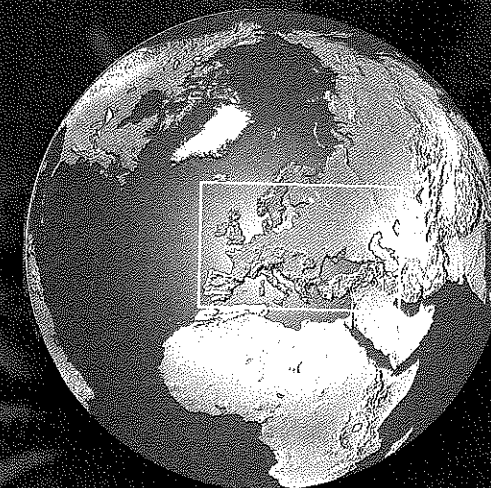


# UNIT 8

## Europe Enters the Modern Age

- |            |                           |
|------------|---------------------------|
| Chapter 33 | The Age of Exploration    |
| Chapter 34 | The Scientific Revolution |
| Chapter 35 | The Enlightenment         |





# Setting the Stage

## Europe Enters the Modern Age

In the last unit, you learned about the Renaissance and the Reformation. In this unit, you'll learn about Europe during the early modern age. This period lasted from the 1400s to the 1700s.

The early modern age was a time of major discoveries and new ways of thinking. It began with a series of voyages by European explorers during the 1400s, 1500s, and early 1600s. Historians call this time the Age of Exploration.

Before the 1400s, Europeans had only limited knowledge of other continents. Beginning in about 1418, several countries sent explorers by sea to other parts of the world. Portugal and Spain led the way. They were followed

by England, France, and the Netherlands. Their journeys took explorers to Africa, Asia, and North and South America. Their discoveries changed Europeans' knowledge of the world forever.

Countries raced to take advantage of this new knowledge. They sought riches through trade. They also claimed large parts of the world for themselves. As they competed with one another, Europeans had an enormous impact on people living in distant lands.

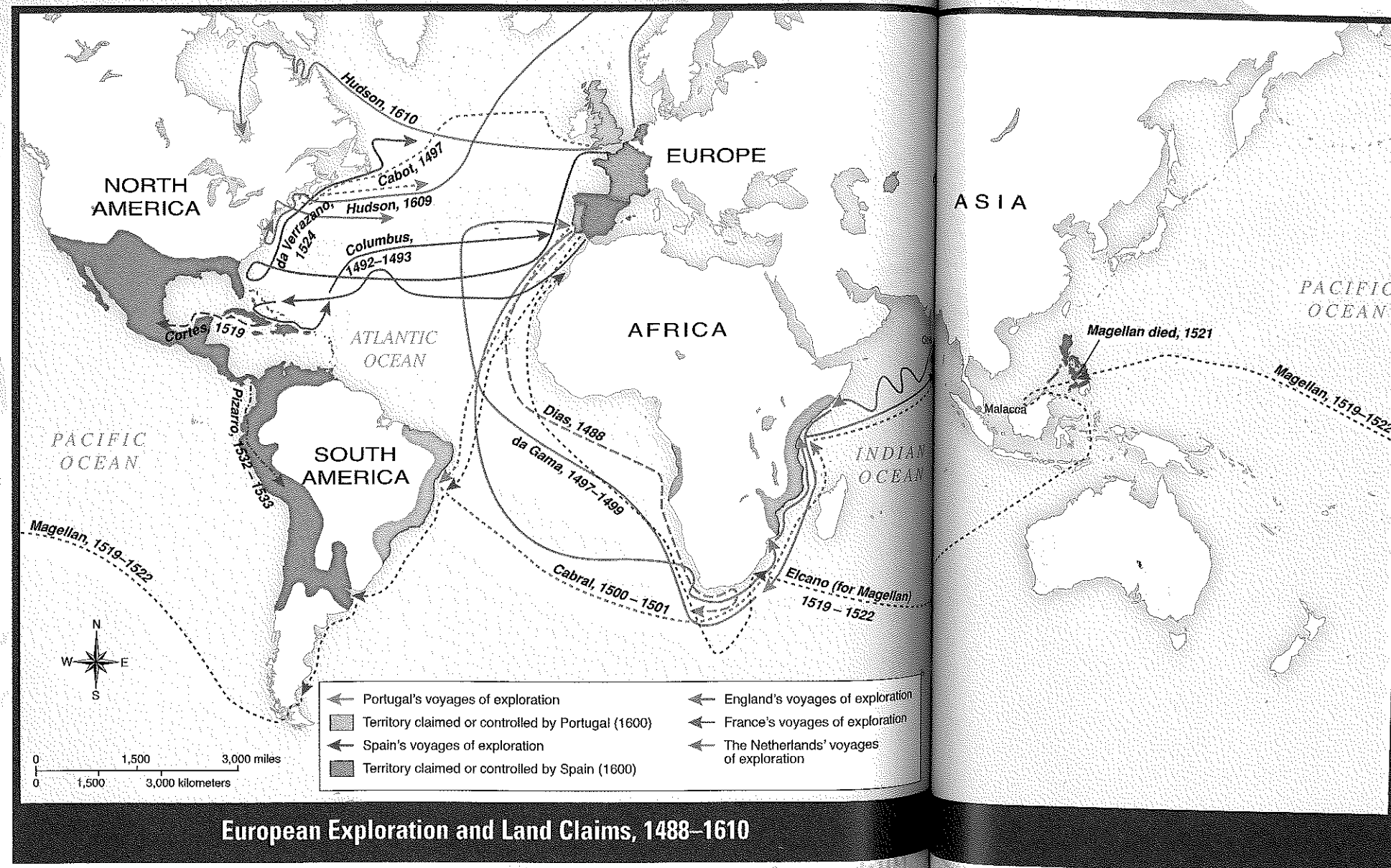
A second great change during this period was the Scientific Revolution. Between 1500 and 1700, scientists used observations, experiments, and logic

to make dramatic discoveries. For example, Isaac Newton formulated the laws of gravity. These laws explained both the movement of physical objects on Earth and the motions of planets in the heavens. The methods used by Newton and other scientists led to rapid progress in many fields.

