

Explore More—Baby It's Cold Outside

Directions: Listen to your teacher talk about climatic changes and how humans modified the physical environment to meet their basic needs. Refer to the maps in your Explore Geography Picture Dictionary to locate the places your teacher mentions. Circle any words you don't understand. Underline or highlight important ideas in the text. Write notes in the margins to help you understand key points. Then answer the questions in your own words.

The Ice Ages and Glaciers

During the last Ice Age, ice sheets called glaciers covered parts of the northern continents. Where are the northern continents?

Have student point this out on the world map.

In some places, the ice was 8,000 to 10,000 feet thick—more than a mile thick. How far is a mile in feet? What is one mile from school?

The level of the oceans dropped 300 feet because the water was frozen in glaciers. The ice was so heavy it caused the glaciers to move, pushing soil and loose rocks ahead of them. The glaciers scooped out basins that filled with water to form lakes, such as the Great Lakes. The glaciers also scooped out valleys such as Yosemite Valley in California. In some areas, like Kansas, the Ukraine, and northern China, glaciers ground rocks into powder. The wind picked up the powder and blew it many miles.

Humans Adapt to and Modify the Physical Environment

The Neanderthals, who lived during the time when glaciers covered parts of Europe, used resources in their environment to adapt to the harsh conditions in which they lived. They hunted animals and used the skins to protect them from the cold. They found shelter inside caves. Neanderthals used materials in their environment—such as stones—to make hearths, create tools, and grind seeds.

The Cro-Magnons also adapted to the cold climate and modified the environment to meet their needs. Like the Neanderthals, the Cro-Magnons used materials in the environment to create tools. The Cro-Magnons' stone tools allowed them to have much more control of their environment.

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The Cro-Magnons were successful hunters because they created very good weapons. They also made hooks to catch fish and built traps to catch birds and other animals. Spears made it possible to kill animals from farther away. Scrapers, cutters, and sewing needles helped them make more comfortable clothing and living shelters. As a result of these environmental modifications, the Cro-Magnons were able to stay in one place and find enough food. This made it possible for them to build permanent living places.

People Begin Domesticating Plants and Animals

People in Asia also found ways to live in permanent settlements by adapting to the physical environment. In many parts of southwestern Asia, wheat and barley grow naturally. People would grind wild wheat and barley to eat. Then they began to save some of the seeds for planting. This was the beginning of farming and a steady source of food, which meant people did not have to move to new locations in search of food. Eventually, people established larger settlements and began raising animals like sheep and cattle. ❖

YOUR TURN!

Write your answers to the following questions.

1. What is a glacier? What is an ice age?

2. Name some of the ways that humans adapted to and modified the environment to meet their needs.

3. How did these modifications lead to the rise of domestication of plants and animals, and new sources of clothing and shelter?

Questions for further discussion:

- What would you like to know more about in terms of glaciers, the ice ages, and the domestication of plants and animals? Frame questions that you can answer by historical study and research. Conduct this research and discuss your findings.
- What we know about the ice ages and early humans comes from conclusions drawn from fossils and artifacts. What archaeological evidence that you've learned about is verifiable/unverifiable?
- How might our interpretations of the lives of early humans change as archaeologists uncover new information?