

Non-fiction Group 1

The Decendents of Dragons

Carmel School of Hong Kong, Sack, Oliver - 6

When I was smaller, my dad always told me stories about dinosaurs, and I also often heard my friends talking about dinosaurs. But they are basically Tyrannosaurus rex, Pterosaurs, Xenoceratops, Triceratops, etc. and I'm actually quite scared of these huge "foreign" dinosaurs.

Last month, I went to China with my mother. In the airplane, my mom told me many stories about Chinese dinosaurs and I learned that there are also many dinosaurs found in China. Actually, China is the country with the largest number of dinosaur species in the world, and the world's first flying dinosaur, Microraptor gui, was discovered in China around 120 million years ago. It is the flying dinosaur with a smaller size which caused my most interest.

My mother told me that these dinosaurs covered with feathers, able to glide and even fly, are the most important dinosaur discoveries in the past thirty years. These discoveries have made China became an important country for dinosaur research. They have made humans more understand of the evolution of the birds. Since then, more than 40 dinosaur species have been found in the province of Liaoning, including more than 24 pterosaurs – winged reptiles.

2024 is the Year of the Dragon, and the Chinese call themselves descendants of the Dragon. Flying dinosaurs mean even more to the Chinese. Recently, a new species of titanosaur (Gandi Titanosaur) was found in Jiangxi. Because China is less well—explored by palaeontologists, there is great excitement about what will be discovered next and what amazing stories the ancient fossils will tell!

Great breakthroughs happen all the time on this planet. Humans have gone from monkeys to upright walking, toys have been changed from teddy bears to Nintendo, and learning tools have been improved from brush pens to AI apps. These amazing evolutionary things give our world lots of infinite possibilities. 2025 is a brand new year, with countless unknowns. But there is no doubt that China will "give birth" to many new dinosaurs!

Sinosauropteryx: the small predators in China

ESF Beacon Hill School, Li, Jayden – 9

Sinosauropteryx was a small theropod and it had a small body measuring 1.1 meters in length and it was discovered in China in 2021 when it was found it was perfectly in place. Sinosauropteryx weighed 550 grams and was a carnivorous predator. It moved on two legs and was a fast runner.

Because of its small body size, there is a chance that Sinosauropteryx was the prey for any of the larger carnivores roaming the grounds of China during the early Cretaceous period, around 125 million years ago. One of these predators was Alectrosaurus, which was believed to be a relative of Tyrannosaurus. It is also likely that other small theropods such as Gasosaurus preyed on Sinosauropteryx too.

Sinosauropteryx was a carnivore. It fed on small animals including mammals, lizards, and bugs. Scientists learnt about this because they discovered a tiny lizard preserved in the stomach of one of the fossil specimens. Mammal bones have also been found in the belly of another Sinosauropteryx fossil. Scientists believed that one of these animals had platypus—styled spurs and might even be venomous.

Sinosauropteryx fossils were first found in China in 1996 by Li Yumin. It was discovered that they were mostly a red-brown with alternating dark and light bands on its tail. This feature helped provide some kind of camouflage so that it would not be easily seen by predators. It also has a light coloured stomach, so it has a darker pattern on top and a lighter pattern underneath. This is called countershading, which is also a special feature that some sharks have nowadays.

China-saur?

German Swiss International School, Lai, Caspar – 7

No way, of course there is no such thing – but have you heard of China's dinosaurs?

In recent decades palaeontologists have discovered dozens of important fossils in China. From the over 6 metres in length, long—necked, marine Dinocephalosaurus to the duck—sized Fuijianvenator Prodigiosus, there have been a huge variety of discoveries.

But what is a fossil?

A Fossil is the preserved remains of plants and animals; they are formed when a carcass or dead plant is buried in sediment, preserving the skeleton. Over time the sediment is turned into rock, due to heat and pressure. The most common fossils are bones and teeth, however, in general fossils are very rare. Not all fossils are dinosaurs. For example, there are many fossils of Cephalopods such as Ammonites and Arthropods like Trilobites. Some fossils are as big as double decker buses. Some dinosaurs eat meat like T-rex, some eat vegetables like Dinocephalosaurus, some eat both like Deinocheirus.

How do palaeontologists find fossils?

Palaeontologists dig up fossils by carefully using brushes, forks, spoons, rock hammers, knives, shovels and sometimes pickaxes. Palaeontologists find fossils by using these tools and clues on the ground, such as footprints, swim traces, burrows, dens and trackways.

You could also feel the shape, size, pattern on the ground. They use very tiny and delicate tools like brushes, dental picks and sometimes use water. This is because they have to be careful not to break them. You could also use acid but with lots and lots of patience.

What kind of dinosaur fossils have they found then?

There was a dinosaur fossil found in China. It was a bird—like creature with very long lower legs. This dinosaur's name is Fuijianvenator Prodigiosus and they lived during the late Jurassic period. Another scientist discovered a fossil of a rainbow—coloured, bird—like dinosaur about the size of a duck. It lived in the Jurassic period which is 161 million years ago; it has been named *Caihong juji*.

One dinosaur called Mamenchisaurus Sinocanadorum is 18 metres — that's larger than a double decker bus! It is a sauropod; this is a group of dinosaur species that had long necks and were herbivores. It was found in the northwest of china. They were very intimidating and potentially dangerous because they were enormous, however, like with most herbivores only the trees had to watch out! He was alive in the Late Jurassic era.