Advances in science helped pave the way for a period called the Enlightenment. The Enlightenment began during the 1600s. It was a time of optimistic faith in progress based on reason (rational thinking). In fact, it is often called the Age of Reason.

Enlightenment thinkers wanted to apply observation and reason to problems in human society. This approach led to new ideas about government, human nature, and people's rights as human beings.

The far-reaching changes of the early modern age helped to shape the world we live in today. Let's begin our study of this important time with the voyages of discovery that took place during the Age of Exploration.





◀ Explorer Christopher Columbus plants Spain's flag in the Americas.

# The Age of Exploration

### 33.1 Introduction

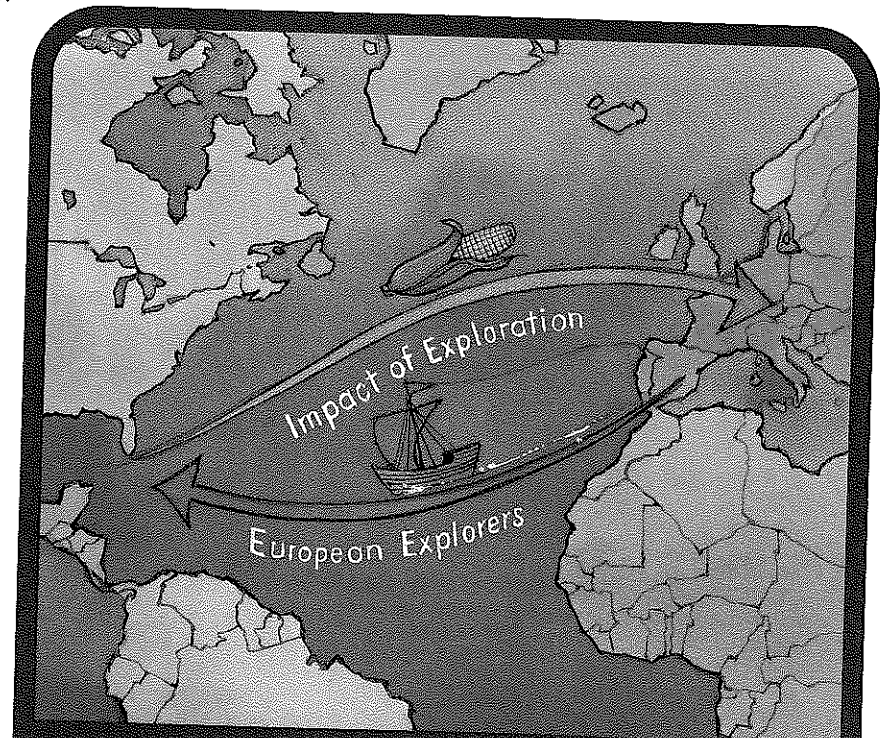
In this chapter, you will learn about the Age of Exploration. This period of discovery lasted from about 1418 to 1620. During this time, European **explorers** made many daring voyages that changed world history.

A major reason for these voyages was the desire to find sea routes to east Asia, which Europeans called the Indies. When Christopher Columbus sailed west across the Atlantic Ocean, he was looking for such a route. Instead, he landed in the Americas. Columbus thought he had reached the Indies. In time, Europeans would realize that he had found what they called the **"New World."** European nations soon rushed to claim lands in the Americas for themselves.

Early explorers often suffered terrible hardships. In 1520, Ferdinand Magellan set out with three ships to cross the Pacific Ocean from South America. He had guessed, correctly, that the Indies lay on the other side of the Pacific. But Magellan had no idea how vast the ocean really was.

He thought his crew would be sailing for a few weeks at most. Instead, the crossing took three months. While the ships were still at sea, the crew ran out of food. One sailor wrote about this terrible time. "We ate biscuit... swarming with worms.... We drank yellow water that had been putrid [rotten] for days... and often we ate sawdust from boards."

Why did explorers brave such dangers? In this chapter, you will discover some of the reasons for the Age of Exploration. Then you will learn about the voyages of explorers from Portugal, Spain, and other European countries. You will also learn about the **impact** of their discoveries on Europe and on the lands they explored.



Use this map as a graphic organizer to help you learn more about the European explorers and their routes and discoveries.



### 33.2 Reasons for the Age of Exploration

Why did European exploration begin to flourish in the 1400s? Two main reasons stand out. First, Europeans of this time had several motives for exploring the world. Second, advances in knowledge and technology helped make voyages of discovery possible.

**Motives for Exploration** For early explorers, one of the main motives for exploration was the desire to find new trade routes to Asia. By the 1400s, merchants and crusaders had brought many goods to Europe from Africa, the Middle East, and Asia. Demand for these goods increased the desire for trade.

Europeans were especially interested in spices from Asia. They had learned to use spices to help preserve food during winter and to cover up the taste of food that was no longer fresh.

Trade with the East, however, was expensive and difficult. Muslims and Italians controlled the flow of trade. Muslim traders carried goods to the east coast of the Mediterranean Sea. Italian merchants then brought the goods to Europe. Problems arose when Muslim rulers sometimes closed the trade routes from Asia to Europe. Also, the goods went through many hands, and each trading party raised their price.

