The Education and the Environment Initiative Curriculum is a cooperative endeavor of the following entities:

- California Environmental Protection Agency
- California Natural Resources Agency
- California State Board of Education
- California Department of Education
- Department of Resources Recycling and Recovery (CalRecycle)

Key Partners:

Special thanks to Heal the Bay, sponsor of the EEI law, for their partnership and participation in reviewing portions of the EEI curriculum.

Valuable assistance with maps, photos, videos and design was provided by the National Geographic Society under a contract with the State of California.
## Contents

### Lesson 1  California’s Changing Economy
- Exit Slip ................................................................. 2

### Lesson 2  Hunters, Gatherers, Farmers, and Franciscans
- Archaeological Analysis ........................................... 3
- Comparing Economies ............................................. 5

### Lesson 3  Documents of Changing Lives
- Sequence of Changes ............................................... 7

### Lesson 4  Mission San Gabriel’s Influence
- A Self-Sufficient Mission’s Lands ................................. 8
- The Effects of Mission Agriculture ............................... 9

### Lesson 5  Changing Natural Systems
- Adobe Houses .......................................................... 10
- Cattle, Far and Wide .................................................. 11
- Grain Crops .............................................................. 12
- No Burning ............................................................... 13
- Roads and Livestock .................................................. 14
- Water Supply ........................................................... 15
- Changes in Daily Life ................................................ 16

### Lesson 6  The End of Hunting and Gathering
- Effects of California’s Changing Economy ...................... 17
Instructions: Read the question and write a response in the space provided. (6 points)

How did the economy of Anaheim change over the years?

Use the words “agriculture,” “crop,” “economy,” “environment,” and “land use” in your answer.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
### Collection of Objects A

<table>
<thead>
<tr>
<th>Item</th>
<th>Artifact or Natural Object</th>
<th>Made of</th>
<th>Used for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish Skeleton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mussel and Abalone Shells</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basket</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortar and Pestle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acorns</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Collection of Objects B

<table>
<thead>
<tr>
<th>Item</th>
<th>Artifact or Natural Object</th>
<th>Made of</th>
<th>Used for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cow Skull</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish Coin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corn Kernels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adobe Bricks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation Canal (aqueduct)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Instructions:
1. Read the information on the Venn diagram.
2. Compare and contrast the California Indian and Franciscan Mission economies and answer the questions on page 2. (3 points each)

California Indian

- Stone tools (mortar and pestle)
- Wild animals (fish)
- Wild plant foods (acorns)
- Temporary shelters
- Water for personal needs (bottle basket)
- Shell beads for trade

Franciscan Mission

- Plow
- Domesticated animals (cattle)
- Domesticated plant crops (corn)
- Permanent adobe buildings
- Water for large-scale agriculture needs (irrigation ditch)
- Spanish coins for trade

Both

- Tools
- Food
- Water
- Shelter
- Trade
Comparing Economies
Lesson 2  |  page 2 of 2

Name: _____________________________________

1. What type of economy did the California Indians have?

________________________________________________________________________
________________________________________________________________________

2. What type of economy did the Franciscan Missions have?

________________________________________________________________________
________________________________________________________________________

3. How were the economies different? Write a generalization about each economy.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Instructions: Draw pictures to show what daily life was like for California Indians and Franciscan padres. Draw pictures of people and things that match each description below. (5 points each)

1. When California had a hunter-gatherer economy.

2. Just after the missions were built.

3. When California missions had an agricultural economy.
Assessment: A Self-Sufficient Mission's Lands
Lesson 4

Name: _____________________________________

1. Cemetery
2. Dry farming
3. Grain storerooms
4. Irrigated fields
5. Irrigation canals
6. Land for grazing cattle and horses
7. Olive presses
8. Orchard
9. Padres’ rooms
10. Reservoir
11. Roads
12. Sheep pens
13. Tanning vats
14. Vineyard
15. Workshops
16. California Indians’ homes
Instructions:
1. Look at the picture, A Self-Sufficient Mission’s Lands.
2. Identify three ways the missionaries changed the land for agriculture (for example: crops, livestock, or things they built).
3. Write at least two sentences to describe the effects on natural systems. (2 points each)

1. Change: _____________________________________________
   Effect on natural systems: ________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

2. Change: _____________________________________________
   Effect on natural systems: ________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

3. Change: _____________________________________________
   Effect on natural systems: ________________________________
   _______________________________________________________
   _______________________________________________________
   _______________________________________________________

Name: ___________________________
Instructions: Read the paragraph, then complete the tasks below.

Most California Indians moved with the seasons. They went where plants or animals were ready for harvest. When they arrived in a new place, they built new houses. Their houses were made of branches or reeds. They were easy to build. If the houses got too many bugs in them, the Indians burned them down and built new ones. This helped the Indians stay healthy. The Franciscans moved many California Indians to the missions. Now they grow crops to eat. The missionaries made the Indians build adobe buildings. They live in these buildings in big groups. The Indians have to stay in one place. Diseases sometimes spread among Indians living at the missions.