For example, around 240 million years ago, a serpent—like reptile named Dinocephalosaurus roamed the earth v. The Dinocephalosaurus had a very long neck researchers recently described that Dinocephalosaurus is a giant. That Dinosaur was found in southern china and was believed to be a marine animal *and* probably used its long neck to hunt along with its fang—like teeth to catch prey.

The reason why China has a lot of fossils is because of the huge area China covers

The Tale of Dinosaurs

German Swiss International School, Shin, Briella – 7

Have you wondered if dinosaurs ever existed? If so, keep reading to learn more about dinosaurs.

CHAPTER 1

Winged Dinosaurs

Why do you think this subheading is called winged dinosaurs? Because in this paragraph, we are going to look at dinosaurs that CAN fly!

The oldest flying dinosaur that was found was the Aurornis. It lived 160 million years ago. It was found in Yaoguo in western Liaoning, China. The rock fossil was found in 2013, 3 years before I was born.

Rhombopteryx is the second winged dinosaur that was found in 2017. It lived during the late Juraasic, which is 145 to 161 million years ago. It was found in Wubaiding Village in northeastern China.

CHAPTER 2

Land Dinosaurs

The first land dinosaur that was found was the Megalosaurus. The Megalosaurus lived during the Bathonian age, around 168 million years ago. It was found in Oxfordshire in England.

Iguanodon is the second land dinosaur ever found. It lived 139 million years ago. It was discovered in the 19th century, mainly in England.

CHAPTER 3

Marine Reptiles

In this section, we are going to focus on Marine Reptiles. These are not really dinosaurs, but they are friends.

The first reptile that I'm going to talk about is the Plesiosaurs. The Plesiosaurs are known for their long necks. They lived in various environments, from shallow waters to deep waters. If you are asking whether Plesiosaurs can swim, they are actually brilliant swimmers.

Ichthyopterygia was the second Marine reptile. The Ichthyopterygia looks like a dolphin. They also have slim bodies and long noses. The Ichthyopterygia are known for their long necks too.

CHAPTER 4

10 cool facts about dinosaurs.

- 1. Did you know that Stegosaurus have bony plates to protect themselves?
- 2. Did you know that plant-eating dinosaurs are the biggest animals that ever walked on earth?
- 3. Did you know that the name triceratops means three horns?
- 4. Did you know that the tiny dinosaur Microraptor has feathers on its arms and legs?
- 5. Did you know that the Parasaurolophus had a long, backward curving crown on its head?
- 6. Did you know that the Sauroposeidon may be as long as over 100 feet and weigh as heavy as 40 tons?
- 7. Did you know that many dinosaurs lived in herds?
- 8. Did you know that the Brachiosaurus had longer front legs than back legs?
- 9. Did you know that the size of the brain of a Stegosaurus is similar to a walnut?
- 10. Did you know that dinosaurs were living on earth for more than 165 million years?

Now that you have learnt so much about dinosaurs, do you want to go see them? Teleport with me to go to China in the 1990s when people started discovering China as a place for dinosaur fossil—hunting. Maybe we can join the discovery of Sinosauropteryx, the world's first discovered feathered dinosaur! 3,2,1, blast off!

The Herbivore Giants: Titanosaurs

Harrow International School Hong Kong, Mok, Ayden - 6

The average 8-year-old is about 130 centimeters tall. Now imagine 30 schoolkids lined up head to toe – that's how long the largest land animal that ever lived was. Titanosaurs were some of the biggest dinosaurs ever discovered, but there were many species of many sizes. The smallest Titanosaurs, Magyarosaurus, was six meters long and weighed up to one thousand kilograms. However, one of the most gigantic Titanosaurs, the Patagotitan, could grow up to almost forty meters and sixty-nine thousand kilograms.

These long-necked sauropod dinos existed from the Late Jurassic epoch to the end of the Cretaceous period.

Scientists are able to discover the diet of these colossal vegetarians by researching and analysing their poop! Fossils of animal poop are also called coprolites. Titanosaur coprolites were found in India, showing the dinosaurs were indiscriminate eaters. This means that they are a wide variety of plants, including short leafy plants that grew closer to the ground, as well as leaves from tall trees which they reach with their long necks. Scientists estimated that Titanosaurs are 129 kilograms of plants every day. They most likely slept while they were eating as well.

Titanosaur eggs are as small as grapefruits, around 11 centimeters in diameter. Recently, scientists made the discovery of 256 Titanosaur egg fossils in India. 92 nests of Titanosaur eggs were found close to each other, so the scientists theorised that even though the dinosaurs laid their eggs in big colonies, the parents probably did not look after their eggs until they hatched. Researchers speculate that Titanosaur mums dug big holes in the warm ground with their back feet before laying dozens of eggs at a time. The eggs were completely round and smooth like a ping pong.

Titanosaurs were everywhere. Their fossils were found on every single continent – Africa, Asia, Europe, North America, South America, Australia and even Antarctica! During the Cretaceous period, Antarctica was much warmer and had dense conifer and fern forests, where the Titanosaurs could thrive. However, temperatures started dropping towards the Late Cretaceous period. By then, Titanosaurs were globally widespread. The most massive Titanosaur footprint was found in the Gobi Desert in modern—day China, and one of the oldest fossils ever, of a 136—million—year—old Titanosaur, was found in Brazil.

