CALIFORNIA Native American Studies MODEL CURRICULUM





Native Foods Unit Lesson Plan 1: Where Do I Live? Understanding Indigenous History and Geography Grade Level: 6th-8th Grades Time Frame: Two 60 minute Class Periods Subjects: History, Geography, English Language Arts

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Learning Objectives

- 1. Understand the geographic distribution and historical experiences of Indigenous groups in California.
- 2. Explore the impact of colonization, including the Gold Rush, on Native American territories and cultures.
- 3. Analyze the relationship between sovereignty, federal recognition, and Indigenous identity.
- 4. Reflect on the cultural and ecological significance of tribal lands.

Materials

- Laptop or device
- "Where Do I Live?" Worksheet
- California County Map (traditional and modern tribal territories)
- Access to the Native-Lands website: https://native-land.ca/
- Links to tribal nation information (provided in resources)

Curriculum Themes: (check all that apply)

- History
- Cultural Strengths
- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

Common Core Standards:

CCSS.ELA-LITERACY.RST.6-8.4: Determine the meaning of key terms and symbols in historical and geographic contexts.

California Social Sciences Framework

Eighth Grade Standard 12: Students analyze the divergent paths of the American people from 1800 to the mid 1800s and the challenges they faced:

Part 1: Discuss the influence of industrialization and technological developments on the region, including human modification of the landscape and how physical geography shaped human actions (e.g. growth of cities, deforestation, farming, mineral extraction).

Part 2: Identify the reasons for the development of federal Indian policy and the wars with American Indians and their relationship to agricultural development and industrialization.

Unit Authors and Researchers

This unit was researched, authored, and edited by the California Indian Museum and Cultural Center, California Indian Education for All, and the San Diego County Office of Education. Key writers and researchers of this unit are Nicole Lim, Jayden Lim, and Dr. Staci Block. The unit resources were designed and created from funding through the California Department of Education's Native American Studies Model Curriculum grant and contract.



California Native American Studies Model Curriculum

The California Native American Studies Model Curriculum (NASMC) will support the design and development of open-source lesson plans, primary source documents, planning resources, teaching strategies, and professional development activities to assist California K-12 educators in teaching about California Native American Studies. Per AB 167, the NASMC is defined as lesson plans, primary source documents, planning resources, teaching strategies, and professional development activities to assist educators in teaching about Native American Studies.

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center and California Indian Education for All.

Background Information for Teachers

Educators Guide and Videos to the Essential Understandings of California Indian History and Culture

Please take time to read through this document and watch these videos to learn from California Indian cultural bearers as they teach the <u>Essential Understandings of California Indian History and Culture</u>. (https://bit.ly/NASMC_EU)

- Essential Understanding 1: Great Diversity Among Tribes (EU1 Video) <u>https://bit.ly/NASMC_EU1</u>
- Essential Understanding 2: Diversity Among Identity (EU2 Video) https://bit.ly/NASMC_EU2
- Essential Understanding 3: Native Traditional Beliefs (EU3 Video) <u>https://bit.ly/NASMC_EU3</u>
- Essential Understanding 4: Policies that Affected Tribes (EU4 Video) <u>https://bit.ly/NASMC_EU4</u>
- Essential Understanding 5: Reservations (EU5 Video) https://bit.ly/NASMC_EU5
- Essential Understanding 6: History from a California Indian Perspective <u>(EU6 Video)</u> <u>https://bit.ly/NASMC_EU6</u>
- Essential Understanding 7: Tribes Have Sovereign Powers (EU7 Video) https://bit.ly/NASMC_EU7

Indigenous Critical Orientations: Rationale for Classroom Practice

The following excerpt text comes from the <u>National Council for Social Studies Using Inquiry to Prepare Students for</u> <u>College, Career, and Civic Life Secondary Grades</u> - Chapter 8 How Does an Indigenous Critical Orientation Change the Story.

https://www.socialstudies.org/tps/ebook-secondary-inquiry/how-does-indigenous-critical-orientation-change-story

The United States government has entered into more than 500 treaties with tribal nations living on this land. Unfortunately, many of these treaties have been broken. Indigenous peoples have endured senseless loss of life and attempts at erasure and assimilation. Additionally, among the many atrocities endured since the arrival of Europeans on land already occupied by sovereign Indigenous nations, Indigenous nations have gone through termination and the pains of seeking reconciliation (Dunbar-Ortiz, 2014).

As United States citizens, we have a responsibility to make sure peoples' history on this land is acknowledged, treaties are upheld, and students understand the repercussions of United States' settler misdeeds, so that we can reconcile past failures in order to move forward in a humane manner. Yet, despite being sovereign nations on the same soil, most Americans have only been exposed to part of the story, as told from a single perspective through the lenses of popular media and textbooks. Research also shows that 87% of state standards across the United States address Indigenous peoples only on pre-1900 happenings (Shear et al., 2015). "These narrow Eurocentric narratives presented in American textbooks, state standards, and teacher resources have a real impact on the ways people understand and interact with Indigenous People" (NCSS, 2018, para. 4). Additionally, these portrayals also often negatively affect Indigenous youth sense of self-worth (Sabzalian, 2019b).

Social studies classrooms are not neutral. They are contested spaces in which perspectives of times and places are often narrowed to hegemonic views (Lintner, 2004). "Educators must pay more attention to the ways colonization, racism, and power matter in educational settings and work towards more effective and longer-term pre-service and in-service training that helps educators understand and strategize about their role as agents for social change and greater educational equity" (Brayboy & Castagno, 2009, p. 49). When exploring primary sources, it is critical to understand whose voice is driving the primary source. Students (and teachers) must understand that a primary source about a specific Indigenous tribe, or that generalizes Indigenous peoples, and is not voiced by an Indigenous person of that tribal nation being described can lead to misconceptions and stereotypes. Therefore, it is recommended that if using a primary source from a non-Indigenous voice,



students analyze the source for author bias. Imbalance through teacher selection of sources is one example of bias (Sadker, 2009). This is also a possible danger in using primary sources that inadvertently display Indigenous peoples from a non-Indigenous voice.

The framework shared in this section has the potential of disarming these biases. Ideally, primary sources from Indigenous voices should be used whenever possible. As a framework to bring in Indigenous voices, Leilani Sabzalian (2019b) has identified six areas to guide Indigenous studies in the classroom: place, presence, perspectives, political nationhood, power, and partnerships. These six areas can be used as a teacher analysis guide for educators to make sure they are bringing in Indigenous voices.

6Ps for Educators: Indigenous Critical Orientations

Place

All teaching and learning takes place on Indigenous lands. Educators emphasize the Indigenous peoples and homelands of the place in which they live and teach.

Presence

Students are taught that Indigenous peoples are still here. Educators focus on contemporary Indigenous peoples and issues in curriculum to counter the dominant narrative that Indigenous peoples no longer exist

Perspectives

Indigenous voices can counter Eurocentrism in curriculum and provide generative analyses to enrich social studies more broadly. Educators incorporate Indigenous perspectives throughout the curriculum, not only to create more robust and comprehensive accounts of history, but also to complement all curricular topics.

Political Nationhood

Indigenous identities and communities are not only social and cultural; they are also political. Educators move away from a multicultural emphasis on Indigenous cultures, and toward a focus on Indigenous citizenship, nationhood, and inherent sovereignty as part of civics and citizenship education.

Power

Educators challenge power dynamics within curriculum as well as recognize Indigenous power. Educators critically interrogate the ways Eurocentrism permeates textbooks and curriculum, as well as emphasize the countless creative ways Indigenous peoples assert their power by enacting meaningful social change.

Partnerships

Cultivate and sustain partnerships with Indigenous peoples, organizations, and nations. Educators foster meaningful and mutually beneficial relationships between districts, schools, and/or classrooms and Indigenous peoples, organizations, communities, and/or nations

6Ps for Students: Indigenous Critical Orientations

Place

All learning takes place on Indigenous lands. Students will continue to learn and create relationships with the Indigenous peoples and homelands of the place in which they live and learn.

Presence

Students are taught that Indigenous peoples are still here. Students will learn about contemporary Indigenous peoples and issues in the curriculum to counter the dominant narrative that Indigenous peoples no longer exist.

Perspectives

Indigenous voices can counter Eurocentrism in curriculum and provide generative analyses to enrich social studies more broadly. Students will learn about Indigenous perspectives throughout the curriculum through movies, primary sources, secondary sources, books, and digital media, not only to create more robust and comprehensive accounts of history, but



also to complement all curricular topics.

Political Nationhood

Indigenous identities and communities are not only social and cultural; they are also political. Students will be taught to focus on Indigenous citizenship, nationhood, and inherent sovereignty as part of civics and citizenship education, rather than a multicultural emphasis on Indigenous cultures.

Power

Students will be taught to challenge power dynamics and recognize Indigenous power within curriculum and learning. Students will critically interrogate and be aware of the ways Eurocentrism permeates textbooks and curriculum, as well as emphasize the countless creative ways Indigenous peoples assert their power by enacting meaningful social change.

