

Fossils

Fossils are shapes of dead animals and plants that lived millions of years ago made in rock. Usually when something dies it is eaten or decays and disappears. However, when an animal or plant dies it can get covered over and, over millions of years, become a fossil.

Dinosaurs

- Fossils are really important to know what happened a long time ago.
- Without fossils we would not even know that dinosaurs existed!
- People who study fossils are called palaeontologists.
- Palaeontologists started studying fossils 200 years ago, so we've only known about dinosaurs for 200 years!



Did you know?

- 'Sue' is the nickname given to 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 can sink into mud or be buried by sand. This usually happens at the bottom of the sea. When this happens it doesn't disappear. When it is underground, water and minerals leak into the bones and where bits of body used to be. This makes a hard shape. Next, the fossil gets squashed under more layers of sand, mud and other bits that make sedimentary rock. Finally, over many, many millions of years a fossil is created for someone to dig up one day.

Fossils Questions

1. How long have we known about dinosaurs? Tick one.

- 200 million years
- 200 thousand years
- 200 years
- 200 days

2. What is the name of a person who studies fossils?

3. What is the nickname of the best preserved Tyrannosaurus rex skeleton? Tick one.

- Sam
- Sue
- Sylvia
- Sandra

4. Fossils got their name from the old word fossilis which is an old word meaning... Tick one.

- fossils
- dug up
- buried
- old

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

True False

- Some people used to think ammonites were snakes turned into stone.
- Whitby is a town in South Yorkshire.
- Fossils can't be made under the sea.
- Fossils take millions of years to make.

6. Why weren't fossilised animals or plants eaten by other animals?

7. The author used an exclamation mark at the end of the Did You Know... ? section to make it sound surprising. Why is that sentence surprising?

Fossils Answers

1. How long have we known about dinosaurs? Tick one.

- 200 million years
- 200 thousand years
- 200 years
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2. What is the name of a person who studies fossils?

A person who studies fossils is called a palaeontologist.

3. What is the nickname of the best preserved Tyrannosaurus rex skeleton? Tick one.

- Sam
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True False

- Some people used to think ammonites were snakes turned into stone.
- Whitby is a town in South Yorkshire.
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- Fossils take millions of years to make.

6. Why weren't fossilised animals or plants eaten by other animals?

They were buried under mud or sand.

7. The author used an exclamation mark at the end of the Did You Know... ? section to make it sound surprising. Why is that sentence surprising?

Accept any response that refers to this being a strange thing to believe, such as: 'It does not seem possible to turn snakes into stone. It could seem strange that people believed this.'

Fossils

Fossils are shapes of dead animals and plants that lived millions of years ago made in rock. Usually when something dies it is eaten or decays and disappears. However, when an animal or plant dies and gets covered over, it can stay there and over time, become a fossil.

Dinosaurs

Fossils are really important in understanding what has happened 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 some plants or animals die, their body sinks into mud or is buried by sand. This often happens at the bottom of the sea and stops 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, to make a hard shape. This is squashed under more layers of sand, mud and eventually rock over many, many millions of years.

Fossils Questions

1. Which one is closest in meaning to the word **decay**. Tick **one**.

- fossil
- rot
- disappear
- die

2. Use the text to fill in the blanks:

Fossils are made when a dead animal or plant gets _____.

3. Explain in your own words why we have only known about dinosaurs for 200 years.

4. What does the Latin word 'fossilis' mean?

5. What is the name of the place that is good for fossil hunting? Tick **one**.

- St Hilda
- Whitby
- Ammonites
- Sedimentary

6. What is the name of the spiral shaped fossil pictured in the text? Tick **one**.

- immonites
- ammonites
- sue
- minerals

7. Why aren't there any fossils of cats that lived twenty years ago?

Fossils Questions

8. Number the boxes to show the order in which fossils are created. The first one has been done for you.

- It is squashed under more layers of sand and mud.
- Minerals and water seep into the bones and where the bones used to be.
- The layers of sand and mud turn into rock, and create a fossil.
- Their body sinks into the mud or sand.
- A plant or animal dies.

Fossils Answers

1. Which one is closest in meaning to the word **decay**. Tick **one**.

- fossil
- rot**
- disappear
- die

2. Use the text to fill in the blanks:

Fossils are made when a dead animal or plant gets **covered over**.

3. Explain in your own words why we have only known about dinosaurs for 200 years.

Accept responses that refer to the link between fossils being discovered and dinosaurs, such as: 'We have only known about dinosaurs for 200 years because dinosaurs lived so long ago that fossils are the only evidence of them that has survived this long. So when fossils of dinosaurs were discovered, no one before that had known that they had existed.'

4. What does the Latin word 'fossilis' mean?

The Latin word 'fossilis' means 'dug up.'

5. What is the name of the place that is good for fossil hunting? Tick **one**.

- St Hilda
- Whitby
- Ammonites
- Sedimentary

6. What is the name of the spiral shaped fossil pictured in the text? Tick **one**.

- immonites
- ammonites
- sue
- minerals

7. Why aren't there any fossils of cats that lived twenty years ago?

Accept any response that refers to fossils taking a long time to form, such as: 'There are no fossils of cats from twenty years ago because fossils take millions of years to make. Twenty years isn't long enough to make a fossil.' Number the boxes to show the order in which fossils are created. The first one has been done for you.

8. Number the boxes to show the order in which fossils are created. The first one has been done for you.

- 4 It is squashed under more layers of sand and mud.
- 3 Minerals and water seep into the bones and where the bones used to be.
- 5 The layers of sand and mud turn into rock, and create a fossil.
- 2 Their body sinks into the mud or sand.
- 1 A plant or animal dies.

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 most complete and best preserved Tyrannosaurus Rex specimen ever found.
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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 | |
|-----------------------|-----------------------|--|
| <input type="radio"/> | <input type="radio"/> | The word 'fossilis' means buried. |
| <input type="radio"/> | <input type="radio"/> | Ammonites are the symbol of the town Whitby. |
| <input type="radio"/> | <input type="radio"/> | Fossils can be found in all type of rocks. |
| <input type="radio"/> | <input type="radio"/> | Fossils take hundreds of years to form. |

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.'