In conclusion, we happily know that Titanosaurs were friendly vegetarians because we cheerfully researched their poop. From the tiniest Magyarosaurus to the biggest Patagotitan, these gentle giants lovingly laid dozens of eggs at a time. Excited scientists joyfully found the most humongous footprint in the sandy Gobi Desert. These incredible Titanosaurs were some of the very large creatures that playfully roamed around millions of years ago. Munching on lots of yummy plants, they happily laid around 256 eggs at a time. Even though they disappeared around 66 million years ago, their magical fossils continue to help us playfully learn about their amazing lives. Scientists happily study these old bones to understand how they happily lived and what delicious plants they happily ate, bringing joy to all who discover their ancient secrets.

Kowloon Tong School (Primary Section), Chuang, Shun Hin – 8

Seeing birds soaring in the sky, have you ever imagined the dinosaurs like "China dragon bird" was doing exactly the same 252 millions years ago?

Let us travel back to ancient China, where we could find some of the earliest dinosaurs, such as Saurornithoides. They are known for their bird-like features, characterized by long limbs, sharp claws and a skull with large, forward-facing eyes that provide clear vision.

Here we come to Jurassic Period when a wide variety of dinosaurs species, including Mamemchisaurus and theropods. Their fossils were discovered in Sichuan, China. Both of them have lengthy tails, which help them in running and balancing. Sadly, they disappeared due to asteroid impact, volcanic eruption and climate change.

Lastly, feathered dinosaurs such as Yutyrannus and Microraptor existed in Cretaceous Period. Both of them were found in Liaoning, China. You may wonder why feathers are crucial to them. This is because feathers are good for insulation and powered flight. They could glide effectively between trees in the forest, turning them into "the Flying King".

What is so special about Chinese dinosaurs? Their fossils have been exceptionally well—preserved. Fine grained sedimentary rocks in Liaoning is famous for its rich fossil beads. This provides insight on the evolutionary relationship between feathered dinosaurs and birds. In addition, China is the home to a board spectrum of feathered dinosaur. This diversity suggests an extensive and complex ecosystem. However, for other places in the world, fewer feathered dinosaurs species were found.

Other than evolutionary investigation, fossilized footprints and nesting sites tell us their social behaviour among dinosaurs, such as parental care in Oviraptor. Also, their habitat reflects climate and environment in ancient China. For example, Microraptor display features suited for gliding, indicating a forested habitat with varying elevations.

To conclude, Chinese dinosaurs play an important role in understanding their history, evolution, diversity and habitat. Let's wait for much more amazing stories to be unearthed!

Kowloon Tong School (Primary Section), Guo, Zihan – 8

Scientists have discovered two dinosaurs fossils in China that are the first of their kind ever found. The fossils help us understand how the dinosaurs evolved over millions of years—from the late Jursaaic to the upper Cretaceous period.

What are the dinosaurs? The two species are called Bannykus Xiuunykus. They existed around 120 years ago. They were members of the alvarezsaurid group of dinosaurs, distant cousins of the T-Rex.

Why are scientists so excited about the discovery? Up until now there was a 70 million year gap from when scientists believe one alvarezsaur dinosaurs lived in the Jurassic period. The fossil discovery help us see what happened during that gap.

What did they look like? They were a bit bigger then a large dog but they are more similar to a bird. They walked on two legs. They are insects, had short arms, small hands and one large claw. Their ancestors (species that came before them) were theropods, which had three fingers and were carnivores.

How did they evolve? Until now, scientists didn't know. But recent discovery shows us that two evolutionary shifts occurred:

- 1-The teeth got smaller over time, because their diet changed.
- 2—The large claw at the end of their from arm shrunk from their ancestors` longer hand, because they needed to adapt to digging for insects.

Why did they evolve this way? Researchers believe that larger dinosaurs were dominating the landscape, making it hard for the alvarezsaurian dinosaurs to catch their prey. Over time, they started eating insects because they were more plentiful.

Kowloon Tong School (Primary Section), Hui, Yet Wai – 8

Humans are evolved from apes, but do you know what birds are evolved from? Before 1996, two points of contention is that bird's origin of dinosaurs or reptiles. But recent decade, along with China become the research centre of feathered dinosaur, scientists finally prove birds are evolved from dinosaurs. All of these start from the discovery of first feather dinosaur fossil in Liaoning, China.

In this report, we are going to talk about the impact of those special fossils found in China.

In 1861 in Solnhofen, German, the fossil of Archaeopteryx was found. Its structure had both reptile and bird characteristics, and it's similar with Compsognathus, kind of this dinosaur fossil was found in 1850. It's the first—time scientist linked birds with dinosaur. Afterwards, people used more than 100 years to prove their statements.

Until 1996, a farmer from a village in the west of Liaoning dug up a piece of stone slab, it was hard and there was pattern with fossils on it. A month later, he handed it over to China

University of Geosciences. Mr Ji from CUOG discovered that the fossil had characteristics of meat—eating dinosaurs, such as sharp teeth with serrations, tore limbs, hind limbs and long tails, he could see that it was clearly a dinosaur. However, explosion shocked him. it's not a normal dinosaur, it's fluffy—haired. There was a short layer of fibrous barrier less than 1 cm wrapped around head to tail. Mr Ji courageously linked it to the origins of birds. After this discovery, some paleontologists from the world agreed with Mr. ji about the short layer. But it was not fully evolved since it is still in primitive or derivatives stage. Some of them still thought the laver was hairs rather than feather. At this point, although paleontologists had conflicts about the feather structure, and were suspicious of the usage of primitive feather was only for maintaining its own temperature, rather than on modern birds, feather on wings helped flying, this was the first strong evidence that proved birds were evolved from dinosaurs.

