

Palaeontology

What Is a Palaeontologist?



Mary Anning

A palaeontologist is a scientist who learns about life on Earth by studying fossils. Fossils are the preserved remains of plants, animals and other living things. When living things die, the soft parts of the body dissolve into the ground. The hard parts, such as a skeleton, however do not and are covered over the years by rock called sediment. More and more sediment builds-up over time and squashes the hard parts down and they eventually turn into a rock. The hard parts gradually dissolve and minerals leave a model of the original bone which is called a fossil. Palaeontologists dig up the fossils and use them to learn about how the Earth and living things have changed over time.

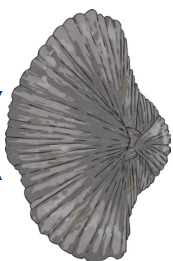
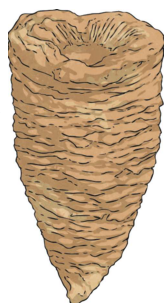
Dangers

Finding fossils was a dangerous activity. Palaeontologists have to take care when searching for fossils. The surfaces that they work on can be slippery and unstable. There is always a danger too that rocks will fall from above in a landslide and hurt the scientists working below.

Mary Anning, who lived in the 1700s, was one of the first palaeontologists. She made many incredible discoveries and is thought of as one of the greatest fossil hunters to have ever lived. She would spend her time searching the coast in Dorset with her dog, Trey, and on one occasion, she narrowly missed being killed by a landslide (where lots of rocks fall at once from the cliff).

Modern Palaeontology

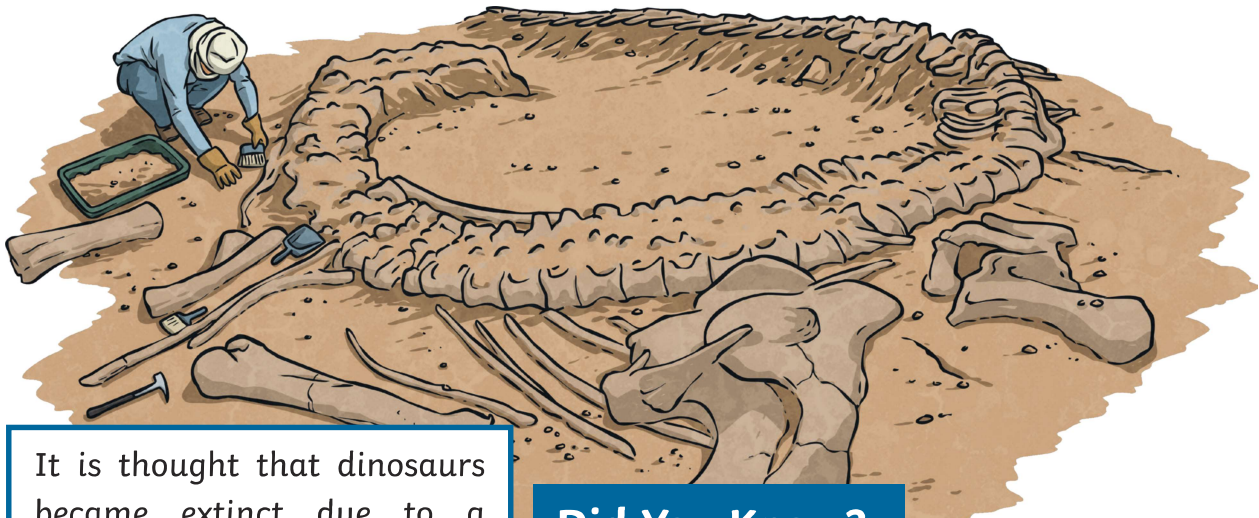
Modern palaeontologists don't often go out searching for fossils like Mary Anning did. They search on existing sites where fossils have already been found. They take safety precautions such as wearing hard hats, using special equipment and checking the times of tides so that they don't become isolated in remote locations. New fossils are usually found by accident by people who are simply going for a walk who are not palaeontologists at all.



We have learned a lot from palaeontologists:

We know that there were animals who lived millions of years ago, the most fascinating of which are the dinosaurs.

We understand more about dinosaurs. For example, how they looked, what they ate and how they lived.



It is thought that dinosaurs became extinct due to a falling asteroid. The impact of the asteroid was so huge that it changed the climate (weather) around the world. The climate became colder and the dinosaurs were not able to survive.

Did You Know?

Not all dinosaurs are dead. All the birds (including chickens) that are alive today are related to the dinosaurs! Even the dinosaurs that did not fly, like the T-Rex, have similarities with modern birds such as hollow bones.

Questions

1. What is a palaeontologist? Tick **one**.

- ☐ an architect
- ☐ a historian
- ☐ a scientist
- ☐ a doctor

2. What word is used to describe the rocks that form fossils? Tick **one**.

- ☐ minerals
- ☐ sediment
- ☐ salt
- ☐ stones

3. Look at the first paragraph.

Find and **copy** a word that means **slowly**.

4. Why do palaeontologists study fossils?

5. Where did Mary Anning search for fossils? Tick **one**.

- ☐ Devon
- ☐ Dorset
- ☐ Suffolk
- ☐ Somerset

6. Name **two** ways in which modern palaeontology is safer today than in the past.

7. What have palaeontologists taught us about dinosaurs? Use evidence from the text to support your answer.

8. What have birds today and the T-Rex got in common? Tick **one**.

- ☐ wings
- ☐ heavy bones
- ☐ short legs
- ☐ hollow bones

Answers

1. What is a palaeontologist? Tick **one**.

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- ☐ a historian
- ☒ **a scientist**
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2. What word is used to describe the rocks that form fossils? Tick **one**.

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3. Look at the first paragraph.

Find and **copy** a word that means **slowly**.

gradually

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To learn about how the Earth and living things have changed over time.

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- ☐ Devon
- ☒ **Dorset**
- ☐ Suffolk
- ☐ Somerset

6. Name **two** ways in which modern palaeontology is safer today than in the past.

Modern palaeontology is safer today because...

Answer should include two of the following:

- **they search on existing sites where fossils have already been found**
- **they wear hard hats**
- **they use special equipment**
- **they check the times of the tides**

7. What have palaeontologists taught us about dinosaurs? Use evidence from the text to support your answer.

Pupil's own response, such as: Scientists have taught us that dinosaurs lived millions of years ago but that when an asteroid fell to Earth, it changed the climate which meant that it was too cold for the dinosaurs to survive. They have also taught us that some animals that are alive today are related to dinosaurs, such as the chicken.

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- ☐ wings
- ☐ heavy bones
- ☐ short legs
- ☒ **hollow bones**