Partnerships

Cultivate and sustain partnerships with Indigenous peoples, organizations, and nations. Educators and students foster meaningful and mutually beneficial relationships between schools and/or classrooms and Indigenous peoples, organizations, communities, and/or nations.

Note from Sabzalian (2019b): These critical orientations are used as a framework for guidance when attempting to be inclusive of tribal nations' perspectives while establishing how and what primary sources are being analyzed. By using this framework, teachers can counter fallacies that lead to misconceptions and stereotypes through using Indigenous voices and recognizing Indigenous lands and sovereignty while allowing educators and students to critically reflect on how their own understandings have been constructed.

6Ps Background for Teachers

Teachers should read the following for background and support to teach the 6Ps. These resources follow this lesson plan and are also in the Teacher Resource folder for this unit.

- Changing the way we see Native Americans | Matika Wilbur | TEDxTeachersCollege: <u>https://www.youtube.com/watch?v=GIzYzz3rEZU</u>
- Five Critical Orientations To Support Indigenous Studies Curriculum written by Leilani Sabzalian and Alison Schmitke
- <u>National Council for Social Studies Using Inquiry to Prepare Students for College, Career, and Civic Life Secondary</u> <u>Grades</u> - Chapter 8 How Does an Indigenous Critical Orientation Change the Story? <u>https://www.socialstudies.org/tps/ebook-secondary-inquiry/how-does-indigenous-critical-orientation-change-stor</u> <u>Y</u>

Further recommended reading and resources:

- Tuck, E. (2009). Suspending damage: A letter to communities. *Harvard Educational Review*, 79(3), 409-428. <u>https://www.researchgate.net/profile/Eve-Tuck/publication/268000737 Suspending Damage A Letter to Com</u> <u>munities/links/55ae5ae308ae98e661a6e282/Suspending-Damage-A-Letter-to-Communities.pdf</u>
- Vizenor, G. (Ed.). (2008). Survivance: Narratives of Native presence. Lincoln, NE: University of Nebraska Press. <u>https://books.google.com/books?id=pp3B2dAnX8wC&pg=PA1&source=gbs_toc_r&cad=2#v=onepage&q&f=false</u>
- Gerald Vizenor, Ph.D. 2020 Mimi and Peter E. Haas Distinguished Visitor Lecture, Stanford University Video: <u>https://www.youtube.com/watch?v=WDsR3 gK4xs</u>
- Wilkins, D. E. (1997). American Indian sovereignty and the U.S. Supreme Court: The masking of justice. Austin: University of Texas Press.
 - https://books.google.com/books/about/American Indian Sovereignty and the U S.html?id=ZEUHMXdVvX4C
- Wood, K. (nd). Homeland. National Association of Tribal Historic Preservation Officers. Retrieved from http://www.nathpo.org/Many_Nations/mn_fiction.html
- Chaat-Smith, P. (2009). *Everything You Know about Indians Is Wrong*. Minneapolis, MN: University of Minnesota Press.
- Dunbar-Ortiz, R. (2015). An Indigenous peoples' history of the united states. Boston, MA: Beacon.



- Dunbar-Ortiz, & Gilio-Whitaker, D. (2016). "All the real Indians died off" and 20 other myths about Native Americans.
- Mihesuah, D. (1996). American Indians: Stereotypes & realities. Atlanta, GA: Clarity.
- National Museum of the American Indian. (2007). Do all Indians live in tipis: Questions and answers from the National Museum of the American Indian. New York, NY: Collins, in association with the National Museum of the American Indian, Smithsonian Institution.

https://books.google.com/books/about/Do_All_Indians_Live_in_Tipis.html?id=vGrRHfNPaiUC



Lesson Plan Day 1

Engage (15 minutes)

1. **Discussion Prompt:** Display the quote:

"As soon as lines were drawn on maps by European hands, Indigenous place names, which are intricately connected with Indigenous history, stories, and teachings, were replaced with English names, erasing Indigenous presence from the lands." -Thomas King, An Inconvenient Indian

- 2. Facilitate a class discussion using these questions:
 - What is the purpose of a map?
 - Who gets to name streets, cities, or regions? Why?
 - How would you feel if someone renamed your hometown after themselves?
- 3. Introduce the idea that many Indigenous place names and territories were erased or renamed during colonization, including during the California Gold Rush. When settlers came into California, they ignored the Native names, and replaced them with names from their own cultures, usually using Spanish words. Some Indigenous names have been preserved, and some have been lost.

Explore (30 minutes)

1. Activity: Project Map #1: Traditional Tribal Territories (<u>Map Link</u>). <u>http://aimfireriversideca.tripod.com/sitebuildercontent/sitebuilderpictures/calprecontact.gif</u>

• Discuss how tribes often respected shared boundaries for trade, celebrations, and seasonal migrations.

- 2. Student Writing Prompt:
 - List all the Native or Indigenous groups you know.
 - Circle the tribes you believe are in California. Share responses as a class.
- 3. Interactive Mapping Activity: Introduce the Native-Lands website. https://native-land.ca/
 - Zoom into the class's geographic area.
 - \circ $\$ Guide students to explore which tribes traditionally occupied the region.
 - Students complete the "Where Do I Live?" Worksheet, noting local tribes, languages, and original place names.

Day 2

Explain (20 minutes)

- 1. **Map Comparison:** Display Map #2: Modern Tribal Territories (<u>EPA Tribal Map</u>). <u>https://www.epa.gov/sites/production/files/2015-07/documents/r9tribes.pdf</u>
 - Ask students to compare this map with Map #1.
 - Discussion questions:
 - What differences do you notice?
 - How has the size of tribal lands changed over time?
 - Why do you think these changes occurred?

2. Teacher Explanation:

Highlight the impact of historical events, including the Gold Rush, on tribal land loss and displacement.

- Explain key policies such as the 18 unratified treaties, the Indian Reorganization Act (1934), and the Rancheria Act (1958).
- \circ $\;$ Discuss the significance of federal recognition and sovereignty for tribes today.

Elaborate (30 minutes)

1. Geographic Features Activity:

Provide students with blank maps of their county.



- Using the National Map Viewer (<u>Link</u>), students mark key geographic features like rivers, forests, and mountains. <u>https://viewer.nationalmap.gov/advanced-viewer/</u>
- Students identify features that could have been significant to Native communities for food, water, or shelter.

2. Critical Thinking Questions:

- How did losing access to these features impact Native communities culturally and economically?
- How does federal or state recognition affect modern tribes' ability to protect their lands?

Extend (10 minutes)

- 1. Pose the following reflection questions for journal writing or discussion:
 - Imagine you could no longer practice key parts of your culture (e.g., language, celebrations, food). How would your life change?
 - Do you think assimilation pressure still exists today for certain groups? Why or why not?

Evaluate (15 minutes)

1. Classroom Discussion:

- What Native groups are Indigenous to your area?
- What are their names today?
- What geographic features in your area might have supported Native communities historically?
- 2. Exit Ticket:
 - What is one thing you learned about Indigenous groups in California today?
 - Why is it important to understand the history of the land we live on?

Supporting Resources

- State of California Native American Heritage Commission <u>http://nahc.ca.gov/resources/california-indian-history/</u>
- Native-Lands Interactive Map
 <u>https://native-land.ca/</u>
- County List of Tribal Nations in California
 <u>https://www.etr.org/ccap/tribal-nations-in-california/county-list-of-tribal-nations/</u>
- Tribal Land Maps
 <u>https://www.epa.gov/sites/production/files/2015-07/documents/r9tribes.pdf</u>
- Bureau of Indian Affairs
 <u>https://www.bia.gov/regional-offices/pacific/who-we-are</u>

Reflection for Teachers

- Did students demonstrate an understanding of the historical and modern significance of tribal lands?
- Were students able to connect Indigenous cultural practices to geographic and environmental features?
- How might this lesson be adapted to include more student-led inquiry or project-based learning?



Native Foods Unit

Student Worksheet: Where Do I Live? Understanding Indigenous History and Geography

Name: _____

Date: _____

Part 1: Vocabulary

Define each term based on what you learn from the lesson.

1. Tribe:

2. Rancheria:

3. Sovereignty:

- 4. Federally Recognized Tribe:
- 5. Time Immemorial:

Part 2: Exploring Traditional Tribal Territories

1. Using the Native-Lands Website

Go to <u>https://native-land.ca/</u> and zoom into your region. Answer the following questions:

a. What tribes traditionally lived in your area?



c. What natural features (e.g., rivers, mountains, forests) are near your area? Why do you think they were important?

2. Reflection: How do you think these natural features supported the daily life of the tribes in your area?

Part 3: Comparing Past and Present Tribal Lands

1. Look at the traditional tribal territory map (Map #1) and the modern tribal lands map (Map #2).

a. What differences do you notice between the two maps?

b. Why do you think these changes happened?

c. How do you think losing access to their traditional lands affected Native communities?