European monarchs and merchants wanted to break the hold that Muslims and Italians had on trade. One way to do so was to find a sea route to Asia. Portuguese sailors looked for a route that went around Africa. Christopher Columbus tried to reach Asia by sailing west across the Atlantic.

Mapmakers created better, more accurate maps by using navigational tools and information from explorers.



Other motives also came into play. Many people were excited by the opportunity for new knowledge. Explorers saw the chance to earn fame and glory as well as wealth. Some craved adventure. And as new lands were discovered, nations wanted to claim the lands' riches for themselves.

A final motive for exploration was the desire to spread Christianity. As you learned in Unit 7, both Protestant and Catholic nations were eager to make new converts. Missionaries followed the path blazed by explorers, sometimes using force to bring native peoples into their faiths.

**Advances in Knowledge and Technology** The Age of Exploration began in the midst of the Renaissance. As you have learned, the Renaissance was a time of new learning. A number of advances made it easier for explorers to venture into the unknown.

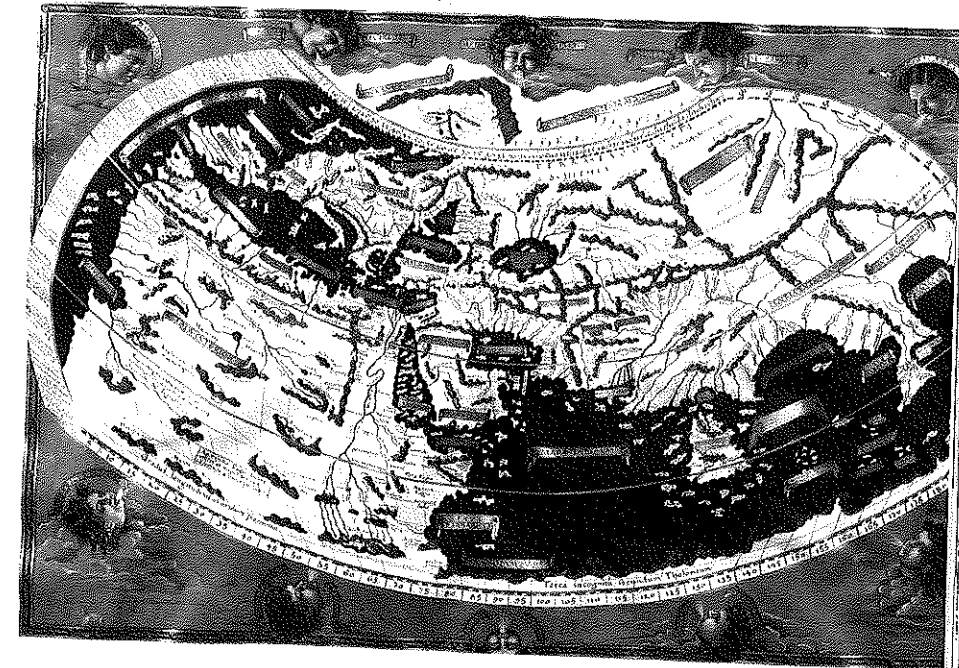
One key advance was in **cartography**, the art and science of mapmaking. In the early 1400s, an Italian scholar translated an ancient book called *Guide to Geography* from Greek into Latin. The book had been written by Ptolemy in the second century C.E. Printed copies of the book inspired new interest in cartography. European mapmakers used Ptolemy's work to draw more accurate maps.

Discoveries by explorers gave mapmakers new information to work with. The result was a dramatic change in Europeans' view of the world. By the 1500s, globes showed Earth as a sphere, or ball. In 1507, a German cartographer made the first map that clearly showed North and South America separated from Asia. In turn, better maps helped explorers by making navigation easier. The most important Renaissance geographer, Gerardus Mercator, created maps using improved lines of **longitude** and **latitude**. Mercator's mapmaking technique was a great help to navigators.

An improved ship design also helped explorers. By the 1400s, Portuguese and Spanish shipbuilders were making **caravels**. These ships were small, fast, and easy to maneuver. Their shallow bottoms made it easier for explorers to travel along coastlines where the water was not deep. Caravels also used lateen (triangular) sails, an idea borrowed from Muslim ships. These sails could be positioned to take advantage of the wind no matter which way it blew.

Along with better ships, new navigational tools helped sailors to travel more safely on the open seas. By the end of the 15th century, the compass was much improved. Sailors used compasses to find their bearing, or direction of travel. The astrolabe, which you read about in Unit 2, helped sailors figure out their distance north or south from the equator.

Finally, improved weapons gave Europeans a huge advantage over the people they met in their explorations. Sailors could fire their cannons at targets near the shore without leaving their ships. On land, the weapons of native peoples often were no match for European guns, armor, and horses.



Europe's Age of Exploration produced important advances in cartography and navigation. This 15th-century map of the world is drawn according to the work of 2nd-century Greek geographer Ptolemy.

**cartography** the art and science of mapmaking  
**longitude** a measure of how far east or west a place on Earth is from an imaginary line that runs between the North and South Poles  
**latitude** a measure of how far north or south a place on Earth is from the equator  
**caravel** a light sailing ship that is easy to maneuver and can sail in shallow water





Prince Henry the Navigator encouraged Portuguese exploration and began a school of navigation.



Vasco da Gama

### 33.3 Portugal Begins the Age of Exploration

The Age of Exploration began in Portugal. This small country is located on the southwestern tip of Europe. Its rulers sent explorers first to nearby Africa and then around the world.

