

SANTA CRUZ MUSEUM
of natural history

**FIRST PEOPLES
EDUCATION KIT**

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Kit Introduction

Why do we provide this kit?

This education kit is designed to familiarize your students with topics presented in the *First Peoples of Santa Cruz* field trip and to provide a depth of experience and opportunity to apply knowledge after the trip. It can also be used within your own unit on the Native people of central California. The activities within this kit will give your students a better understanding of such topics as **food preparation, the use of native plants and animals, oral tradition, and culture** using unique artifacts, hands-on exploration, engaging activities and writing prompts.

How does it work?

These activities can be used in any order to support classroom learning. You may find that some activities are not appropriate for the level of your class, but for the most part these activities can be adjusted to different age or learning groups. When possible, we have included suggestions for modification and extension activities and writing prompts.

A Note on Terminology

The terms “**Ohlone**” or “**Ohlone culture**” are applied to artifacts, practices, and knowledge that pertain to the 50 tribes spanning from Big Sur to San Francisco. This is a modern grouping, coined by anthropologists, and members of each group do not necessarily identify as “Ohlone”. This term is useful when specific origins are unknown, or to describe widely-used cultural practices shared amongst many groups in this area.

Due to decades of missionization, direct lineage from many of these groups have been lost, along with knowledge and physical evidence of their culture. Whenever possible, we will attribute artifacts and practices to their specific origins, recognizing that Indigenous culture is by no means homogeneous.

Awawas was the language spoken by groups in the Santa Cruz area, and **Mutsun** was the language spoken by groups in the Watsonville/Gilroy area. Descendants of Awawas and Mutsun speakers taken to Missions Santa Cruz and San Juan Bautista now identify as **Amah Mutsun** and have formed a tribal band, and are working to relearn their culture and heal from historic trauma. *For more information, visit amahmustun.org.*

To view a detailed map of the tribes in this area, please visit our Virtual First Peoples Exhibit at santacruzmuseum.org.

Kit Inventory

Artifacts

- Abalone shell
- Bag of acorns
- Bag of shells
- Bag of stones
- Jar of Chia seeds
- Clapper stick
- Deer and/or elk skin
- Fire drill and hearth
- Moon snail shell
- Mortar and Pestle
- Rabbit pelt
- Shell necklace
- Stave game
- Stone/ Obsidian points
- Tule craft (basket, cordage, boat or doll)
- Tule samples

Additional Resources

- First Peoples Bay Area Map
- Native Plants and Their Uses booklet
- Mix and Match Game Cards

Books

- *Life of the California Coast Nations*, by Bobby Kalman
- *Rumsien Ohlone Stories*, told by Linda Yamane
- *Little Deer and the First Native American Flute*, by Al Striplen
- *When the Mission Bells Rang*, by Judith A. Scott

Item Descriptions (descripciones de los artículos)

Abalone shell (concha de abulón): The Ohlone people used the shells for decoration or made them into badges to indicate clan (after eating the abalone of course!) They would also pass plants used for basket weaving, like grasses and tule, through the holes in the shell to remove rough patches, making the strands even for perfect baskets. (Awaswas word for abalone: *tuppenish*)

Bag of acorns (bolsa de bellotas): Acorns made up a large part of the traditional diet. They were harvested, ground up, then leached. Afterwards they made a delicious warm mush. (Awaswas word for acorn: *rappak*, Awaswas word for oak tree: *aruwe*)

Bag of Shells (bolsa de conchas): Certain shells were used as currency and other times for decoration. Olivella shells were baked in underground ovens to turn their color a matte white so that each shell was uniform and therefore a consistent currency. Shells could also be used as game pieces (see “Hand Game” in Worksheets)

Bag of Stones (bolsa de piedras): *Obsidian:* These shiny stones could be fashioned into spear/arrow points and, if polished enough, even mirrors. Formed by lava rapidly cooling, this rock is not naturally found locally; however, there is archaeological evidence of the Ohlone using obsidian locally, which indicates trade practices with other California tribes. *Chert:* a form of this rock is also known as “flint” and is found naturally along the central coast of California. It was the preferred *local* rock for creating spear/arrow points (Awaswas word for rock: *irek*)

Chia seeds (semillas de chía): Chia is a plant native to this area. The seeds of the chia plant are highly nutritious and filling. When they are soaked in water, they become jelly-like and are used to thicken soups. For fun: put a couple of chia seeds in a bowl of water and have students observe the changes that the seeds go through.