Part 4: Personal Connection

- 1. Imagine that you could no longer speak your language, celebrate your traditions, or eat your traditional foods. How would your life change?
- 2. Write a few sentences about why it's important to learn about the history of Indigenous peoples and their connection to the land.

Part 5: Mapping Your Area

Using the blank map of your county:

- 1. Mark the locations of important geographic features like rivers, mountains, or forests.
- 2. Identify areas where tribal nations are located today.
- 3. Use colors to distinguish traditional lands from modern tribal territories.

Part 6: Exit Ticket

- 1. What is one thing you learned today about Indigenous groups in your area?
- 2. Why is it important to respect and protect the land we live on?



Native Foods Unit Lesson 2: Pomo Stories: Healthy Ecosystems Feed Healthy Communities Grade Level: 6-8 Grades Time Frame: Two 60 minute class periods Subjects: English Language Arts

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Lesson Overview

In this lesson, students will explore a Pomo story to understand the importance of oral tradition in teaching lessons about community, respect, and connection to the environment. Through reading and analysis, students will gain insight into Native perspectives on interdependence and stewardship of ecosystems.

Background Information

Pomo oral traditions highlight the deep relationship between humans, plants, animals, and the environment. Stories emphasize the responsibility humans have to maintain balance in nature, teaching lessons about land stewardship, ecosystem harmony, and respect for all living and nonliving things. Native cultures are not monolithic. Each tribe has distinct traditions tied to their specific geographic locations. Contemporary Native authors, like Greg Sarris, offer authentic perspectives that reflect dynamic, living cultures. His collection, *How a Mountain Was Made*, serves as the basis for this lesson.

Learning Objectives

- Analyze the purpose of oral traditions in Native cultures.
- Understand the interconnectedness of ecosystems from a Pomo worldview.
- Develop respect for cultural narratives and their role in environmental stewardship.

Materials

- Laptop or device
- Student Worksheets
- "Lizard and Mockingbird Kidnap Rock's Daughters" Story

Curriculum Themes: (check all that apply)

- History
- Cultural Strengths
- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

California Indian Essential Understandings

- Tribal traditions and oral histories connect culture, spirituality, and daily life.
- Tribal histories often provide unique perspectives that differ from mainstream historical narratives.

Common Core Standards

- CCSS.ELA-LITERACY.RL.7.2: Determine a theme or central idea and analyze its development.
- CCSS.ELA-LITERACY.RI.7.1: Cite evidence to support analysis of explicit and inferred ideas.
- CCSS.ELA-LITERACY.RI.7.3: Analyze interactions between individuals, events, and ideas.



Teacher Background Knowledge

In this lesson, students read and analyze a contemporary Pomo story to understand the purpose of oral tradition in teaching lessons about community, respect, and purpose. By exploring the themes and context of the story, students gain insight into the interconnectedness of humans, plants, and animals, as well as the cultural importance of land stewardship and fostering harmony within ecosystems.

Oral traditions have been a cornerstone of Native cultures, passing down lessons on interdependence, environmental care, and cultural values. Pomo stories, in particular, often highlight the deep relationship between humans, plants, and animals, emphasizing the responsibility humans have to maintain balance in their natural world. These stories provide guidance on avoiding conflicts that arise from imbalance and offer wisdom on topics such as family, spirituality, food customs, and human nature.

The story featured in this lesson is from *How a Mountain Was Made*, a collection by Greg Sarris, the Honorable Chairman of the Federated Indians of Graton Rancheria in Sonoma County, California. The stories center around Sonoma Mountain, a sacred and culturally significant location, and offer a place-based lens into Native perspectives.

Why Use Place-Based Stories?

Native cultures are diverse, with each tribe maintaining unique oral traditions and customs tied to their geographic location. Within large tribal groups, smaller bands often develop their own distinct stories, practices, and perspectives. For example, Pomo territory spans four counties and encompasses various tribal groups with differing traditions. By choosing specific stories tied to a particular location and acknowledging their origins, educators show respect for the unique identity of the Native community being represented.

Why Use Contemporary Texts Written by Native Authors?

Historically, many Native oral traditions have been recorded, interpreted, and published through a settler-centric lens, distorting the original meanings and intent of these stories. Anthropologists and cultural enthusiasts often altered or reimagined Native stories to fit Western ideals, erasing authentic perspectives.

Including contemporary Native authors, like Greg Sarris, in lesson plans ensures the representation of tribal communities in ways that reflect their own voices and intentions. Modern Native texts preserve cultural authenticity while showcasing the dynamic nature of Native traditions, which continue to evolve over time. By engaging with these stories, students gain a deeper, more accurate understanding of Native culture and its relevance in the modern world.

Connection to the Lesson

Through the lens of this contemporary Pomo story, students will:

- 1. Explore the role of oral traditions in teaching important cultural lessons.
- 2. Analyze themes of interdependence, community, and environmental respect.
- 3. Understand the importance of honoring the specific geographic and cultural origins of Native stories.
- 4. Recognize Native culture as living, dynamic, and continuously adapting.

This lesson provides a meaningful foundation for further discussions on land stewardship, ecosystem balance, traditional foods, and the cultural significance of respectful relationships with the natural world.



Lesson Plan

Engage

- Provide students with "The Purpose of Stories in the Pomo Oral Tradition" worksheet.
- Read the included quotes from How a Mountain Was Made as a class.
- Discuss the purpose of stories from a Pomo perspective.

Explore

- Distribute and read the story, *Lizard and Mockingbird Kidnap Rock's Daughters*, in groups or pairs.
- Analyze the story using guided questions.
- Discuss responses as a class.

Explain

- Discuss how the Pomo worldview sees all parts of an ecosystem-living and nonliving-as a community.
- Emphasize the importance of showing care and respect for all aspects of the environment.

Elaborate and Extend

- Ask students to draw their home environment, including:
 - People, animals, plants, nonliving natural items (e.g., rocks, water).
 - Personal belongings or objects.
- Label and detail their drawing as much as possible.

Evaluate

- Have students:
 - List all plants, animals, and nonliving things in their drawing.
 - Explain how they show respect and care for these items.
 - Reflect on what happens when respect is not given.
- Share findings with the class.

Source: How a Mountain Was Made by Greg Sarris Link. https://greg-sarris.com/wp-content/uploads/2013/07/How-a-Mountain-Was-Made1.pdf



Pomo Stories Worksheet	
Name:	_
Date:	
Class/Grade:	

Part 1: Understanding the Purpose of Stories

Read the following quotes from How a Mountain Was Made by Greg Sarris and answer the questions below:

1. Quote 1:

"Stories teach us how to live in harmony with the world around us."

• What do you think this means?

2. Quote 2:

"Through stories, we learn respect for all things, big and small."

• Why is it important to respect all parts of an ecosystem?



Part 2: Exploring the Story

Read Lizard and Mockingbird Kidnap Rock's Daughters. Work in groups or pairs to answer these questions:

1. What lesson does this story teach about community and respect?

2. How are the characters connected to the natural world?

3. What happens when balance or respect is missing?



Part 3: Personal Reflection

- 1. Draw a picture of your home environment (on the back of this worksheet or a separate sheet). Include:
 - People and animals who live there.
 - Specific plants.
 - Nonliving natural items (e.g., rocks, water).
 - Other items (e.g., furniture, books, toys).
- 2. Make a list of all the things in your drawing:

Your List:

3. Choose one item from your list:

- How do you show respect and care for it?
- What happens if you do not show respect and care?

Part 4: Sharing and Discussion

Be ready to share your answers and drawing with the class. Discuss how showing respect for all parts of your home

connects to the Pomo lesson of community and balance.



Native Foods Unit Lesson 3: Introduction to Oak Woodlands Ecosystem Grade Level: 6th-8th Grades Time Frame: 60 minutes Subject: Science

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Lesson Overview

This lesson introduces students to the Oak Woodlands ecosystem, an area of cultural and ecological significance for the Pomo people. Students will learn about key species, their roles within the ecosystem, and their importance to Native traditions. Additionally, students will explore the connections between culture, ecosystems, and sustainability through vocabulary activities and food chain exploration.

Learning Objectives

- Understand the basic features of the Oak Woodlands ecosystem.
- Identify the cultural significance of key species to the Pomo people.
- Recognize the relationships within a food chain and their impact on ecosystem health.
- Reflect on the connections between culture, nature, and sustainability.

Materials

- Laptop or device
- Student Worksheets
- Oak Woodland Ecosystem Cards
- Acorn Processing Material Photos

Curriculum Themes: (check all that apply)

History

Cultural Strengths

- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

NGSS Performance Expectations

- MS-LS2-3: Develop a model to describe the cycling of matter and energy flow in ecosystems.
- K-LS1-1: Use observations to describe patterns in what plants and animals need to survive.

California Environmental Principles

- Principle 1: People depend on natural systems for resources.
- Principle 2: Human actions influence the health of natural systems.
- Principle 3: Natural systems change in ways that benefit and are influenced by humans.



Teacher Background Knowledge

This lesson introduces students to species and food sources traditionally significant to the Pomo people. By learning Indigenous words for local plants and animals, students begin to explore the interconnectedness of species within food chains and food webs. This foundational understanding will deepen as students examine the Oak Woodlands ecosystem in greater detail throughout subsequent lessons.

