Evolving Traditions: Southwest Native Potter and Silver
Drawn from the Academy’s anthropology collections, this exhibit highlights Native American pottery and silver jewelry created by members of the Navajo, Hopi and Zuni tribes and by the Rio Grande Pueblos. As you explore the exhibit on Level 3, complete the following tasks! You may proceed in any order.

Complete the Venn diagram comparing characteristics of Zuni and Navajo jewelry:

List four common materials used in Southwest Native jewelry:
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Discuss with your peers
What do you think are some of the similarities and differences between ancient jewelry and modern jewelry crafted by Southwest Natives?

Draw your own design inspired by a piece you’ve seen in the exhibit!

Describe your favorite piece of Southwest Native jewelry using words or pictures.
Label each pottery term according to its role by writing a letter in the box at left. Use an S for terms used in pottery shaping, F for terms used in firing, or D for terms used in decoration.

<table>
<thead>
<tr>
<th>Pottery Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>coiling</td>
</tr>
<tr>
<td>redware method</td>
</tr>
<tr>
<td>turquoise-coated</td>
</tr>
<tr>
<td>paddle-and-anvil</td>
</tr>
<tr>
<td>blackware method</td>
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<tr>
<td>incisions (sgraffito)</td>
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<tr>
<td>painting</td>
</tr>
</tbody>
</table>

How is Zuni pottery decoration distinguished from that of other pueblos?

Find a tribe that has a unique style or method of making pottery. What is the tribe and what makes them unique?

Brainstorm with your peers

Are the storyteller figures from the Cochiti Pueblo realistic? What might the different parts of the figures represent?

Many objects give you hints as to the wildlife, habitats, climate, or natural resources available to the pueblo residents.

List as many examples as you can using observations of the objects themselves.

Use your list to discuss with your peers

What can be inferred about the environment in which pottery is created?
Objectives

Through this scavenger hunt, students will:

1. describe artistic elements of jewelry and pottery crafted by Native Americans of the Southwest
2. compare jewelry and pottery of different tribes and of different time periods.
3. create an image of a piece of jewelry based on the observed pieces.

Materials

- Southwest Native Pottery and Silver Scavenger Hunt (one sheet per student)
- pencils
- clipboard (optional)

Vocabulary

- **blackware method**: a method of firing that results in a piece of pottery that is black, though the original clay can range in color; this method involves placing wood or dried manure into the fire, which creates a smoky environment that blackens the pottery.
- **clay slip**: a thin layer of clay on the outside of a piece of pottery often used in decoration.
- **coiling**: a pottery making technique in which additional clay is shaped into ropes and then added one at a time to the exterior of the base, with each succeeding coil placed atop the previous one. The coils are pinched together and the interior and exterior surfaces are scraped so the coils adhere to each other and produce a smooth surface that can be decorated.
- **firing**: a step in the making of pottery that hardens the clay and often changes its color.
- **Hopi**: a tribe of Pueblo Southwest Native Americans
- **incisions (sgraffito)**: a method of pottery decoration, where the artist carved into the outside layer of clay.
- **Navajo**: a tribe of Southwest Native Americans that is currently the largest in the United States. They live primarily in the northeastern corner of Arizona.
- **Overlay**: a silver working technique used predominately by Hopi, in which designs are cut out from one sheet of silver and then that sheet is soldered to a second sheet
- **paddle-and-anvil**: a pottery making technique in which a lump of clay is roughly hand-formed into a desired shape. A stone “anvil” is then held against the inside surface of the emerging vessel while the exterior is pounded with a flat board or paddle, causing the vessel walls to become thinner and rise higher.
Southwest Native Pottery and Jewelry: Scavenger Hunt

- **pueblo**: a term that describes a community of Southwest Native Americans, from the Spanish word for “town.” Pueblo also refers to the groups of Southwest Native tribes that include the Zuni, Hopi, and Taos.
- **redware method**: a method of firing that results in a product that ranges from reddish brown to orange (the original clay does not have to start as red); the color change is due to the high iron content of the clay that is fired at low temperatures.
- **turquoise**: a blue-green mineral that is found in the Southwest of the United States.
- **Zuni**: a tribe of Pueblo Southwest Native Americans

**Teacher Background**

This exhibit highlights Native American pottery and silver jewelry created by members of the Navajo, Hopi and Zuni tribes and by the Rio Grande Pueblos.

**2000 Years of Pottery History**

*(Adapted from a background article (unpublished) provided by Russ Hartman, Senior Collections Manager of Anthropology at the California Academy of Sciences.)*

Native Americans in the Southwest have been making pottery for almost 2,000 years. Since the late 1800s, their wares have developed an international following, raising craft to the level of art. During those years, the pottery has changed dramatically in some ways, while core cultural traditions and an ingrained respect for Mother Earth and her clay have remained constant. The Academy exhibit *Evolving Traditions: Southwest Native Pottery and Silver* offers an overview of that 2,000 year journey and a look into the lives of some of the individuals who have sustained this ancient craft within their specific tribal groups.

