

Science Project, Wk. 15 -- Prints (#128)

Name: _____

Purpose: To determine how fossils were preserved.

Materials: modeling clay, paper plate and cup, seashell,
petroleum jelly, plastic spoon, plaster of paris, water

Procedure:

- Rub the outside of the seashell with petroleum jelly.
- Press the seashell into a lemon-sized piece of clay.
- Carefully remove the seashell so that a clear imprint of the shell remains in the clay.
- Mix 4 spoons of plaster of paris with 2 spoons of water in the paper cup.
- Pour the plaster mixture into the imprint in the clay.

(NOTE: Plaster of paris can clog drains! Throw any leftovers in the trash, along with the paper cup and spoon.)

- Wait 15-20 minutes for the plaster to harden, then separate the clay from the plaster mold.



Did you know?

The ancient Greeks believed that the large bones of mammoths and dinosaurs were human bones, relics from a time when people were giant-sized. In Britain and Ireland, ammonites were said to be snakes turned to stone by St. Hilda or St. Patrick. Fossil sea urchins were 'fairy loaves' baked by sprites and fairies, and trilobite tails were butterflies turned to stone by Merlin. Special powers were often ascribed to fossils, and it was thought that carrying them gave protection from poison, lightning strikes, evil spirits and illness.

From "Fossil folklore," http://www.bbc.co.uk/nature/fossils/Fossil_collecting (last retrieved 12/01/2012).

Hypothesis (CIRCLE): The plaster will look more like the image on the

left



right

Result (CIRCLE): The plaster looked more like the image on the

left



right

Photos for above trilobite retrieved courtesy R.Weller/Cochise College.

Conclusion:

The layer of clay *and* the plaster are both examples of **fossils**, that is, of impressions or traces of organisms. Ancient organisms made impressions in soft mud as our shells did in the clay. Provided nothing else filled in the imprint, the dried mud would form a hollow, **mold fossil**. Fossils created as the result of minerals or mud filling in the imprint and hardening are called **cast fossils**.

Sketch:



Observe how fossils can form by watching the animation found here:
<http://www.pdesas.org/module/content/resources/14002/view.ashx>

http://www.fossilguy.com/sites/ambbridge/a_moh.cl.htm