The Oak Woodlands ecosystem, characterized by oak and conifer trees, native grasses, and flowers, features a Mediterranean climate with dry summers and wet winters. For the Pomo people, this ecosystem supports not only their food sources but also cultural practices like basket-making. However, access to these resources has been limited by privatization and regulations on gathering, impacting both cultural traditions and ecological health. Responsible cultural gathering, as practiced by Native people, helps maintain balance, reduces wildfires, and prevents the spread of invasive species.

The **Oak Woodlands ecosystem**, located in California, is home to a diverse range of oak trees, conifer trees, and native grasses and flowers. With a Mediterranean climate characterized by hot, dry summers and mild, rainy winters, this ecosystem plays a vital role in the cultural, spiritual, and subsistence practices of the Pomo people. For the Pomo, cultural traditions are inseparable from the ecosystems they inhabit. For example:

- **Baskets**, which are central to many cultural practices, rely on the availability of specific plants found in the local ecosystem.
- The loss or limited access to these natural resources threatens cultural traditions and the ability of Pomo communities to sustain practices that have been passed down for generations.

Challenges to Resource Accessibility

Native communities face significant barriers to accessing culturally important resources, such as:

- **Privatization of land**: Large portions of traditional Pomo territories are now privately owned or regulated by state and national parks.
- Regulations on gathering: Laws restrict Native peoples from gathering materials in many areas.

These restrictions not only hinder cultural practices but can also negatively impact the ecosystem. Without responsible cultural gathering, issues like overgrowth, invasive species, and heightened wildfire risk can arise. Many Native communities advocate for cultural gathering rights to sustain both the health of the ecosystem and their communities.

Focus on Pomo Language

In this lesson, students will be introduced to Pomo language words for species significant to the Oak Woodlands ecosystem.

Key Context on Pomo Language:

- There are **twelve distinct Pomo tribes**, each with unique dialects. Neighboring tribes, or bands, may share similarities in language and culture, but not all use the same dialect.
- In cases where no word was available for a specific species, or the dialect could not be located, the Northern Pomo tribal language was used as the primary reference.

The **Northern Pomo Language Audio Dictionary** provides accessible language resources and is a valuable tool for this lesson: Link to Northern Pomo Language Tools https://northernpomolanguagetools.com/



By the end of this lesson, students will:

- 1. Learn about the Oak Woodlands ecosystem and its cultural importance to the Pomo people.
- 2. Explore the relationships between species in food chains and webs.
- 3. Understand the significance of cultural gathering and resource accessibility for Native communities.
- 4. Begin to familiarize themselves with Indigenous words for local species in the Northern Pomo dialect.

Key Takeaways for Students

- The health of ecosystems directly influences cultural traditions and community well-being.
- Cultural gathering is a vital practice for both ecological balance and cultural preservation.
- Language is an essential component of cultural identity and understanding Indigenous perspectives.

This lesson encourages students to reflect on the interconnectedness of culture, language, and ecosystems, fostering respect for Indigenous knowledge and practices.

Vocabulary

- **Ecosystem**: A system formed by the interaction of organisms with their environment.
- Species: A group of similar organisms capable of reproducing.
- Culture: Customs, arts, and social practices of a group.
- Food Chain: A sequence showing who eats whom in an ecosystem.
- **Dialect**: A specific form of a language unique to a region or group.

Lesson Plan

Engage

Ask students to respond to the following questions in writing:

- What is your favorite type of outdoor landscape?
- What are your favorite activities to do outside in our county?
- Who do you spend time with when you're outdoors, and what do you usually do?

Introduce the Oak Woodlands ecosystem and explain its significance to the Pomo people. Highlight that each species in this ecosystem has both ecological and cultural importance.

Explore

Provide students with "Oak Woodland Ecosystem Cards" and review them together:

- Help students pronounce the Pomo and English names for each species.
- Discuss the role each species plays in the ecosystem.

Activity: Ask students to organize their cards based on the following prompts:

- 1. Find species collected in a basket.
- 2. Find species hunted by Pomo people.
- 3. Identify species eaten by deer or humans.
- 4. Identify species reliant on oak trees for food or shelter.



Explain

Discuss the connections between species and their role in cultural practices.

- Emphasize that each species is vital to the ecosystem's health and the survival of Pomo traditions.
- Introduce trophic levels (producer, consumer, decomposer) and explain their interactions.

Elaborate and Extend

Have students create combinations of 3-5 species to form food chains, considering who eats whom. Prompts for discussion:

- Which species eat plants?
- Which eat meat?
- Are there species not eaten by others?
- What role do decomposers like mushrooms play?

Students can share their food chains and discuss their observations.

Evaluate

Reflection Questions:

- 1. How is culture connected to nature?
- 2. How does culture depend on a healthy ecosystem?

Extension: Have students practice creating food chains using the PBS Kids Woodland Food Chain game. Link.



Native Foods Unit Lesson 3: Oak Woodlands Ecosystem Worksheet Name: ______ Date: ______ Class/Grade: ______

Part 1: Engage

Answer the following questions:

1. What is your favorite type of outdoor landscape (e.g., forest, beach, desert)? Why?

2. What are your favorite activities to do outside in our county?

3. When you spend time outside, who are you usually with, and what do you do?

Part 2: Explore

Using the "Oak Woodland Ecosystem Cards," complete the following activities:

- 1. Group the species cards based on these prompts:
 - Species collected in a basket: _____
 - Species hunted by Pomo people: ______
 - Species eaten by deer: ______
 - Species eaten by humans: ______
 - Species relying on oak trees for shelter: ______
 - Species relying on oak trees for food: _____



Part 3: Explain

Answer the following questions after exploring the species cards:

1. Why is each species important to the ecosystem's health?

2. How are these species connected to Pomo culture? Give an example.

3. What happens to the ecosystem when one species is removed or disrupted?



Part 4: Elaborate

Create food chains using the species cards.

1. Choose 3-5 species and form a food chain. Write your chain below:

Example: Oak tree \rightarrow Acorn \rightarrow Deer \rightarrow Mountain Lion

Your Food Chain:

2. Discuss these questions:

- Which species in your chain eat plants?_____
- Which eat meat?_____
- Are there any species in your chain that are not eaten by others? If yes, which ones?

• What role do mushrooms (decomposers) play in the ecosystem?

:_____

Part 5: Reflect and Share

1. How is culture connected to nature?

2. Why is it important to maintain a healthy ecosystem for both humans and nature?

3. Use the PBS Kids Woodland Food Chain game to practice making food chains.

https://toybox.tools.bbc.co.uk/activities/id/g6klkqfxx1/



Native Foods Unit Lesson 4: Traditional Ecological Knowledge Case Study: Fire Grade Level: 6th-8th Grades Time Frame: Two 60 minute Class Periods Subject: Science

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Lesson Overview

This lesson explores the role of fire in maintaining healthy ecosystems through the lens of Traditional Ecological Knowledge (TEK). Students will examine the cultural, ecological, and practical significance of controlled burning as practiced by Native communities, apply these principles to scenarios, and analyze the impact of fire on biodiversity and food webs.

Learning Objectives

- Understand the concept of Traditional Ecological Knowledge and its role in land stewardship.
- Recognize the ecological benefits of controlled burning.
- Analyze how fire impacts biodiversity, food webs, and cultural practices.
- Reflect on the consequences of fire suppression and overgrowth.

Materials

- Laptop or device
- Student Worksheets

Curriculum Themes: (check all that apply)

History

Cultural Strengths

- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

NGSS Standards

- MS-LS2-3: Develop models to describe matter cycling and energy flow.
- MS-LS2-5: Understand biodiversity's role in ecosystem health and human resources.

Crosscutting Concepts

- Cause and Effect: Relationships predict natural and human-made phenomena.
- Energy and Matter: Track energy flows in ecosystems.
- Stability and Change: Small changes can cause significant ecosystem shifts.



Teacher Background Information

In this lesson, students explore the role that fire plays in supporting healthy ecosystems. Students are introduced to an Indigenous approach to caring for the environment and apply these approaches to realistic scenarios.

Native peoples have cared for the environment using methodologies now referred to as **Traditional Ecological Knowledge**, or **TEK**, since time immemorial. During this time, Natives designed complex, specific strategies for protecting ecosystems, and with those ecosystems, community food webs.

Traditional Ecological Knowledge (TEK) differs from modern Western approaches to land management in that it encompasses all aspects of culture, health, and community life. Culturally significant plants and animal habitats are tended to with care; manipulation of plant species is performed in order to promote diversity and heighten production in order to meet a wide variety of cultural and nutritional needs. Common methods of caring for culturally significant plants include controlled burning, pruning, coppicing, transplanting, weeding, irrigation, and more. All of these strategies combined produced what many refer to as a "well-tended garden" throughout the land now known as California. Tending to the environment was a constant process, that ensured a steady availability of traditional foods and materials used in daily life.

