While Church reform, cathedral building, and the Crusades were taking place, other important changes were occurring in medieval society. Between 1000 and 1300, agriculture, trade, and finance made remarkable progress. Towns and cities grew. This was in part due to the growing population and territorial expansion of western Europe. The creativity unleashed during this age also sparked the growth of learning and the birth of an institution new to Europe—the university.

**A Growing Food Supply**

Europe’s great revival would have been impossible without better ways of farming. Expanding civilization requires an increased food supply. Farming was helped by a warmer climate that lasted from about 800 to 1200. Farmers began to cultivate lands in regions once too cold to grow crops. They also developed new methods to take advantage of more available land.

**Using Horsepower**

For hundreds of years, peasants depended on oxen to pull their plows. Oxen lived on the poorest straw and stubble. They were easy to keep, but they moved very slowly. Horses needed better food, but a team of horses could plow twice as much land in a day as a team of oxen.

Before they could use horses, however, people needed a new type of harness. Harnesses of the early Middle Ages went around the horse’s neck. They nearly strangled the animal when it pulled. Sometime before 900, farmers in Europe began using a new technology. This was a harness that fitted across the horse’s chest, taking pressure off its neck and windpipe. As a result, horses gradually replaced oxen for plowing and for pulling wagons.

**The Three-Field System**

At the same time, villagers began to organize their land differently. Under the old, two-field system, peasants divided the village’s land into two great fields. They planted one field with crops and left the other to lie fallow, or unplanted to avoid exhausting the soil, for a year. So if a village had 600 acres, each year farmers used 300 acres for raising food, leaving the other 300 acres fallow.

Around 800, some villages began to organize their land into three fields. With the same 600 acres, they used 200 acres for a winter crop of wheat or rye. In spring, they planted another 200 acres with oats, barley, peas, or beans. The remaining 200 acres lay fallow. Under this new, three-field system, farmers could grow crops on two-thirds of their land each year, not just on half of it. As a result, food production increased. Villagers had more to eat. The food was also better for them, because peas, beans, and lentils are good sources of vegetable protein. The result was an increase in population. People could raise larger families. Well-fed people could better resist disease and live longer. With horses, a farmer plowed more land in a day. This meant that teams cleared forests for new fields. All over Europe, axes rang as the great forests began to fall.
Trade and Finance Expand

Just as agriculture was expanding, so were trade and finance. This was in part a response to population growth. By the 1000s, artisans and craftsmen were manufacturing goods by hand for local and long-distance trade. Trade routes spread across Europe from Flanders to Italy. Italian merchant ships traveled the Mediterranean to ports in Byzantium such as Constantinople. They also traveled to Muslim ports along the North African coast. Trade routes were opened to Asia, in part by the Crusades.

Fairs and Trade Most trade took place in towns. Peasants from nearby manors traveled to town on fair days, hauling items to trade. Cloth was the most common trade item. Other items included bacon, salt, honey, cheese, wine, leather, dyes, knives, and ropes. Such local fairs met all the needs of daily life for a small community. No longer was everything produced on a self-sufficient manor.

The Guilds Great fairs were made possible by the guilds, which controlled the crafts and trade. A guild was an association of people who worked at the same occupation. It was similar to a union today. In medieval towns, guilds controlled all wages and prices in their craft. Each guild usually met in its own guild hall. The first guilds were formed by merchants who controlled all the trade in their town.

As towns grew, skilled artisans—such as wheelwrights, glassmakers, winemakers, tailors, and druggists—began craft guilds. Guilds enforced standards of quality. Bakers, for example, were required to sell loaves of bread of a standard size and weight and at a fair price.

Only masters of the trade could be guild members. Becoming a master wasn’t easy. First a child was apprenticed for five to nine years to a master to learn the trade. Then the apprentice became a journeyman and could go to work for wages. As the final step, a journeyman made an item—whether it was a shoe, a barrel, or a sword—that qualified as a “master piece.” Journeymen whose product met guild standards were welcomed into the guild as masters.

A Financial Revolution This medieval world of fairs and guilds created a need for large amounts of cash. Before a merchant could make a profit selling his goods at a fair, he first had to purchase goods from distant places. Usually, this meant he had to borrow money, but the Church forbade Christians from lending money at interest, a sin called usury. Where, then, did merchants go for a loan?

Many of Europe’s Jews lived in the growing towns and were moneylenders. Moneylending was one of the few ways of making a living allowed them. In this largely Christian world, Jews were kept on the fringes of society. Guilds excluded them. They had to live in segregated parts of towns called ghettos. Because Jews were forbidden to hold land, they had never become part of the feudal system. Over time, the Church relaxed its rule on usury. Banking became an important business, especially in Italy.

Urban Splendor Reborn

All over Europe, trade blossomed, and better farming methods caused a spurt of population growth. Scholars estimate that between 1000 and 1150, the population of western Europe rose from around 30 million to about 42 million. Towns grew and flourished. Compared to great cities like Constantinople, European towns were primitive and tiny. Europe’s largest city, Paris, probably had no more than 60,000 people by the year 1200. A typical town in medieval Europe had only about 1,500 to 2,500 people.