Clapper Stick: The Ohlone did not make drums like some other Native American tribes; their percussion instrument was the clapper stick. These instruments are made from the branches of elderberry trees, because the center of an elderberry branch is easily hollowed out, which helps to create the signature clapping sound. (Awaswas word for elderberry: *chishsha*)

Deer or Elk skin (piel del venado o del uapití): The Ohlone hunted deer and elk as a major source of food. In order to hunt such large animals, they needed tools like spears and arrows. Once hunted, the skin could be tanned and used as shawls, blankets, skirts, and were also used in the process of making new spear/arrow points. (Awaswas word for deer: *tooche*)

Moon snail shell (concha de caracol luna): The Ohlone people feasted on the snails that dwelled within these shells, which are part of the mollusk family. These snails can grow up to 6 inches in length and stretch themselves to up to a foot in length! Also known as the “necklace snail,” the shells of the moon snail are used decoratively throughout the world.

Mortar and Pestle (molcajete y mano): Boulders or bedrock were ground down to create a bowl shape into the stone (the mortar). The process of making a mortar starts with chiseling a deep circle into a stone, then crushing the “plug” in the center out of the way. The pestle is a long stone, usually with a gritty texture, used to grind materials in the mortar. Some materials ground with mortars and pestles by the Ohlone were acorns, chia seeds, and pigments. (Awaswas word for mortar: *urwan*, Awaswas word for pestle: *pakshan*)

Rabbit pelt (piel de conejo): Rabbits made a delicious meal for the Ohlone. Afterwards, the pelts were used as sitting mats and sometimes capes. (Awaswas word for rabbit: *werwe*)

Shell necklace (collar de conchas): Polished, beautiful shells were commonly made into necklaces and other pieces of jewelry. Olivella shells in particular were used as currency, carved into circles and baked in earth ovens to create a consistent white color and then traded for goods. Think about our money today; a dollar bill looks the same all over the country, but if some of those dollar bills were printed in a different color, the value of those unique bills might go up. This is why the Ohlone would bake them to be the same color. These shells would often be used for necklaces and sometimes decorated baskets.

Stave game (juego de palos): People passed the time by playing this fun, simple game. Life for the Ohlone people has always been about more than just survival, games and music were part of everyday life.

Obsidian or stone points (puntas de obsidiana o de piedra): Pieces of stone and obsidian were commonly sharpened into spear/arrow points.

Tule craft (basket or boat or doll) (canasta o bote o muñeca) Tule could make strong, durable boats and baskets. (Awaswas word for tule: *rookosh*)

Tule (tule): A spongy reed-like plant, when tule touches water it swells up, making boats and baskets watertight. Tule was also used to cover the willow frames of their hut-shaped homes.

Tending Nature

Learning Objectives

By the end of the activity, students will understand:

1. Native people have a deep knowledge of nature that helps them to survive.
2. Native people respect plants and animals like members of their family, and “tending” to them was done with the same attitude as caring for loved ones.

Key Terms

- **Stewardship (protección):** (environmental stewardship) responsible use and protection of the natural environment through conservation and sustainable practices.

