By 5000 years ago, people had begun farming in almost every part of the world that had moderate temperatures, enough rainfall, and fertile soil. For most of the time that humans have lived on earth, they have fed themselves by gathering wild plants and hunting wild animals. Farming marks the time when people began to grow plants and raise animals for food. They also began training animals to be of use to them. The switch to farming marks a gigantic change in how people related to the earth and their environment. Instead of simply finding and taking what nature provided, people started to help nature along. As farmers, humans started to take control of the production of food.

This shift from food gathering to food producing meant that people could now be sure of getting enough to eat. A dependable source of food allowed people to settle in one place. As food became abundant, communities began to flourish. Farming was a giant step towards the development of civilization.

**How Farming Got Started**

How and why did humans begin to farm? We weren't there, so we can only speculate. Different scientists have various theories. Here are some.

- **Spilled-Grain Hypothesis:** Neolithic women—who probably gathered the wild grain—noticed that new grain plants grew when they accidentally spilled grain seeds. They tried scattering seeds on purpose, and it worked!

- **Watching-the-Animals Hypothesis:** Animals often find plants to eat in places with water and good soil. The people who hunted animals noticed this pattern. When people stayed at these sites, the animals became tame. People started weeding and irrigating the plants so they would grow better. They also started saving the seeds of the better plants and planting them.

- **Moov'en-and-Groov'en Hypothesis:** One season, nomads liked a site so much they decided to stick around for a while. They stayed so long that they harvested a crop and then saw it grow to harvest stage again. These groups learned to grow a crop from seed to harvest and then move on.

**Think For Yourself**

1. Why was the introduction of farming such an important event in the story of human development?
2. On your own, explain why you agree with one of the hypotheses described above, or propose one of your own. Write down two facts or reasons to justify your hypothesis.
3. In a small group, discuss which hypothesis you think makes the most sense. Support your opinion with facts and reasons.

**Testing a Hypothesis About Farming**

The following article about the origins of farming was written by an historian at the Natural History Museum in England. The text of the article appears in black. Use the questions highlighted in red to help you think about how scientists justify hypotheses by finding supporting reasons and facts.
WHY FARMING BEGAN

The historian's hypothesis is stated in the first sentence. Do you agree with it? What support does the historian give for the hypothesis?

Farming probably developed in response to a shortage of food. Towards the end of the Ice Age, the human population was steadily increasing. But climatic changes led to the extinction or migration of many of the larger animals. So, in many areas, there were far fewer animals to hunt. Also, in dry areas, people would be forced to live near permanent supplies of water. What information does the historian add to support the argument?

We can imagine that the people in these settled communities must have been forced to store food for hard times. They probably stored nourishing grains and kept animals tethered as a kind of "walking food store." Such practices could have developed gradually into farming. Using the legend, locate the places where scientists have found 7000-year-old evidence of early farming. Where are these sites located in relation to the equator? The Fertile Crescent was a vast region with the perfect climate for farming. For more information on this region, see Chapter 4.

Evidence of Farming More Than 7000 Years Ago

The fundamentals of farming haven't changed in 7000 years. It involves planting crops, harvesting crops, storing crops, herding animals, feeding animals, and breeding animals. What fundamentals are illustrated in these photographs?

How does planning help farmers avoid food shortages?

Farmers must be able to plan for the future. They must store grain for planting next year, and store food to feed themselves and their animals during the winter. The historian's conclusion is in the first sentence in the following paragraph. How does the historian support the conclusion?

Farming was a very important step forward for modern humans because it was the solution to the problem of getting enough to eat. Farming produces more food from the same amount of land. So communities that adopted farming would have had an advantage over the hunters. Their populations would have been able to increase. Many of these early farming settlements were the beginning of the towns and cities of the modern world.

Farming in Jericho
Over 9000 years ago, 2000 people lived at Jericho [JAIR-ih-koh], a community near the Dead Sea. Hunting alone could not have supported such a large population, so archaeologists knew right away that these people must have been farmers. This excited the archaeologists, because Jericho was such an old site—it could be the place where farming began. The archaeologists began to unearth the evidence.

- The excavators found grains of barley that were larger than barley grains that grow wild.
- They found small goat bones. The earliest tamed goats were often poorly fed, so they were small in size.
- They found flint sickles, a tool for cutting corn. Sickles are only useful for cutting a lot of corn—wild corn grows too scattered for a sickle to be useful.
- They found a grindstone, called a quern. Similar querns are used to grind corn in some communities even today.

Try This
Meet with a partner to discuss how the historian argued a hypothesis in the article “Why Farming Began.” Use the questions in the article to guide your discussion. Take turns reading the questions, and responding.

Think For Yourself
State your own hypothesis about how farming started. If you wrote one down before you read the article, use it. Then discuss the following with a partner.

