Lesson 1: California Indians

Focus Question: How did the physical environment affect the lives and culture of the California Indians?

Note to the Teacher: The regions for California Indians vary slightly from the natural geographic regions studied in Unit 1. For example, the Coastal Region group is divided into two groups, the Northern Coastal region and the Southern Coastal Region. Remarkably, some groups in northwest California, who lived near the coast, had relatively little cultural adaptation to the sea. Other groups, such as the coastal Indians of Southern California, were heavily oriented to the sea and coastal environment, not only for food but also as a rich source of raw materials used to fashion art and artifacts.

The Central Valley Region and the Mountain Region are combined into the same group since many of the California Indians tribal members lived part of the year in the Central Valley and then traveled to the higher elevations of the Sierra Nevada to escape the hotter weather. The Desert region remains a separate region for the California Indians.

California’s varied environments, such as coastal regions, mountains valleys and deserts presented native groups with different challenges and varying natural resources.

Although environment influenced some aspects of California Indian culture, it was not the deciding factor. For example, language did not determine a person’s culture. The Chumash Indians of the Santa Barbara area spoke a completely different language from their Gabrielino (Tongva) neighbors in Los Angeles and Orange Counties, yet both shared very similar life ways and customs. On the other hand, the coastal Gabrielinos (Tongva), Juanenos (Akagchemen) and the desert dwelling Cahuilla Indians spoke closely related languages and shared closely related cultures, while living in different environments. California was and still is home to large numbers of native peoples who differ from one another by language, culture, religion, and social organization.

Activity #1 Researching the Connections between the Environment and the Daily Life of California Indians

Materials Needed for each student:
5 copies of Handout #1.1 The Environment and Daily Lives of the California Indians
Textbook, library resources, and internet access

How did the natural environment affect the way Indians lived? Explain to students that the land and natural resources around the Indians determined the types of homes they built, the food they ate, and the clothing they wore. Indians in California lived mostly by hunting and gathering the resources provided by nature. For example, coastal Indians of Southern California obtained much of their food from the ocean and built their villages along rivers and streams to have access to fresh water. They also gathered acorns, roots, nuts and other wild plants to add to their diet. The coastal Indians lived on the fertile lowland portion of California, in the hills and valleys, and along the coastline and the coastal islands. Explain to students that in this lesson they will examine how the Indians used different natural resources found in the local environment, including plant fiber, shells, stones and bones.
**Procedure:**

This research activity is divided into three parts:

**Part 1: Guided Reading**  The teacher works with the students using guided reading of the textbook. The purpose is to model for students how to read informational text, identify the main idea, and record the information on retrieval charts. The retrieval charts will only be partially completed since the textbook does not provide all of the needed information.

**Part 2: Group Research** Students work in tribal groups to complete a retrieval chart for their tribe using a variety of reference and internet resources.

**Part 3: Mural** Following their research, students will compare and contrast two tribes (Activities #2 through #4) and/or work with tribal group members to create a mural to depict the environment and ways of life for their tribe (Activity # 5).

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**Part 1: Guided Reading**

This section will take 5 classroom periods. Use the following textbook lessons:

- Harcourt’s *Reflections*: Unit 1, Chapter 2, Lessons 2 - 5
- Houghton Mifflin’s *California*: Unit 1, Chapter 2, Lessons 2-4

**Step 1:** Distribute to each student a copy of *Handout #1.1 The Environment and Daily Lives of the California Indians*. Review the categories found on the chart. In the section titled, Physical Region/Location, write Northern Coastal Region.

The Environment and Daily Lives of the California Indians

<table>
<thead>
<tr>
<th>Region/Location</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Names of Tribes</td>
<td></td>
</tr>
<tr>
<td>Climate</td>
<td></td>
</tr>
<tr>
<td>Natural Features</td>
<td></td>
</tr>
<tr>
<td>Natural Resources</td>
<td></td>
</tr>
<tr>
<td>Shelter/Houses</td>
<td></td>
</tr>
<tr>
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<tr>
<td>Clothing</td>
<td></td>
</tr>
<tr>
<td>Tools/Weapons/Transportation</td>
<td></td>
</tr>
<tr>
<td>Customs/Beliefs/Trade</td>
<td></td>
</tr>
<tr>
<td>Interesting Facts</td>
<td></td>
</tr>
</tbody>
</table>

**Step 2:** Beginning with the textbook lesson on the Northern Coastal Region, model how to preview the text. Next, use guided instruction to read each section of the lesson. As you read, scan for the main ideas and details. Model how to write pertinent information on the chart using phrases, not complete sentences. Students record on their chart while the teacher records on a large version of the same chart. Leave blank any sections of the chart not covered in the lesson.

