

Make a fossil!

Many people think of fossils as old bones, but paleontologists know that they are so much more than that. Eggs, scat, and even footprints can fossilize, leaving behind valuable clues to how dinosaurs and other animals lived. Because these are the animal's traces, and not their bones, we call these *trace fossils*. Many of the best trace fossils come from fine grained sediments, such as silt or clay; sand typically doesn't make good trace fossils. Here's how to make one of the more common types of fossil, an imprint.

You'll need:

1. 2 cups Plaster of Paris
2. 1 cup sand
3. 1 cup water
4. Mixing bowl
5. A shoe box
6. Shells, leaves, or anything else you want to have a fossil of.

Mix the plaster of paris with the water in the mixing bowl (better ask your mom first!). The mixture should be about the consistency of yogurt. If it is too thin, add more plaster; if it is too thick, add more water.

Now pour half the mixture into the cardboard box. Tap gently on the sides of the box to level the plaster and to get out any air bubbles. Place your shells, leaves, or other fossil items into the plaster. You may want to try making some footprints using a toy dinosaur. Allow the mix to sit for a few minutes, while you mix the sand into the remaining plaster of paris. Pour the sand and plaster mixture over the trace fossils and tap the box again to level the plaster.

Put your fossil somewhere cool and dry for two or three days, so that the plaster can harden forming a rock. The harder the plaster, the better the fossil will be, so don't get into a hurry! (Remember that most fossils take millions of years to form, so this is the fast course!)

When it is hard and completely dry, tear the cardboard away from your rock. Ask a parent to help you use a hammer to tap on the side of the rock. After you have tapped the side of the rock, it should split into two pieces. If you look carefully, you will be able to see your fossil in both the fine-grained plaster and in the coarse-grained sand.