

# Make Your Own FOSSILS



## SUPPLIES:

- A couple of twigs, leaves, flowers, shells or bugs
- 1 cup of flour
- ½ cup of cold coffee
- 1 cup used coffee grounds
- ½ cup of salt
- 1 sheet waxed paper

When you think of fossils, dinosaur bones encased in rock may first come to mind. But did you know that there are several different types of fossils? These include petrified fossils, carbon films, preserved remains, and trace fossils. To learn more, make your own trace fossils using objects from the backyard in this fun science activity!

## How to make your own fossils:

Trace fossils are the most common fossils, and they're created when living things leave an impression in the earth. There are two main types of trace fossils: **molds and casts**. A mold forms when an organism is pressed into layers of sediment, but the organism itself gradually disappears so only the mold of its shape is left. Follow these steps to create a mold fossil.

1. Collect small objects from nature, such as twigs or shells.
2. Combine the flour, coffee, coffee grounds, and salt in a bowl and knead them until smooth.
3. Divide the dough into 4-5 equal pieces, and then roll each piece into a ball. Place one ball in an airtight container and set aside.
4. Place your remaining dough balls onto a piece of waxed paper and flatten each one with your hand.
5. Press one nature object into each flattened piece of dough. Carefully remove the objects and take a look at the molds that were made.
6. Set your imprinted dough aside to dry for one day.



## Other types of fossils:

Learn a little more about the other fossil types by trying these additional activities.



**A cast**, which is the opposite of a mold, is made when minerals and sediment fill in the spaces of a fossil mold to create a replica of the original organism.

**Try this:** Push a piece of leftover fossil dough into one of your dried molds. Gently pull it out and take a look at the cast you have made. How closely does it resemble the original object?

**Petrified fossils** form when minerals are deposited into the hardest parts of an organism and turn into stone.



**Carbon films** form when an organism leaves behind a thin layer of carbon. They're known for showing a lot of detail.

**Try this:** Place a leaf under a sheet of white paper and gently rub a pencil over top of it – notice the details of the leaf that show through onto the paper.

**Preserved remains** form when an organism is able to maintain its original state by getting trapped in tar, tree resin, or even ice.

**Try this:** Place a dead insect, leaf, or flower in an ice cube tray filled with water and then wait for it to freeze. Does the item look any different frozen?

