



SANTA CRUZ MUSEUM of natural history

Welcome to the Ohlone Program

The Ohlone Program is one of the Museum’s oldest and most popular programs. We strive to **respectfully and accurately** represent local native tribes, their history, and their culture. Thanks to the generous support of the Santa Cruz County Community Foundation, we are able to **revisit and revise** this program to best reflect current knowledge about Ohlone culture. The key terms and themes of this program have been thoughtfully and intentionally created with input from **Ohlone consultants**, as well as feedback from teachers and docents who have participated in this field trip. We have done our best to preserve some of the “favorites”, while updating the content and adding activities to include more interactive, inquiry-based, and student-driven learning. Teacher feedback has been invaluable in this process, and we thank you for your support as we continue to grow.

Part I: Ohlone Program Overview

Title: Ohlone Program

Topic: Students learn about the lifestyle of the Ohlone people native to the Santa Cruz area, known as the Awaswas, before the introduction of Europeans. They see different tools and practices used to survive, and gain an understanding of a different culture, allowing them to view and connect to nature in a different way. In the process of learning about the Ohlone’s connection to nature, students come to understand that humans are a part of the ecosystem.

Why is this a relevant and interesting topic? Not only is learning about Native Americans a state standard for all students, it is also important to have a perspective of different cultures. Native people today work to protect and preserve their culture, traditions, and practices, and by teaching children about these things we help them to do so. Even for those who have no native ancestry, learning about these cultures can be relevant to all our lives. We can benefit from exposure to a diversity of cultures, particularly those that have a different type of connection to the environment. Especially in a time when people are further disconnected from natural processes and from how things that they use daily are made, children are interested to learn about and practice resourcefulness, and begin to truly see the nature that surrounds them, not only as a backdrop, but as a resource and a system of which they are a part.

Theme Statement: The Santa Cruz region offered a sustainable way of life for its native people with its rich biodiversity of flora and fauna. By studying how the Awaswas (commonly generalized as the Ohlone) relied on their knowledge of local plants and animals, as well as their unique skills honed over thousands of years of surviving and thriving in this region, students develop an appreciation for native traditions, plants, animals, and habitats. They also develop cultural awareness and are able to see similarities and differences between cultures, both as they were and as they are.

Stewardship Outcomes: At the conclusion of this program, students will not only have an appreciation for the history of native people in this area, but also for their connection to nature. Students will be better prepared to:

1. Notice plants and animals, and consider their value/use for food, tools, shelter, etc.
2. Make choices that demonstrate an understanding that the health of their environment influences their own health and that of their community.
3. Take action to conserve resources with an understanding that all animals, including humans past and present, need clean food, air, water, and space to survive.

Additional Outcomes: *By the end of the program, students will:*

1. Relate their own needs to the needs of people in the past and people in different cultures, including the need for food, water, shelter, and community.
2. Identify Ohlone as the culture practiced by Native Americans in this area, and name the tribe that lived where their school is.
3. Empathise with other cultures rather than reducing them to stereotypes and know that Ohlone culture is still practiced.
4. Identify at least one example each of native plants that were used for food, shelter, and tools.
5. Identify at least one animal that was important to survival and Ohlone culture.
6. Demonstrate *thankfulness* for their experiences in nature.

Standards

We are actively working on developing our curriculum and helping teachers to identify ways in which our program supports and relates to Common Core, CA History-Social Science Frameworks, and Next Generation Science Standards. This is by no means an exhaustive representation of the connections that can be drawn from our program, but shows what we strive to do best. If you have any comments, suggestions, or concerns about how the standards are reflected in our programming, feel free to contact us.

Core Objectives of the Ohlone Program	Common Core (CC) and History-Social Science (HSS) Standards Supported	Next Generation Science Standards (NGSS) Disciplinary Core Ideas Supported and Related*
Students learn to identify the area in which Ohlone tribes lived, and how they <i>interact with the natural environment in this region</i> .	<p>HSS1.2.4 Students describe how location, weather, and physical environment affect the way people live, including the effects on their food, clothing, shelter, transportation, and recreation.</p> <p>HSS3.1.2 Students trace the ways in which people have used the resources of the local region and modified the physical environment.</p> <p>HSS3.2.2 Students discuss the ways in which physical geography, including climate, influenced how the local Indian nations adapted to their natural environment.</p>	<p>*ESS3.C Human Impacts on Earth Systems</p> <p>K-ESS3-3: Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.</p>
Students learn that all living things, including people (past and present) <i>need food, shelter, space, and water to survive</i> .	<p>HSSK.6.3 Students understand how people lived in earlier times and how their lives would be different today (e.g., getting water, growing food, making clothing).</p>	<p>ESS3.A: Natural Resources</p> <p>K-ESS3-1: Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do.</p>
Students <i>compare their lives</i> to the lifestyles of a past culture, including family and community structure.	<p>HSSK.6.3, HSS3.1.2, HSS3.2.2 (see above)</p> <p>HSS1.4.3 Students recognize similarities and differences of earlier generations in such areas as work, dress, manners, stories, games, and festivals.</p>	<p>*LS2.D: Social Interactions and Group Behavior</p> <p>3-LS2-1: Being part of a group helps animals obtain food, defend themselves, and cope with changes. Groups may serve different functions and vary dramatically in size.</p>
Students identify native plants and animals and their potential <i>roles in human life</i> (food, tools, cultural symbols). This includes <i>how Ohlone may have applied their knowledge</i> to interact with (hunt, avoid, use for tools, etc) plants and animals.		<p>ESS3.A (see above)</p> <p>ETS1.A: Defining and Delimiting Engineering Problems</p> <p>3-5-ETS1-1: Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria).</p>

