



## Lesson Plan #46

# Colorful Caterpillars

by Tracy Gamble

*Tracy Gamble is a studio potter working and teaching in Plainfield, Indiana*

*Photography by David L. Gamble*



Caterpillars come in all shapes, sizes and colors. For this lesson plan, study real caterpillars from your backyard or images of caterpillars in books, photos or online. Students create pinch pots and attach them to form the caterpillar's body. In one, 40 to 50 minute, class period each critter is constructed and painted with underglaze, slow dried and fired to have a completed colorful caterpillar. Add more class periods to decorate with other kinds of low fire glazes after the caterpillars are slow dried and bisque fired.

## Tools & Materials

- AMACO® Low Fire White Art Clay No. 25—50 lbs. (45015Y) —Approximately 3 pounds of clay per student
- AMACO® Double-Ended Clay Shapers— 11126L No. 6 Angle Chisel/Flat Chisel or 11128N No. 2 Taper Point/Cup Round
- AMACO® Wire Clay Cutter (11017N)
- AMACO® Scoring Tool (11199R)
- Vinegar and vinegar brushes
- Wooden skewers
- AMACO® Ceramic Brushes—Variety of shapes and sizes
- Cardboard (8 x 10 inch pieces)
- Newspaper
- Glaze—Variety of:
  - AMACO® Teachers' Choice Glazes **NEW!**
  - AMACO® Teachers' Palette Glazes **NEW!**
  - AMACO® Velvet "V" Underglazes
  - AMACO® Liquid "LUG" Underglazes
  - AMACO® Liquid Gloss LG-10 Clear Glaze

## Technique

### Create the Caterpillar



1. Roll five 2" balls of clay to make pinch pots.



2. To make small pinch pots, push thumb through  $\frac{2}{3}$ ds of the way and pinch rotating as you go. Remember...each caterpillar body part is a small round ball shape.

## Lesson Plan Goals and Objectives

- Students will create a clay creature following handbuilding techniques.
- Students will learn and use coil, pinch and sgraffito techniques.
- Students will glaze and personalize their work.
- The lesson incorporates aesthetics and criticism with a hands-on activity.
- Students will be able to identify patterns and visual styles from nature.

This lesson is suitable for grades 2, 3, and 4.

## National Visual Arts Standards

- Understanding and applying media, techniques and processes.
- Using knowledge of structures and functions.
- Choosing and evaluating a range of subject matter, symbols, and ideas.
- Reflecting upon and assessing the characteristics and merits of their work and the work of others.
- Making connections between visual arts and other disciplines.



3. Squeeze opening to make the pinch pot into rounded ball shape.



4. Smooth. Wooden skewers work well for smoothing and for scoring.



5. Repeat until you have five rounded, ball shaped, pinch pots.



6. Put the caterpillar parts together by scoring (roughen connecting parts with a scoring tool or a wooden skewer) and paint on vinegar (moisten, the scored area only, with vinegar).



7. Attach by pressing together. Attach three pinch pots side by side.



8. Smooth around connected areas with Clay Shaper tool.



9. Roll out two coils,  $\frac{1}{4}$ " to  $\frac{3}{8}$ " wide and 5" to 7" long for caterpillar feet. The coils attach parallel along the bottom three pinch pots and up onto the 4th.



10. Attach coils to underside of caterpillar by scoring and painting, the scored area only, with vinegar. The coils provide a sturdy base.



11. Press coils on and smooth connected areas with Clay Shaper tool or finger.



12. To prevent cracking during the drying and firing process, make a hole in the top of a pinch pot on an end, and make a hole on the top of one of the other remaining pinch pots.



13. Score pinch pots, caterpillar parts, in connecting areas, paint on vinegar and attach.



14. Form antennae out of short coils, score, and paint with vinegar and attach.



### Decorate the Caterpillar

15. Paint on brightly colored underglazes. Using a wooden skewer, scratch through underglaze to decorate. This texturizing, decorating technique is called sgraffito.

There are a great number of decorating possibilities for these caterpillars in addition to the underglaze technique. Studying real caterpillars, in your backyard, and photos of different kinds of caterpillars gives ideas for decorating. Imagination is an excellent tool for decorating, too.

### Firing

16. Slow dry and then bisque fire all the caterpillars to Cone 04. Paint Low Fire glazes on and then glaze fire to Cone 05. The caterpillar examples for this lesson plan are AMACO's Teachers' Choice and Teachers' Palette low fire glazes fired to Cone 05. AMACO's Velvet Underglazes were also used with and without a clear glaze (AMACO's LG-10 Clear Transparent) painted on and fired also to Cone 05. There are many additional low fire glazes. Experiment and explore for really Colorful Caterpillars.

## Tips for Success

- The goal for each pinch pot is for the walls of each pot to be the same thickness everywhere—approximately  $\frac{1}{4}$  to  $\frac{3}{8}$  inches.
- Share vinegar, one small container (yogurt cup size) for 5-6 students.
- Use small brushes to apply vinegar—one per student—and encourage students to moisten instead of soak scoring with vinegar.
- Build the caterpillar on some newspaper or piece of cardboard. 8" by 10" inches for the cardboard or enough layers of newspaper to carry finished project.
- Set up an underglaze station on one table and send 4 to 5 students at a time to paint underglaze. Do this as caterpillars get finished and during the last part of the class.
- Slow dry completed caterpillars (whether painted with underglaze or not) by covering loosely with plastic, gently draped, for the first 24 hours.

## Glossary

**Bisque:** Unglazed ceramic after the first firing.

**Fire:** To heat the clay in a kiln at a very high temperature until it is hard and it becomes ceramic.

**Glaze:** A special clear or colored liquid mixture applied to ceramic surfaces that become hard and glass-like when fired to the right temperature in a kiln.

**Scoring:** Carving tiny slits into the moist clay with a fork or scoring tool before adding slip and joining.

**Sculpture:** A three-dimensional work of art which is intended to be viewed from all sides. It can be made out of materials such as plaster, stone, wood, metal, and clay.

**Sgraffito:** A technique where a top layer of color is scratched to reveal a color beneath.

**Underglaze:** A colored decoration applied to bisque or greenware and usually covered with a glaze before firing. Normally does not flow during firing and therefore good for detail work.



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