



Muncan Riverbed Fossil - - Ceramic Art Lesson Plan

Grade Level: K-8

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Introduction:

Dinosaurs weren't the only living things to leave behind fossils. Scientists called palebotanists have also been able to use plant fossils to get a better idea of what life was like in prehistoric time. Fossils also help in classifying plants based on their structure. Our fossil may have been formed when a fern branch fell into the soft mud along a riverbank. Over the course of a great number of years, the mud hardened and turned into a sedimentary rock. Even though the fern is gone, its impression remains.

Educational Objectives:

This lesson provides opportunities for students to:

- Make an "instant fossil" using leaves collected from their own environment.
- Study the fossil record and learn how fossils are formed.
- Learn about techniques that paleontologists and palebotanists use to study fossils.
- Study Botany and understand various classifications of plant life.

References:

When the Dinosaurs Were Gone Geological Society of America The Cleveland Museum of Natural History Earth Science Books and Resourses The Library of Congress

http://www.dinosgone.org http://www.geosocietv.org http://www.cmnh.org/education http://www.brookscole.com/geo http://lcweb.loc.gov/homepage/lchp.html

Teaching Tips:

- Have the students collect 10-20 types of leaves. This way, extra leaves can be shared with students that have none.
- Leaves that are well-defined work better than very fine or small leaves, try to use leaves that have large veins or interesting textures.
- If a student is having difficulty removing a leaf, just leave it in the clay, it will burn out in the firing.

Duncan Materials:

Cover Coat® Opaque Underglazes:

• 10, 2oz Cover Coat Underglazes in assorted colors

E-Z Stroke™ Translucent Underglazes:

• 2-3, 1oz E-Z Stroke Underglazes in dark colors



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Brushes/Tools:

- BR 576- ¾" Premium Glaze
- TL 415- Sponge

Miscellaneous Materials:

- Soft clay (approximately 2 lbs. for each student)
- Rolling pin(s) for rolling slabs and rolling leaves
- Two boards of equal thickness to use as shims for slab rolling
- Plenty of leaves, weeds or dry grasses to roll into the clay
- Newspaper

Step-by Step:

- 1. Place the two boards parallel to each other on either side of the clay so that the slab can be rolled to an even thickness.
- 2. Cut out an uneven edge for the fossil and rewrap the excess clay.
- 3. Apply three coats of a light colored Cover Coat to the slab making sure that each coat is dry before the next is applied.
- 4. Arrange the leaves on the slab and lay a sheet of newspaper over the clay.
- 5. Carefully go over them with the rolling pin to roll the leaves into the clay.
- 6. With the leaves still in the clay, carefully apply two coats of a darker colored Cover Coat. Let dry.
- 7. When the piece is completely dry, carefully remove the leaves and bisque fire to Cone 04.
- 8. After fired, sponge on E-Z Stroke that has been diluted with water, wiping it back so that it stays in the depressions left by the leaves.
- 9. Fire to Cone 06.

Project Closure:

Language Arts connection and project closure

Write and illustrate a brief description of this project, include detailed descriptions of the materials used and what happened during this project.

National Standards for the Arts

http://www.ed.gov/pubs/ArtsStandards.html

http://www.mcrel.org/compendium/Standard.asp?SubjectID=13

State Standards:

http://edstandards.org/Standards.html

Or refer to the Dept. of Education for a specific state.

Please visit <u>www.duncanceramics.com</u> Art Educators tab, Learning tab, to view the Standards based Vocabulary and Language Instruction, Art Project Rubric, and Writing Rubric documents.