

Pottery Refit

Time: 45 minutes

Materials Needed:

- 1 mini terracotta clay pot per student
- Markers
- Plastic grocery bag (to break the pot)
- Elmer's glue
- Small Dixie cups (to hold the glue)
- Paint brushes (for glue)
- Stiff paper plates (students will re-built their pot on this plate)

This activity is designed to help students learn about techniques used by archaeologists in the lab. Students decorate small ceramic pots, then “accidentally” drop them...Oops! Using glue and the students’ puzzle power they reassemble their pots to take home.

Introduction:

Archaeologists rarely find pottery (prehistoric or historic) in one unbroken piece when excavating. Due to its fragile nature, ceramics are usually broken into multiple pieces (if we're lucky, they're all in one place!). A lot of archaeological work is done outside of the field and in the lab. One of these steps is refitting ceramics. Putting the pieces back together allows archaeologists gather more information from the vessel than they would be able to from just a single piece.

Activity Steps:

1. Give each student a clay pot. Pass out markers and tell students to decorate in any way they desire. Let them know the pots will be broken after decoration is complete (so it doesn't come as an unpleasant surprise).
2. Give students time to complete their designs. As they finish, allow them to come up, put their pot in a plastic garbage bag, and drop them from above their heads. Let them know that throwing the bag down with force will result in many smaller pieces and will be harder to put back together. Just dropping the bag results in better re-fitting pieces.
3. Once a sufficient number of pieces are created, send the student back to their seats with a paper plate, Dixie cup of glue, and paintbrush. (Have small groups of students share a Dixie cup of glue – each student does not need their own).
4. Make sure students write their names on their paper plates.
5. Now students must try to re-construct their pot from the pieces they've created. Tell students to use plenty of glue (it will dry clear) and hold pieces together for about 30 seconds to help ensure the pieces stay together.

Do students have all the pieces? Why or why not? Do they think archaeologists always have all the pieces? What challenges did they face?

Background Information

Archaeology Lab Work

- 1 hour of work in the field (i.e. excavation), usually equates at least 2-3 hours of work in the lab
 - Cleaning, counting, classifying, cataloging, labeling, analyzing, conserving, reconstructing and writing up information
 - Archaeologists bring back not only artifacts from a dig, but also: notes, photographs, soil data/samples, maps, and excavation journals.
 - In more recent years, addition of 3D scanning, digital modeling, and 3D printing
- Why is it important?
 - This is where the artifacts become more than just objects in the ground – they become information!

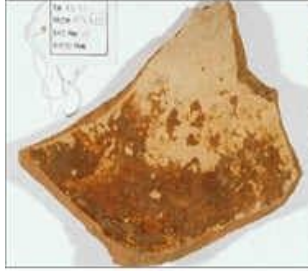
Cleaning



Classifying



Residue Analysis - What is left on the artifact?



Metal Conservation Through Electrolysis



Reconstruction



Further Information:

- Blog Post About Archaeology Lab Work -
<https://livesandlegaciesblog.org/2015/09/10/after-digging-what-happens-in-the-archaeology-lab/>
- Short Video from the “Archaeology in Annapolis” YouTube page -
https://www.youtube.com/watch?v=_IMhhDSHMJA
- 3D Scanning and 3D printing in Archaeology and Museums -
<https://www.aniwaa.com/guide/3d-printers/3d-printing-for-archeology-and-museology/>
- Blog Post - Broken Pots: More than the Sum of their Parts -
 - https://nmnh.typepad.com/rogers_archaeology_lab/2015/04/broken-pots-more-than-the-sum-of-their-parts.html
- 3D Models of Pottery Reconstruction from RLA Archaeology
 - <https://sketchfab.com/rla-archaeology/collections/haw-river-series-pottery>
 - <https://sketchfab.com/rla-archaeology/collections/catawba-project>