**Step 3:** Distribute a new copy of Handout #1.1 and label the region Southern Coastal. Continue the same procedure for modeling how to read each section of the textbook, identify the main ideas, and record information on the retrieval chart.

**Step 4:** Distribute a copy of Handout #1.1 and label the region The Central Valley and Mountains. This time, have pairs of students read the first section together and record information on their retrieval charts. Have selected groups share the information written on their charts as the teacher records their information on the large classroom chart. Discuss how some information might be recorded in more detail.
Step 5: Distribute a copy of Handout #1.1 and label the region Deserts. This time, have pairs of students or individual students independently read each section of the lesson and record information on their retrieval charts. Have selected individuals or groups share their charts as the teacher records their information on the large classroom chart.

### Part 2: Group Tribal Research
Form groups of 3 or 4 students for a total of 8 to 10 groups. Assign each group one of the following tribes and tell them the geographic region where the tribal group lives.

<table>
<thead>
<tr>
<th>Regions for California Indians</th>
<th>Tribal Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Coastal Region</td>
<td>Yurok, Hupa, Pomo</td>
</tr>
<tr>
<td>Southern Coastal Region</td>
<td>Chumash, Gabrielino</td>
</tr>
<tr>
<td>Central Valley and Foothills of the Sierra Nevada</td>
<td>Maidu, Miwok, Yokut</td>
</tr>
<tr>
<td>Desert Region</td>
<td>Mojave, Cahuilla</td>
</tr>
</tbody>
</table>

Students conduct research on their specific tribe. Using a copy of Handout #1.1, students write in the name of the region and the name of their tribe. While students have already completed a retrieval chart for the region, they will now focus on their specific tribe. They do not have to duplicate information already recorded the chart of their region.

Provide students with library resources and access to the internet. An excellent website is [http://www.fourdir.com/california_indians_index.htm](http://www.fourdir.com/california_indians_index.htm) As students record information on their retrieval chart, encourage them to compare the information they wrote in Part 1 with the factual information located in their research.

#### Activity # 2 Build Fluency using a Venn Diagram
On the chalkboard or whiteboard, draw a Venn Diagram. Label the left circle Gabrielino Indians, label the right circle Yurok Indians, and label the intersecting area as Both. Have students from the Gabrielino group and the Yurok group write information in each section of the Venn diagram to compare and contrast the tribes and how they depend on, adapt to, and modify the environment. The teacher and other students may make suggestions.

<table>
<thead>
<tr>
<th>What is being compared and contrasted?</th>
<th>How are they the same?</th>
<th>How are they different?</th>
</tr>
</thead>
<tbody>
<tr>
<td>region</td>
<td>Gabrielino Indians and Yurok Indians live along the coast of the Pacific ocean</td>
<td>Gabrielino Indians live along the southern coast of California. Yurok Indians live along the northern coast of California.</td>
</tr>
<tr>
<td>shelter</td>
<td></td>
<td>Yurok Indians build plank houses made of redwood. Gabrielino Indians built dome-shaped houses covered with tule.</td>
</tr>
</tbody>
</table>
Once students understand the process, mix and match student tribal groups from different regions and have the students complete a Venn diagram to compare and contrast their tribes. The process may be repeated several times.

**Activity #3 Writing Compare/Contrast Sentences:**

Explain to students that writers use certain **signal words** when they write compare and contrast sentences. Duplicate the following chart on chart paper:

<table>
<thead>
<tr>
<th>Signal words when you write <strong>compare</strong> sentences:</th>
</tr>
</thead>
<tbody>
<tr>
<td>too  alike  both  the same as  have in common</td>
</tr>
<tr>
<td>resemble as well as</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signal words when you write <strong>contrast</strong> sentences:</th>
</tr>
</thead>
<tbody>
<tr>
<td>but  different  yet  does not appear</td>
</tr>
<tr>
<td>however  instead  otherwise  even though</td>
</tr>
<tr>
<td>in contrast</td>
</tr>
</tbody>
</table>

Gabrielino Indians and Yurok Indians are two sample topics that can be compared. Refer to the Venn diagram developed in Activity #2. Help students write compare and contrast sentences using the signal words. For example:

- Both the Gabrielino Indians and the Yurok Indians live along the coast of California.
- The Gabrielino Indians, however, live in the southern coastal region and the Yurok Indians live in the northern coastal region.
- Yurok Indians build plank houses made of redwood. In contrast, the Gabrielino Indians build dome-shaped houses that are covered with tule.

