

Event A: Food Shortage

After thousands of years of hunting for and gathering their food, Neolithic people began farming. One of the first areas they farmed was the rolling foothills of the Zagros Mountains located in northern Mesopotamia. As early as 8500 B.C.E., people *cultivated* (grew) grain and *domesticated* (tamed) sheep and goats. The abundant rainfall and mild weather made farming easy, and the village's food supply gradually increased. The foothills also provided timber that Neolithic



farmers used to build shelters and stones that people used to make tools. Farmers settled down more permanently in villages and grew crops over a long period of time. The increased food supply, sturdier shelters, and improved technology probably allowed the human population in Mesopotamia to grow dramatically over the next several thousand years.

Some scholars believe that by 5000 B.C.E., farmers in the Zagros foothills did not have enough land on which to grow food for the increasing population. As a result, people could no longer maintain a stable food supply. A food shortage arose among the villages in the foothills. However, a large plains area lay below the Zagros foothills. Two rivers ran through the plains—the Euphrates River and the Tigris River. The river plains were spacious and unoccupied, but the land was very hard and dry during most of the year. During the summer, the hot sun baked the soil until it became stone-hard. In the spring, the rivers flooded the plains unpredictably. In addition, the river plains had no timber or stones with which people could make shelters and tools.

Critical-Thinking Question A: You are a member of one of the villages in the foothills. You must decide what to do about the food shortage in your village. Which of the following responses do you think best addresses the problem of food shortage?

- A. Increase the number of times each year that farmers plant their crops.
- B. Move down to the river plains and try to grow crops there.
- C. Abandon farming and return to hunting and gathering.
- D. Attack neighboring villages and steal their food.

Event B: Uncontrolled Water Supply

After moving to the Mesopotamian river plains, farmers faced many challenges as they tried to grow their crops. The soil on most of the plains was hard and dry for most of the year. Hot, strong winds blew thick layers of dust across the ground.

During the spring, however, rain and melted snow from the mountains flowed into the rivers, causing them to flood across the plains. At first, the floods helped farmers because they softened the hard ground into a rich, fertile soil that



was good for growing crops. But problems arose because the heaviest flooding occurred in April, the same month that farmers planted their crops. Most of the farmers' young plants, or *seedlings*, were washed away in the flood waters. Then, during the summer, the sun baked the land stone-hard and destroyed any existing vegetation. These seasonal changes—either too much water or not enough water—meant that farmers had to constantly struggle to raise their crops. The farmers' success depended upon their ability to control the water to create a reliable water supply all year round.

Critical-Thinking Question B: You are a member of one of the villages on the Mesopotamian plains. In order to provide your village with a year-round supply of water, you must design a water-control system. Draw and label the best plan for this system. Your plan should include a river and fields.

Event C: Building and Maintaining a Complex Irrigation System

Around 5000 B.C.E., Mesopotamian farmers began to build irrigation systems to provide water for their fields all year round. At first, farmers simply carried water in buckets from the Tigris and Euphrates Rivers to their individual fields. They built up the natural earth walls, called *levees*, to prevent flooding. When the land was dry, farmers poked holes in the levees. The river water then flowed through the holes, down onto the plains,



and into farmers' thirsty fields. Over time, the water carved deep paths in the ground. People shaped these paths into manmade waterways, or *canals*, to control the direction in which the water flowed. *Dams*, or barriers, and *reservoirs*, or water-collection pools, also helped block and store water at various places along the river.

The irrigation system provided enough water for farmers to harvest crops twice a year. The second harvest usually increased the food supply so that there was an extra amount of food, or *surplus*. But irrigation systems demanded constant maintenance because they were complex. Reservoirs and canals easily became clogged with *silt*, very fine mud particles contained in the river water. The reservoirs and canals had to be cleaned regularly. Because different villages' canals were connected to each other, one clogged canal could destroy the entire irrigation system.

Critical-Thinking Question C: You are a member of one of the villages on the Mesopotamian plains. You must decide on the best way to maintain a complex irrigation system. Which of the following responses do you think best addresses this problem?

- A. Maintain only the canals around your own village's fields.
- B. Force members of another village to maintain the entire irrigation system throughout the year.
- C. Cooperate with other villages to regularly maintain the entire irrigation system.
- D. Abandon irrigation and return to collecting and carrying water from the river to the fields.

Event D: Attacks by Neighboring Communities

Mesopotamian villages gradually became dependent on each other to build and maintain their irrigation systems. Workers from different villages probably worked together regularly. They cleared silt from the canals to prevent them from clogging. Workers also scooped water from one reservoir to another to make sure the water levels were balanced. People who lived several miles apart were connected by the irrigation canals that wound through the cities. Between 3500 and 3000 B.C.E., villages in the southern half of Mesopotamia grew into towns and cities. They had populations as great as several thousand people. This region of growing cities and towns was called Sumer, and its people were called Sumerians.



As Sumerian cities grew, they fought to use more of the irrigated water. For example, cities located upriver (closer to the source of the river) built new canals or blocked other cities' canals. These actions prevented water from reaching the cities located downriver. Sometimes cities' fights over water usage were so hostile that some people were killed. City members became very loyal to their own city and attached to their land. Therefore, Sumerians began to search for ways to protect their cities from neighboring ones. But the Mesopotamian plains provided no natural barriers for protection. There were neither mountain ranges nor rushing rivers to protect people from attacks.

Critical-Thinking Question D: You are a member of a Sumerian city. A city upriver is directing all the river water into its own canals. When you protest, they threaten to attack you. You must design and draw a defense plan to protect the city. Copy the drawing of the city below, and design your plan around it.