From Sinosauropteryx forward, feathers evolution had been found from these dinosaur fossils, China's tales of dinosaurs began. Early 1997, Protarchaeopteryx was found in Liaoning, it had exactly same feathers as modern birds around its tail. Later, Caudipteryx was found. It possessed a long tail and feather indicating characteristics of early birds, its body structure resembled small dinosaur, however in its stomach, there was pile of small stones which also could be found in modern birds that have herbs for food, showing evolutionary links to birds

After Caudipteryx, arguments around dinosaurs and birds stopped. With more and more dinosaur species have been found in liaoning, even other places of China. They have reshaped people's understanding and solved problems which people debate for more than a hundred years. Palaeontologists are excited and surprised by China, especially the western of Liaoning. They are awaiting this land to bring more and greater miracles to the world.

Kowloon Tong School (Primary Section), Lam, Tsz Lang – 9

The legends of the meat and grass eater dinosaurs have been destroyed by a huge meteor. Now, there are dinosaur fossils everywhere. A lot of these fossils have been found in China, with more and more being discovered in recent years.

The first land dinosaurfossil was found by a farmer, it is the Sinosauroptreryx. One day the farmer was watering the vegetables when he stepped on something hard. He was curious about what it was, so he quickly grabbed his metal spade and started digging. That was when the farmer realized it was the Sinosauroptreryx's fossil. He quickly called the police about what he had just found, and the police brought it to the scientists, who named the Sinosauroptreyx, which means "the China dragonbird".

The first underwater dinosaur fossil was found by a group of scientists in a submarine twenty years ago through the "Scientist deep sea explore competition (154)", The Mega.The team wanted to search for a blobfish when they shone the submarine lights onto the sand—ground. That was when they found agigantic white fossil about twenty km long. It turns out to be the Shonisaurus's fossils, which means "deaths of the ocean". The scientists led the judge of the competition to see the gigantic fossil. Of course, the Mega Team won first prize.

Since then, more than 40 dinosaur species have been found in the province of Liaoning, including more than 24 Pterosaurus—winged reptiles. Recently a new species of titanosaur was found in Jiangxi because China is less well—explored by paleontologists.

New Tales of China's Dinosaurs

Kowloon Tong School (Primary Section), Lee, Lok Yin – 8

In 1990, a farmer in China saw a dinosaur in the Liaoning region. They call them "China Dragon Bird". There are more than 40 dinosaur were found there. This animal became famous. More than 1 million people have begun keeping these dinosaurs as pets.

Marymount Primary School, Sin, Ka Man Clara – 6

According to oldest.org, studying fossils (paleontology) has helped scientists piece together our planet's history and has provided insight into the origins of life. A specimen must be about 10,000 years old to be considered a fossil and many of them on the fossil record are millions of years old.¹

American Museum of Natural History mentioned that Dr. Mark Norell, Chair and Curator, Division of Paleontology, analyzed important new feathered dinosaurs from Liaoning, China. Under his direction, a team of paleontologists working in the Gobi desert since 1990 has produced a wealth of great specimens.²

Reported by Elizabeth Mearns in CGTN on 21 February 2024, the science of paleontology was given an incredible boost in 1996 when on a hillside in Sihetun, Liaoning Province, a Chinese farmer stumbled onto the world's first known feathered dinosaur. The creature is now known as Sinosauropteryx – literally, China winged reptile – and the discovery led to a gold rush of fossil–finding that has turned China into the new center of paleontology.³

What stories the ancient fossils in China will tell us? Will it eventually become an oriental Jurassic Park? In Chinese, Dinosaur and Chinese dragon sounds similar. Chinese dragon is associated with the emperor of China. It represents prosperity and good luck. 2024 is the "Year of the Dragon" and dragon is one of the 12 animal signs under the Chinese zodiac. However, Chinese dragon is a virtual animal whereas China's Dinosaurs is based on the study of Dinosaur Science and paleontology.

In my opinion, China's Dinosaurs attracts Dinosaur lovers all around the world to study the Dinosaur Science. We should not use the traditional view of Chinese dragon to stereotype China's Dinosaurs. In fact, there is a China Dinosaurs theme park located in Changzhou, Jiangsu and it has been opened since September 2000.

With the use of artificial intelligence, I believe Paleontologists can find out more species of Dinosaurs in China and can create videos and photos of China's Dinosaur and let the public knows how China's Dinosaur look like 10,000 years ago.

With more resources allocated to the study of China's Dinosaur, scientists can study the topic on extinction of China's Dinosaur. It is an interesting topic to compare the DNA of China's Dinosaur with the DNA of other animal species and study the evolution process in the past 10,000 years. By studying this topic, I believe scientists can found out more about the sustainability of human being.

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Was Microraptor a transition of a dinosaur to a bird?

St. Joseph's Primary School, Mak, Tin Hang - 7

Microraptor was a very special type of dinosaur. It was one of the smallest dinosaurs with lizard—hipped (i.e. pubis pointing forward), and was only found in China. Numerous fossils shown that it had feathers on all arms and legs, could glide and possibly fly. Many scientists are studying whether Microraptor was a transition of a dinosaur to a bird during evolution.

What was Microraptor?

It was a tiny dinosaur, only around 35 cm tall and 62cm long. It lived during the early Cretaceous period (i.e. 145 to 99 million years ago).

Could Microraptor glide or fly?

Xu Xing has been one of the leading paleontologists studying Microraptor in China since the discovery of the first few fossils. He was excited to find asymmetric feathers (like birds' feathers) on the arms and legs in the fossils. Together with some scientists who also wanted to know whether Microraptor could glide, they decided to do a wind tunnel experiment.