Exactly when and where pottery production began in the American Southwest is a question that likely will never be definitively answered by archaeologists. People have lived in the Southwest for many thousands of years, but pottery began showing up in the archaeological record only around A.D.200.

Two pottery making techniques are used by today’s Native potters. The potter’s wheel was unknown prior to the arrival of the Spanish and is still not used today. Maricopa potters in the Phoenix area employ the **paddle and anvil technique**, in which a lump of clay is roughly hand-formed into a desired shape. A stone “anvil” is then held against the inside surface of the emerging vessel while the exterior is pounded with a flat board or paddle, causing the vessel walls to become thinner and rise higher.

All other pottery producing groups, i.e. all Pueblos and the Navajo, begin a pot by hand forming a pancake-like base and then completing the vessel with the **coiling technique**. Additional clay
is shaped into ropes and then added one at a time to the exterior of the base, with each succeeding coil placed atop the previous one. The coils are pinched together and the interior and exterior surfaces are scraped so the coils adhere to each other and produce a smooth surface that can be decorated.

Learning the many steps required to produce quality pottery is a lengthy process accomplished primarily through observation. Gathering raw clay, sifting and curing it, and polishing pots completed by older relatives are all vital steps that involve communal labor and strengthen family ties. Children are encouraged to participate in the process from the time they are very young, and are given increasingly more responsibility as they master each step. Sitting alongside their mothers, grandmothers or other relatives, younger potters are shown how to do each step, but they are never told, “Do it this way.”

“Evolving Traditions” presents examples of pottery from many different tribal groups, allowing for the comparison of the vessel forms, designs, and colors from one group to another. All of the pots are made from clay, but no two clay deposits are the same and the traditions of one tribe or pueblo also differ markedly from each other. As one goes through the exhibit, it should be easy to discern some of these differences that readily identify the cultural identity of the person who made it.

In some tribes and pueblos, families form pottery dynasties, almost always overseen by a family matriarch. Perhaps the most famous Native American artist of all time is Maria Martinez, who along with her husband, Julian, re-invented black-on-black pottery and propelled a growing demand for Native American pottery. The couple demonstrated their craft at the St. Louis World’s Fair in 1904. In addition to family dynasties, many hundreds of other potters make equally beautiful and equally collectible pottery as a symbol of their cultural pride and heritage.

Southwest Native Jewelry

(Adapted from a posting by Russ Hartman on the Academy’s Science Now blog.)

For most of us, the words “southwestern Indian jewelry” usually conjure up images of sterling silver and turquoise. But it’s not that simple. While it’s true that the two materials have dominated the work of Navajo and Pueblo jewelry makers for more than 100 years, it’s actually a relatively recent innovation among southwestern native crafts, beginning around 1870. What’s more, the craft and style is different between the native peoples in the area.

Jewelry making, itself, is an ancient craft among southwestern Indians, dating back 2,000 years or more to the region’s pre-Pueblo ancestral inhabitants. Turquoise mined from local deposits was shaped into beads and pendants for more than a thousand years, but only during the last quarter of the 19th Century was silver introduced by Mexican craftsmen.

At Zuni Pueblo in New Mexico, men learned to work iron and copper about the same time as the Navajo, in the 1850s. Around 1872, a Navajo silversmith taught a Zuni man how to work silver. Not surprisingly, Navajo and Zuni silver jewelry looked very similar in the late 1800s and
well into the early decades of the 1900s. Jewelry made for native use was often very heavy and
set with just a few large stones, as turquoise was still considered very scarce and valuable. To
service a growing number of tourists to the Southwest, one company began the production of
lighter weight pieces and, as early as 1899, had contracted with a turquoise miner in Nevada to
supply turquoise pre-cut into specific sizes and shapes.

The Hopi Indians learned silver working from their trading partners, the Zuni, sometime in the
1890s, and by 1906 there were Hopi silversmiths in all Hopi villages. Predictably, early Hopi
jewelry looked very similar to that made by the Zuni and the Navajo, and remained so until circa
1940s.

Following World War II, a number of factors combined to allow the Navajo, Zuni and Hopi to
develop different styles of jewelry that would set their work apart from each other.

Navajos preferred the look of both silver and turquoise in combination with each other, so they
retained a style where the silver serves as a base for stone settings. Equally popular is jewelry
that does not include any stone settings at all, relying upon filed or stamped designs to accentuate
the silver.

