

## MAIN IDEAS

- 1 **Science and Technology** New technologies supported an agricultural revolution.
- 2 **Culture** Agriculture made a big change in how people lived.
- 3 **Geography** Farming developed independently in many areas of the world.

## TAKING NOTES

**Reading Skill: Understanding Cause and Effect**

Identifying causes and effects will help you understand the relationships among events in this lesson. In Lesson 2, look for the effects of the cause listed in the chart below. Record them in a chart of your own.

Cause	Effects
Agricultural revolution	1.
	2.
	3.

 Skillbuilder Handbook, page R26



▲ **Pottery** This pottery figure from Hungary is holding a sickle, a farming tool. The figure represents a deity, or god, and dates back to about 4500 B.C.

**Words to Know**

Understanding the following words will help you read this lesson:

**grazing animal** an animal that feeds on growing grass (page 59)  
*Humans could keep herds of grazing animals after they learned to grow grasses.*

**develop** to grow or cause to grow (page 60)  
*As the number of villages in the region increased, a more complex economy developed.*

**fertile** good for plants to grow in (page 60)  
*Few people lived in the desert because it lacked water and fertile soil.*

# Learning to Farm and Raise Animals

## TERMS & NAMES

domesticate

agriculture

slash-and-burn

irrigation

**Build on What You Know** In the United States today, few people are farmers. However, in early human societies, almost everyone was a farmer. Today, because of technology, one farmer can raise enough food to feed many people.

## The Beginnings of Agriculture

- 1 ESSENTIAL QUESTION** What new farming tools and methods did early farmers invent?

Early humans were nomadic. They moved around in search of food. By around 8000 B.C., though, they had learned to modify the environment by growing plants and raising animals.

**Climate Changes** Global warming resulted in the retreat of the Ice Age glaciers. This retreat meant that early humans could move into new areas. As temperatures rose, the growing season became longer. Wild grasses spread and were **domesticated** by humans—that is, humans learned to grow and tend the grasses. This skill provided humans and grazing animals with more grain to eat.

## Connect to Today

**Peru** A shepherd tends her sheep in the Andes Mountains of Peru. Sheep were among the first animals that humans learned to domesticate. ▼





**The Domestication of Animals** Early humans learned to domesticate animals such as sheep and goats around 9000 B.C. People raised them for food and clothing.

Domesticated animals offered a reliable source of meat and milk products. After people killed an animal, they used its skin to make clothing and shelters. They made harpoons, needles, and other tools from the bones.

**The Agricultural Revolution** Food gatherers noticed that grain sprouted from spilled seed. Around 8000 B.C., people got the idea of **agriculture**—planting seeds to raise crops.

*Agricultural revolution* is the name given to the shift from food gathering to food raising. The agricultural revolution brought about changes in tools and technology. People made hoes to loosen the soil, sticks to dig holes, and sickles to harvest grain.

Early farmers practiced **slash-and-burn** agriculture. They cut and then burned trees and brush to clear land for crops. After a number of growing seasons, soil often became poor. People then moved on to a new location.