**Key Explorers** The key figure in early Portuguese exploration was Prince Henry, the son of King John I. Nicknamed “the Navigator,” Henry was not an explorer himself. Instead, he encouraged exploration and directed many important expeditions.

Beginning in about 1418, Henry sent explorers to sea almost every year. He also started a school of navigation where sailors and mapmakers could learn their trades. His cartographers made new maps based on the information captains brought back.

Henry’s early expeditions focused on the west coast of Africa. He wanted to continue the crusades against the Muslims, find gold, and take part in trade.

Gradually, Portuguese explorers made their way farther and farther south. In 1488, Bartolomeu Dias became the first European to go around the southern tip of Africa. Later, Dias died in a storm at sea.

In July 1497, Vasco da Gama set sail with four ships to chart a sea route to India. Da Gama’s ships rounded Africa’s southern tip and then sailed up the east coast of the continent. With the help of a sailor who knew the route to India, they crossed the Indian Ocean.

Da Gama arrived in the port of Calicut, India, in May 1498. There he obtained a load of cinnamon and pepper. On the return trip to Portugal, da Gama lost half of his ships. Many of his crewmembers died of hunger or disease. Still, the valuable cargo he brought back paid for the voyage many times over. His trip made the Portuguese even more eager to trade directly with Indian merchants.

In 1500, Pedro Cabral set sail for India with a fleet of 13 ships. Cabral first sailed southwest to avoid calms (areas where there are no winds to fill sails). But he sailed so far west that he reached the east coast of present-day Brazil. After claiming this land for Portugal, he

sailed east and rounded Africa. Arriving in Calicut, he established a trading post and signed trading treaties. He returned to Portugal in June 1501 after battling several Muslim ships.

#### The Impact of Portuguese Exploration

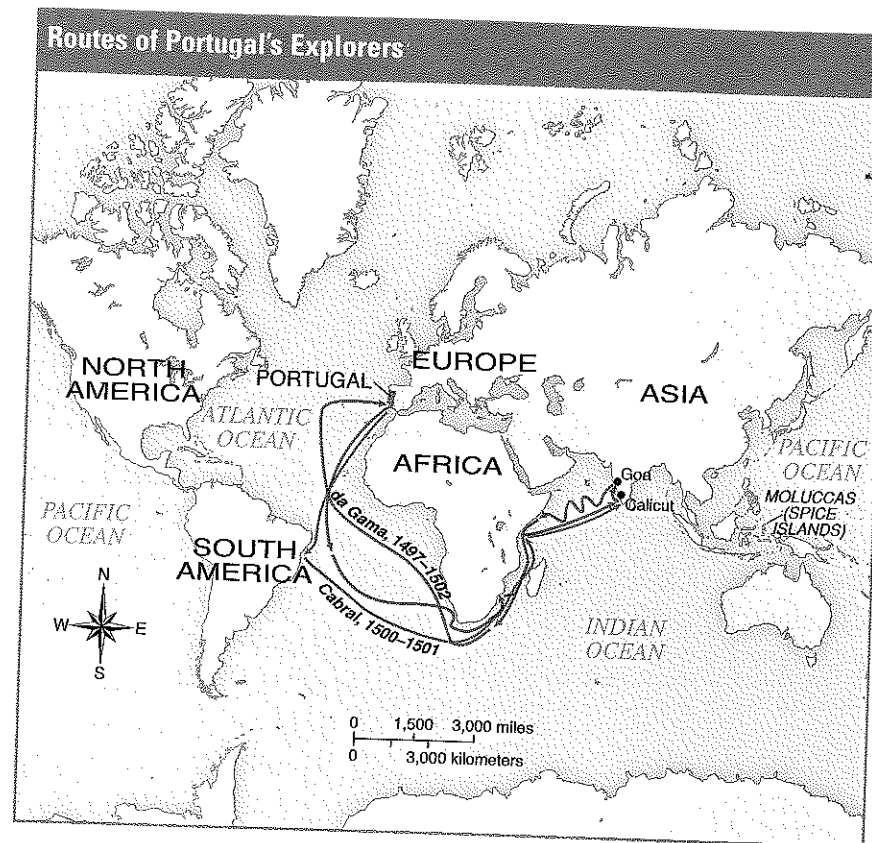
Portugal’s explorers changed Europeans’ understanding of the world in several ways. They explored the coasts of Africa and brought back gold and slaves. They also found a sea route to India. From India, explorers brought back spices like cinnamon and pepper and goods such as porcelain, incense, jewels, and silk.

After Cabral’s voyage, the Portuguese took control of the eastern sea routes to Asia. They seized the seaport of Goa in India and built forts there. They attacked towns on the east coast of Africa. They also set their sights on the Moluccas, or Spice Islands, in what is now Indonesia. In 1511, they attacked the main port of the islands and killed the Muslim defenders. The captain of this expedition explained what was at stake. If Portugal could take the spice trade away from Muslim traders, he wrote, then Cairo and Makkah “will be ruined.” As for Italian merchants, “Venice will receive no spices unless her merchants go to buy them in Portugal.”

Portugal’s control of the Indian Ocean broke the hold of Muslims and Italians on Asian trade. The prices of Asian goods like spices and fabrics dropped, and more people in Europe could afford to buy them.

During the 1500s, Portugal also began to establish colonies in Brazil. The native people of Brazil suffered greatly as a result. The Portuguese tried to get the native people to give up their religion and convert to Christianity. They also forced them to work on sugar plantations. Missionaries sometimes tried to protect them from abuse, but countless numbers died from overwork and European diseases. Others fled into the interior of Brazil.

