How fossils are formed

Fossils are the remains of a once-living organism, preserved as rock. Scientists can use fossils to find out what life on Earth was like in prehistoric times.

There are several different ways that fossils can form. Mould and cast fossils are formed during the following process:

1. When an organism dies, the body is gradually covered by mud and sand.
2. Once the body is covered, the soft parts such as the skin and muscles rot away, leaving the skeleton or shell behind.
3. Over time, the ground around the remains hardens and becomes rock.
4. Water in the rock dissolves the bones or shell, leaving a space where they used to be in the shape of the organism. This is a **mould fossil**.
5. Sometimes the space is slowly filled with minerals that turn into stone. A **cast fossil**, which is the same shape as the skeleton or shell, has now been formed.
6. After millions of years, the rock around the fossil is worn away and the fossil is revealed. It could then be found by a fossil enthusiast!



Other ways fossils can form

Insects can become trapped by sticky tree sap. This hardens over millions of years and turns into a clear, yellow rock called amber, which preserves the body inside.

Fossils can also be marks in rocks made during prehistoric times, such as footprints. These are known as trace fossils.

Copyright © 2018 Cornerstones Education Limited