Part II: Ohlone Program Field Trip Content

Outline

We will do our best to adhere to the following outline. Please let our staff know as soon as possible if your class has specific needs with respect to timing, such as an early departure time or wanting to include “free time” in the program hour. Late arrivals or early departures may result in the exclusion of some parts of the program.

Greeting/Nature Walk: 10 minutes

Station 1: 25 minutes

Station 2: 25 minutes

Total program time: 1 hour

Groups are welcome to explore the museum for up to 30 minutes after their program.

Greeting

Time: 10 minutes

Location: Amphitheatre/ Garden

Objectives/vocabulary: Provide an overview of the program and introduce key concepts.

- **Geography** of the region inhabited by the people we will be discussing.
- **Appropriate names** for the Native People of the region, past and present.
- **Survival** in this landscape, which required deep knowledge and **gratitude** for the natural abundance of the area.
- **Native plants** with cultural significance to Ohlone people are identified while walking from amphitheatre to Museum.
- **Museum rules** and explanation of the organization of the program (two rooms, switch, meet outside together).

Plant Station

Time: 25 minutes

Location: Front Room/ “Ohlone Room”

Objectives: Students will a) explore the exhibit and artifacts, b) examine tule and apply critical thinking to understand how this plant was used, and c) experience turning acorns into food. In doing so, students will learn about native plants and their uses as food, shelter, and tools. They will begin to explore the important relationship between the Ohlone and nature, and realize why the Ohlone expressed thankfulness for their resources.

Vocabulary: oak/acorn, weaving, management, resource, gratitude, oral tradition, ecosystem

Artifacts/tools: mural, baskets, mortar and pestle, soaproot brush, food examples, plant guides, dried plants, tule artifacts: baskets, rope, mat, duck decoy** and net** (**can be used in both stations)

Animal Station

Time: 25 minutes

Location: Back Room/ "Animal Room"

Objectives: Students will a) explore the exhibit, b) apply critical thinking skills to understand and model hunting practices, and c) discuss resourcefulness and using animals not only to survive, but to thrive and have a rich culture. In doing so, students learn about hunting traditions of the Ohlone people, and see examples of ways that animals were used beyond food (such as musical instruments). They will be introduced to animals not only as food and resources, but also as cultural symbols found in storytelling and central to Ohlone culture.

Vocabulary: hunting, sustainability, sweat lodge, scent, camouflage, decoy, oral tradition, native

Artifacts/tools: deer pelt, antlers, bone skin scraper, bow and arrow, atlatl, fishing basket, tule duck decoy and net** (**can be used in both stations)

Part III: Resources & Ohlone Classroom Kit

We encourage field trip participants to rent our Ohlone Classroom Kit. This kit includes artifacts, books, and other resources that will support classroom learning in preparation for the field trip, or as a continuation of learning after the trip. We are also happy to share additional resources and links to information that we have found to be accurate and up to date. Please visit the education page on our website for more information and helpful links.

Classroom Kit Contents

- “Ohlone Program Classroom Kit” manual
- Artifacts
 - Abalone shell
 - Bag of acorns
 - Bag of Shells
 - Bag of Stones
 - 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, and boat or doll)
 - Tule samples
- Images
 - Laminated Native Plants and Uses cards
 - Mix and Match Game Cards
- Media
 - *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

List of Activities and Concepts

Activity	Description	Materials needed
Tending Nature*	Students identify the needs of living things and explore the relationship between Ohlone people and nature.	<ul style="list-style-type: none"> - Bean seeds - Potting soil - Paper cups, cut up egg carton, or other container
Tule Tools	Students explore how plants are used beyond food and learn a useful application for a familiar plant.	<ul style="list-style-type: none"> - Corn husks, dried (available at most supermarkets) - Beads (optional) - Tape
Painting with Nature*	Students experiment with materials to create pigments and create modern artifacts.	<ul style="list-style-type: none"> - Plants and minerals (found around school) - Metal spoons and paper plates - Water or vegetable oil to mix pigments
Story Reconstruction	Students practice using oral tradition to preserve culture and information.	
Tree of Music	Students learn about native plants and practice making music the Ohlone way.	
Stave Game	Students explore a part of Ohlone culture that goes beyond survival.	<ul style="list-style-type: none"> - wide craft sticks - pipe cleaners - markers
Worksheets	Make copies of these laminated worksheets to be used by your students.	