The colonization of Brazil also had an impact on Africa. As the native population of Brazil decreased, the Portuguese needed more laborers. Starting in the mid 1500s, they turned to Africa. Over the next 300 years, ships brought millions of enslaved West Africans to Brazil.



**colony** a country or an area ruled by another country  
**plantation** a large farm where crops such as sugar, rubber, or tobacco are grown



Pedro Cabral



Explorer Christopher Columbus convinced King Ferdinand and Queen Isabella of Spain to support his westward voyages.

### 33.4 Spain's Early Explorations

In the late 1400s, King Ferdinand and Queen Isabella of Spain were determined to make their country a powerful force in Europe. One way to do this was to sponsor explorations and claim new lands for Spain.

**Key Explorers** It was Ferdinand and Isabella who sponsored the voyages of Christopher Columbus. The Italian-born Columbus thought that the Indies, or eastern Asia, lay on the other side of the Atlantic Ocean. He believed sailing west would be the easiest route to the Indies.

When Columbus failed to win Portuguese support for his idea, he turned to Spain. Ferdinand and Isabella agreed to pay for the risky voyage. They wanted to beat Portugal in the race to control the wealth of Asia. They also wanted to spread Christianity.

In August 1492, three ships left Spain under Columbus's command. For the crew, venturing into the open ocean was frightening. As the weeks went by, some of the men began to fear they would never see Spain again.

Then, on October 12, a lookout cried "Land!" Columbus went ashore on an island in the Caribbean Sea. Thinking he had reached the Indies, Columbus claimed the island for Spain.

For three months, Columbus and his men explored nearby islands with the help of native islanders, whom the Spanish called Taino. Thinking they were in the Indies, the Spanish soon called all the local people "Indians."

In March 1493, Columbus arrived back in Spain. He proudly reported that he had reached Asia. Over the next 10 years, he made three more voyages to what he called the West Indies. He died in Spain in 1506, still insisting that he had sailed to Asia.

Many Europeans, however, believed that Columbus had actually found a land mass that lay between Europe and Asia. One of these people was Ferdinand Magellan, a Portuguese explorer.

Magellan believed he could sail west to the Indies if he found a **strait**, or channel, through South America. The strait would connect the Atlantic and Pacific Oceans, allowing ships to continue on to Asia.

Magellan won Spain's backing for a voyage to find the strait. In August 1519, he set sail with five ships and about 250 men.



Christopher Columbus

**strait** a narrow body of water that connects two seas

Magellan looked for the strait all along South America's east coast. He finally found it at the southern tip of the continent. Today it is called the Strait of Magellan.

After passing through the strait, Magellan reached the Pacific Ocean in November 1520. It took another three months to cross the Pacific. During the crossing, Magellan's men ran out of food and were plagued by disease and thirst. They reached an island in the western Pacific just in time.

Continuing west, Magellan visited the Philippines. There he became involved in a battle between two local chiefs. In April 1521, Magellan was killed in the fighting.

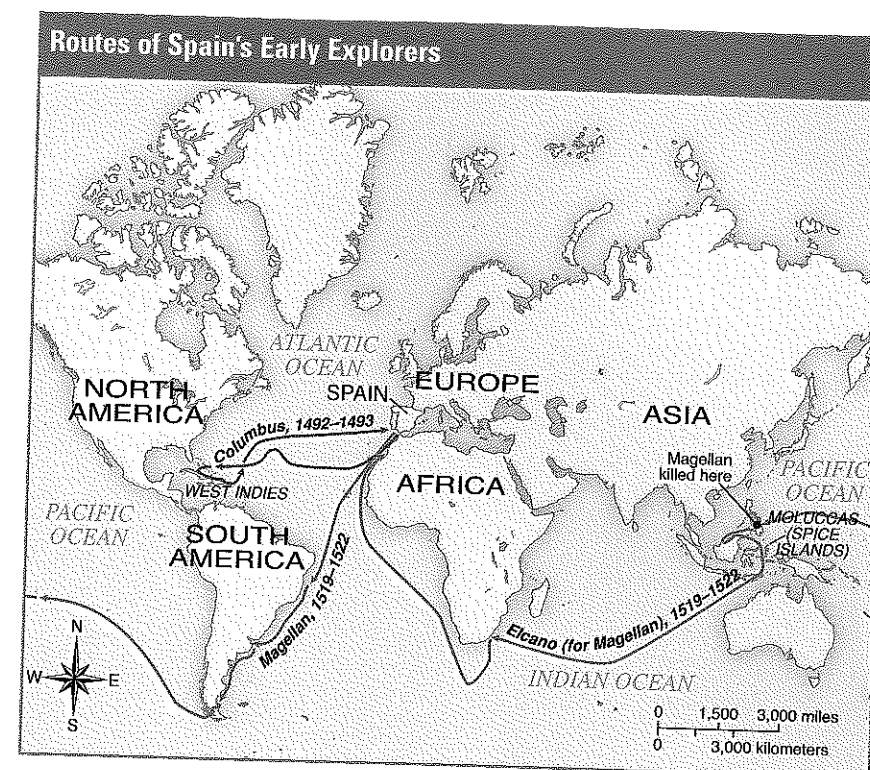
Magellan's crew sailed on to the Spice Islands. Three years after the expedition began, the only ship to survive the expedition returned to Spain, loaded with cloves. The 18 sailors on board were the first people to **circumnavigate** the globe.

**The Impact of Early Spanish Exploration** Early Spanish exploration changed Europeans' view of the world. The voyages of Columbus revealed the existence of the Americas. Magellan's expedition opened up a westward route to the Indies. It showed that it was possible to sail completely around the world. And it proved that Columbus had indeed found a "New World"—one they hadn't realized was there.