The introduction of electricity at Zuni Pueblo in the 1940s allowed for generators to power
electric saws to cut ever smaller pieces of turquoise. Previously, Zuni men and women
laboriously cut turquoise pieces by hand. The ability to cut smaller and smaller pieces allowed
the Zuni to further develop their inlay techniques as well as the setting of hundreds of small
stones on a single bracelet or necklace. Unlike the Navajo, the Zuni like to accentuate the stone
settings. The silver is merely a means to support the stones. Turquoise, coral, black jet, and
white shell are especially significant to the Zuni people and these four materials are often
combined on a single piece of jewelry.

Many Native American men served in the military during World War II, and like other veterans,
they often returned home with few opportunities for employment. In 1947, a group of Hopi
veterans enrolled in a federally-funded GI training program on the Hopi Reservation. The
students learned basics of design and how to adapt traditional Hopi motifs from pottery and
textiles to silverwork. They used a technique known as overlay, in which designs are cut out
from one sheet of silver and then that sheet is soldered to a second sheet. The cutout areas of the
first sheet are then oxidized to make them stand out against the surrounding silver. This
technique was immediately popular and remains the hallmark of contemporary Hopi silverwork.

Contemporary Native American jewelers capitalize on the traditions fostered by earlier
generations, but they also work in a completely different world from their predecessors. Many
of them have degrees in art, engineering, and other subjects and have traveled internationally and
been exposed to many different cultures. Like their ancestors, these younger artists are
influenced in their work by their own life experiences – people, places and events. They
combine seemingly divergent traits from one culture with those of their own, just as they fuse
one type of metal to another for an entirely different effect. In the end, however, they remain
rooted in their own traditions while also forging new ones.
Activity

Preparation
1. Print out the *Southwest Native Pottery and Silver Hunt* for each student.
2. Go over the scavenger hunt questions with your adult chaperones ahead of time and make sure they are familiar with the activity and vocabulary.

Introduction
The collections in *Evolving Traditions: Southwest Native Pottery and Silver* focuses on the jewelry work and pottery of the tribes of the Southwest United States.

- Draw attention to the two areas of the exhibit – the pottery is in the back section and the jewelry is in the front along one wall. In general, the collection is organized by tribe.
- Go over the questions on the scavenger hunt with your students and make sure they understand what they will be doing. Remind them that they can do the scavenger hunt in any order and that many of the questions do not have one correct answer.

Procedure
1. Divide students into their chaperone groups. The *Evolving Traditions* exhibit space is on the 3rd floor balcony. The exhibit space is relatively small so you may wish to stagger the time each group will spend in the exhibit.
2. Allow time for students to explore, observe, and answer the questions on the scavenger hunt.

Wrap-Up
Discuss the questions that your students answered from their scavenger hunt. Ask students to share their experiences observing the jewelry and pottery. What did they see that surprised them? What do they wonder about now that they have seen the exhibit?

References


Correlated California Content Standards

Grade Four
Visual Arts
1.5 Describe and analyze the elements of art (e.g., color, shape/form, line, texture, space, value), emphasizing form, as they are used in works of art and found in the environment.
3.1 Describe how art plays a role in reflecting life (e.g., in photography, quilts, architecture).

Science: Investigation and Experimentation
6a. Differentiate observation from inference (interpretation) and know scientists’ explanations come partly from what they observe and partly from how they interpret their observations.

Grade Five
Visual Arts
1.3 Use their knowledge of all the elements of art to describe similarities and differences in works of art and in the environment.
3.3 Identify and compare works of art from various regions of the United States.
3.4 View selected works of art from a major culture and observe changes in materials and styles over a period of time.

History-Social Science
5.1.1 Describe how geography and climate influenced the way various [pre-Columbian] nations lived and adjusted to the natural environment, including locations of villages, the distinct structures that they built, and how they obtained food, clothing, tools, and utensils.
5.1.2 Describe their [the pre-Columbian natives’] varied customs and folklore traditions.

Grade Six
Visual Arts
1.1 Identify and describe all the elements of art found in selected works of art (e.g., color, shape/form, line, texture, space, value).
1.2 Discuss works of art as to theme, genre, style, idea, and differences in media.
3.2 View selected works of art from a culture and describe how they have changed or not changed in theme and content over a period of time.
3.3 Compare, in oral or written form, representative images or designs from at least two selected cultures.

Grade Seven
Visual Arts
1.1 Describe the environment and selected works of art, using the elements of art and the principles of design.
3.2 Compare and contrast works of art from various periods, styles, and cultures and explain how those works reflect the society in which they were made.

Grade Eight
Visual Arts
1.1 Use artistic terms when describing the intent and content of works of art.
3.2 Compare, contrast, and analyze styles of art from a variety of times and places in Western and non-Western cultures.
4.3 Construct an interpretation of a work of art based on the form and content of the work.