Aim:  How did inhabitants of Early River Valley Civilizations innovate to meet their needs?

HW:  Complete p. 9-15 in packet if we don't finish in class.

Inhabitants of early River Valley Civilizations innovated by creating irrigation systems.
Objective:

How did inhabitants of Early River Valley Civilizations innovate to meet their needs?

- Describe how early river valley civilizations innovated to meet their needs

Introduction

Directions: Water is one of the most important resources in our society. Answer the questions below about our current uses of water.

1. What do we use water for?
   - Showers
   - Farming
   - Cooking
   - Clean
   - Drinking
   - Swimming
   - Transportation

2. How do you think that water gets to where we need it?
   - Irrigation pipes

During the Neolithic era, people stopped moving around and settled down in one place. Once people settled down in one place, they had to modify their environments to meet their needs.
When humans **ADAPT** to or **MODIFY** their environment, they **change** their behavior and change the world around them to meet their needs.

<table>
<thead>
<tr>
<th>Example</th>
<th>This is an example of humans modifying or adapting to their environment because:</th>
</tr>
</thead>
<tbody>
<tr>
<td>domesticating animals and creating farms to have a stable food supply</td>
<td>keeping animals in pens. feeding animals. digging up earth, planting seeds. animals + people can travel into new areas + changed them. water goes to new land + makes more land is fertile. trees keep soil firm. removing trees + shrubs changes the ecosystem.</td>
</tr>
<tr>
<td>building bridges to connect remote villages</td>
<td></td>
</tr>
<tr>
<td>building canals to get water to areas without access to water</td>
<td></td>
</tr>
<tr>
<td>removing or adding trees or shrubs</td>
<td></td>
</tr>
</tbody>
</table>
The Neolithic Revolution and Water Access

All civilizations need access to water. However, in some places there are not reliable water supplies. To meet the needs for reliable water access, early civilizations made modifications to their environment. The Neolithic Revolution was a major turning point in human history around 10,000 BCE. This was the point when humans began to cultivate crops and domesticate certain animals. People abandoned hunting and gathering and permanent settlements were established.

Why did humans need access to more water after experiencing the Neolithic Revolution?

Humans needed more access to water after the Neolithic Revolution because...
Example 1: Irrigation

<table>
<thead>
<tr>
<th>The environmental problem was that there was …</th>
<th>Early River Valley Civilizations modified their environments to create …</th>
</tr>
</thead>
<tbody>
<tr>
<td>unreliable access to water</td>
<td>IRRIGATION SYSTEMS</td>
</tr>
</tbody>
</table>

What is irrigation?
Irrigation is the process of bringing water from a natural source like a river to an area without water.

Watch the "What is irrigation?" video to see examples of irrigation across the world.

1. Based on the video, identify advantages and disadvantages to using irrigation in the chart below.

<table>
<thead>
<tr>
<th>Advantages to Using Irrigation</th>
<th>Disadvantages to Using Irrigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easier to move water to farmland.</td>
<td>Run off can mix with pesticides to cause pollution.</td>
</tr>
</tbody>
</table>

Irrigation in Ancient Egypt and Mesopotamia

Directions: Watch this Discovery Education Video on Irrigation in Ancient Egypt and this video on Irrigation in Ancient Mesopotamia then complete the tasks that follow.

2. Describe the techniques used by Ancient Egyptians and people living in Mesopotamia to meet their water and food needs.
   - E: Shaduf - buckets lowered into Nile and in seesaw style dumped into irrigation canal.
   - M: Created canals with gates to control the flow of water.

3. Explain the effects of using these techniques on these civilizations.
   - E: More fertile land → more crops: grains, figs, onions, grapes
   - M: Enabled a surplus of food
**Example 2: Terrace Farming and Mud Brick Making**

<table>
<thead>
<tr>
<th>The environmental problem is that there is ...</th>
<th>50</th>
<th>Early River Valley Civilizations modified their environments to create ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>not enough flat land to farm because of mountains</td>
<td></td>
<td>TERRACE FARMING</td>
</tr>
</tbody>
</table>

**Terrace Farming in Ancient China**

Directions: Examine the image below and watch [this video on the rice terraces in Yunnan, China](#) then complete the tasks the follow.

**Terrace Farming**

4. In your own words, describe what terrace farming is and explain how terrace farming benefited the Ancient Chinese.
Mud Brick Making

Directions: Watch this [CCTV video on how a modern day mud brick maker makes bricks](#), a process that is not that different from the technique used by people in Ancient Egypt, Mesopotamia, and the Indus River Valley Civilization.

| 5. Describe the techniques used to make mud bricks. | 6. Explain how being able to create bricks might have affected the Early River Valley Civilizations. |
SQ 15: How did inhabitants of Early River Valley Civilizations innovate to meet their needs?

Directions: Based on what you have learned, complete the task below.

Part I
Describe how early river valley civilizations innovated to meet their needs. (Be sure to define the need and describe how their innovation addressed the problem)

Connect Cause and Effect

Think Like a Geographer