You are a California Indian who has not gone to live at the mission. You are used to eating foods you have gathered and hunted from natural systems. How do these changes to the land affect you?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

You are a Franciscan missionary. You are used to eating foods you have grown yourself. How do these changes to the land affect you?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Instructions: Read the paragraph, then complete the tasks below.

The animals brought from Spain live very well in California. In the early days of the missions, there were few people living there, and just a few cattle. Now many California Indians live at the missions. There are thousands of cattle. Mission brands help identify the cattle on the ranchos. However, it is still hard to keep up with so many cattle. Some cattle travel far away in search of the native plants they like to eat.

You are a California Indian who has not gone to live at the mission. You are used to eating foods you have gathered and hunted from natural systems. How do these changes to the land affect you?

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

You are a Franciscan missionary. You are used to eating foods you have grown yourself. How do these changes to the land affect you?

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________
Instructions: Read the paragraph, then complete the tasks below.

At the mission, crops of wheat and corn grow in huge plowed fields where native plants used to be. A lot of water is used to irrigate the crops. After harvest, grain is stored in adobe rooms. Some of the grain is ground into flour and used to make bread. Grain is also sold to the military. Some grain is saved for future planting. Stored grain is helpful when there are periods of less rain and smaller harvests.

You are a California Indian who has not gone to live at the mission. You are used to eating foods you have gathered and hunted from natural systems. How do these changes to the land affect you?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

You are a Franciscan missionary. You are used to eating foods you have grown yourself. How do these changes to the land affect you?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Instructions: Read the paragraph, then complete the tasks below.

The Spanish stopped California Indians from setting fires. The missionaries believe the land and buildings are safer now. California Indians used to set the fires for many reasons. Burning cleared brush away from meadows where native grasses grew. Then the Indians could collect the grass seeds. Burning also opened the cones of some pine trees. Indians could then collect the nuts. Burning got rid of pests, too, and helped many new plants sprout. Then the Indians could hunt the deer that came to feed. Now bushes are spreading, weeds are taking over, and pests are multiplying. It became harder for Indians to find enough food. More Indians came to live and work at the mission. With more workers, harvests were larger. The mission could feed its people and sell grain to the military.

You are a California Indian who has not gone to live at the mission.
You are used to eating foods you have gathered and hunted from natural systems. How do these changes to the land affect you?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

You are a Franciscan missionary.
You are used to eating foods you have grown yourself. How do these changes to the land affect you?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Instructions: Read the paragraph, then complete the tasks below.

The Spanish traveled on dirt roads that connected the missions to one another. Most of the explorers and soldiers rode horses or mules. Oxen pulled carts full of food, tools, and other things to and from the mission. They used many tools to grow crops and make products to sell to soldiers, explorers, and ranchers. When sheep or cattle were brought to a mission, they moved in herds. They ate and crushed plants in their path and made the soil hard. Seeds from weeds stuck in the animals' fur and in their hooves. Now weeds have spread to new places. Old World weeds, such as ripgut and thistles, are starting to grow where native plants used to be.

You are a California Indian who has not gone to live at the mission.
You are used to eating foods you have gathered and hunted from natural systems. How do these changes to the land affect you?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

You are a Franciscan missionary.
You are used to eating foods you have grown yourself. How do these changes to the land affect you?

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
Instructions: Read the paragraph, then complete the tasks below.

Dams and reservoirs were built near the missions. They block what were once free-flowing streams. California Indians used the rivers and streams for water, food, and transportation. The irrigation ditches built by the missions carry water away from the streams. The water was used for plants in the mission’s gardens, fruit orchards, vineyards, and crop fields. Many Indians were finding it harder to fish and travel on the rivers, and some started trading with or working at the mission in exchange for food. Others lived permanently at the mission.

You are a California Indian who has not gone to live at the mission.
You are used to eating foods you have gathered and hunted from natural systems. How do these changes to the land affect you?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

You are a Franciscan missionary.
You are used to eating foods you have grown yourself. How do these changes to the land affect you?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Instructions: Pretend you are a California Indian who has not gone to live at a mission. Write responses to the following prompts. (5 points each)

1. What is a day in your life like?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

2. How has your life changed from the way it was before the Franciscans brought agriculture?

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

3. Describe at least one difference in how you can use the land.

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Instructions: Read and discuss the following questions with your partner. Then, use your answers to help you complete the chart below. Identify and include at least five important facts within each box. (5 points per box)

- What effect did a hunter-gatherer economy have on California’s natural systems?
- How did people live in a hunter-gatherer economy?
- How did the change to an agricultural economy affect California’s natural systems?
- How did people live in an agricultural economy?

<table>
<thead>
<tr>
<th>Hunter-gatherer Economy</th>
<th>Effects on Natural Systems</th>
<th>Effects on People</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agricultural Economy</th>
<th>Effects on Natural Systems</th>
<th>Effects on People</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>