

### Material Needed

- Paper cups
- Non-hardening clay or playdough
- Plaster of Paris or equivalent mixture (e.g., flour + water)
- Plastic sandwich bags, resealable
- Natural materials (shells, leaves, bark, sticks, rocks, small bones)
- Scissors
- Measuring cups
- Water
- Hand towels or rags

### Grade Range

- 3-5
- 6-8

### Topics/Skills

Science: Common Ancestry and Diversity, Fossils, History of the Earth

### Learning Standards

NGSS: [Biological Evolution](#), [Earth's Systems](#)

### Duration

30-45 minutes

### Prep Time

10-15 minutes

## Fossil Fun

### Cast, Bury, and Dig Up Your Own Modern Day Fossil!



Students are fascinated by fossils. This activity allows them to create their own fossil and to make a casting of it – just like a paleontologist.

### Activity Challenge

Make a plaster cast of a “fossil” and then bury it for someone to find.

### Preparation

1. Review the materials list and gather all items.
2. Find a workspace that is okay to get dirty and wet.

### To Do (adult supervision required)

1. Place a lump of clay in the bottom of a paper cup. Press in firmly.
2. Select a sample of natural material and push it firmly in the clay. Remove the sample and make sure it has left an impression in the clay.
3. Examine this “fossil” and compare it with the natural material used to create it. Set the cup aside.
4. Measure and pour 1 cup of Plaster of Paris into a plastic sandwich bag.
5. Pour ½ cup of water into the bag plaster-filled bag. Seal the bag, squeezing out some of the air and allow the bag to sit for 3-5 minutes.
6. Mix the plaster and water together by gently squeezing the bag until the mixture is uniform. The bag may feel warm, which is normal.
7. Hold the bag over the prepared cup. Cut a hole in the bottom corner of the bag and allow the plaster to flow into the cup covering the fossil. Set aside and allow to harden (time depends on amount of plaster in cup).
8. Throw the used bag into the trash. Never wash plaster down the sink!
9. When the plaster is hard, tear away the paper cup. Gently separate the clay from the plaster.
10. Compare the plaster casting, the impression in the clay and the original specimen.

### Observations

How does the plaster casting, the impression in the clay and the original specimen compare? What differences or similarities exist between them?

### Extensions

- Use this technique on outings to preserve footprints and other signs of plant and animal life.
- Bury the cast fossils and have family or friends try to find them and dig them up.
- Create a fossil-themed scavenger hunt using paleontology or archeology themes!

### The Science behind the Activity

The term “fossil” is used for any trace of past life. They are often the remains or impressions of animals and plants that once lived on earth. They are generally found in sedimentary rock. Paleontologists study fossils to learn about life that existed long ago. Fossils can provide an historical record of the biology and ecology of a region over time and provide clues about the age of the Earth. Scientists can make comparisons between the fossils of extinct organisms and organisms that are alive today.