**REVIEW** What was the impact of new tools on early humans?

## Settlements Begin

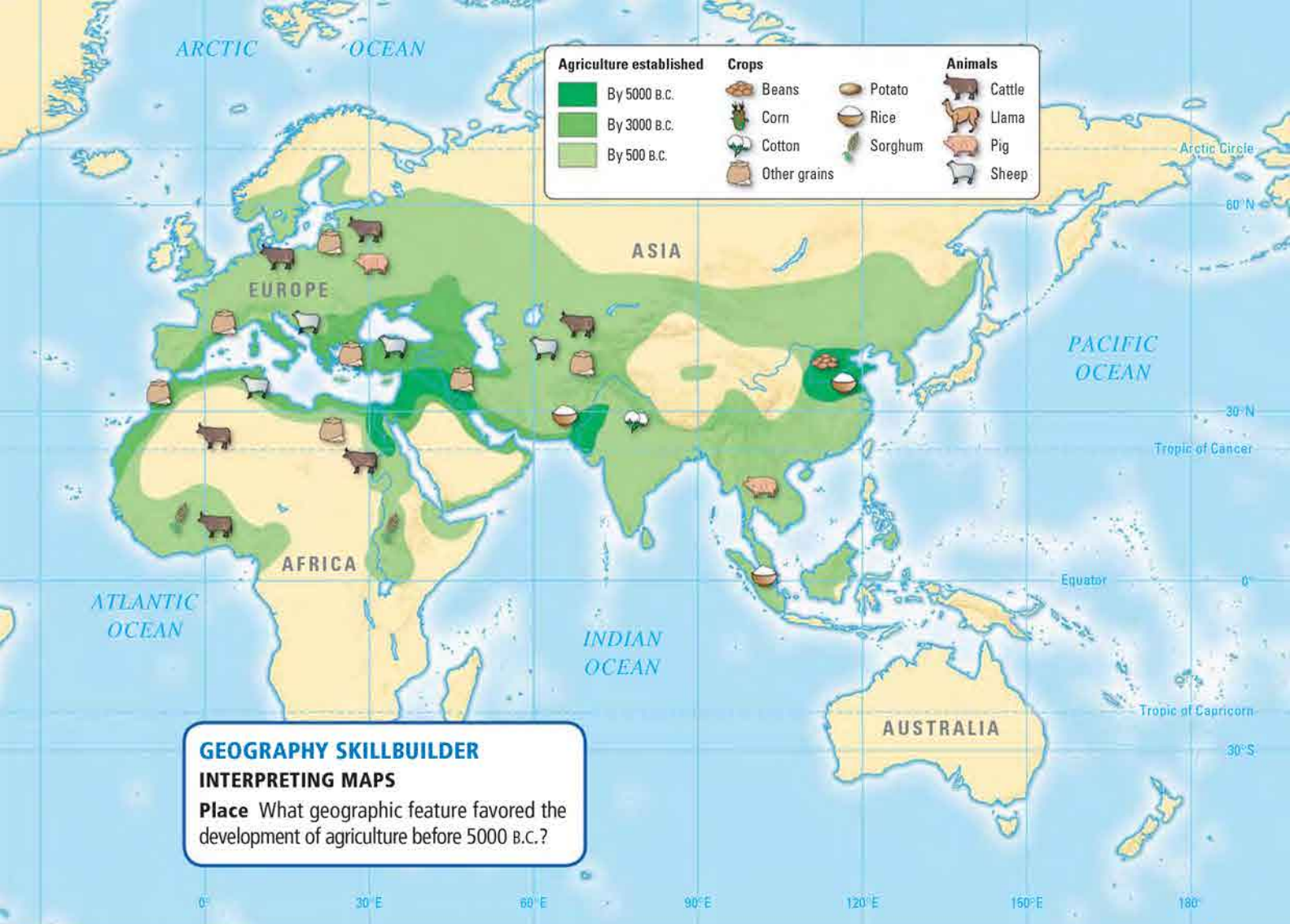
### 2 ESSENTIAL QUESTION Why did villages develop?

People learned to be better farmers as their tools improved. Groups often remained in the same areas instead of moving around every few years. They began to develop permanent settlements.

**Farming Villages Develop** Fertile soil produced bigger and better crops. This attracted farmers. River valleys had soil that was especially rich. Their soil was better than that in fields that had been cleared by slashing and burning. Farmers settled in villages and went out to the fields to work. Villages grew to hold several thousand people. People lived in shelters made of mud, bricks, logs, and hides.







Village life provided many advantages. Food was more plentiful. People living in larger groups could more easily withstand attacks by nomadic bands. Village life also had disadvantages, including the risks of fire, disease, and flood.

**REVIEW** How did farming change the way people lived?

## Farming Develops in Many Places

### 3 ESSENTIAL QUESTION Where did farming develop?

About 8000 B.C., people in different parts of the world began to develop farming. Early farmers invented new methods of farming.

**River Valleys in Africa and Asia** Early farming developed in areas where water was available, such as in river valleys. These included the Huang He in China and the Nile in Africa. African farmers along the Nile were among the first to use **irrigation**—the watering of crops. They built irrigation systems of dikes and canals.

**Uplands in the Americas** Farming in the Americas developed later than in the rest of the world. It developed mainly in upland regions—plateaus and other flat areas at fairly high elevations. Farmers in the Americas developed techniques suited to the environment. The terracing of land to create flat areas helped adapt the land for raising crops such as corn, beans, potatoes, and squash.

**REVIEW** What crops did early farmers raise in the Americas?

### Lesson Summary

- After the Ice Age, humans learned to domesticate animals and plant crops.
- As people learned to be better farmers, farming villages developed.
- Farming developed independently in many parts of the world.

### Why It Matters Now . . .

The development of farming led to a great increase in human population. Today most people depend on agriculture for their food. In some parts of the world, such as Africa and India, most people are still farmers who live in villages.

## 2 Lesson Review

### Terms & Names

1. Explain the importance of  
domesticate                      slash-and-burn  
agriculture                      irrigation

### Using Your Notes

**Understanding Cause and Effect** Use your completed chart to answer the following question:

2. What new technologies developed for growing and harvesting grain?

Cause	Effects
Agricultural revolution	1.
	2.
	3.



### Main Ideas

3. What farming techniques were part of the agricultural revolution?
4. How did agriculture change the way people lived together?
5. In what geographical regions did farming develop in Asia, Africa, and the Americas?

### Critical Thinking

6. **Cause and Effect** How did the end of the Ice Age affect the way people lived?
7. **Comparing and Contrasting** Compare the areas in which farming developed in Asia and Africa with those in which farming developed in the Americas. How were they different and similar?

### Activity

**Internet Activity** Use the Internet to research farming techniques used by early farmers. Design one scene or panel of a mural on a blank sheet of paper.

**INTERNET KEYWORD:** *prehistoric farming tools*