

3rd Grade - Cupcakes

(two-part lesson)

Part I

Lesson Objectives

Students will be introduced to hand building and the pinch and pull method with clay. They will manipulate the clay using fine motor skills which helps develop hand and finger strength and dexterity, and they will develop an understanding of how applied pressure affects the behavior of the clay. Students will learn how to form a coil, how to score and slip and how to smooth out the clay.

Vocabulary

- **Pottery:** Vessels like bowls, jugs and other objects made from clay.
- **Hand building:** Using hands, fingers and simple tools to shape clay.
- **Pinch pot:** A clay bowl created by pinching and manipulating clay into the desired shape.
- **Texture:** The feel or appearance of a surface.
- **Greenware or Boneware:** Unfired clay projects.
- **Bone Dry:** Completely air-dried clay.
- **Bisqueware:** Clay projects that have been fired once, without glaze.
- **Kiln:** An oven used for firing clay.
- **Fire:** To heat clay in a kiln.
- **Glaze:** Paint used to color clay; glaze turns to glass when fired in a kiln.

Project Supplies – 1st class

All supplies should be in the supply room on the clay shelves.

- Canvas table cloths (for white clay; one for each table)
- Wire cutter (to cut the clay block)
- White clay
 - Use a 1" slice from a block between 4 students (cut slice into 4 pieces) for the pinch pot.
 - Use ½" slice from a block between 2 students (cut slice into 2 pieces) for the frosting.
- Bamboo skewers and plastic knives (one of both, per student)
- Water cups



Lesson Summary:

Step 1: Roll clay into a ball.

Step 2: Push thumb into clay.

Step 3: Pinch and turn to create a pinch pot.

Step 4: Flatten the rim and bottom of the pot.

Step 5: Make a coil.

Step 6: Make the frosting top.

Step 7: Add a cherry.

Step 8: Add sprinkles.

Step 9: Add texture for the cupcake wrapper.

Instructions – 1st class

Play the step-by-step lesson video below during the class to assist you with the steps.

[Step-by-step lesson video](#)

(This video is also available to access via the Art Docent page on the PTSA site)

Creating the Pinch Pot:

1. To make the pinch pot, demonstrate/play the video to show students how to make a ball with their clay. They can use the table to roll the clay into a ball, or use their hands to tap it together into a ball.
2. Have students hold the ball of clay in one hand and use the thumb of their other hand to push into the center of the clay ball.
3. Instruct students to push straight down through the ball until their thumb is about one inch away from the palm of their hand.
4. Have students start from the bottom, pinching the clay between their thumb and fingers, while slowly turning the pinch pot with the other hand.
5. They should continue to pinch and turn while gradually moving to the top. They can smooth and shape the pinch pot as desired, but they should be made aware to keep about a pencil thickness throughout the pinch pot, especially around the top.
6. Instruct students to tap the pot on the table to flatten the base of the pot.
7. Instruct students to turn their pot over and to tap the rim of the pot on the table to create an even, flat rim.

Creating the Frosting:

8. Have students take half the clay for the coil and roll it along the table to create an even coil. A thin, worm-like coil is better than a snake-like coil.
9. Line the coil up with the lid of the pot, then offset it so each new coil going up gets closer and closer.
10. If students need more coil, they can create a new coil, and attach it to the exiting coil.
11. Cut off any extra coil at the top.
12. Lift off the frosting top and smooth out the coils on the inside using a little water and a plastic knife. Wet fingers and smooth out the inside coils.
13. Wet fingers and gently smooth the coils on the outside.
14. If students want to add a cherry they can make one with a small ball and a stem. Students should score and slip the clay to attach the cherry (see video).
15. Students can take little pieces of clay to add sprinkles if desired.
16. Show students how to add texture to their pinch pot using the bamboo skewer (cupcake wrappers usually have a linear texture to them).
17. Students should use a bamboo skewer to clearly write their FIRST name and LAST initial on the bottom of their clay cupcake.

18. Have students place their clay cupcakes into a class cardboard box that you have labelled using a clay log sheet. They will dry out on the kiln shelves for about 3 weeks before being fired in the kiln.