If desired, you may have students first complete *Handout #1.2 Compare and Contrast: The Environment and Daily Lives of the California Indians.*

**Activity #4 Comparing and Contrasting California Indian Tribes**

**Materials needed:**

For each student, a copy of *Handout #1.3 Comparing and Contrasting California Indian Tribes*

**ASSESSMENT: Standard 4.2.1 Comparing and Contrasting California Indian Tribes**

**Prompt:** Select two Indian tribes from different regions of California. Use historically accurate examples to compare and contrast the tribes according to at least 3 of the following topics: geography, food, clothing, shelter, tools, transportation, economy and/or government.

**Rubric:**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Uses Multiple Perspectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supports the Topic with Accurate Examples</td>
</tr>
</tbody>
</table>

**Recommended Correlation:** Grade 4 Response to Expository Text Writing Rubric.

**Indicators:** Response to Expository Text Writing Rubric

**Note:** As an alternative assessment, refer to the mural described in the next activity.
Activity #4 Paint a Mural to Depict the Daily Life in a Village of Your Tribal Group

A mural is a design or a pictorial representation executed on background paper using a variety of media. It can be either two- or three-dimensional. Students should use the information from their research on their California Indian tribe to help them depict a scene that visually illustrates the daily life of people who occupied a tribal village. The size of the mural can vary from small to the area of an entire wall.

Note: If desired, all of the tribes in a specific region may work together on a large mural background for their region. Each tribal group can then work on one section of the mural to depict their specific tribe’s way of life.

Materials needed for a mixed media mural:
- large sheets of neutral-toned butcher paper for the background
- tempera and watercolor paint; crayons; colored chalk
- construction paper to create three-dimensional paper sculpture objects that are glued to the background
- a variety of other papers such as tissue paper and cardboard
- mosaic materials such as sticks, stones, tiles, sandpaper and raffia (available from craft stores)
- several sizes of paint brushes and sponges (use to smear, wipe, dot or trail the paint on the background paper)
- glue and scissors
- various containers for supplies

ASSESSMENT: Standard 4.2.1 A Mural Depicting Life in a California Indian Tribe

Prompt: Create a mural to illustrate life in a California Indian village. Working in groups of four, select one tribe from a region. Draw or paint the background of the mural to reflect the natural environment of the region. Each person in the group is responsible for depicting one of the following: food, clothing, shelter and tools/transportation.

Rubric:
Indicator: Knowledge of Historical Content
Indicator: Supports the Topic with Accurate Examples – use “geographic” examples

Recommended Correlation: Visual and Performing Arts Rubric be used with this prompt. Artistic Expression: Background and Foreground

Materials needed for the assessment:
For each student, a copy of Handout #1.3 Comparing and Contrasting California Indian Tribes

Procedure:
Organize the development of the mural before beginning the work. The purpose of the mural is for each tribal group to visually display the content on their retrieval chart. Also, each group will orally describe how their tribe depended on, adapted to, and modified the physical environment.
Step 1: Using their retrieval charts, tribal groups determine the background for their mural. It should depict the local landscape, including the region’s natural features such as: mountains, hills, valleys, canyons, rivers, harbors and/or ocean.

Step 2: Determine the people, natural resources, animals, buildings and events that will be depicted on the foreground of the mural. Include information from each of the topics on the retrieval chart. Discuss the proportions of the objects. These objects should be constructed separately and then attached to the mural.

Step 3: To assess the mural, use the rubrics for Knowledge of Historical Content and Supports the Topic with Accurate Geographic Examples.

In addition to the content of the mural, each person’s participation in the group activities may be assessed according to:
- willingness to interact within the group
- staying on task
- sharing materials
- cooperating with other group members
- being courteous to others
- doing a fair share of the work
- willingness to clean up the work area

Step 4: Students organize committees within each tribal group to work on different parts of the mural. Choose materials suited for the project. Students should be encouraged to be creative in their use of materials while remaining historically accurate and geographically.

Step 5: Title the mural, “Culture of a __________ Indian Village”

Step 6: Each tribal group orally presents their mural to classmates answering the key question, “How does the tribe depend on, adapt to, and modify the physical environment?” If desired, the oral presentation may reflect the following Grade 4 Language Arts standard:

2.0 Speaking Applications (Genres and Their Characteristics)

Students deliver brief recitations and oral presentations about familiar experiences or interests that are organized around a coherent thesis statement. Student speaking demonstrates a command of standard American English, organizational and delivery strategies, and they speak in a manner that guides the listener to understand important ideas by using proper phrasing, pitch, and modulation.

