



# Fossils

## Earth Science



S3E2. Students will investigate fossils as evidence of organisms that lived long ago.

- Investigate fossils by observing authentic fossils or models of fossils or view information resources about fossils as evidence of organisms that lived long ago.
- Describe how a fossil is formed.

**Fossils are the remains of dead organisms.**

**Plants or animals can die and be buried by sediments, frozen, dried, or preserved.**

**Over millions of years, a fossil will be formed.**

**mineralized fossil:** minerals in mud replace the minerals of the organism's hard body parts (bones or shells)

**mold fossil:** shape of a once living organism left in sediment when the rock formed. The organism breaks down (decays), leaving only the empty space shaped like the organism.

**cast fossil:** forms when mud or minerals later fill a mold fossil. It is the actual shape of the living thing.

**trace fossil:** items that were never alive; things like footprints or nests; help learn about animal behaviors

**amber fossil:** preserved organisms found in tree sap

**petrified wood:** minerals have replaced the soft parts of a once living plant

**frozen or dried fossils:** may still have hair or skin visible. They have been protected from decaying due to being frozen or dried out.

### Purpose

- Teaches about the past history of our Earth
- Shows how animals and plants have changed (adaptations/evolution)
  - Past weather conditions
  - Former location of oceans, lakes, or forests





amber fossil of a spider



trace fossil of dinosaur  
foot print



mold fossil of a trilobite



petrified wood fossil



cast fossil of a trilobite