First of all, they made a model of the Microraptor accordingly to the shapes of the bones and feathers shown in the fossils. Then, they put it in a wind tunnel and tried out different gliding postures. One of the postures worked. They concluded that Microraptor could glide but the friction between the air and the legs' feathers made the gliding distance short.

At the same time, scientists have been trying to find out whether Microraptor could fly because of its flight feathers. But it didn't seem to have muscles strong enough for powered flight.

Predators and prey

Microraptor's main predators were other carnivore dinosaurs. While the long feathers on its legs and tail made it difficult for Microraptor to run fast, its gliding power allowed it to escape from most of the predators because they could not fly.

Based on the findings in the digestive systems of the Microraptor remains, scientists believed that it usually ate lizards and other small animals. But it is extremely surprising that one of the fossils showed a Microraptor had eaten a fish! Given it was unlikely that Microraptor could swim with its long feathers, scientists thought that the Microraptor might get the fish by scavenging. Microraptor's diet and digestive system were similar to that of modern birds.

Conclusion

Many people tried to argue that Microraptor evolved into modern birds. In 1999, when a fossil was sent to America for further studies, people thought it was a new species, Archaeoraptor. But it turned out to be fake: it was the fossils of an Archeopteryx's body joined with the fossil of a Microraptor's tail. As such, it remains unknown whether the Microraptor evolved into modern birds. As there were other dinosaurs which were very similar to modern birds, existed before Microraptor, e.g. Archeopteryx and Anchiornis, perhaps Microraptor was an experimental stage of dinosaurs' evolution. It will be very exciting to see more Microraptor and other bird—like dinosaur fossils being found in China to provide an answer to the question.

An Interview with Mr Wang in Ganzhou City

St. Joseph's Primary School, Tam, Hiu Cheung Alistar – 8

Reporter: Hello, this is Ali, a student reporter from Hong Kong. I am now in Ganzhou City. Next to me is Mr

Wang. Mr Wang, what is your job?

Mr Wang: I am a paleontologist. I work with fossils.

Reporter: Can you tell us more about fossils and your job?

Mr Wang: Fossils are usually found in rocks deep in the ground. When an animal or plant dies, its body can get buried into sand or mud. Then over millions of years the sand or mud gets compacted and eventually turns into rock. The part of an animal most likely to fossilize are the hard parts such as the bones or teeth. Scientists excavate, which means dig carefully, fossils out of the ground. After recording information about the fossils, they will wrap them to keep them safe. Then they will take to them to a museum. Scientists will study fossils to examine the shape and color of the fossils. They can sometimes fit bone fossils together to form a complete skeleton.

Reporter: That sounds amazing, like doing a challenging jig-saw puzzle!

Mr Wang: It is more important than just a game. Fossils help scientists to learn more about what the Earth was like when dinosaurs lived here.

Reporter: Dinosaurs? I have never seen them, what are they?

Mr Wang: Dinosaur is a kind of gigantic reptile which lived on Earth between 235 million years to 65 million years ago.

Reporter: Did they live in China?

Mr Wang: Yes, we have found dinosaur fossils in: Inner Mongolia, Lufeng in Yunnan Province, Zigong in Sichuan Province, Nanyang in Henan Province and Western Liaoning District. Most recently, we have found fossils of a new species of titanosaurian sauropod dinosaur in Ganzhou City in Jiangxi Province.

Reporter: Please tell us more!

Mr Wang: This new genus is called Jiangxititan ganzhouensis. They lived between 72 million to 66 million years ago. They are massive dinosaurs with a long neck and pillar—like legs. Scientist believed because of the warm climate in Western Liaoning province many plants and animals lived in that area many millions of years ago. However, repeated volcano eruptions killed all the creatures. Some were covered volcanic ash and became fossils.

Reporter: Thank you Mr Wang for giving us such interesting and fascinating information about dinosaurs! Please continue with your hard work to help us learn more about our Earth millions of years ago. Unfortunately, that's all we have time for today. Thank you all for watching this live interview from Ganzhou City.

St. Margaret's Coeducational English Secondary and Primary School, Trevor, Ng - 7

66 million years ago, there was a mass extinction that killed all dinosaurs. Scientists think It was caused by huge meteorites hitting Earth. A meteorite hurdles through space toward Earth. It crashes into Earth and explodes. Dust clouds, fill up the sky blocking out light from the Sun.

Global forests fires then cause an extreme winter. Volcanoes erupt, whichadds more smoke and ash to the sky. There is no food for the dinosaurs, so they all die.

Millions of years ago, huge animals roamed the Earth. Some weighed more than 10 times as much as an elephant. They're dinosaurs! But if dinosaur is lived so long ago, how do we know so much about them? The answer can be found in what they left behind. A fossil is the remains of an ancient plant or an animal that has been preserved in the rock. Have you ever found a strange looking rock that looked like a seashell or had an imprint of a leaf or an animal track, it was probably a fossil.

China is the country with the most dinosaur discoveries in the world China is a great place to find dinosaur fossils. Scientists keeps digging and using new tools to discover more amazing dinosaurs. Every new find teaches us something exciting about these giant creatures from the past.

A Big, Strong Dinosaur – Yunnanosaurus In Yunnan Province, scientists dug up bones of a new dinosaur. They named it Yunnanosaurus. This dinosaur was super strong and had a cool crest on its head. It lived a long, long time ago and was probably the king of its area, hunting other dinosaurs for food.