Columbus's voyages were the beginning of Spanish settlement in the West Indies. Spain earned great wealth from its settlements. Settlers mined for precious minerals and started sugar plantations. The Spanish also sent Europe new crops, such as sweet potatoes and pineapples.

For the native people of the West Indies, Spanish settlement was devastating. Priests forced many of them to become Christians. Native people were forced to work as slaves in the mines and on the plantations. When the Spanish arrived, perhaps 1 or 2 million Taino lived on the islands. Within 50 years, fewer than 500 were left. The rest had died of starvation, overwork, or European diseases.

Like Portugal, Spain looked to West Africa for new sources of laborers. From 1518 through the mid 1800s, the Spanish brought millions of enslaved Africans to work in their American colonies.



**circumnavigate** to travel completely around something, such as Earth



Ferdinand Magellan





When Spanish explorer Cortes first entered Mexico, he was welcomed by the Aztec ruler, Montezuma.



Hernan Cortes

### 33.5 Later Spanish Exploration and Conquest

After Columbus's voyages, Spain was eager to claim lands in the New World. To explore and conquer "New Spain," the Spanish turned to adventurers called *conquistadors* (conquerors). The conquistadors were allowed to establish settlements and seize the wealth of natives. In return, the Spanish government claimed one fifth of the treasures they found.

**Key Explorers** In 1519, Spanish explorer Hernan Cortes and a band of conquistadors set out to explore present-day Mexico. From native people, Cortes learned about the Aztecs. As you discovered in Unit 6, the Aztecs had built a large and wealthy empire in Mexico.

With the help of a native woman named Malinche, Cortes and his men reached the Aztec capital, Tenochtitlan. The Aztec ruler, Montezuma, welcomed the Spanish with great honors. Determined to break the power of the Aztecs, Cortes took Montezuma hostage.

Cortes now controlled the Aztec capital. In 1520, he left Tenochtitlan to battle a rival Spanish force. While he was gone, a group of conquistadors attacked the Aztecs in the midst of a religious celebration. In response, the Aztecs rose up against the Spanish. The soldiers had to fight their way out of the city. Many of them were killed during the escape.

The following year, Cortes mounted a siege of the city, aided by thousands of native allies who resented Aztec rule. The Aztecs ran out of food and water, yet they fought desperately. After several months, the Spanish captured their leader, and Aztec resistance collapsed. The city was in ruins. The mighty Aztec Empire was no more.

Four factors contributed to the defeat of the Aztec Empire. First, Aztec legend had told of the coming of a white-skinned god. When Cortes appeared, the Aztecs welcomed him because they thought he might be their god Quetzalcoatl. Second, Cortes was able to make allies of the Aztecs' native enemies. Third, their horses, armor, and superior weapons gave the Spanish an advantage in battle. The Aztecs had never seen any of these things before. Fourth, the Spanish carried diseases that caused deadly **epidemics** among the Aztecs.

Aztec riches inspired Spanish conquistadors to continue their search for gold. In the 1520s, Francisco Pizarro received permission from Spain to conquer the Inca Empire in South America. As you learned in Unit 6, the Incas ruled an empire that ran along most of the Andes Mountains. By the time Pizarro arrived, however, a civil war had weakened the empire.

In April 1532, the Inca emperor, Atahualpa, greeted the Spanish as guests. Following Cortes's example, Pizarro launched a surprise attack and kidnapped the emperor. Although the Incas paid a roomful of gold and silver for Atahualpa's ransom, the Spanish killed him the following year. Without their leader, the Incas' empire quickly fell apart.

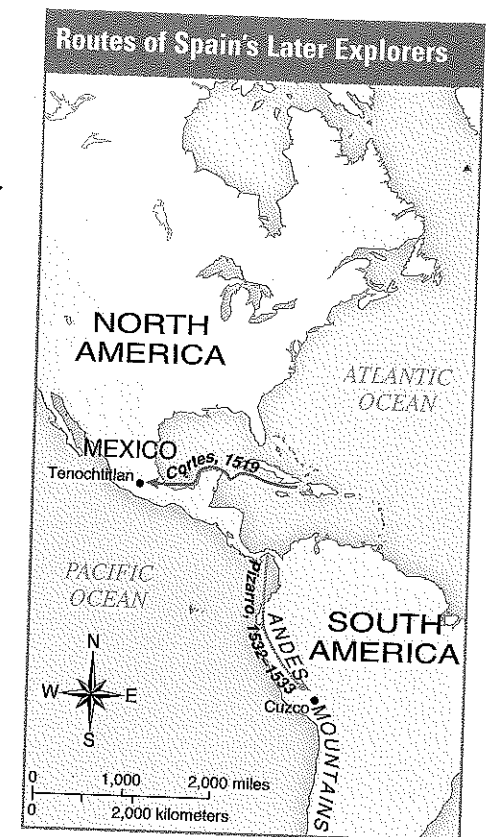
#### The Impact of Later Spanish Exploration and Conquest

The explorations and conquests of the conquistadors transformed Spain. The Spanish rapidly expanded foreign trade and overseas colonization. For a time, wealth from the Americas made Spain one of the world's richest and most powerful countries.

Besides gold and silver, ships brought corn and potatoes from the New World to Spain. These crops grew well in Europe. By increasing the food supply, they helped spur a population boom. Conquistadors also introduced Europeans to new luxury items, such as chocolate and tobacco.

In the long run, gold and silver from the Americas hurt Spain's economy. **Inflation**, or an increase in the supply of money compared to goods, led to higher prices. Monarchs and the wealthy spent their riches wastefully instead of building up Spain's industries.

