

**Materials included:**

Paper cup, to mix plaster.

Clay, to create your print.

Plaster, to make a copy of your cast. When working with plaster, make sure you are in a well ventilated area.

What you will need:

A safe place to work that is easy to clean

Adult supervision

Water

Stirring stick (popsicle stick, spoon, etc.)

Directions:

Check out our website for an instructional guide with pictures!

1. Warm up your clay in your hands.
2. After you clay is warm, make an impression. If you'd like, it can be an impression of a toy. If you don't want a toy to get dirty, your fingerprint works just fine. When making your impression, make sure to gently press your toy or finger into the clay.
3. After you have your impression made, mix your plaster with 2 tsp of water.
4. After you have mixed your plaster, slowly pour it into your clay. Try not to splash! You should have a little plaster left over. Make sure you do not pour it down the drain, as plaster is damaging to plumbing. Let the extra dry, and throw it in the trash.
5. Let your plaster dry. Plaster takes about an hour to set, but 24-48 hours to fully cure. Is your plaster warm or hot? Plaster is initially warm as the plaster and water react. As it cures, it is cold to the touch. Once it is room temperature, it is fully cured. To learn more, look up endothermic and exothermic reactions. It is safe to remove your cast after a little over one hour.
6. After the plaster has hardened, carefully peel back the clay to reveal your trace fossil replica.
7. If you'd like, you can decorate your cast. Non-toxic acrylic paints will work best.

What are trace fossils?

Fossils that are formed from the impression of something left in mud or sediment are called trace fossils. Trace fossils are extremely important to the study of ancient life. Trace fossils give us a valuable insight into how the animal acted when it was alive. Additionally, trace fossils give more information about the soft parts of organisms that may have decayed over the thousands of years the animal was buried. For example: Foot prints found at The Mammoth Site give us an idea of what the mammoths that were in the sinkhole were doing before they died, and how they would have walked. Trace fossils often fall into two categories, molds and casts. A mold is an impression left behind in sediment that turns to rock. A cast is a fossil formed from material that fills in an impression left behind by an organism. Is the fossil replica you made today a mold or a cast?