

Making Fossils

3rd Grade

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1. References

Wonders of Our World, <http://wow.osu.edu/experiments/geology/mdfossils.html>

2. Benchmarks

GLI LS-4 – Use examples to explain that extinct organisms may resemble organisms that are alive today.

GLI LS-5 – Observe and explore how fossils provide evidence about animals that lived long ago and the nature of the environment at that time.

GLI LS-6 – Describe how changes in an organisms' habitat are sometimes beneficial and sometimes harmful.

3. Objectives

Students will be able to discern the difference between cast and mold fossils. The students should also be able to understand that fossils tell of the past.

4. Materials

- Modeling clay
- Plastic Container
- Plaster of Paris
- Water
- Mixing bowl
- Measuring cup
- Shells of various shapes and sizes

5. Demonstration

Tell the students that I would like them to make a cast fossil. Present them with clay and shells. Allow them to come up with ideas on how to make a cast fossil. If the students do offer the desired answer, tell them how they can do it.

6. Target Objectives

- Fossils tell about the past.
- Have students learn about cast (filled in imprints) and mold (imprints) fossils.

7. Target Model

- There are different types of fossils that result from different processes.
- Cast fossils can be filled in molds or parts of the organism that have chemically changed to be rock.

8. Procedure

- Form modeling clay into a round ball, then flatten the ball into a good mold, about ¼” thick.
- Press the shell or fossil into the mold.
- Mix Plaster of Paris and water (2 parts Plaster to 1 part water).
- Remove shell or fossil from mold.
- Pour Plaster of Paris into mold.
- Mark mold with student’s name and allow the Plaster to dry, 30 minutes to overnight.

9. Target Revised Model

- Yet to be determined

10. Summary

This lesson is being performed to show the difference between cast and mold fossils. The students will also get their own ‘cast fossil’ to take home. A small discussion and demonstration of geological time will be given to enable the students to know that many fossils, especially dinosaur fossils, are millions of years old.