* These activities are described below. The Classroom Kit includes visual aids and materials for some activities, but many can be recreated with materials in most classrooms.

Tending Nature

Learning Objectives

By the end of the activity, students will understand:

- That all living things need space, food, water, and shelter.
- Ohlone people had a deep knowledge of nature that helped them to survive.
- Ohlone people respected 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

- **Nutrients:** a substance that provides nourishment essential for growth and maintenance of life.
- **Stewardship:** (environmental stewardship) responsible use and protection of the natural environment through conservation and sustainable practices
- **Habitat:** the natural home of a living thing. Usually a place where organisms can get the food, water, shelter, and space they need to survive.

Background Information

Ohlone people had a deep understanding of the life cycles of the plants and animals upon which they depended. They were **stewards** of their environment. While their practices were not considered to be reflective of modern agriculture, they did **tend** to plants and animals in ways that promoted beneficial growth by doing things such as tilling the soil, pruning plants, and using fire to suppress undesirable plant growth.

Materials

- Bean seeds (not provided)
- Potting soil (not provided)
- Paper cups, cut up egg carton, or other container (not provided)

Procedure

1. Ask students, “What do people need to survive?” Write the list on the board.
2. When the words food, shelter, space, and water come up, circle these words. Lead them to these terms if they do not volunteer them.

3. Discuss and list on the board what plants need to survive. Circle the words food, shelter, space, and water when they say them again.
4. Discuss and list on the board what wildlife (animals that live on their own in nature) need to survive. Circle the words food, shelter, space, and water when they say them again.
5. Point out that all living animals need food, water, shelter, and space. That is called a habitat. Habitat is food, water, shelter, and space that a plant or animal needs to survive.
6. In small groups or as a class, have students discuss how or where they get the things that they need to survive.
7. Where do they think that Ohlone people got things to survive hundreds of years ago?
8. Ohlone people tended to nature and were stewards of their environment. This was so important that they felt like plants and animals were similar to family.
9. Review the needs of living things as you create a habitat for your beans and plant the seeds.
10. Students may tend to their plants throughout their unit or whole school year. Some may choose to research methods about keeping plants alive--Ohlone people also did research and shared information on how to best grow the plants that they needed.

Extensional activities and writing prompts:

- *Writing: Describe your habitat. Where do you get the things you need to survive?*
- *Art: Draw your habitat. Label your drawing with the things that you need to survive.*
- *Science: Keep a log tracking the care and growth of your plant. Record when you water it, and how much. You may also include data such as weather and temperature. When your plant sprouts, take measurements and describe its progress.*

Painting With Nature

Learning Objectives

By the end of the activity, students will understand:

- Ohlone culture was based in oral tradition, however pictures and art were also used for cultural expression.
- Pictographs and petroglyphs are evidence of past cultures.
- Ohlone used natural pigments found in nature to create paints and dyes.

Key Terms

- **Pictograph:** a pictorial symbol for a word or phrase, often painted onto stone, hides, sticks, or even tattooed by practitioners of Ohlone culture
- **Petroglyph:** a picture carved into rock
- **Archaeology:** the study of human history and prehistory through the excavation of sites and analysis of artifacts and other physical remains
- **Pigment:** natural, organic coloring matter. Often derived from plants, minerals, and animals

Background Information

Although Ohlone culture was based in oral tradition, pictographs and decorated bowls, clothing, and tools were a part of their culture. 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

- Plants and minerals (found around school--not provided)
- Metal spoons and paper plates (not provided)
- Water or vegetable oil to mix pigments (not provided)

Procedure

1. What are ways to pass on information without writing? Brainstorm ideas as a class.

2. Share pictures of pictographs and artifacts as examples of dyed materials made by Ohlone people. Discuss: Why do you think that Ohlone people decorated these things and even themselves (tattoos)?
3. 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.
4. 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 face or mouth after grinding up plants! Always wash hands after doing projects like this.
5. Students can use their pigments to paint on paper--some dyes change color when they dry, so be patient!

Extensional activities and writing prompts:

- *Create a cartoon strip without words to communicate a story or instructions to a task.*
- *Use your paints to decorate your own Stave Game (paint one side of wide craft sticks) and/or clapper sticks.*