2.2 Make informational presentations:
- Frame a key question.
- Include facts and details that help listeners to focus
- Incorporate more than one source of information
Activity #5 I Am Poem
Using Handout #1.5 I Am Poem, have each student write an “I Am Poem” from the viewpoint of a California American Indian from a specific tribe.

Assessment:
The major assessment for Lesson 1 includes either Comparing and Contrasting California Indian Tribes (Handout #1.3) or A Mural Depicting Life in a California Indian Tribe (Handout #1.4).

Additional assessment of this lesson is integrated with the instruction and occurs throughout the unit. The focus question provides a framework for the evaluation of the lesson.

- Working in tribal groups, use the textbook, library and internet resources to research and complete a retrieval chart (Handout #1.1 The Environment and Daily Lives of the California Indians) for each region. (Activity #1)
- Working in a tribal group from a different region, complete a Venn diagram to compare and contrast your tribes. (Activity #3)
- Write an “I Am Poem” from the viewpoint of a California American Indian from a specific tribe.

Student work may be assembled into a unit portfolio containing the retrieval charts, the Venn diagram, and the “I Am Poem.”

Compare and Contrast Venn Diagram
# The Environment and Daily Lives of California Indians

<table>
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<th></th>
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<tbody>
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</tr>
<tr>
<td>Clothing</td>
<td></td>
</tr>
<tr>
<td>Tools/Weapons Transportation</td>
<td></td>
</tr>
<tr>
<td>Customs Beliefs Trade</td>
<td></td>
</tr>
<tr>
<td>Interesting Facts</td>
<td></td>
</tr>
</tbody>
</table>
### Compare and Contrast: The Environment and Daily Lives of California Indians

<table>
<thead>
<tr>
<th>Region/Location</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Tribe</td>
<td></td>
</tr>
<tr>
<td>Climate</td>
<td></td>
</tr>
<tr>
<td>Natural Features</td>
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<tr>
<td>Interesting Facts</td>
<td></td>
</tr>
</tbody>
</table>
**Comparing and Contrasting California Indian Tribes**

Prompt: Select two Indian tribes from different regions of California. Use historically accurate examples to compare and contrast the tribes according to at least 3 of the following topics: geography, food, clothing, shelter, tools, transportation, economy and/or government.

Rubric:

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>ADVANCED</th>
<th>PROFICIENT</th>
<th>BASIC</th>
<th>BELOW BASIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>USES MULTIPLE PERSPECTIVES</td>
<td>Student uses many historically accurate examples to compare/contrast multiple perspectives.</td>
<td>Student uses several historically accurate examples to compare/contrast multiple perspectives.</td>
<td>Student uses limited historically accurate examples to compare/contrast multiple perspectives.</td>
<td>Students uses few or no historically accurate examples to compare/contrast multiple perspectives.</td>
</tr>
<tr>
<td>SUPPORTS THE TOPIC WITH ACCURATE EXAMPLES</td>
<td>Student supports the topic with insightful historical and/or geographic examples.</td>
<td>Student supports the topic with several historical and/or geographic accurate examples.</td>
<td>Student supports the topic with limited historical and/or geographic examples.</td>
<td>Student has few or no historical and/or geographic examples.</td>
</tr>
</tbody>
</table>
Handout # 1.4

**A Mural Depicting Life in a California Indian Tribe**

**Prompt:** Create a mural to illustrate life in a California Indian village. Working in a group of four, select one tribe from a region. Draw or paint the background of the mural to reflect the natural environment of the region.

Each person in the group is responsible for depicting one of the following in the foreground of the mural: food, clothing, shelter and tools/transportation.

**Step 1:** With members of your tribal group, determine the background for the mural. It should depict the local landscape, including the region’s natural features such as: mountains, hills, valleys, canyons, rivers, harbors and/or ocean. Be creative in your use of materials while remaining historically and geographically accurate.

**Step 2:** Determine the people, natural resources, animals, buildings and events that will be depicted on the foreground of the mural. Include information from each of the topics on the retrieval chart. Determine who in your group will be responsible for each task. These objects should be constructed separately and then attached to the mural.