When colonists and settler communities moved into California, they changed the way that humans interacted with the natural environment. Settlers, including modern conservationists, characterized Native people as lazy, unable to care for the vast "wilderness" in which they lived, and in desperate need of intervention. What settlers did not understand is that the land they were invading had been intentionally changed and cared for in order to support biodiversity, and to reduce the likelihood of natural disasters and ecosystem collapse. California Natives had been successful in securing reliable food sources and creating a natural environment in which abundance was the norm.

Once settlers took hold of California, Native populations were forced from their traditional homelands, moved into missions or boarding schools, sold into slave labor, or murdered. Native communities faced enormous physical and legal challenges when it came to tending the ecosystem and food webs, and settler governments designed new ways to manage the land. Cities and neighborhoods sprung up in the middle of floodplains, forests, and traditional fire paths. Forests and woodlands were cut down for lumber, making room for massive farms and vineyards. Cattle was introduced, as were new grasses preferred by cows. Instead of using fire to support food growth, settler governments tried to suppress fire whenever possible. California now faces a twelve-month fire season with wildfires ever increasing in size-a challenge that has been partially caused by settler dismissal of Traditional Ecological Knowledge. Today, many tribal communities are revitalizing traditional ecological practices in an attempt to protect the environment from the effects of climate change, restore food webs, and nurture traditional cultural practices.

For Native communities in California, the regular practice of controlled **cultural burning** is essential to nurturing the resources that are required for sustaining life and cultural traditions. **Because cultural burning is a practice that is inseparable from Native culture and is a practice that may vary between tribal communities, it is something that must be taught on the land, by trusted tribal leaders.** However, many settler communities, including people in power, are beginning to explore the concept of **"Good Fire,"** namely, that fire can be harnessed as a way to support the ecosystem and promote food growth. This concept, as you will explore with students in the following lessons, has been understood for thousands of years, and has been proven time and time again to work.

The use of cultural burning to support habitats happened seasonally and varied in frequency depending on the purpose. Because of the frequent, time specific use of fire, fires rarely grew out of control. While many Californians today associate fire with destruction and fear, it is estimated that the number of acres burned in California annually ranged from 5.6 million to 13 million acres. Most of these acres were burned intentionally for a wide variety of purposes. While different tribes burned for different reasons depending on their local ecosystem, below are some of the common uses of burning for the



Pomo people in Northwestern California. This is just a sampling of uses, as there are countless applications of fire in California by Native peoples!

Traditional Uses for Fire:

- 1. Antiseptic: Fire and smoke control the spread of disease, or rust fungus. Rust fungus can spread through tule used for basketry, infecting the plant and making it vulnerable to slugs and useless for making baskets. Smoke is also an antiseptic that can kill disease fungus on the barks of trees, especially oak trees.
- 2. Nutrition Support: Burning, and the ash it produces, cycles nutrients, like phosphorus, through the soil, promoting new growth of a wide variety of grasses. Nitrogen reliant plants like clover (a favorite food), thrive in newly burned spaces where nitrogen is in abundance. Fire also enhanced mushroom populations, on which trees and shrubs depend. Many seeds and grains germinated with greater ease after a fire. In fact, many nitrogen-fixing plants, such as wild peas and other greens, depended on the presence of fire for seed germination.
- 3. **Population Control:** Grassy areas are burned to drive out and control grasshopper populations, as grasshoppers can easily overpopulate in hot, dry climates and ruin grasslands. Douglas Fir and other conifer trees tend to encroach into Oak Woodlands and coastal prairies. Controlled burning of conifer seedlings prevents encroachment and promotes growth of oaks, grasses, and protects prairie lands. Regular fire also kept insect populations in check, promoting plants growth. For example, oak, hazel, and huckleberry bushes are all burned to reduce insect populations and promote fruit growth.
- 4. **Food Growth:** Regular fires are set to prairies, grasslands, and forest floors in order to burn back overgrown brush, tree seedlings, and to reduce forest density and create space for light to shine through to the forest floor. Burning seeded or fully grown plants, such as tar-weed or soaproot, make room for new growth grasses. Clearing the grasslands, forest floors, and Oak Savanna/Woodlands provides oaks more space to grow, enhancing acorn production. Manzanita trees, whose berries are used for cider and whose bark and leaves are used for medicines, were kept apart from another through burning, as they require space to grow
- 5. **Cultural Materials:** Burning shrubs supports the growth of long, thin shoots, flower stalks, and leaves that can be used for basket weaving. Regular burning prevents brush from becoming tangled and overgrown so that more light can reach the plant and to keep the plant easily accessible to gatherers. Favorite materials include red willow, redbud, ferns, and sourberry. Other cultural materials that relied on burning to produce new, growth include clothing, cordage, musical instruments, weapons, cages, structures, and games.
- 6. **Gathering Accessibility:** Burning the floor of the Oak Woodlands and Oak Savannas makes gathering acorns more accessible. Burning and pruning back bushes and brush makes gathering foods and cultural materials easier. Trails used to travel, gather foods, and hunt were maintained through regular burning.
- 7. **Hunting Accessibility:** In areas with high density grasses, burning grasslands can be used to increase the visibility of animals, like dear, making hunting easier. Smoke is used to push animal and insect populations from their homes, causing squirrels, quails, deer, and others to move into spaces where they are more easily hunted.
- 8. **Protection:** Burning tall grasses in woodlands and forests increases visibility. Having the ability to see through the forest once proved to be important for the safety of Native village encampments. In fact, when the California Grizzly roamed California's landscape, they were humans' top predator.

Native peoples have used TEK to manage ecosystems for thousands of years, employing techniques like controlled burns to:

- Reduce overgrowth and wildfire risks.
- Enhance biodiversity and food sources.
- Support cultural practices such as basketry and traditional medicines.

Settler practices, such as fire suppression and overdevelopment, disrupted these methods, contributing to larger, more destructive wildfires. Today, many Native communities are revitalizing these practices to mitigate climate change impacts and restore ecosystems.



Key Concepts

- 1. Good Fire: The practice of using fire intentionally to enhance ecosystem health and food production.
- 2. **Cultural Burning**: A practice deeply rooted in Native traditions, conducted seasonally and tailored to specific ecological and cultural needs.
- 3. Fire's Role in Ecosystems:
 - **Antiseptic**: Fire and smoke prevent the spread of disease and pests, such as rust fungus in basketry materials or slugs in oak trees.
 - **Nutrient Cycling**: Ash enriches soil with nutrients like nitrogen and phosphorus, promoting plant growth and germination.
 - **Population Control**: Fires help manage pests, such as grasshoppers, and reduce encroachment by conifers, preserving oak woodlands and prairie lands.

By the end of this lesson, students will:

- Understand the principles and benefits of cultural burning.
- Analyze the historical impact of colonization on California's ecosystems.
- Explore the relationship between fire, biodiversity, and cultural practices.
- Apply TEK principles to scenarios involving ecosystem management.

Key Takeaways

- Fire, when used responsibly, is a tool for sustaining ecosystems, promoting food growth, and supporting cultural traditions.
- The dismissal of TEK by settler communities has contributed to ecological challenges such as wildfires and invasive species.
- Revitalizing cultural burning practices is essential for environmental and cultural restoration.

Key Vocabulary

- Keystone Species: A species essential to the balance of an ecosystem.
- **Ecosystem**: A community of organisms interacting with their environment.
- **Consumer**: Organisms that eat other organisms for energy.
- Apex Predator: A predator at the top of the food chain.
- Trophic Level: Levels in a food web, representing steps from producers to apex predators.



Lesson Plan

Engage

Ask students to respond to the following writing prompt:

• What are your experiences with fire in your community?

Project images of forest ecosystems before and after fires (Fire Images 1 & 2). Facilitate a class discussion:

- What variables make fires worse?
- How do these forest examples compare to well-maintained ecosystems?

Explore

Watch the KCET episode *Cultural Burning* together as a class. Pause for discussion and have students complete EdPuzzle questions to ensure comprehension.

• Link: EdPuzzle Video - https://edpuzzle.com/media/5f2898772b1e-903f2a104eb2

Activity:

• Create a class list of facts and questions about fire from the video.

Explain

Discuss how controlled burning supports ecosystems:

- Prevents overgrowth and reduces wildfire risk.
- Promotes biodiversity by creating conditions for species to thrive.
- Recycles nutrients and supports seed germination.
- Provides cultural resources for food, tools, and art.

Elaborate and Extend

Group students in pairs or small teams to analyze fire scenarios using Ecosystem Samples 1 & 2:

- Scenario A: Examine the effects of fire on the settler-managed ecosystem.
- Scenario B: Analyze the benefits of fire in a Native-managed ecosystem.

Students will draw diagrams of food webs for each scenario and compare biodiversity, food availability, and ecosystem health.

Class Discussion:

- Which ecosystem (settler or Native-managed) has greater biodiversity?
- How does "good fire" create resilience in ecosystems?



