



Putting Together the Pieces

Dexter Norris, Katy Beth Culp, Mound House Education Staff

Grade Level: 3 & Up

Subject(s): Science, Art

Key Terms:

- Archaeology
- Artifact
- Ceramics
- Decoration
- Pottery
- Potsherd
- Temper
- Vessel

Florida State Standards:

SC.3.N.1.4 VA.3.S.3.1
 SC.3.N.1.5
 SC.3.N.1.6

SC.4.E.6.3 VA.4.H.2.2
 SC.4.N.1.3 VA.4.H.3.1
 SC.4.N.1.7

SC.5.N.1.5 VA.5.H.2.2
 VA.5.S.3.1

Summary:

Pottery is a common **artifact** found by archaeologists, and can provide great information about a person or culture. Archaeologists often find broken pieces of ceramic material, called **sherds**, and must reassemble pieces of pottery, like a puzzle, to get a better idea of what the original item looked like. Archaeologists are then able to gain insight into how the item was used and the people who made it by looking at characteristics like size, shape, decoration (or lack thereof), and so on. In this activity, students will decorate, break, and then act like archaeologists to reconstruct a piece of pottery.

Objectives:

Students will apply problem-solving skills by attempting to reconstruct their pottery in order to understand the process by which archaeologists conduct their work.

Materials:

- Terracotta flowerpot (1 per student) or clay
- Paint or markers
- Canvas bag or pillowcase
- Rubber bands
- Hammer
- Tape or glue



Putting Together the Pieces

Background:

For thousands of years, humans have been forming items out of clay and baking them in fires or ovens to make **pottery**. These items have been used for cooking, eating, carrying water, making decorations, and more. Archaeologists can sometimes use pottery to identify certain cultures, by examining the materials used, and the designs and paintings used as **decoration**.

Often, pottery is discovered in broken pieces, called **sherds** or **potsherds**, at archaeological sites. It takes a lot of time and patience for researchers to reassemble and research pottery.

Procedure:

- Have students create a design or stencil on paper.
- Repeat the design with paint or marker across the entire flowerpot.
- Once dry, place the pot inside a pillowcase or bag, use tape or rubber band to close the bag.
- Break the flowerpot using a hammer.
 - Careful: The goal is to break it into several large pieces, not to smash it to smithereens.
- Take larger pieces of the pottery out of the bag and spread them out on a table or floor
 - Caution, some pieces can be sharp
- Attempt to reconstruct the pottery using tape and glue.
 - For fun: Introduce this part of the activity by telling students they will be junior archaeologists for the day. They just got back from spending all day in the field gathering these pottery sherds. Now they are back at the lab and need to reconstruct the original artifact.

Closure:

Once students have reassembled their pottery, discuss the challenges they faced. Were there any pieces missing? Were there any pieces leftover? What tools could make the job easier? Did they lose their patience? Would it be more or less difficult without any decorative patterns?

Teacher Tips:

- Consider dividing this lesson into two days. The first day can include making a piece of pottery (with the knowledge that it will be broken). The pottery can then dry overnight, or over a weekend, before being painted and used in this lesson.
- For added difficulty: Have students try to reconstruct a different student's flowerpot, rather than their own, or mix different pieces of pottery together before breaking with a hammer.
- For multiple students: Have students collaborate to reconstruct a pot. If the pieces are mixed up, they will also need to communicate with other groups. This is very similar to how scientists must communicate and collaborate every day.
- It is easier to reconstruct a typical terracotta flowerpot upside down since the opening is wider than the base.



Key Words:

- Archaeology - The study of people and cultures from the past through material evidence.
- Archaeologist - Scientist who studies archaeology.
- Artifact – An item that humans have made, used, and left behind.
- Ceramics – Any of the various hard, brittle, heat-resistant and corrosion-resistant materials made by shaping and then firing a nonmetallic mineral, such as clay, at a high temperature. Common examples are earthenware, porcelain, and brick.
- Decoration - The methods, colors and motifs used to decorate the vessel.
- Pottery - The art of making containers, sculptures, and other objects out of clay.
- Potsherd - A broken piece of ceramic material (like pottery).
- Temper – Adding natural materials to clay to make the pottery more durable and strong.
- Vessel – Term used to describe any container-like object like a pot or a bowl that is used to hold, store, or carry things.



A reconstructed bowl on display at the Mound House museum

More information:

Examples of Calusa artifacts from Marco Island excavation -

<https://www.floridamuseum.ufl.edu/sflarch/collections/key-marco/>

Restoring Pottery - <https://www.fieldmuseum.org/science/research/area/conserving-our-collections/treatment/restoring-pottery>

Tempering in Southern Pottery – http://csasi.org/2013_july_journal/tempering_in_southern_pottery.htm