**Rubric:**

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>ADVANCED</th>
<th>PROFICIENT</th>
<th>BASIC</th>
<th>BELOW BASIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWLEDGE OF HISTORICALLY ACCURATE CONTENT</td>
<td>Student demonstrates an in-depth understanding of the historical content; all main ideas are supported by facts; contains no obvious inaccurate facts; contains substantial supportive evidence.</td>
<td>Student demonstrates a clear understanding of the historical content; all main ideas are supported by facts; contains no obvious inaccurate facts; would be improved with more evidence.</td>
<td>Student demonstrates a limited understanding of the historical content; most main ideas are supported by facts, no obvious inaccurate facts; would be improved with more evidence.</td>
<td>Student demonstrates little understanding of the historical content; facts may be inaccurate; lacks supportive evidence.</td>
</tr>
<tr>
<td>SUPPORTS THE TOPIC WITH ACCURATE EXAMPLES</td>
<td>Student supports the topic with insightful historical and geographic examples.</td>
<td>Student supports the topic with several historical and geographic accurate examples.</td>
<td>Student supports the topic with limited historical and geographic examples.</td>
<td>Student has few or no historical and geographic examples.</td>
</tr>
</tbody>
</table>
I Am Poem

I am
I wonder
I hear
I see
I want
I am

I pretend
I feel
I touch
I worry
I cry
I am

I understand
I say
I dream
I try
I hope
I am
Extended Activities for California Indians

Create an Artifact
Regional tribal groups can be assigned or allowed to select a specific California Indian artifact to create. Artifacts could represent Indian transportation, economy, or culture. For example, for the coastal region of California Indians, a transportation artifact could be a raft or canoe and an economic artifact could be a string of clam shells or a coil basket.

Exploring California Indian Legends
Read the Chumash legend of *Rainbow Bridge* by Audrey Wood. Discuss the major events of the legend and list these on the chalkboard or on sentence strips. Have the students create an artistic rendition of the story using crayons and water colors to create a crayon resist painting. Have the students retell the story with their families as a homework assignment. Inform the students that almost all the tribes had a creation legend. As you read other legends, ask questions such as:

- What role do natural resources available to the tribe play in the legend?
- What does the legend tell about the tribe’s culture?
- What does the legend tell about the tribe’s way of life?

California Indian Games
Explain that stones, shells and plant fiber were used in many games played by California Indians. Explain that California Indian football was played by teams from different villages. One or two balls were used. These were about the size of a tennis ball, but they were made of stone. The ball was lifted and thrown by the toes.

Here are some to try.

**Peon** – “The Hand Game”
Each player needs two short sticks that can be hidden within a closed fist—one white and one black (for Indians, bones were often used). You also need counter sticks to keep score—any number desired up to 15. The players are divided into two teams. All the members of one team hide their short sticks, one in each fist. Then they bring their hands in front of their bodies and fold their arms. A “killer” is chosen from the opposite team. He guesses which hand holds the white stick for each of his opponents by bending his head (or pointing) toward the hand he chooses. His team gets a counter stick for every correct guess. Now the other team hides their short sticks, and a “killer” from the first team guesses. The game continues until one side holds all of the counter sticks. They are the winners.

**Chachaukel** – A Game for 2 Players
You will need 50 counters (sticks or rocks), 2 markers (2 long, thin sticks), 8 split reeds or popsicle sticks, painted dark on one side. Space the 50 counters out in a long row. Players begin with their markers at opposite ends of the line. The 1st player tosses the 8 split reeds in the air. When they land, count only the light side facing up. Move the marker stick past that number of counters. There is an exception: If every reed lands dark side up, that is a score of 8. A player gets another turn if all the reeds land the same side up. Players take turns tossing the reeds and moving their markers, getting closer and closer to each other. If a throw brings the 2 marker sticks to the same spot, the player already in the space must move all the way back to the beginning and start over. The first player to reach the other end wins. (Courtesy of Katy Tahja in the publication *Native Americans of Southern California.*)
Walnut Shell Dice Game
Crack open walnuts (very carefully) along the middle so that you have two complete half shells. Remove the walnuts and clean out the shells. Fill the shells with tar or asphalt (or clay or play dough) and level the top. Press a few chips of shell into the tar or filler material for decoration. Let the dice dry. You will need six half shells for the game. Get ten sticks about the size of a pencil. These will be used as counter sticks. You can decorate them any way you want.

Two players begin the game. All the counter sticks are in the middle. If three walnut shells (dice) land with the tar side up, the player takes one counter stick. If the player gets all six dice, either tar-side-up or tar-side-down, the player takes two counter sticks. Whenever a player scores, he gets another turn. If he does not score, the turn goes to the other player. Once all the counter sticks in the middle have been picked up, the players take the sticks from each other as they score. Whoever ends up with all ten counters wins the game. Usually the play goes on until someone has won two out of three games.

