaving only the strongest bones.

4. As times goes by, new layers of rocks, earth and mud sweep over the remaining bones burying them beneath the surface.

5. This keeps on happening for years and years, and years and years, and years!

IT'S A MYSTERY

Around 65 million years ago the dinosaurs suddenly disappeared. There are many thoughts about what happened...



ASTEROID IMPACT

Some people believe that an asteroid from outer space crashed into the earth's surface, wiping out the dinosaurs with it.





Some people think that the temperature changed and it got really cold, making it impossible for the dinosaurs to keep on living. They couldn't keep warm enough!

FREEZING COLD



Some people believe that a mystery bug made the dinosaurs feel ill and not many of them could fight it off. They became sick and couldn't get better again.





MYSTERY BUG



HOWEVER, SOME SMALL ANIMALS, INSECTS AND REPTILES SURVIVED AND STILL LIVE WITH US TODAY... TURN TO PAGE XXX FOR MORE.

TYPES OF DINOSAUR

There were so many types of dinosaurs ranging from two-legged quick runners to four legged-stompers.

Some dinosaurs ate meat, some ate plants, some ate both meat and plants. They all had special names:

herbivore = plant eater
carnivore = meat eater
omnivore = meat and plant eater

Keep reading to find out more about these three types of dinosaur!

CLASSIFICATION



SAUROPODS
Large herbivores that walked mainly on 4 legs

LARGE THEROPODS
Large carnivores that walked on 2 legs

CERATOPIANS
Medium-sized horned herbivores that walked mainly on 4 legs





ORNITHOMIMOSAURS
Ostrich-shaped herbivores or omnivores



SMALL THEROPODS
Small carnivores that walked on 2 legs

ANKYLOSAURIDS
Medium-sized herbivores that walked on 4 legs with armoured legs and tail spikes





EUORNITHOPODS
Medium-sized herbivores that mainly walked on 2 legs



A WHAT-I-VORE?

