

Making an Impression

*Planting the Seed:
Gardens, Growing, and Agriculture in Art*



Objective:

By the end of this lesson, students will:

- Learn about fossils.
- Create an art object that reinforces the concept of impression fossil formation.

Core Curriculum Ties:

- **K-6 Science Core Benchmarks:**

Students will understand how fossils are formed and how they can be used to make inferences. Students will identify features of fossils that can be used to compare them to living organisms that are familiar (e.g., shape, size and structure of skeleton, patterns of leaves). Describe three ways fossils are formed in sedimentary rock (i.e., preserved organisms, mineral replacement of organisms, impressions or tracks).

- **K-6 Visual Arts Core Benchmarks:**

The student will explore and refine the application of media, techniques, and artistic processes and will explore a variety of art materials while learning new techniques and processes.

Materials:

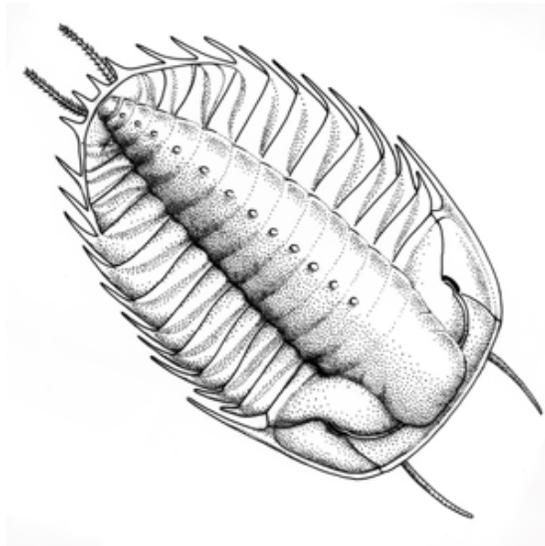
- Background material on Fossils
- Flowers or leaves to print
- Watercolor or other rough, acid-free paper
- Selection of hammers (including ball-peen or cross-peen, if possible)
- Hard work surface (cutting board, slab of wood, etc.)
- Paper towels
- Scissors
- Pens
- Tweezers or toothpicks

Alternatives:

If you are short on hammers, smooth stones or rocks can effectively act as a hammering tool. You can also use a smooth can or wooden building blocks from your classroom.

Time:

- Adaptable at the discretion of the teacher. Can be spread over several days in 15-30 minute increments or can be a brief 60-90 minute assignment.



Making an Impression

“Fossils are evidence of living organisms from the past and are usually preserved in sedimentary rocks. A fossil may be an impression left in sediments, the preserved remains of an organism, or a trace mark showing that an organism once existed. Fossils are usually made from the hard parts of an organism because soft parts decay quickly. Fossils provide clues to Earth's history. They provide evidence that can be used to make inferences about past environments. Fossils can be compared to one another, to living organisms, and to organisms that lived long ago.”¹

Conversations:

- How do you think fossils are made?
- Do you think fossils were made only a very long time ago?
- What objects, other than bones, can make an impression on a surface?
- What do the fossils we see today tells us about the once living organism that made the impression?

Additional Fossil References:

FICTION:

- Kathleen Weidner Zieffeld, *Fossil Fever (Road to Reading)*, 1999

NON-FICTION:

- Paul Taylor, *Fossils (DK Eyewitness Book Series)*, 2004
- Frank H. T. Rhodes, Paul R. Shaffer, Herbert S. Zim and Raymond Perlman, *Fossils (Golden Field Guide Series)*, 2001
- David Ward, *Fossils (Smithsonian Handbooks)*, 2002
- Frank A. Garcia, Donald S. Miller and Jasper Burns, *Discovering Fossils: How to Find and Identify Remains of the Prehistoric Past (Fossils and Dinosaurs, 1998*
- *Prehistoric Life: The Definitive Visual History of Life on Earth*, Dk Publishing, 2009

WEBSITES:

- www.uen.org/core/displayLessonPlans.do?courseNumber=3040&standardId=1214&objectiveId=1215



¹ Utah Education Network, Science Core Curriculum, Accessed on August 31, 2011.
<http://www.uen.org/core/core.do?courseNum=3040>.

Activity: Hammer Flower & Leaf Prints²

Start by going on a walk or visiting your garden to find leaves and flowers to work with. You're looking for things with bright colors that aren't too juicy or too dry. It'll take a little trial and error to find good plants, so start with a variety and play around.

Set up your work surface. You want a smooth, hard surface that you can hammer on and not worry about denting or getting messy.



Next, trim any chunky or squishy bits off of the plants and arrange them on your watercolor paper. Cover the plant with 2-3 layers of paper towels.



On the paper towels, sketch the borders of the area you'll need to hammer. Then, **HAMMER**. Start by making small, even taps using the flat side of one of the hammers. This will set the flowers or leaves in place. Then go carefully over the entire area with a ball- or cross-peen hammer. Start by going in rows up and down (see the arrows in the previous picture), then do another pass from side to side. You'll need to hit every single bit of the plant, so be patient. It can take a while.

² Photos & Activity taken from the blog Build/Make/Craft/Bake, "Hammered Flower & Leaf Prints," Accessed on August 31, 2011. <http://buildmakecraftbake.com/2009/04/how-to-hammered-flower-and-leaf-prints.html>.



Peel back the paper towel to check your progress. If the pattern on the towel is filled in, then you're probably done. If not, replace the paper towel and continue.



Once the leaves look pretty well smashed, peel away the leaf from the paper to reveal the print.