Background Information

For thousands of years, Native people got everything they needed from the natural world around them. They had a deep understanding of the life cycles of the plants and animals upon which they depended, and understood the importance of maintaining healthy ecosystems. Native people tended to plants and animals in ways that promoted beneficial growth using methods such as tilling the soil, pruning and coppicing plants, and using fire to maintain grasslands for hunting grounds. Modern scientists and land managers are working with tribes to relearn these traditional **stewardship** practices.

Materials

- Seeds (not provided) **beans work well but you can use any seed*
- Potting soil (not provided)
- Paper cups, cut up egg carton, or other container (not provided)

Discussion

1. *Where do you get the things that you use every day (food, water, clothing, etc.)?*
2. *Where did Native people get these things hundreds of years ago?*

Activity

Grow and tend a plant

1. Research methods for keeping plants alive (either using the internet, books, or word of mouth)
2. Students plant and tend to their seeds throughout the semester or year
3. Keep a log, tracking the care and growth of your plant (when you water it and how much, temperature, weather, etc.)

Tule Tools

Learning Objectives

By the end of the activity, students will understand:

1. Native people used plants for many things beyond food (and so do we!)
2. Tule is an abundant plant that is useful for making many different types of things.

Key Terms

- **Tule (tule):** a giant species of sedge that grows abundantly in freshwater marshes. Tule was used by Native Californians to make shelters, boats, mats, baskets, and other tools
- **Twine (cordel):** a strong rope consisting of two or more strands of fibers twisted together

Background Information

Tule is a type of plant that grows in freshwater marshes and is abundant in Santa Cruz along rivers, creeks, and lagoons. It is an ecologically important plant that reduces erosion and also filters contaminants from water. The stems of tule plants are spongy and buoyant, and the outer layer is water resistant. This made it a good material for the Ohlone to construct canoes and huts. When properly prepared and dried, tule can also be used to create rope, weave baskets, and make other tools.

Materials

- Tule artifacts & sample
- Cordage instructions
- Corn husks, dried (not provided, available at most supermarkets)
- Tape (not provided)

Discussion

1. Brainstorm as a class what kinds of things are made out of plants (other than food).
2. Pass around tule rope and artifacts. *Make observations, describe potential uses, material, how it is made, etc.*
3. Pass around the tule sample. Introduce tule and its special properties (*inside is spongy and buoyant, outside is water resistant*).

Activity

Make twine bracelets

**For this activity we recommend using corn husks as a substitute for tule because they are more easily available and it limits the need to harvest this important native plant.*

1. Give each student 1-3 corn husks
2. Tear or cut corn husks into 1" wide strips
3. Tie the ends of two husk strips together and tape the knot down.
4. Twist the right strand clockwise several times.
5. Twist the left strand clockwise several times.
6. As you twist, pass the right strand over the left strand, trading places.
7. Continue to twist and pass the strands over each other--they should start to twine together naturally.
8. When you near the end of a strand twist another piece of husk onto the end, overlapping by 1".
9. Continue until you reach a desired length and then tie the end into a knot.

Painting With Nature

Learning Objectives

By the end of the activity, students will understand:

1. Native people used natural pigments found in nature to create paints and dyes that they used for many different purposes.

Key Terms

- **Pigment (pigmento):** natural, organic coloring matter. Often derived from plants, minerals, and animals

Background Information

Native people had many different forms of art including decorated baskets, clothing, and tools that were a part of their culture that were passed down along generations. Natural pigments from plants and minerals were used to create dyes and paints. Many plants and berries could be ground and even further processed to create dyes. For example, poison oak tea turns a dark color when left to sit, and was used to dye clothing and baskets.