A Tiny Bird-Like Dinosaur In Fujian Province, where lots of feathered dinosaurs are found, scientists discovered Fujjianvenator. This dinosaur looked a bit like a bird and had feathers. It might have even flown a little bit! This helps scientists understand how dinosaurs turned into birds.

Dinosaur embryo egg In Ganzhou, scientists found perfectly preserved dinosaur embryo that was preparing to hatch from its egg. The discovery has also given researchers a greater understanding of the link between dinosaurs and modern birds.

Agilisaurus is a genus of ornithischian dinosaur from the Middle Jurassic Period of what is now eastern Asia. It was about 3.5–4 ft (1.2–1.7 m) long, 2 ft (0.6 m) in height and 40 kg in weight. It has leaf–shaped teeth that were well–adapted to their abrasive, plant–based diets. Most surprisingly, the wavy enamel of the teeth of agilisaurus louderbacki and all other ornithopods, presumably to make it more resistant to wear, was previously thought to be exclusive to the hadrosaurs.

Wow, with all this information I feel like I can be a palaeontologist now! And I am now more interested in dinosaurs. So I will read more books about dinosaurs.

The Amazing Lufengosaurus

Stamford American School, Wong, Marcius Ching Hong – 8

200 million years ago, what is now China was very different from what it is today. It was much dryer and sizzling hot with volcanic eruptions. This is why many scientists believe that China has the most dinosaur fossils with 341 species being discovered.

When fossils were discovered in Lufeng county, many villagers mistook them for the remains of dragon bones. It wasn't until they were educated about the existence of dinosaur fossils that they started reporting their discoveries to local conservation authorities. One such discovery was the Lufengosaurs in 1939 by Yang Zhongjian. He was a world renowned paleontologist from China who found the fossil in Yunnan province of china. More recently, a mountaineer came across a Lufengosaurus fossil and gave clues to the director of Lufeng's protection center of dinosaur fossils, Wang Tao. This 10 meter long fossil is believed to be a type of giant Lufengosaurus and the fact that it's 70% intact makes it a truly remarkable discovery.

Unlike the larger Apatosaurus, Lufengosaurus only weighed approximately 1700 kg. It had the ability to walk on its 2 strong, 6 meters long legs while using its tail for balance, which is something the Apatosaurus couldn't do. Its skull was long and flat, about 25 centimeters long with a little bump behind each nostril. On each thumb was a claw as sharp as a knife, which is used for defense against predators. Despite its sharp teeth and claws, the Lufengosaurus was a herbivore and ate ferns, leaves and other plants using its long neck to reach the treetops.

It is believed the Lufengosaurus lived in the drier landscapes and forests of what was prehistoric China. Plant fossils were found in the surrounding area indicating that what is now an arid desert was a lush forest millions of years ago. The remains of all these dinosaurs show that they once thrived in this area.

Since 2008 this area has been open to the public as a tourist attraction, where people can do some sightseeing in an otherwise unappealing location. The area is home to a state of the art museum as well as the dinosaur themed amusement park.

The Lufengosaurus is just one of the many fascinating dinosaurs discovered in China. There is no doubt that China holds many more exciting new dinosaur fossils just waiting to be unearthed, even Hong Kong had a fossil found on one of its remote northern islands. Hopefully, in the future all countries can work together and share all their knowledge on these magnificent animals. Also, don't forget: Marcius wrote this

The Extinction of Dinosaurs

Stamford American School, Yeung, Yik Ching Sophie – 9

Dinosaurs lived for 3 periods. There are 3 different types of periods which are Triassic, Jurassic and Cretaceous. They all lived together in 1 continent. Back in the old days all the countries were all together so they could find each other very easily. The widespread secondary effects of an asteroid impact were considered to be why the dinosaurs died out so suddenly just because of the asteroid.

The impact site, known as the Chicxulub crater. The asteroid is thought to have been between 10 and 15 kilometers wide, but the velocity of its collision caused the creation of a much larger crater, 150 kilometers in diameter. The asteroid hit and this asteroid was so strong that it can change the weather. Dinosaurs in China couldn't survive the heat in this world so the dinosaurs in China and the world died. Its center is offshore, but the crater is named after the onshore community of Chicxulub Pueblo Sedimentation on the floor of the gulf filled in the crater and eventually buried beneath several hundred to ~1 kilometer of sediment. The Chicxulub crater is not visible at the Earth's surface like the famous Meteor Crater of Arizona. Yixian Formation is one such place that was affected by the asteroid — it is a place where hundreds of dinosaur fossils have been found in China, covered in ancient volcanic ash. It has some of the world's best preserved fossils, down to the feathers. And they're often in positions that look like they were just frozen in an instant.

All evidence suggests an asteroid impact was the main culprit. Volcanic eruptions that caused large—scale climate change may also have been involved, together with more gradual changes to Earth's climate that happened over millions of years. The Chinese Dinosaurs found were near a volcano, causing them to die. Different kinds of dinosaurs of other things like the immediate impact of the asteroid. Other dinosaurs died in a different way like some injuries or they survived and died because of climate change.

Fun facts:

- Asteroids are large, rocky bodies that orbit the Sun. They range from a few to hundreds of meters in diameter. It is exactly the same age as the extinction of the non-bird dinosaurs, which can be tracked in the rock record all around the world.
- The asteroid that is a crater in Mexico the crater is known as the Chicxulub Crater.
- Some dinosaurs can die in a lot of different ways like some died from the asteroid but most of them should have died to the asteroid, injuries and others.
- Some dinosaurs have different fossils and people from now still try to find these dinosaur fossils.

