



## Learning with Fresno Chaffee Zoo

### Make Your Own Fossils

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Fossils are evidence of plants and animals that lived long ago and have been preserved by nature. Did you know there are many kinds of fossils? Learn how you can make some fossil replicas of your very own!

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#### Supplies

- **Clay or dough:** Don't have any at home? Follow the recipe below!
  - **Tools for stamping:** toy dinosaurs or other animals, seashells, leaves, rocks, etc.
- Optional:** paint and paint brushes

#### Salt Dough Recipe:

- 1 cup salt
- 2 cups flour
- $\frac{3}{4}$  cup water

In a large bowl, mix salt and flour together. Add water slowly, stirring in until you get a good clay consistency. You may need more or less water than is listed in the recipe. Knead the dough with your hands to bring it together and make it smooth. You can leave the dough out to air dry in a warm, dry place or bake in the oven with **an adult's help** at 250 degrees F until firm. This can take two hours, so be patient!

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#### Steps

First, make a small dough ball and then flatten it out with your hands, like a cookie. Lay it down on your work surface. Use a hard toy animal or your fingertips to make footsteps through the clay. This is a **trace fossil**. Trace fossils are not part of an animal's body, but show us where the animal has been. Footprints, burrows, and even coprolites (which is fossilized dinosaur poop) are trace fossils dinosaur scientists, called paleontologists, can use to learn more about ancient animals.

For your next fossil, start as you did last time, by making a ball of dough into a flat cookie. Next, press into the clay with a leaf, a seashell, side of a hard toy animal, or whatever else you want to try. This is a **mold fossil**. Mold fossils are made when a plant or animal's body breaks down and leaves behind an imprint of itself.

After you bake or dry your mold fossil, there's one more fossil you can make. Take your finished mold fossil, and press some clay into it, then carefully pull it out. You have just made a **cast fossil!** Cast fossils can happen naturally when minerals from the soil fill in a mold fossil. Both cast and mold fossils can tell paleontologists a lot about the size and shape of ancient plants and animals.

You can use your new fossils as toys, decorations, jewelry or anything else you can imagine. You can even paint them with watercolor, acrylic, or tempera paint. It takes very special conditions and thousands of years to make natural fossils, but now you can enjoy your very own replicas at home!