Materials

- Examples of dyed or painted Ohlone artifacts
- Plants and/or minerals (not provided)
- Metal spoons and paper plates (not provided)
- Water or vegetable oil to mix pigments (not provided)

Discussion

Share examples of dyed or painted Ohlone artifacts. Discuss: *Why do you think that Ohlone people decorated these things and themselves?*

Activity

1. Explore your schoolyard to find plants and rocks to make dye! **Make sure that students avoid harmful plants such as poison oak or stinging nettle. (For younger students, you may opt to bring in a few different types of berries and vegetables (beets, cabbage, spinach, blueberries) instead.)*
2. In pairs or groups students can experiment with making dye. They can try grinding using a spoon or rock, or soaking things in water or oil. **Avoid touching the face or mouth after grinding up plants! Always wash hands afterwards*
3. Students can use their pigments to paint on paper--some dyes change color when they dry, so be patient!

OPTIONAL: Use your paints to decorate your own Staves Game (pg 17) or your own clapper sticks (see Tree of Music, pg 14).

Story Reconstruction

Learning Objectives

By the end of the activity, students will understand:

1. Telling stories was important to Native people. They did not have written language, so telling stories was a way to preserve knowledge, traditions, and values.
2. Stories can have many meanings and morals.

Key Terms

- **Oral tradition (tradición oral):** information passed down from generation to generation without being written down

Background Information

Indigenous California languages did not have a written form and most aspects of their culture were passed down through the spoken word. Many cultural practices, traditional knowledge, and skills were passed down generationally through storytelling. For thousands of years, **oral tradition** preserved the rich history and knowledge of local tribes.

When Native people were forced to move to the missions, many traditions and languages were lost and people were forced to learn Spanish. There are some records and notes from missionaries and early ethnographers that helped preserve some words and stories of local Ohlone culture, but many of the remaining parts of their language and culture have been passed down by Indigenous people that survived the Mission period. These languages and stories are being relearned by their modern descendants in an effort to preserve and continue their cultural practices.

Materials

- When the World Ended, How Hummingbird Got Fire, How People Were Made: Rumsien Ohlone Stories by Linda Yamane **Note: we will be sharing "How Hummingbird Got Fire" during the field trip*
- Little Deer and the First Native American Flute by Al Striplen **Note: this is not a traditional Ohlone story, but the author is a member of the Amah Mutsun Tribal Band*

Procedure

1. Read or tell a story to the class (*for a challenge, read instructions or a recipe aloud*).
2. Have students individually write as much of the story down as they can remember.
3. In small groups, see if they can reconstruct the story.
4. Have groups repeat their rebuilt story aloud to the class. (*Can also be done "Popcorn Style" where each student or group adds one detail at a time*)
5. Re-read or retell the original story. *How much was preserved? Was the main point preserved? What details changed?*

Tree of Music

Learning Objectives

By the end of the activity, students will understand:

1. Ohlone culture is based in oral tradition and songs are a part of that practice of passing along important pieces of culture through the generations.
2. Native people used native plants to create many of their instruments.

Key Terms

- **Clapper stick:** A wooden percussion instrument made from elderberry branches
- **Elderberry:** A tree native to California with edible berries and branches that were made into baskets, instruments, games, and more

Background Information

The Ohlone used elderberry clapper sticks, along with a traditional four-holed elderberry flute, to accompany them in song and dance. For this reason, the **elderberry tree** was known to Native Californians as the “Tree of Music”. A **clapper stick** is made by splitting and hollowing a straight branch part-way to its handle, and striking the split ends together against the palm to produce a rhythmic, clapping sound. Music was performed at “Big Time Gatherings,” weddings, before and/or after a large hunt, while performing a chore, and during other everyday occasions.

Materials

- Clapper stick
- Wide craft sticks (not provided)
- Pipe cleaners (not provided)
- Markers (not provided)

Procedure

- Brainstorm as a class:
 - What are some things you might write a song about?
 - What do you think the Ohlone sang about?
- Watch the videos of modern Ohlone people signing traditional Ohlone songs:
 - Ohlone Fire Song <https://www.youtube.com/watch?v=uQA0EfdWO-8>
 - Ohlone Song, Spirit of the Land <https://www.youtube.com/watch?v=jFRfxdjpKS8>
 - Ohlone Song, Idle No More <https://www.youtube.com/watch?v=CXI25gildsk>
 - Reviving the Ohlone Language <https://www.youtube.com/watch?v=a-fe8p2LTZk>

Activity

Students can create their own clapper stickers:

1. Draw or paint on two wide craft sticks (see *Painting with Nature*).
2. Wrap one pipe cleaner twice around one craft stick (about one inch from the bottom) and then adding a second craft stick, wrap the two together so that the pipe cleaner holds the two together, but also wedges between the two.