The Spanish conquests had a major impact on the New World. The Spanish introduced new animals to the Americas, such as horses, cattle, sheep, and pigs. But they also destroyed two advanced civilizations. The Aztecs and Incas lost much of their culture along with their wealth. Many became laborers for the Spanish. Millions died from disease. In Mexico, for example, there were about 25 million native people in 1519. By 1605, this number had dwindled to 1 million.



**epidemic** an outbreak of a disease that affects many people within a geographic area  
**inflation** an increase in the supply of money compared to goods, resulting in higher prices



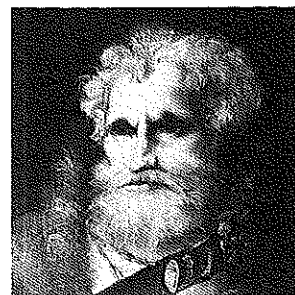
Francisco Pizarro





English explorer Henry Hudson traded with native North Americans.

**northwest passage** a water route through North America connecting the Atlantic and Pacific Oceans



John Cabot

### 33.6 European Exploration of North America

Spain and Portugal dominated the early years of exploration. Rulers in rival nations wanted their own share of trade and new lands in the Americas. Soon England, France, and the Netherlands all sent expeditions to North America.

**Key Explorers** Explorers often sailed for any country that would pay for their voyages. The Italian sailor John Cabot made England's first voyage of discovery. Cabot believed he could reach the Indies by sailing northwest across the Atlantic. In 1497, he landed in what is now Canada. Believing he had reached the northeast coast of Asia, he claimed the region for England.

The next year, Cabot set out on another voyage with five ships. The fate of this expedition is uncertain. Cabot may have returned to England, or he may have been lost at sea.

Another Italian, Giovanni da Verrazano, sailed under the French flag. In 1524, da

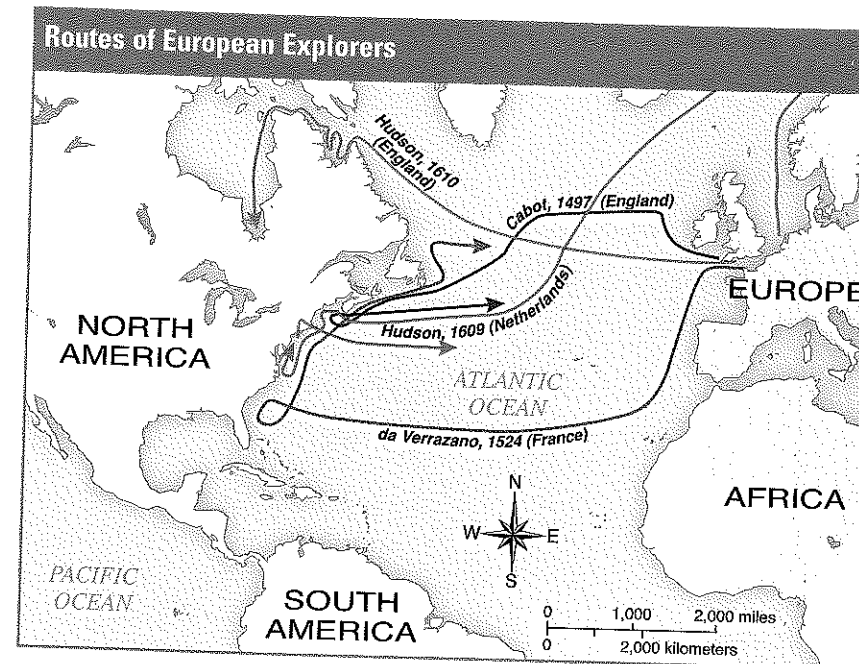
Verrazano explored the Atlantic coast from present-day North Carolina to Canada. His voyage gave France its first claims in the Americas. Like many explorers, however, he met an unhappy end. On a later trip to the West Indies, he was killed and eaten by native people.

Sailing for the Netherlands, English explorer Henry Hudson journeyed to North America in 1609. Hudson wanted to find a **northwest passage** through North America to the Pacific Ocean. Such a water route would allow ships to sail from Europe to Asia without entering waters controlled by Spain.

Hudson did not find a northwest passage, but he did explore what is now called the Hudson River. Twenty years later, Dutch settlers (people from the Netherlands) began arriving in the Hudson River valley.

The next year Hudson tried again, this time under the flag of his native England. Searching farther north, he sailed into a large bay in Canada that is now called Hudson Bay. He spent three months looking for an outlet to the Pacific, but there was none.

After a hard winter in the icy bay, some of Hudson's crew rebelled. They set him, his son, and seven loyal followers adrift in a small boat. Hudson and the other castaways were never seen again. Hudson's voyage, however, laid the basis for later English claims in Canada.



#### The Impact of European Exploration of North America

Unlike the conquistadors in the south, northern explorers did not find gold and other treasure. As a result, there was less interest at first in starting colonies.

Canada's shores did offer rich resources of cod and other fish. Within a few years of Cabot's trip, fishing boats regularly visited the region. Europeans were also interested in trading with Native Americans for other skins, whale oil, and beaver and fox furs. By the 1600s, Europeans had set up a number of trading posts in North America.

English exploration also contributed to a war between England and Spain. As English ships roamed the seas, some captains, nicknamed "sea dogs," began raiding Spanish ports and ships to take their gold. Between 1577 and 1580, Francis Drake sailed around the world. He also claimed part of what is now California for England, ignoring Spain's claims to the area.