China Dragon Bird: Feathered Dino Wonder

The French International School of Hong Kong, Qi, Franz – 6

Punk was a super cool China Dragon bird lived in ancient China, and it was found in a mysterious forest.

Its scientific name is Sinosauropteryx, which means "Chinese reptile bird". China has found tons of dinosaurs, but I am sure Punk is one of the coolest! Why? Because it's like a mini dragon with fluffy wings! It could not fly, but may be the fastest runner ever. I bet it could even outrun Bolt!

There are different kinds of dinosaurs – some eat plants (herbivores), some eat meat (carnivores), and some love to snack on bugs (insectivore). Punk loves to eat meat, just like me!

Why did dinosaurs disappear? A giant asteroid crashed into Earth! But at least we have Punk's story to remember how awesome dinosaurs were!

China in the Jurassic: A Land of Dinosaurs and Plants

Victoria Shanghai Academy, Cheong, Tsz Lam – 8

Did you know that there were 50 species of dinosaurs in China? That is a lot. The environment back then was vibrant and diverse. In this essay, I will examine the weather, climate, plant life, and geography of China during the Jurassic period in great detail.

First and foremost, the climate during the Jurassic period in China was warm and humid. To exemplify, according to the Geological Magazine in 2021, the temperature back then was 10°C to 15°C warmer than the current average temperature. In addition, there were lots of rainfall and seasonal monsoons. Therefore, vegetation was enhanced because of ferns, cycads and conifers.

Other than the warmer climate, China had a broad range of plants 160 million years ago. For instance, according to the Journal of Paleogeography in 2019, there were ferns, cycads, conifers and ginkgoes back then. As a result, the forest structure was dense, which greatly improved the diversity of both herbivores and their predators throughout that geological period.

Apart from the plant life, the soil was rich in nutrition during that era. To illustrate, according to the Proceedings of the National Academy of Science of the USA in 2013, the Yangtze River formed in the Jurassic period and flowed into the Tethys Sea. Additionally, according to Nature Communications in 2021, it was discovered that there was a continental—scale river system in Eastern Tibet during the late Cretaceous—early Paleogene. Consequently, the better the water supply, the higher the dinosaur population.

Last but not least, there was a plethora of geological features in the time of the middle Mesozoic. To demonstrate, according to Geoscience Frontiers and the Journal of Asian Earth Science, tectonic movements had a significant influence on the uplift of the Tibet Plateau and other mountain ranges in China. Due to this, there were mountain ranges, plateaus, basin and valleys in the time of the middle Mesozoic.

In conclusion, the muggy and sultry weather, lush plant life, nutrition—rich soil quality, and expansive geography provided an optimal living environment for dinosaurs in China during that significant period. Due to the factors mentioned above, if you aspire to be a paleontologist or are interested in this field, China is the place to go.

Exploring China's Dinosaur Discoveries

Victoria Shanghai Academy, Guo, Ka Hei – 7

Have you ever seen a dinosaur? Your answer is definitely "not yet"! The term "dinosaur," meaning "terrible lizard," refers to a group of reptiles that ruled the Earth over 65 million years ago. In Chinese, dinosaurs are called 恐 龙 (kǒng lóng). China is home to the most dinosaur species in the world, with 341 species identified, and that number continues to grow as eight or nine new species are discovered each year.

Since the excavation of dinosaur fossils began, we have learned more about these extinct creatures. The first dinosaur skeleton in China was discovered by a construction worker while digging to build a dam. This dinosaur was named Yangchuanosaurus. It was a formidable predator, capable of taking down prey much larger than itself. In the Western Liaoning district, fossils of Sinosauropteryx were discovered; it is notable for being the first known dinosaur with primitive feathers. Other significant finds in this area include Beipiaosaurus and Archaeopteryx, making it a hot spot for dinosaur excavation. Chinese researchers have also unearthed exquisitely preserved fossils of small theropods. The Western Liaoning district, once resembling a peaceful lake, appears to have been the site of sudden, deadly volcanic ash rains that buried these creatures.

The Inner Mongolia Autonomous Region is known as the largest "dinosaur town" in China. Many dinosaur fossils have been discovered here, primarily of ceratopsians and ankylosaurs (both herbivorous dinosaurs). Fossils ranging from infants to adults have been unearthed. Lufeng County, located in the central part of Yunnan Province, gained fame for its dinosaur fossils in the 1930s, with the first discovery made in 1938. Lufeng is renowned for having the largest collection of dinosaur fossils, earning it the title "Hometown of Dinosaurs."

The altitude of Lufeng is 1,600 meters, and the region experiences a subtropical plateau monsoon climate. In 1995, a farmer discovered a dinosaur fossil and found an unusual arrangement: the heads of four dinosaurs were all facing east, marking a unique discovery in the history of dinosaur excavation. Lufeng is also notable for being the only locality where dinosaur fossils from two geological ages have been found at the same fault.

Zigong County in the southern part of Sichuan Province is referred to as the "Cemetery of Dinosaurs" and the "Former Residence of Dinosaurs," where many fossils, totaling hundreds of tons, have been unearthed. The dinosaur fossil stores in Zigon are characterized by their large quantity, diverse classifications, concentrated storage, and exceptional preservation, features that are rarely seen elsewhere in the world. In the 1920s, locals in Nanyang City found unusual stones that they called "stone gallbladders," "stone eggs," "stone pills," or "stone balls." Nanyang is one of the earliest areas in China where dinosaur egg fossils were discovered. To date, thousands of fossilized egg pieces have been unearthed, with sizes ranging from as small as hen eggs to as large as rice bowls. The eggs are primarily ovoid, with some exhibiting a rugby shape, and are preserved remarkably well.