Mission Bells

Learning Objectives

By the end of the activity, students will understand:

1. The Mission system in California had a massive impact on the lives of Native people and the natural world.
2. Native people experienced great suffering during the Mission period, with the loss of their traditional cultural practices, languages, families, and names.

Key Terms

- **Colonization:** the process of settling among and establishing control over the Indigenous people of an area (Spanish colonization of California: 1769-1834)
- **Amah Mutsun** -present-day Native American tribe local to Santa Cruz

Background Information

The Spanish began their colonization of Central California in the 1770s by building a series of missions near Native American villages. Native people were forcibly removed from their homes and taken to the Mission compounds, where they were forced to perform unpaid labor and convert to Christianity. In the Missions, children were separated from their parents, and Native people were not allowed to practice their culture or speak in their native language. They were not even allowed to use their own names. They were brutally punished if these rules were broken. In addition to these restraints on their culture, the Spanish also brought deadly diseases such as smallpox and measles. It is estimated that approximately 150,000 Native Americans died in California during this time. Visit amahmustun.org/history for more information.

This period marked a massive change not only for Native people, but also for the rest of the natural landscape of California. Non-native species arrived with the Spanish, spreading throughout the landscape, while native plants and animals became threatened by increased hunting and farming practices and the elimination of thoughtful tending by the Native tribes.

Materials

- *When the Mission Bells Rang*, by Judith A. Scott

Procedure

1. Read the story *When the Mission Bells Rang*.
2. Ask students to reflect on what they learned from the story.
3. Have students write their own narrative, building upon their reflections from this story
 - a. *Prompt 1:* Choose another local animal and write about how the animal would have been affected by the mission bell, and how they could have tried to help to stop the ringing. Include an illustration.
 - b. *Prompt 2:* Choose a local animal and write about how that animal may be affected by the world today (roads, cars, tall buildings, airplanes, etc). Is there anything we can do to help them? Include an illustration.

Staves Game

Learning Objectives

1. Students will learn to play a traditional Ohlone game.
2. Students will make their own Staves set to play with.

Key Terms

- **Staves:** split sticks (often from elderberry) that were decorated with geometric patterns on the rounded side

Background Information

Games were used in much the same way they are today, as a way to relax, connect with others, and have fun. Native life was full of games - dice games, racing games, shinny (hockey) games, and many others. The staves game is a game of chance that was played widely by the people of the Ohlone culture. It is played with four or six sticks, or staves, often made of split elderberry and decorated with colorful geometric patterns, and sticks or stones used for keeping score.

Materials

- Six split sticks or staves - decorated on the rounded side, plain on the flat side
- 10 or more "points" (shells, acorns, stones, sticks, tule, etc)
- Wide craft sticks (not provided)

Procedure

1. This game is played with six split sticks. The flat side should be plain; the rounded side should be decorated.
2. The first player tosses the playing sticks gently on the ground. They are scored by how they fall:
 - a. All up or all down = two points and another turn
 - b. Half up and half down = one point and another turn
 - c. Any other combination = no points and turn is over
3. Use stones, shells, acorns, or any other item that you have at least ten of as points.
4. Winner can be determined in one of two ways:
 - a. First person to five points wins or
 - b. Person with the most points at the end of an allotted time wins.

Activity

**Create your own staves using wide craft sticks.*

1. Provide each student with 6 popsicle sticks
2. Have students use markers to draw designs on one side of each popsicle stick