

## **Fossils**

Fossils are the remains or the imprints of the remains of plants and animals that lived long ago. These remains may look just like the plant or animal, or they may be the actual organism that has turned to stone. These fossil remains may be thousands or, more likely, millions of years old. They can be found everywhere on Earth from deserts, to the arctic, to streams, and even in the driveway!

Fossils are formed in several ways. One of the ways that fossils are formed is by imprints. Imprints are the remains of either dead plants and animals or parts of these plants and animals. There are two kinds of imprints—casts and molds. In a cast imprint, the organism dies and is filled with minerals. These minerals turn to stone and produce a stone replica of the organism. In a mold imprint the original plant or animal dies and decays. The space that is left turns into stone and becomes the fossil. Bones, teeth, skin, hair, and shells can all become imprint fossils. Trace fossils are something that was made by the animal while it was living. This can include footprints and burrows.

Freezing is another process by which fossils are formed. The organism must be continually frozen from the time of death until its discovery. This limits the timetable of most frozen fossils to the Ice Age. Wooly mammoth and wooly rhinoceros fossils have been found in Alaska and Siberia. Frozen fossils can have hair, flesh, skin, and even food in their mouths. It almost seems as if they were flash frozen.

Fossils can also be created by drying. This mummification occurs in hot, dry parts of the world. This process can occur in animals and humans. Often the flesh, hair, and skin remain intact. These mummies have been preserved for thousands of years by drying.

Asphalt can also produce fossils. In downtown Los Angeles there is a twenty-three-acre park known as the La Brea Tar Pits. Within this park are 100 pits filled with tar that were made when oil seeped to the surface of the Earth. Fossils that are 10–40 thousand years old have been pulled from these pits. Thousands of years ago animals were trapped in these pits and the asphalt preserved them. Bones, teeth, seeds, shells, and exoskeletons of insects have been found here.

Some fossils are preserved in amber. Thousands of years ago, insects were trapped in the sap of trees. These insects died and were covered with the sap. Later the tree died, fell over, and gradually turned to coal. The sap was turned into amber. The coal was covered with salt water and gradually

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eroded. Finally, the amber was released from the coal and inside is the perfectly preserved insect.

Fossils are formed in many ways, but mostly they are just formed by luck! Unless just the right conditions existed, dead plants and animals decomposed. With a little luck, however, a fossil formed and we get to get a glimpse of life millions of years ago.

- 1. Based on paragraph 2, what is the meaning of replica?
  - A. a copy
  - B. a mineral
  - C. a footprint
  - D. a dead plant
- 2. According to the selection, what is required for mummification?
  - A. an area of tar pits
  - B. a hot, dry climate
  - C. a cold, frozen climate
  - D. an area of trees with sap
- 3. Which detail from the selection explains why most frozen fossils are from the Ice Age?
  - A. "The organism must be continually frozen from the time of death until its discovery."
  - B. "Wooly mammoth and wooly rhinoceros fossils have been found in Alaska and Siberia."
  - C. "Frozen fossils can have hair, flesh, skin, and even food in their mouth."
  - D. "It almost seems as if they were flash frozen."



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- 4. Which sentence best summarize the main idea of the selection?
  - A. Freezing is another process by which fossils are formed.
  - B. Bones, teeth, skin, hair, and shells can all become imprint fossils.
  - C. Fossils are formed in many ways, but mostly they are just formed by luck!
  - D. Some fossils are preserved in amber.