Nevertheless, these small communities became a powerful force for change.
Trade and Towns Grow Together  By the later Middle Ages, trade was the very lifeblood of the new towns, which sprang up at ports, at crossroads, on hilltops, and along rivers. All over Europe, as trade grew, towns swelled with people. The excitement and bustle of towns drew many people. They were no longer content with their old feudal existence. Even though they were legally bound to their lord’s manor, many serfs ran away. As people left life on the manor for life in towns, they challenged the traditional ways of feudal society in which everyone had his place. They did not return to the manor, and towns grew rapidly.

Most medieval towns developed haphazardly. Streets were narrow, filled with horses, pigs, oxen, and their refuse. With no sewers, most people dumped household waste, both animal and human, into the street in front of the house. Most people never bathed, and their houses lacked fresh air, light, and clean water. Because houses were built of wood with thatched roofs, they were a constant fire hazard. All in all, there were many drawbacks to living in a medieval town. Nonetheless, many people chose to move to such towns to pursue the economic and social opportunities they offered.

The Revival of Learning  Growing trade and growing cities brought a new interest in learning. At the center of the growth of learning stood a new European institution—the university. Athens, Alexandria, Rome, and Constantinople had all been centers of learning, but never before had the world seen the university as it arose in western Europe.

Scholars and Writers  The word *university* originally designated a group of scholars meeting wherever they could. People, not buildings, made up the medieval university. Universities arose at Paris and at Bologna, Italy, by the end of the 1100s. Others followed at the English town of Oxford and at Salerno, Italy. Most students were the sons of burghers or well-to-do artisans. For most students, the goal was a job in government or the Church. Earning a bachelor’s degree in theology might take 5 to 7 years in school; becoming a master of theology took at least 12 years of study.

At a time when serious scholars and writers were writing in Latin, a few remarkable poets began using a lively *vernacular*, or the everyday language of their homeland. Some of these writers wrote masterpieces that are still read today. **Dante Alighieri** wrote *The Divine Comedy* (1321) in Italian. **Geoffrey Chaucer** wrote *The Canterbury Tales* (about 1387–1400) in English. **Christine de Pisan** wrote *The City of Ladies* (1405) in French. Since most people couldn’t read or understand Latin, these writers brought literature to
The Formation of Western Europe

many people. For example, Chaucer’s *Canterbury Tales* describes a pilgrimage to the shrine of St. Thomas à Becket. It was read aloud at gatherings:

**A VOICE FROM THE PAST**

It happened in that season that one day
In Southwark, at *The Tabard*, as I lay
Ready to go on pilgrimage and start
For Canterbury, most devout at heart,
At night there came into that hostelry
Some nine and twenty in a company
Of sundry folk happening then to fall
In fellowship, and they were pilgrims all
That towards Canterbury meant to ride.

*Geoffrey Chaucer*, the Prologue to *The Canterbury Tales*, translated by Nevill Coghill

**The Muslim Connection**  The revival of learning sparked European interest in the works of ancient scholars. At the same time, the growth of trade was accelerated by the Crusades. This brought Europeans into contact with Muslims and Byzantines. These people had preserved in their libraries the writings of the old Greek philosophers. In the 1100s, Christian scholars from Europe began visiting Muslim libraries in Spain. Few Western scholars knew Greek. Jewish scholars translated Arabic versions of works by Aristotle and other Greek writers into Latin. At first, Europeans acquired a huge new body of knowledge. This included science, philosophy, law, mathematics, and other fields. In addition, the Crusaders learned from, and brought back to Europe, superior Muslim technology in ships, navigation, and weapons.

**Aquinas and Medieval Philosophy**  Christian scholars were excited by the Greek writings. Could a Christian scholar use Aristotle’s logical approach to truth and still keep faith with the Bible? In the mid-1200s, the scholar *Thomas Aquinas* (uh-KWY-nuhs) argued that the most basic religious truths could be proved by logical argument. Between 1267 and 1273, Aquinas wrote the *Summa Theologica*. Aquinas’s great work, influenced by Aristotle, combined ancient Greek thought with the Christian thought of his time. Aquinas and his fellow scholars who met at the great universities were known as schoolmen, or *scholastics*. The scholastics used their knowledge of Aristotle to debate many issues of their time. Their teachings on law and government influenced the thinking of western Europeans, particularly the English and French. Accordingly, they began to develop democratic institutions and traditions.

**Vocabulary**

**pilgrimage:** a journey to a sacred place or shrine.

**Spotlight On**

**Arab Scholars**  A number of Islamic scholars had a great influence on European thought. The woodcut from 1584 above shows Ibn Sina, known in the West as Avicenna. He was a Persian philosopher, astronomer, poet, and physician. A book of his that greatly affected Western thought was *The Cure*, an interpretation of the philosophy of Aristotle. This work, translated into Latin, influenced the scholastics.

Another scholar was Ibn Rushd, known in the West as Averroes, who lived in Córdoba, Spain. He achieved fame for his commentaries on the works of Aristotle. These works were translated from Arabic into Latin and were used in universities throughout Christian Europe in the 1200s. Ibn Rushd’s work greatly influenced Western thinkers.

**Think Through History**

D. Supporting Opinions  Why do you suppose that Aristotle was called “the master of those who know” and “the philosopher” in medieval times?