Now It’s Your Turn. Using resources from the natural environment, challenge students to design a new game. Be creative. Ask questions such as,
- What materials will you use?
- How many players can play your game?
- What are the rules?
- How will you keep score?
- How do you determine who wins the game?

Art Projects
Many art projects make use of stones, minerals and related materials. Below are samples of art projects using different media and tools.

Charcoal is one of the oldest and finest drawing media. It is capable of making a very wide range of light and dark grays and blacks. It may be used crisply or blended and rubbed to produce sensitive shadings and achieve volume through lights and shadows. Before working on white or pastel-colored paper, “fix” the surface by spraying with a shellac and alcohol solution or with hair spray.

Sticks and twigs of varying sizes and flexibility may be dipped in thin paint or ink and used as “pens” or “brushes.” Try drawing with the sharp end of a toothpick to make crisp lines before using the chewed end of a green twig to introduce fuzzy, mealy lines into the same drawing. Drag, push, dot and skitter a brittle twig over a surface to achieve varied linear effects.

Chalks are powdered pigments mixed with white talc and pressed into large or small cylinders. Chalk can be used in a number of ways to achieve interesting art projects. Chalk rubbings can be made by drawing with the point or side of the chalk upon thin paper placed over a textured area. The texture will appear as a rubbing upon the paper surface. On colored paper, the broad side of white chalk can be used to make wide strokes while the end of the chalk can be used to make narrow strokes. Using sandpaper wet or dry, apply colored chalk to achieve vivid, unusual effects. Chalk can be dipped in water and applied immediately to the paper for a rich, colorful effect. Since chalk dries quickly, frequent dippings are necessary to keep it moist. Dry chalk can be used on wet paper. Moisten the paper and draw upon it with dry chalk, using its point or side. Try smudging the chalked areas with fingers for variation. Moist newspapers underneath help the surface paper retain the necessary dampness. Dry chalk can be used also with buttermilk or liquid starch.
Crayons may be chipped or scraped with dull knives or scissor blades. The colored chips may be arranged closely upon paper that is then covered with another piece of paper and pressed with a warm iron. When the chips are sufficiently melted, the top sheet may be peeled off or, for variation, slightly slipped before removal. Either the original, the monoprint or both may be used. Crayon engravings can be made by first heavily covering the entire surface of the paper with crayons, preferably light, bright colors. This area is then covered solidly with black or dark crayon, which may be burnished with the palm of the hand. Using a tool such as a partially unfolded paper clip, compass point or nail, scratch a design into the top covering of crayon to reveal the colors underneath. Also, crayon may be used to draw on sandpaper to create rich textural effects.

Clay modeling may be used to make coil bowls, pinch pots and animals. Modeling tools such as a dull knife, fingernail file, tongue depressor or a lollipop stick can be used to help achieve the desired shapes.

Using Tools – Preparing Acorns.
Acorns were the most important staple food of most of the California Indians. California Indians gathered acorns from different species of oak tree. Acorns were plentiful and healthy, but they were time consuming to prepare. Because the Indian women worked together, acorn preparation and cooking was a social time, a time for visiting, singing, gossiping as well as getting the meal ready.

If you have a supply of acorns, the class can prepare them as the Indians did. Remove the hard outer shell (crack them with a stone to be authentic) and dry the soft seed in the sun (or toast them in an oven for a short time). In a mortar, pound the dried seeds into a fine meal. Keep sifting and pounding until all of the meal is quite fine. This takes a surprisingly long time. In the process, students will begin to really understand how much work is involved. Make sure to leach the tannin out of the meal before it is eaten. This can be done by making a shallow depression in the acorn meal and slowly pouring water through several times. Also, you can use a basket as a leaching basin. In our modern times, cheesecloth (available at a paint store) is a useful alternative.

If this all seems too much, you can use a blender to grind and leach at the same time. Put the dried, shelled acorns in the blender jar with plenty of water and run it at high speed until the water is clear and the meal doesn’t taste bitter. Pour it into a coffee filter or a cheesecloth bag and let it drain.

To make acorn mush, mix the dough with enough water to make a thin mix and cook it until it is about the consistency of oatmeal. You will need to eat it the same day since it doesn’t keep. If you don’t have any chance to get acorns, acorn flour is sold in Korean groceries – all ground and leached.