The Rivers and Ancient Empires of China and India
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:

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**Science Background**  Introducing a River System

None required for this lesson.
Important Features of the Indus, Ganges, and Huang He Valleys
Lesson 1

Instructions: Locate and label the physical features, listed below, on the map(s) assigned by your teacher, Indus River Valley (page 3), Ganges River Valley (page 4), or Huang He River Valley (page 5). (5 points for each feature)

Indus River Valley
The Indus River and the direction that it flows (use arrows)
Arabian Sea
Punjab Plain
Sind Plain
Kirthar Range
Toba Kakar Range

Ganges River Valley
The Ganges River and the direction it flows (use arrows)
Bay of Bengal
Himalaya Mountains
Ganga Plains
Chota Nagpur Plateau
Kaimur Hills

Huang He River Valley
The Huang He River and the direction it flows (use arrows)
Yellow Sea
Gobi Desert
Kunlun Range
Great Plain of China
Loess Plateau
Indus River Valley Map
Ganges River Valley

Lesson 1

Ganges River Valley Map

Name: ________________________________
Huang He River Valley Map

Name: ____________________________________
Instructions: Use complete sentences to answer the following questions. (5 points each)

1. Describe the cycle of a monsoon.

2. How do you think the seasonal cycles of the major rivers in India and China benefited people?

3. How did the cycles of these rivers help lead to permanent human settlements?
Monsoon Cartoon
Lesson 2

Name: _____________________________________

**Instructions:** Using the numbers 1–6, put the pieces of the following cartoon in order, to correctly show the Asian monsoon cycle.

1. The cooler air over the ocean does the opposite. The cooler air is humid and heavy; so it sinks and rushes in to cover the land.
2. A cycle begins. Warm air flows out to sea, and cool air flows onto the land, moved by the winds.
3. When the Sun heats the air over the land, a monsoon forms where the land meets the sea.
4. In summer, the land becomes hotter than the ocean, which makes the air over the land rise, because warm air is dry and light.
5. The land becomes cooler during the winter, and the air rushes out over the ocean to fill the gap left by rising, warmer winds. The airflow is reversed.
6. As the humid ocean air moves onto the land, the air loses some of its moisture in the form of RAIN, especially over the mountains.
Part 1

Instructions: Answer the following questions using information from the Looking at Natural Resources and Rivers presentation.

1. What three river valleys in India and China were home to some of the world’s earliest civilizations?
   a. ________________________________
   b. ________________________________
   c. ________________________________

2. Which religions and philosophies developed in these river valleys?
   a. ________________________________
   b. ________________________________
   c. ________________________________

3. The main cities of the Indus Valley civilization were ________________________________
   and ________________________________.

4. The most important crops in ancient India and China were ________________________________
   ________________________________.

5. What are ecosystem goods? ________________________________
   ________________________________

6. What are three examples of ecosystem goods in India and China? ________________________________
   ________________________________
   ________________________________

7. What are ecosystem services? ________________________________
   ________________________________
   ________________________________
8. What are three examples of ecosystem services in India and China? _______________________

____________________________________________________________________________________

____________________________________________________________________________________

9. Why is the Huang He also called the Yellow River? ________________________________

____________________________________________________________________________________

10. Give several examples of river materials used in ancient China. ____________________

____________________________________________________________________________________

11. What was the most important part of ancient Chinese economy in the valley of the Huang He?

____________________________________________________________________________________

**Part 2**

**Instructions:** Complete the following chart. Write down an ecosystem good (natural resource) in the first column. Next, give examples of how that natural resource helped shape ancient Indian and/or Chinese civilizations in these categories: the economy (how to make money), the government (what laws they had), religion (who or what people worshipped), and culture (how the resource was used, for example, food, art). (1 point for each cell in each row)

The first resource, silk, has been completed as an example. (You might not have an answer for every category.)

<table>
<thead>
<tr>
<th>Natural Resource</th>
<th>Economy</th>
<th>Government</th>
<th>Religion</th>
<th>Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silk (silkworms)</td>
<td>They sold and traded silk.</td>
<td>Leaders controlled trade.</td>
<td></td>
<td>Silk cloth was highly prized by the wealthy.</td>
</tr>
</tbody>
</table>
### Natural Resources and Rivers

#### Lesson 3  |  page 3 of 3

Name: _____________________________________

<table>
<thead>
<tr>
<th>Natural Resource</th>
<th>Economy</th>
<th>Government</th>
<th>Religion</th>
<th>Culture</th>
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<tbody>
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</table>
Part 1

Instructions: Answer the questions below about the river you studied with the help of your group. Answer the questions about the other river using the information shared by your classmates.

Questions about the Indus:

1. What kind of resources did the Harappans have?

2. What kind of cities did the Harappans have?

3. Why did this civilization end?

Questions about the Ganges:

1. What is the longest river in India?

2. What did Aryans bring to the Ganges valley?
Comparing the Indus and the Ganges
Lesson 4 | page 2 of 2

3. What religion did the Aryans practice?

______________________________________________________________

______________________________________________________________

Part 2
Instructions: Use information from the lesson to fill in the diagram below.
**River Flow Flowchart**

**Lesson 5**

Name: ________________________________

**Instructions:** Complete the flowchart below by writing the following events in the order in which they happened. (Remember, the event in the first box should lead to the next box, and so on.) The first one has been done for you.

**Events:**

- **Specialization of Labor:** People start to do many different jobs.
- **Permanent Settlement:** People no longer move from place to place.
- **Surplus Grain Storage:** People begin to store extra food to eat during winter months or during years of drought.
- **Population Growth:** People have more children and live longer.
- **Use of Ecosystem Goods:** The Huang He River provides water for growing crops and watering animals.
- **Trade:** People begin to use the river for trade and transportation.
- **Establishment of Dynasties:** A single family rules a large area by the river.
- **Evolution of Social Classes:** Some people start to control grain and water. These people become very powerful.

**Use of Ecosystem Goods:** The Huang He River provides water for growing crops and watering animals.
Instructions: You are an adviser to King Tang, the first emperor of the Shang Dynasty. Your first job is to read Natural Resources of the Huang He (Student Edition, page 7). Then you are to write a letter to King Tang and give him your advice. Tell the king what he should do with the natural resources in his empire. You need to tell him how to use at least three resources. Write your letter on the turtle shell below. (5 points for each resource discussed, 15 points total)

Dear King Tang,

[Letter content goes here]

Name: ________________________________
**Instructions:** In the spaces provided in the chart below, answer the questions for the Sacramento-San Joaquin River Delta and a river near an ancient civilization of your choice. (5 points each row)

<table>
<thead>
<tr>
<th>Uses of the river</th>
<th>Civilization: California River(s): Sacramento and San Joaquin</th>
<th>Civilization: _____________ River: _____________</th>
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<th>Changes to the river</th>
<th>Civilization: _____________ River: _____________</th>
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<th>Effects (or possible effects) of those changes</th>
<th>Civilization: _____________ River: _____________</th>
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Name: ______________________________
Instructions: In a few sentences, summarize the effects of people’s use of the rivers today and in ancient civilizations. When did people have the most influence on the river? Were rivers more important to people in ancient times than they are today? Why or why not? (10 points)