Evaluate

Reflect as a class:

- 1. What are the benefits of controlled fires?
- 2. How do controlled burns strengthen food webs?
- 3. What happens when fires are suppressed?

Resources

- Tending the Wild by Kat Anderson
- UC Berkeley Oak Woodland Info https://oaks.cnr.berkeley.edu/
- <u>California Fire History Map</u> <u>https://projects.capradio.org/california-fire-history/</u>



Native Foods Unit Lesson 4: Traditional Ecological Knowledge: Fire and Ecosystems Student Worksheet Name: ______ Date: ______ Class/Grade: ______

Part 1: Engage

1. What are your experiences with fire in your community?

(Think about wildfires, campfires, or other uses of fire you have seen or learned about.)

- 2. Look at the provided images of forests before and after fires (Fire Images 1 & 2).
 - What variables do fires depend on? What makes them worse?

• Do the forests in the images look well-maintained? How could they be better managed?



Part 2: Explore

Video: Cultural Burning

Watch the KCET episode Cultural Burning. Afterward, answer the following questions:

1. What is cultural burning, and how does it differ from wildfires?

2. List two ways cultural burning helps the ecosystem:

3. Why is cultural burning important to Native traditions?



1. What are some benefits of controlled fires?

2. How does fire promote biodiversity? Give examples of how it helps plants and animals.

3. What happens when fires are suppressed, and ecosystems become overgrown?

Part 4: Elaborate

Scenario Analysis

In groups, analyze the provided scenarios (Scenario A & B) and use Ecosystem Samples 1 & 2. Answer the following:

1. Draw a food web for each scenario on a separate sheet of paper. Label the relationships between species.



2. Compare the two ecosystems:

• Which ecosystem has greater biodiversity? Why?

• How does fire affect the availability of food and cultural resources?

3. If fire were applied to the settler-managed ecosystem, how might it change?



1. Why is it important to use fire responsibly in land management?

2. How does using fire support both nature and cultural practices?

3. What can happen to an ecosystem if controlled burns are not used?



Native Foods Unit Lesson 5: Native Foods for Today's World Grade Level: 6th-8th Grades Time Frame: 60 minutes Subjects: Health, Science

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Lesson Overview

This lesson introduces students to traditional Native foods of California, exploring their health benefits, cultural significance, and connection to food sovereignty. Students will examine how food practices have evolved due to historical changes and learn how Native communities are revitalizing traditional foodways to promote health, sustainability, and cultural pride.

Learning Objectives

- Understand the role of traditional Native foods in California's ecosystems and cultures.
- Recognize the impacts of historical policies on Native diets and health.
- Explore how Native communities are working toward food sovereignty today.
- Reflect on their own food traditions and their connection to culture and health.

Materials

- Laptop or device
- Student Worksheets

Curriculum Themes: (check all that apply)

- History
- Cultural Strengths
- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

California Health Standards

- 1.1.N: Describe how nutritional choices affect health.
- 1.5.N: Differentiate between health-promoting and harmful diets.

Common Core Standards

- CCSS.ELA-LITERACY.RI.7.1: Cite textual evidence to support analysis.
- CCSS.ELA-LITERACY.RI.7.2: Determine central ideas and summarize text.


In this lesson students are introduced to **traditional Native foods** in California and learn about **food sovereignty**. Students explore contemporary examples of California Native foods that range in style, method, and degree of tradition. Students learn that Native foods are diverse, tasty, and healthy.

Traditional Native foods in California reflect the state's biodiversity and the deep ecological knowledge of its Indigenous peoples. Foods like acorns, berries, mushrooms, and salmon were historically abundant due to sustainable practices such as cultural burning and responsible harvesting. These practices ensured balance within ecosystems. The arrival of settlers disrupted traditional foodways through land seizure, bans on cultural practices, and federal policies that introduced processed rations to Native diets. These changes led to significant health disparities, including diabetes and obesity. Today, Native communities are reclaiming their food traditions to restore health, food sovereignty, and cultural identity.

Native or Indigenous foods in North American vary dramatically depending on their geographic region. California Natives have traditionally enjoyed an abundance of food options as a result of the wide **biodiversity** of the land. The practice of **Traditional Ecological Knowledge (TEK)**, methods for tending the landscape that have been developed over thousands of years by Native people, specifically aims to ensure ample food production across California's varied landscapes. As settlers seized land from Native peoples, regulations were put in place that banned the use of many TEK practices, such as cultural burning, traditional salmon fishing, and hunting. These practices were instead replaced with the construction of dams, the development of protected wildlands on which maintenance and "interference" by humans was severely limited, deforestation, and mining, which polluted waterways once relied upon for food. Traditional methods for obtaining cultural foods became difficult to practice.

In addition to these environmental regulatory shifts, federal policy aimed at assimilation discouraged and forbade traditional Tribal practices, often leading to changes in diet that accompanied the placement of Native peoples onto reservations. On reservations, Native communities found themselves with little to no infrastructure, no economic prospects, and on top of that, reservations were generally located in areas that were difficult to farm. Because Natives had few, if any, food sources, the US government began to issue food rations, usually consisting of flour, coffee, tea, and beef. This massive shift in the types of foods consumed by Natives has led to enormous health disparities. Diseases most common in Indian Country are diabetes, coronary health disease, and obesity. Many reservation residents still depend on these rations today.

Across the United States, Tribal communities are reinvigorating their traditional foodways as a way of supporting food sovereignty. Because of the negative impact of Western food on Native health, communities are working to reintroduce traditional foods and food production methods into their communities. In many cases, this traditional knowledge was never truly lost. Some methods of supporting food sovereignty are: developing community health centers that grow and distribute healthy Indigenous foods to Native families, community gathering and hunting trips, using traditional trapping and fishing methods on traditional waterways, and envisioning Native foods through a modern lens in Native owned restaurants and businesses.

As the general public becomes more aware of the foods Indigenous to the places they live, multiple understandings are strengthened. First, it becomes obvious that Westernized, processed foods can be poisonous to the body, and are incredibly detrimental to Native peoples and people who have little access to affordable healthy foods. Westernized, **processed foods** should be consumed in limited quantities. Second, supporting Indigenous foods means supporting the ecosystem in a way that avoids overconsumption. When advocating for the consumption of **local**, Indigenous foods, communities must consider how that food is being cultivated and collected, and how humans are ensuring the health of the food web in order to promote new growth the following season. Lastly, **traditional foods** in Native communities are cultivated and consumed using culturally specific methods and ideologies, ones that are integrally connected to story, song, and ceremony. Non-Natives should take time to consider these things when thinking about how to incorporate traditional



foods into their own diets so as to be respectful to Native communities who rely on these foods and avoid appropriating cultural traditions.

Food and the Local Ecosystem:

Traditional Ecological Knowledge is based in the understanding that all organisms within an ecosystem are in relation to one another. The health of one organism is intimately connected to the health of another. In this way, understanding the Native traditional diet means building an awareness of how nurturing a healthy ecosystem is a part of human health. By using fire to support Oak tree health, for example, Natives also support the health of insect, bird, squirrel, deer, grass, and mushroom communities, and ensure a bountiful acorn crop for Native peoples. Supporting the health and biodiversity of Native grasses supports deer, insects, reptiles, flowers, rabbit, elk, human, and many other plant and animal communities. All of these organisms rely on one another in some way. The need for nutritional, reliable food sources necessitates a deep understanding of how every organism in one's local ecosystem are related.

Consuming local Native foods extends beyond meeting nutritional needs; traditional foods bring with them cultural histories and practices that are often passed down through **oral tradition**. Stories warn of the importance of maintaining spiritual balance with the natural world in hopes of receiving productive harvests. Gathering, storing, and cooking baskets made from the reeds and shoots of well-maintained plants highlight the many different plants that take part in the entire process of growing, preparing, and eating food. Eating is not just about filling one's stomach or curbing hunger. How we grow and gather food, how we store and prepare it, and finally, how we eat it, all contribute to the community's spiritual, physical, mental, environmental, and emotional health.

Traditional Foods of the Pomo People:

Blackberries Elderberries Manzanita Berries Rose Hips Vegetables Red Clover/Wild Flowers Miner's Lettuce/Dandelion Seaweed/Kelp Cattails Roots/Tubers **Mushrooms** Grains Seeds/Flowers/Grasses (Pinole) Protein Mussels/Clams/Abalone Venison/Elk/Rabbit Salmon/Fish Acorns Hazel nuts/Nuts Quail/Birds Eggs

- Indigenous: Naturally occurring in a particular region.
- Food Sovereignty: The right of communities to grow, distribute, and consume their own food.
- Reinvigorate: To renew strength or energy in something.
- Nutrition: The process of providing the body with necessary nutrients for health.



Lesson Plan

Engage

Begin with a quick write:

• Describe a favorite food from your family's culture. When do you eat it, and why is it important to your family?

Discuss how food reflects culture and tradition, introducing the idea that Native foods also carry deep cultural and ecological connections.

Explore

Explain that Native food practices vary based on local ecosystems.

- Natives in Northern California relied on acorns, while desert tribes valued cactus.
- Tribes often traded across regions, enriching their diets.