In 1990, dinosaur fossils of Nuroaurus were discovered in a desert in China. This dinosaur was long and heavy—the largest in its area during its time. Dinosaurs disappeared about 65 million years ago due to a massive asteroid impact, which created clouds of dust and smoke that altered the climate, leading to the extinction of nearly all dinosaurs.



Beautiful Feathered Tyrant

Po Leung Kuk Choi Kai Yau School, Lui, Hoi Ki Sophie – 7

Yutyrannus was one of the most significant dinosaur discoveries in China's history. Yutyrannus huali meaning 'beautiful feathered tyrant' is from the Superfamily Tyrannosauroidea, the type Tyrannosaurus rex is in. Yutyrannus is classified in the Proceratosauridae kind. Three near—complete skeletons were claimed to be found in a quarry at Batu Yingzi in Liaoning Province, in northeastern China. They lived on Earth over 131 million years ago from the early Cretaceous period to the middle Jurassic period.

Yutyrannus were much larger in comparison to T-Rex, being 7.5 metres long and weighing around 1400 kilograms. They had four limbs and walked on their back legs. Each short arm had three fingers tipped with large claws. Known as bone—crushers, they had sharp banana—shaped teeth that were able to cut through meat. They also had large skulls which were 90 centimetres in length. There was a shallow crest that sat on their heads. Yutyrannus have feathers that cover several areas of the body. Their feathers were up to 20 centimetres long. They have a coat of filaments called "proto—feathers." This is the type of feathers Yutyrannus has. Due to the low—quality preservation, it could not be confirmed if the feathers were compound, broad or narrow type. Xu said, "From all the dinosaurs I found, Yutyrannus is the only gigantic dinosaur that has feathers". From what we know about it, Yutyrannus could not fly for sure because of its weight. Maybe its feathers were used to attract mates, or perhaps for keeping warm.

Yutyrannus were carnivores, which means they ate meat. They were apex predators, making them very powerful since they were at the top of the food chain. Given their arms were short, they had to hunt in groups to take down stronger and larger dinosaurs such as Brachiosuraus, a large long—necked dinosaur. They hunted their prey by using their long strong tails to swipe their target down. Then they used their sharp claws to tear the meat before eating it.

The discovery of Yutyrannus was published in *Nature* by a well known Chinese palaeontologist named Xu Xing of the Chinese Academy of Sciences in 5 April 2012. Even though he was never interested in paleontology he still discovered over 30 species. Since his discovery, he has been focusing on the transition between dinosaurs to birds. The Yutyrannus fossils are now part of the Zhucheng Dinosaur Museum and the Erlianhaote Dinosaur Museum collections. Hopefully soon, even more dinosaur fossils will be discovered in China.

The Land Before Time in China

Shanghai Singapore International School, Lai, Bi Jun Dash - 9

Jurassic Park is one of the world's most famous dinosaur movies, and it's also my favorite! Whenever I watched it, it makes me wonder what is it like during the Jurassic times or during millions of years ago? Are the dinosaurs, pterosaurs and plesiosaurs back then stepping on the same land that I am stepping today in China, where I am currently living in?

It made me curious, so I wanted to dig deeper to find out if dinosaurs ever lived in China!

Not surprisingly, China being a large country with varied geology had discovered more than 90 species of prehistoric animals till date. Some of the dinosaurs and pterosaurs discovered are Sinosauropteryx, Yunnanosaurus, Dinocephalosaurus and many more.

One of the smallest dinosaurs in the world was actually found in China. This tiny dinosaur is called Minisauripus, discovered in Gansu province. The five three—toed fossil footprints found was measured to be between only 1cm and 3cm across (even smaller than a chicken's feet which is around 12cm). These footprints are believed to belong to one of the smallest dinosaurs ever.

A long snake—like mythical Chinese dragon was also one of the interesting dinosaur found in China. This dinosaur found was dated back to 240 million years ago from the Triassic period. It was a 16—foot—long aquatic reptile, called Dinocephalosaurus orientalis. It has 32 separate neck vertebrae, an extremely long neck. The fossil of Dinocephalosaurus orientalis has a snake—like appearance and flippers and was found in the Guizhou Province of southern China. This appearance makes people think that it looks like a Chinese dragon. With it's long neck and sharp teeth, it is easier for this dinosaur to grab fishes and prevent them from escaping.

Most recently, on just October 17 2024, there was a discovery of a new type of dinosaur egg fossils in east China's Jiangxi Province. This dinosaur egg fossils are merely 29mm in length, the smallest ever found globally. These eggs discovered are dated back to late Cretaceous period, over 80 million years ago. For researchers, this discovery expands the diversity of dinosaur eggs from the Late Cretaceous period, it gives new valuable insights into new possibilities and more species that could exist during that period.

These discoveries are so fascinating, and I believe that China will find even more species in the near future. These new species could be discovered any time soon and even near us, and who knows, we might find amazing fossils that are in action like in a mid—fight or hunting for food. Imagine finding fossils while playing in a field, with the dinosaur's mouth open wide, it will be both a scary but amazing sight. Looking forward to more discoveries! Who knows, one day I might be able to find some fossils with my friends while playing at the school field...