- How is your hypothesis similar to and different from the one given in the article?
- Do you think the historian did a good job of supporting a hypothesis? Explain.

Ancient Mysteries
What Was Çatal Hüyük’s Secret to Success?
Çatal Hüyük [CHAT-al HOO-yuk], in present-day Turkey, is one of the oldest cities ever found. Its ruins are over 8000 years old. The city has always puzzled archaeologists. They ask, for example, why were there no streets? You couldn’t just stroll down the street in this city, because there were no streets at all. Through 800 years of city life, homes were built in clusters. Each house was built against the neighbours’ houses. To visit a friend, you popped out of a hole in your roof, walked across the roofs of your neighbours, and then disappeared through a hole into your friend’s home. Why did the people of Çatal Hüyük build their homes this way? No one knows.

We do know about 5000 people lived together in these flat apartment buildings. What inspired these people to live together? We can only assume that life was better together than it was apart. The city bustled with activity. Excavators have found evidence of craft making and trade. Wall paintings, jewellery, cosmetics, cloth, and statues—and the oldest mirror in the world—have all appeared in the ruins. Farming seems to have been easy in Çatal Hüyük. A nearby river brought fertile soil and water for crops. Over time, the people became experts at raising food and animals, including dogs and sheep.

The people of Çatal Hüyük had few natural resources besides food, reeds, and clay. Yet they created a society that brought a good standard of living to 5000 people. What was their secret? Perhaps living so close together, they learned to co-operate. We’ll never know for sure.
Cities: Another Giant Step

Looking at how cities have developed is like seeing civilization evolve. First, the development of farming brought people together in communities. When the farmlands produced more food than the farmers needed to feed their families, some people stopped farming. They developed other skills and moved closer together, forming villages. Sometimes these villages grew into towns, and then cities.

Ancient Cities of the World
In ancient times, cities were the homes of royalty and the officials who held power. These officials usually controlled the surrounding land and decided who could farm it. Some cities grew up around a temple or other place of worship. These communities flourished because people found they could make a living in the town as shopkeepers, craftspeople, artists, teachers, priests, and officials.

Scientists love to discover the ruins of ancient cities. They want to know how ancient people lived and met their individual and common needs.

Seeing Patterns
When we look at the development of different early civilizations, we can see a pattern to the changes. From nomadic groups traveling in search of food, people formed settled, organized communities. These communities grew into cities and eventually met other groups through trade or warfare. Cities developed unique characteristics and solved their problems in different ways. Most of them, however, developed through all the stages shown in the picture series on the next page.

These deserted ruins reveal Tulum, an ancient Mayan city on the Yucatan Peninsula in Mexico. How would the city's seaside location have benefited the people?

Viewing Hint
Before you read the text and view the pictures on the next page, try a little game: Identify the different stages of community development by examining the pictures.
Nomadic bands hunted, fished, and gathered wild plants for food.

As people began to grow their own plants and animals, they built shelters and formed settled communities.

Goods produced by craftspeople were traded for food, shelter, clothing, and raw materials to make other goods.

Rivers allowed early farmers to water their lands. This irrigation ensured a regular food supply and even surpluses that could be stored.

Trade led to technology for land and sea travel which increased the contacts between cultures.

Rulers and their officials found they needed to keep records of trade and taxes. Writing and number systems evolved to help keep track of things.

Rivalries between cities prompted people to develop technology for warfare.

Some early cities still exist today. Some disappeared for unknown reasons.
Try This

1. Examine the information in the picture series on pages 62–63. Make a two-column chart. In the first column, list all the stages—or changes—you see, in order. In the second column, speculate on how each change must have affected people’s lives.

2. With a partner, discuss how the events described in the chart did or did not contribute to a more civilized life for people.

3. In your opinion, which was the most important step in getting civilization started: invention of fire, tools for hunting, the beginning of farming, technology for travel, or the beginning of cities? Remember to support your opinion.

Mesopotamia: Cradle of Civilization

Where would you build a city? In what kind of place could a lot of people live together, get the food they need, and do all the activities that always go on in cities?

If you visited the land where the world’s first cities appeared, you might be surprised. You’d find a hot, dry place—almost a desert. Only a few trees dot the landscape, and you wouldn’t see any stone or other building materials.

About five thousand years ago, an ancient farming people turned this harsh environment into an abundant garden. Their agricultural settlements grew into the world’s first great cities. And within these cities, the world’s first civilization burst into life. We call the land of this incredible people Mesopotamia [me-suh-puh-TAY-mee-uh].

In this chapter, you will see how the environment of Mesopotamia helped civilization flourish. You’ll see how contact with other peoples benefited Mesopotamians but also brought conflict to the land.

In this chapter, you’ve examined the big steps that led towards civilization. You have seen that tools played a crucial role at every step. What tool do you think had the greatest effect?