Distribute a "KWL Chart" (Know, Want to Know, Learned) and have students complete the first two columns before watching the featured videos.

Video Activity: Watch the TED Talk Indigikitchen (focuses on health) and complete the accompanying notetaker.

Indigikitchen Video Link
 <u>https://www.youtube.com/watch?v=1N6e0DnGq38</u>

Explain

After the video:

- Revisit the KWL chart to complete the "What I Learned" section.
- Discuss how eating Indigenous foods supports ecosystem health and cultural traditions.

Prompt students to consider:

• If you relied on local foods like berries or acorns, how would that affect your care for the environment?

Explain that Indigenous food practices are deeply connected to story, song, and ceremony, making them vital to cultural preservation.

Elaborate and Extend

In pairs, students will:

- Read "Modern Traditions: Youth Acorn Bites Program" and answer analysis questions.
- Explore how young people are helping their communities reconnect with traditional foods.

As an extension, students can explore the Indigikitchen YouTube channel for traditional recipes.

Discussion Questions:

- 1. Why are Indigenous foods healthy?
- 2. What is the cultural significance of eating ancestral foods?
- 3. What challenges do Native people face in accessing traditional foods?



4. How are young people promoting Native foods today?

Evaluate

- Revisit the KWL chart and complete it based on the lesson.
- Reflect on the role of traditional foods in fostering health and sustainability for both Native and non-Native communities.

Lesson Resources

- Indigikitchen YouTube Channel
 https://www.youtube.com/channel/UCO918GT8I3HX5f4Z1xKCV4A
- <u>KCET: Decolonizing Diet Video</u> <u>https://www.kcet.org/shows/tending-the-wild/episodes/decolonizing-the-diet</u>



Native Foods Unit Native Foods for Today's World Worksheet Name: _____ Date: _____

Quick Write

Describe a favorite food from your family's culture. When do you eat it, and why is it important to your family?

Reflect and Discuss

Discuss these questions as a class or answer them individually:

- 1. Why are Indigenous foods healthy for both people and the environment?
- 2. What is the cultural significance of eating ancestral foods?
- 3. What can you do to support local Native food systems and communities?

Extension Activity

Visit the <u>Indigikitchen YouTube Channel</u> and explore one recipe. Write a short paragraph describing the recipe, its ingredients, and how it connects to traditional Native foodways.



Native Foods Unit Lesson 6: My Native Plate Grade Level: 6th-8th Grades Time Frame: Two 60 minute Class Periods Subjects: Health, English Language Arts

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Lesson Overview

In this lesson, students learn about their nutritional needs and practice designing healthy meals using Native foods. Students will reflect on the origins of their food, understand the impacts of processed versus Indigenous foods, and explore the importance of diversity in their diets to support personal health and ecosystems.

Learning Objectives

- Understand the nutritional components of a balanced diet, including carbohydrates, proteins, and fats.
- Explore the origins of food and the role of Indigenous foods in local ecosystems.
- Create a personal "Native Plate" meal using Indigenous foods that align with their nutritional needs.
- Recognize the health impacts of poor dietary choices and the role of Indigenous foods in promoting wellne

Materials

- Laptop or device
- Student Worksheets

Curriculum Themes: (check all that apply)

- History
- Cultural Strengths
- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

California Health Standards

- 1.1.N: Describe the short- and long-term impacts of nutritional choices.
- 1.5.N: Differentiate between health-promoting and harmful diets.
- **5.1.N**: Evaluate daily food intake for nutritional requirements.

Common Core Standards

- CCSS.ELA-LITERACY.RI.7.1: Cite evidence to support analysis of texts.
- CCSS.ELA-LITERACY.RI.7.2: Determine central ideas and summarize texts.

- Indigenous Foods: Locally grown foods that have been consumed by Native peoples for thousands of years.
- Processed Foods: Foods altered from their original form, often with added flavors or preservatives.
- Nutrition: The process of providing the body with the nutrients needed for health.
- Macronutrients: Nutrients that provide energy (carbohydrates, proteins, fats).
- Whole Foods: Foods in their natural state with little or no processing.



In this lesson, students learn about their individual nutritional needs, and practice designing nutritious meals using Native foods. Students build awareness around where their food comes from and continue to consider the impact of their food choices. This lesson begins by introducing students to a map highlighting the origin of the world's top 151 crops. Interestingly, although California has hundreds of edible Indigenous plants and animals, it is the origin of only six of the world's most common crops. This is due to a variety of factors, such as the increased in large scale industrial farming, a decrease in traditional land stewardship methods, and an overall lack of visibility of the Native community.

Showing students the origins of their foods illuminates a few things. The first is that it highlights just how many foods come from the Americas. Tomatoes, for example, come from Mexico, despite being a staple in Italian food. Secondly, it shows how much of the typical diet in the United States relies on imported food. Indigenous food in the United States is diverse enough to satisfy a range of dietary needs and desires, if only it is given the attention is deserves.

Once students examine the map of food origins, they move into a lesson that requires them to reflect on their own eating practices and consider ways to incorporate more Native/Indigenous foods into their diets.

To complete this lesson, students will need a basic understanding of **carbohydrates**, **fats**, and **proteins**, which are defined here as well as in the "Explain" section of the lesson:

Protein: 4 calories per gram, used to build healthy muscles and fuels important processes in your body.

Carbohydrates: 4 calories per gram, used as a quick and easily available energy. Carbohydrates include sugar molecules which are broken down in digestion and are stored as fat if they are not burned within a few hours after eating.

Fat: 9 calories per gram, stored in your body and burnt for energy when carbohydrates are not readily available. Fat is also stored in your abdomen to help cushion and protect your organs.

In addition, students will be introduced to the **three major diseases** that occur due to unhealthy eating and exercise habits. These diseases are pervasive in Native communities that do not have access to affordable, healthy food options that align with cultural norms and values. These three health outcomes are repeated in future lessons that address food insecurity and access.

Type 2 Diabetes: When a person eats too many sugary foods for a long time, their body can no longer digest the sugar. The sugar they eat then builds up in their blood. High levels of sugar in a person's blood can damage their kidneys, liver, and other important organs

High Cholesterol: When a person eats too many fatty foods, plaque can build up in their arteries and veins, stopping blood from getting where it needs to go.

Heart Disease: There is an ideal size your body is meant to be, and It is normal to have a large body. When a person eats too many calories without exercising enough to burn off those calories their body can become larger than it is naturally meant to be, and their heart and other organs can become damaged. When the heart is damaged from having to work too hard to support a body that is larger than it is meant to be, there can be serious consequences.

By learning to design their own "**Native Plates**," students learn the necessary elements of a nutritious diet, and begin to take control of their own relationships with food in a way that considers the needs of the ecosystem and traditional food



ways for the Indigenous community at large.

It is important to note that, although the diseases listed above can be linked to food/eating habits, diet is only one of many factors that lead to disease. Within the Native community specifically, prolonged periods of historical trauma, poverty, and removal from Indigenous lands all work to contribute to negative health outcomes within the community.

Lesson Plan

Engage

Begin with a discussion:

- Where does your favorite food come from?
- Do you know if it's locally grown or imported?

Introduce the Food Origins Map and guide students in exploring where common foods originate. Discuss:

- How many foods come from the Americas?
- Why is North America underrepresented on the map despite its biodiversity?
- How has colonization impacted Native foods and ecosystems?

Explore

Introduce the "My Native Plate" activity:

- 1. Pass out the My Native Plate packet and explain that students will design a nutritious meal using Indigenous foods.
- 2. Direct students to the **Choose My Plate** website (<u>link</u>) to calculate their nutritional needs based on age, weight, and activity level.

Teacher Note: Offer anonymous data for students uncomfortable sharing personal details. Participation should be voluntary for class sharing.

Explain

Discuss the components of a balanced diet:

- Carbohydrates: Provide quick energy (4 calories per gram).
- Proteins: Build muscles and fuel vital body processes (4 calories per gram).
- Fats: Store energy and protect organs (9 calories per gram).

Explain how a lack of diet diversity can lead to health issues like:

- Type 2 Diabetes: From excessive sugar intake.
- High Cholesterol: From consuming too many fatty foods.
- Heart Disease: From overconsumption of calories without enough activity.

Highlight the benefits of Indigenous foods:

- Minimal processing, low added sugars, and low cholesterol.
- Promote ecosystem health by supporting biodiversity.



Elaborate and Extend

Students will:

- 1. Use their nutritional data and Indigenous food lists to design a "Native Plate" meal.
- 2. Identify where their chosen foods fit into the food web and their ecosystem.
- 3. Reflect on how Indigenous foods support both personal and ecological health.

Class Discussion:

- What are some Indigenous foods you'd like to try?
- How can you make thoughtful choices about what you eat?
- Do you know where to obtain the ingredients for your Native Plate?

Evaluate

Lead a reflective discussion:

- 1. How does eating Indigenous foods support local ecosystems?
- 2. Why is diversity important in a diet?
- 3. How can individuals balance modern diets with traditional practices?

