

Fossils

Fossils are preserved remains of animals and plants that lived millions of years ago made in sedimentary rock. Usually when something dies it is eaten or decays and therefore disappears. However, when an animal or plant dies it can get covered over with mud or sand, it can stay there and over a long time, become a fossil.

Dinosaurs

Fossils are essential to understanding about life a long time ago. Without them we would not even know that dinosaurs existed! People who study fossils are called palaeontologists and these are the people who have found out what we now know about dinosaurs. However, this only started 200 years ago, so we've only known about dinosaurs for 200 years!



Did You Know...?

- 'Sue' is the nickname given to the most complete and best preserved Tyrannosaurus rex specimen ever found.
- The word 'fossil' comes from an old word 'fossilis', meaning 'dug up'.
- Fossils are only found in sedimentary rock.
- The fossils in the pictures are called ammonites. It is the town symbol for Whitby in North Yorkshire. Whitby is good for fossil hunting and long ago, people thought that the ammonites were snakes turned to stone by St. Hilda!

How a Fossil is Made

When a plant or animal dies, their body sinks into mud or is buried by sand. This usually happens on the sea bed. Being buried preserves it from rotting or being eaten by other animals. Whilst it is underground, water and minerals seep into the bones and where the bones and body used to be and make a hard shape. This is squashed under more layers of sand, mud and eventually rock over many, many millions of years. Much later, palaeontologists or fossil hunters may find it as the rock in which it is encased becomes unearthed.

Fossils Questions

1. What does a palaeontologist do?

2. Which one is closest in meaning to the word **preserved**. Tick **one**.

- ☐ before serving someone
- ☐ kept in its original state
- ☐ dies
- ☐ historic

3. Who is Sue?

4. Why do you think that the people of Whitby thought that the ammonites were snakes turned into stone by St. Hilda?

5. Why did the author use an exclamation mark at the end of the **Did You Know...?** section?

6. Read the **How a Fossil is Made** section. What does the word **seep** mean?

7. Tick the boxes to say whether the sentences are true or false.

	True	False
The word 'fossilis' means buried.		
Ammonites are the symbol of the town Whitby.		
Fossils can be found in all type of rocks.		
Fossils take hundreds of years to form.		

Fossils Questions

8. Explain in your own words how a fossil is created.

Fossils Answers

1. What does a palaeontologist do?

A palaeontologist studies fossils.

2. Which one is closest in meaning to the word **preserved**. Tick one.

- ☐ before serving someone
☒ **kept in its original state**
☐ dies
☐ historic

3. Who is Sue?

Sue is the best preserved Tyrannosaurus rex skeleton ever found.

4. Why do you think that the people of Whitby thought that the ammonites were snakes turned into stone by St. Hilda?

Pupil's own response, that refers to the images such as: 'I think the people of Whitby thought ammonites were snakes turned into stone by St. Hilda because they are a spiral shape and they look like a curled up snake without a head.'

5. Why did the author use an exclamation mark at the end of the **Did You Know...?** section?

Pupil's own response that refers to it being a surprising fact, such as: 'The author used an exclamation mark to show surprise because it is surprising to us today that anyone could believe that snakes could turn to stone.'

6. Read the **How a Fossil is Made** section. What does the word **seep** mean?

Accept responses that refer to a liquid flowing slowly into the bones/space.

7. Tick the boxes to say whether the sentences are true or false.

	True	False
The word 'fossilis' means buried.		✓
Ammonites are the symbol of the town Whitby.	✓	
Fossils can be found in all type of rocks.		✓
Fossils take hundreds of years to form.		✓

8. Explain in your own words how a fossil is created.

Accept responses that correctly order the events of fossil creation, such as: 'A fossil is created when a plant or animal dies and becomes covered by mud or sand. After some time, water and minerals seep into the bones or space that was left by the living thing. This then gets squashed under more mud and sand and after millions of years it becomes sedimentary rock. Finally, it is dug up by a palaeontologist or fossil hunter.'