

FAMOUS FOSSILS

All fossils are rare, but some go on to be celebrated. Famous fossils can be found all around the world. These are some of the most important for various reasons.

CUIVER'S MOSASAURUS

For hundreds of years, people believed that the Earth was very young. They thought that living creatures had only been around for a few thousand years. This all changed in the 18th century. A scientist named Georges Cuvier identified a Mosasaurus skeleton. He was the first person to recognise that it belonged to an extinct species. People had always thought dinosaur bones were related to large creatures like elephants. This was one of the first times that people realised creatures had lived on Earth for millions of years.

MANTELL'S IGUANADON

In 1822, the wife of a country doctor went on a walk near her country home in Sussex. She found a small, curved stone that looked like a walnut. Her husband was curious about fossils, so she took it home for him to look at. Gideon Mantell knew at once that it was a fossilised tooth. He also realised that it was from an extremely large herbivore. He guessed it was roughly 65 million years old. This was interesting because nobody knew that such large herbivores had ever existed. He asked his friend what to do. William Buckland told him to tread carefully. He was worried that evidence of ancient creatures would upset people. Nevertheless, Mantell continued to research the bone. He soon realised that it was from an entirely new species called dinosaurs. He thought the tooth looked very similar to those in an iguana. He named the new animal "Iguanodon". Unfortunately, his friend Buckland had discovered his own bone. He rushed to present it to scientists before Mantell could. This means that Buckland is often credited with discovering the first dinosaur instead of Mantell. It's fair to say that Mantell's Iguanodon was the first dinosaur bone identified.



THE MISSING LINK

When Charles Darwin told the world about natural selection in 1860, many scientists were unconvinced. They argued that there were no fossils that showed creatures gradually turning into other species. Luckily, scientists in Germany had just discovered lots of new fossils. One of those was a nearly complete skeleton of an Archaeopteryx. The Archaeopteryx was a perfect missing link between dinosaurs and birds. It helped to prove Darwin's idea.

LUCY

Scientists thought for a long time that humans had only been around for a few thousand years. In 1974, all of that changed. A team of scientists were digging in Ethiopia in Africa when they discovered the remains of an ancient human. The fossil became known as Lucy and is the earliest human fossil we have. Scientists have dated it as just over 3 million years old. Even though it is nicknamed Lucy, the skeleton is only about half complete, and scientists don't know if it was male or female. Lucy is considered to be an example of the missing link between apes and early humans.

VOCABULARY FOCUS

1. Find and copy a word that means "lots of different".
2. Which word in the first paragraph tells you that fossils are not very common?
3. Find a word in "Cuvier's Mosasurus" that means something was worked out.
4. What does the word "unconvinced" tell you about what scientists thought of Darwin's idea?
5. Find a word in the text that means "really old".

VIPERS QUESTIONS

R

How old did Lord Kelvin believe the Earth was?

S

Why did Buckland tell Mantell to be careful?

I

How do you think Mantell felt when Buckland presented his dinosaur bone?

R

Which dinosaur helped to prove Darwin's idea?

S

What did Mrs Mantell do when she found a strange rock?

Answers:

1. Various
2. Rare
3. Calculated
4. They didn't believe it
5. Ancient

R: 24 million years

S: He was worried that it might upset people if they knew that ancient creatures existed

I: Accept answers that show an understanding of what had happened: I.e. he was frustrated, felt let down and betrayed

R: Archaeopteryx

S: Gave it to her husband