Extension

- 1. Have students create a visual "Native Plate" using drawings, photos, or digital tools.
- 2. Explore traditional preparation methods for one Indigenous food, such as acorns or salmon.

Standards Alignment

Resources

- <u>Choose My Plate Plan</u>
 <u>https://www.choosemyplate.gov/resources/MyPlatePlan</u>
- Tending the Wild by Kat Anderson
- <u>Tongva People Teaching Kit</u>
 <u>http://www.tongvapeople.org/wp-content/uploads/2016/05/Hearst-Museum-teaching-kit.pdf</u>



Native Foods Unit Lesson 7: Native Food Experiences Grade Level: 6th-8th Grades Time Frame: Two 60 minute Class Periods Subject: English Language Arts

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Lesson Overview

In this lesson, students will examine Pomo perspectives on traditional Indigenous foods and settler-introduced foods. They will explore cultural norms surrounding food, reflect on the relationship between the environment, food, and community, and consider how food experiences shape identity and culture.

Learning Objectives

- Compare Indigenous and introduced foods and their impacts on health and the environment.
- Analyze Pomo perspectives on food traditions and cultural values.
- Reflect on the role of food in shaping community and identity.

Materials

- Laptop or device
- Student Worksheets

Curriculum Themes: (check all that apply)

- History
- Cultural Strengths
- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

Common Core Standards

- CCSS.ELA-LITERACY.RI.7.1: Cite textual evidence to support analysis.
- CCSS.ELA-LITERACY.RI.7.2: Determine central ideas and summarize.
- CCSS.ELA-LITERACY.RL.7.4: Analyze word meanings and their impact.

- Indigenous Foods: Foods naturally found and grown in a region, consumed by Native peoples for thousands of years.
- Settler/Introduced Foods: Foods brought from other regions or countries, sometimes beneficial but often disruptive to ecosystems.
- Processed Foods: Foods altered from their natural form, often with added flavors or preservatives.
- Whole Foods: Foods in their natural state with little or no processing.



The understanding of nutrition and Native foods by exploring nutrition labels for introduced and Indigenous foods. Comparing the nutritional content of Indigenous and introduced foods emphasizes the differences specifically in cholesterol, saturated fat, added sugar, and fiber content. Comparing Introduced and Indigenous foods prepares students to further explore their relationship with food and consider the role models in their lives that can support healthy eating habits. While Native peoples' relationship with food has dramatically changed over time, the state of Westernized foods has also changed. To highlight this change, students will choose a trusted adult or mentor in their lives (preferably from their family), to interview about their food history.

Lesson Plan

Engage

Begin with a class discussion or journaling prompt:

- Think about a memorable meal or food experience in your life. What made it special?
- How do you think food connects to culture and identity?

Explore

Provide students with the Native Food Experiences Notetaker and guide them through the following activities:

- 1. Watch the Al Jazeera Video: https://www.youtube.com/watch?v=fe52rEPQSuU
 - Show the video <u>"Native Foods"</u>, where a journalist explores Native restaurants and foods in the U.S.
 - \circ $\;$ Ask students to take notes on foods mentioned, their origins, and how they connect to Native traditions.

2. Read and Reflect:

- Distribute excerpts about Pomo experiences with introduced foods. Discuss how the arrival of settlers disrupted Indigenous food practices.
- Group or pair students to read the quotes and answer analysis questions about the shift from traditional to introduced foods.

Explain

Facilitate a discussion:

- How did geographic location affect the types of foods available to different tribes?
- How did trade networks expand access to foods beyond local ecosystems?
- What values do Pomo people place on food and its connection to community and environment?

Elaborate and Extend

Direct students to the final section of the Native Food Experiences Notetaker:

- Students will read about Pomo food values in the 20th century and complete questions about how these values reflect a connection to land, tradition, and health.
- Encourage students to consider how food shapes their own communities and values.



Evaluate

Wrap up the lesson with a class discussion:

- 1. What are some differences between Indigenous and introduced foods?
- 2. How do values around food connect to the environment and community?
- 3. What can we learn from Native perspectives on food and its role in cultural preservation?

Extension

- 1. Have students research a traditional Native food and its significance to a specific tribe.
- 2. Assign a creative project where students design a "food memory map," connecting their favorite foods to culture, place, and tradition.
- 3. Research one Indigenous food mentioned in the lesson. Write a short paragraph about:
 - Its cultural significance to a specific tribe.
 - How it supports the local ecosystem.
 - A traditional method of preparation.



Native Foods Unit Lesson 8: Family Recipe Grade Level: 6th-8th Grades Time Frame: Two 60 minute Class Periods Subject: Health, English Language Arts

Acknowledgment: Resources from this unit and lesson plans come from California Indian Museum and Cultural Center.

Lesson Overview

In this lesson, students compare the nutritional qualities of Indigenous and introduced foods, interview a trusted adult about food traditions, and adapt a family recipe to include local Indigenous ingredients. Through these activities, students will deepen their understanding of nutrition, cultural connections to food, and the importance of incorporating healthy, whole foods into their diets.

Learning Objectives

- Analyze the nutritional content of Indigenous and introduced foods.
- Understand how food traditions connect to culture and family history.
- Create a modified version of a family recipe using Indigenous ingredients.
- Reflect on the role of whole and processed foods in promoting health.

Materials

- Laptop or device
- Student Worksheets

Curriculum Themes: (check all that apply)

- History
- Cultural Strengths
- Law/Government
- Relationship to Place
- Cross Curricular Integration

Instructional Standards:

California Health Standards

- 1.5.N: Differentiate between health-promoting and disease-linked diets.
- 4.2.N: Practice effective communication skills about nutrition with trusted adults.
- 7.1.N: Make healthy food choices in a variety of settings.

Common Core Standards

• CCSS.ELA-LITERACY.SL.7.1.C: Pose questions to elicit elaboration and connect discussions to the topic.

- Indigenous Foods: Foods native to a region and consumed by Native peoples for generations.
- Settler/Introduced Foods: Foods brought from other countries, which can sometimes disrupt local ecosystems.
- Processed Foods: Foods altered from their natural state, often with added flavors or preservatives.
- Whole Foods: Foods in their natural form with little to no processing.
- Food Sovereignty: The right of communities to grow, distribute, and consume their own food.



The understanding of nutrition and Native foods by exploring nutrition labels for introduced and Indigenous foods. Comparing the nutritional content of Indigenous and introduced foods emphasizes the differences specifically in cholesterol, saturated fat, added sugar, and fiber content. Comparing Introduced and Indigenous foods prepares students to further explore their relationship with food and consider the role models in their lives that can support healthy eating habits. While Native peoples' relationship with food has dramatically changed over time, the state of Westernized foods has also changed. To highlight this change, students will choose a trusted adult or mentor in their lives (preferably from their family), to interview about their food history.

Lesson Plan

Engage

- Begin with a quick-write prompt: "Describe a food your family eats on special occasions. Why is it special, and do you know its cultural significance?"
- Facilitate a discussion on the connections between food, culture, and family traditions.

Explore

- Provide students with the Indigenize Our Diet: Warm-Up Worksheet, including nutritional labels for Indigenous and introduced foods.
- Guide students in creating bar charts to compare the nutritional content (e.g., cholesterol, sugar, fiber) of the two categories.

Discussion Questions:

- 1. Which foods are healthier based on the nutritional information?
- 2. What patterns do you notice about Indigenous foods versus processed or introduced foods?

Explain

- Discuss how whole foods, especially Indigenous foods, are typically healthier than processed foods due to lower levels of added sugar, sodium, and unhealthy fats.
- Provide examples of ingredient substitutions, such as:
 - Using natural fruit-based syrups instead of high-fructose corn syrup.
 - Replacing refined sugar with Indigenous sweeteners.
- Introduce **Pomo Recipes** as examples of hybrid dishes that incorporate both Indigenous and introduced foods while maintaining nutritional balance.



Elaborate

Family Food Interview and Recipe Activity:

- Provide students with the Family Food Interview worksheet and instructions.
- Students will:
 - 1. Select a trusted adult to interview about family food traditions.
 - 2. Collect a recipe that is meaningful to their family.
 - 3. Analyze the nutritional content of the recipe and suggest substitutions with Indigenous ingredients.

Examples:

- Replace white flour with acorn flour.
- Use Indigenous nuts or seeds instead of processed toppings.

Extend

- Read through example recipes as a class, noting how they incorporate Indigenous ingredients while avoiding highly processed foods.
- Have students design a visual representation of their adapted recipe, including nutritional benefits and cultural significance.

Evaluate

- Host a class discussion or showcase where students share their interviews and adapted recipes.
- Discussion questions:
 - 1. What did you learn about your family's relationship with food?
 - 2. How did Indigenous ingredients change your recipe's nutritional profile?
 - 3. What are the benefits of incorporating Indigenous foods into your diet?

Extension

- 1. Host a class potluck where students prepare and share their adapted recipes.
- 2. Create a class cookbook compiling all the recipes and their adaptations.