Clean-up Instructions

1. **Make sure to securely tie leftover clay.** To avoid hardening of the clay, ensure to tie the clay blocks or any leftover clay properly. Remove as much air as possible from the bag first.
2. **Remove cloth tablecloths** - Carefully remove excess clay bits from the cloth canvas table cloths and put this in the trash, then fold the cloth canvas tablecloths in on themselves to avoid letting clay dust into the air or on the floor. Store them back in the correct plastic tub just inside the supply room (red clay tub or white clay tub).
3. **Wipe off the table with a wet rag** - if you cannot find a rag please ask the janitor.
4. **Do not allow students to wash their hands in the sink directly-** Keep a bucket of water near the sink and have each child wash in the bucket first and then in the sink. If the clay settles at the bottom of the sink, it will clog the drain.
5. **Clean all the tools used in the bucket-** Make sure to clean all the tools used for the project in the bucket first and then in the sink.
6. **Leave the bucket of clay water overnight to settle** - After the clay settles in the bucket, discard the water carefully in the sink without disturbing the settled clay at the bottom of the bucket. This clay can be either used as a slip or be discarded in the trash. This does not have to happen the next day, but should be done ASAP.
7. *****DON'T FORGET TO LOCK UP THE KILN CAGE AND RETURN THE KEY TO THE FRONT OFFICE!!*****

TIPS

Docents are welcome to practice the project prior to teaching. Save your creation in case there are any absent children the day of the project.

Have students feel the width of their thumb; this is about how thick the walls of a fully formed pinch pot should be.

If the pinch pot or the frosting coil begins to crack or become brittle, the clay has been overworked and has become too dry. Molding should stop at the first sign of cracking. Use a little spray of water to moisten overworked clay in order to smooth it.

Students will have a follow-up class to glaze their project at least one month after this class is completed. Ensure this class is scheduled with your teacher and ensure that your teacher has booked the STEAM lab in advance.

Clay log sheets to attach to class cardboard boxes can be found in the front of the blue Clay Lesson Plans folder on the clay shelves in the supply room.

3rd grade - Cupcakes

Part II

Once the cupcakes have been fired in the kiln, they are ready to be glazed.

Glaze Supplies – 2nd class

- Paper towels
- Fired projects
- Glaze colors (one for each table)
- Cups or trays for glaze
- BLUE glaze brushes
- Samples of glazed projects (in the supply room)

Instructions – 2nd class

1. Set out paper towels, BLUE glaze brushes and two cups of ONE color per table. Start with about $\frac{1}{4}$ " of glaze per cup. If you can find some scraps of paper in the supply room, a similar color to how the glaze will look after being fired, place those scraps of paper on the tables so that students understand which color is at each table.
2. Show examples of glazed cupcakes if possible and/or show some online photos. Samples may be found in the supply room.
3. Instruct students to tear a paper towel in half and place their pinch pot and frosting top on the paper towels. They should not lift them from their towel when glazing.
4. They should rotate the towel as needed to glaze all sides of the pinch pot and frosting top.
5. Instruct students that there is one color at each table, and that there are dedicated brushes for each glaze color. THEY SHOULD NOT MIX GLAZES. Explain that this is so that any leftover glaze can be reused instead of thrown away. BRUSHES SHOULD NOT GO FROM TABLE TO TABLE.
6. Instruct students that they should walk to a different table, holding their pinch pot or frosting top on a paper towel, if they want to apply a different color.
7. Let students know that if they want a deeper/brighter color, they need to apply multiple layers of the same color. They should let each application dry before applying another layer. Three thin layers of a glaze color is better than one thick layer.
8. Once a glaze color is dry, other colors can be layered on top. Remember that dark colors will prevail. Use black color sparingly.
9. Explain to students that they should not glaze the bottom of the project or $\frac{1}{4}$ " from the bottom, because the glaze may stick the project to the kiln shelves when it is fired.
10. Have students leave their cupcakes at their places. Art docents should follow important clean-up steps below.

Clean-up Instructions

1. Check the bottom of each cupcake for glaze. If found, carefully wipe it off with a damp, warm sponge.
2. Place cupcakes into cardboard boxes (throw away paper towel). Do not stack glazed cupcakes on top of each other.
3. Fill out a log sheet and attach it to the cardboard box containing the cupcakes. You may need more than one log sheet if there are multiple boxes. Log sheets can be found in the blue Clay Lesson Plans folder on the clay shelves in the supply room.
4. Place the cardboard box(es) onto the kiln shelves in the kiln cage. Cupcakes will be fired by the kiln team in 3-5 days once they are dry. They will be available for pickup in the supply room after being fired.
5. Return any unused glaze to the correct jar.
6. When replacing the lid on a glaze jar, make sure the rim is clean; wipe it with a damp paper towel or sponge. Otherwise the jar may glue shut. If you come across a stuck jar, run the lid under hot water to loosen it.
7. *****DON'T FORGET TO LOCK UP THE KILN CAGE AND RETURN THE KEY TO THE FRONT OFFICE!!*****