The English raids added to other tensions between England and Spain. In 1588, King Philip II of Spain sent an armada, or fleet, to invade England. With 130 heavily armed vessels and about 31,000 men, the Spanish Armada seemed an unbeatable force. But the smaller English fleet was fast and well armed. Their guns had a longer range, so they could attack from a safe distance. After several battles, a number of the armada's ships had been sunk or driven ashore. The rest turned around but faced terrible storms on the way home. Fewer than half of the ships made it back to Spain.

The defeat of the Spanish Armada marked the start of a shift in power in Europe. By 1630, Spain no longer dominated the continent. With Spain's decline, other countries—particularly England and the Netherlands—took an active role in trade and colonization around the world.



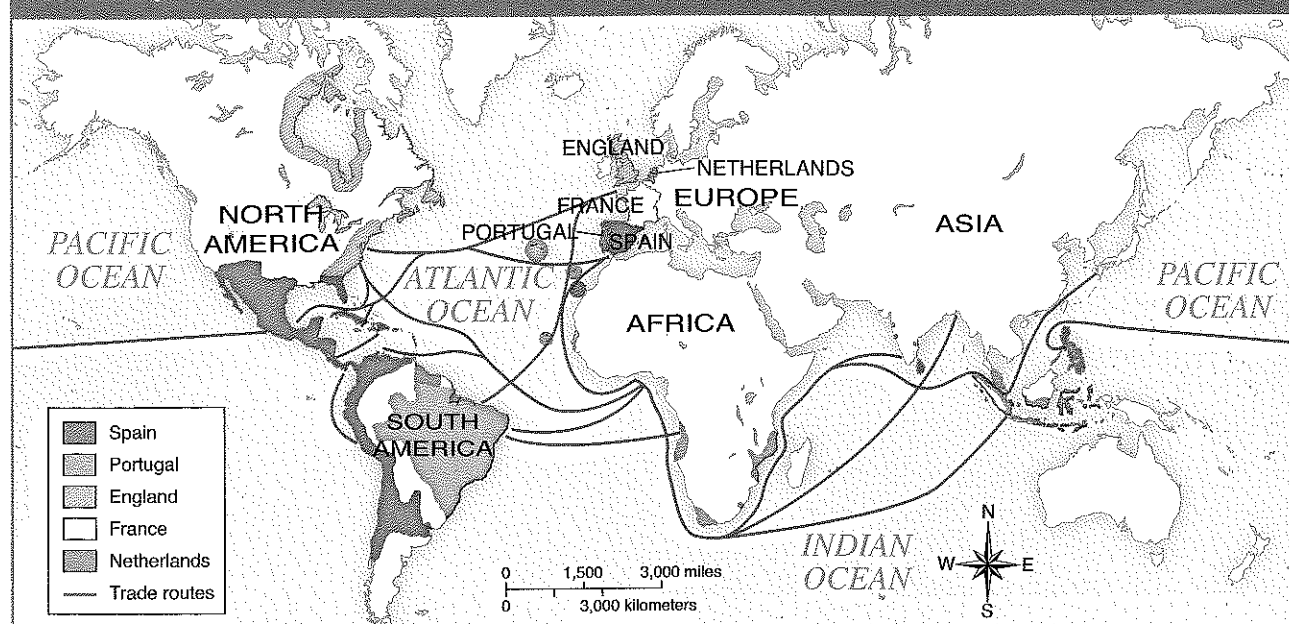
Giovanni da Verrazano



Henry Hudson



Major European Trade Routes, About 1750



### 33.7 The Impact of Exploration on European Commerce and Economies

The voyages of explorers had a dramatic impact on European commerce and economies. As a result of exploration, more goods, raw materials, and precious metals entered Europe. Mapmakers carefully charted trade routes and the locations of newly discovered lands. By the 1700s, European ships traveled trade routes that spanned the globe. New centers of commerce developed in the port cities of the Netherlands and England, which had colonies and trading posts in faraway lands.

Exploration and trade contributed to the growth of **capitalism**. This economic system is based on investing money for profit. Merchants gained great wealth by trading and selling goods from around the world. Many of them used their profits to finance still more voyages and to start trading companies. Other people began investing money in these companies and shared in the profits. Soon this type of shared ownership was applied to other kinds of business.

Another aspect of the capitalist economy concerned the way people exchanged goods and services. Money became more important as precious metals flowed into Europe. Instead of having a fixed price, items were sold for prices that were set by the open market. This meant that the price of an item depended on how much of the item was available and how many people wanted to buy it. Sellers could charge high prices for scarce items that many people wanted. If the supply of an item was large and few people wanted it, sellers lowered the price. This kind of system is called a **market economy**.

Labor, too, was given a money value. Increasingly, people began working for hire instead of directly providing for their own needs.

**capitalism** an economic system based on investment of money (capital) for profit  
**market economy** an economy in which prices are determined by the buying and selling decisions of individuals in the marketplace

Merchants hired people to work in their own cottages, turning raw materials from overseas into finished products. This growing **cottage industry** was especially important in the making of textiles. Often entire families worked at home, spinning wool into thread or weaving thread into cloth. Cottage industry was a step toward the system of factories operated by capitalists in later centuries.

A final result of exploration was a new economic policy called **mercantilism**. European rulers believed that piling up wealth was the best way to build their countries' power. For this reason, they tried to reduce the things they bought from other countries and increase the items they sold.

Having colonies was a key part of this policy. Nations looked to their colonies to supply raw materials for their industries. They profited by turning the materials into finished goods that they could sell to other countries and to their own colonies. To protect the valuable trade with their colonies, rulers often forbade colonists from trading with other nations.

### 33.8 Chapter Summary

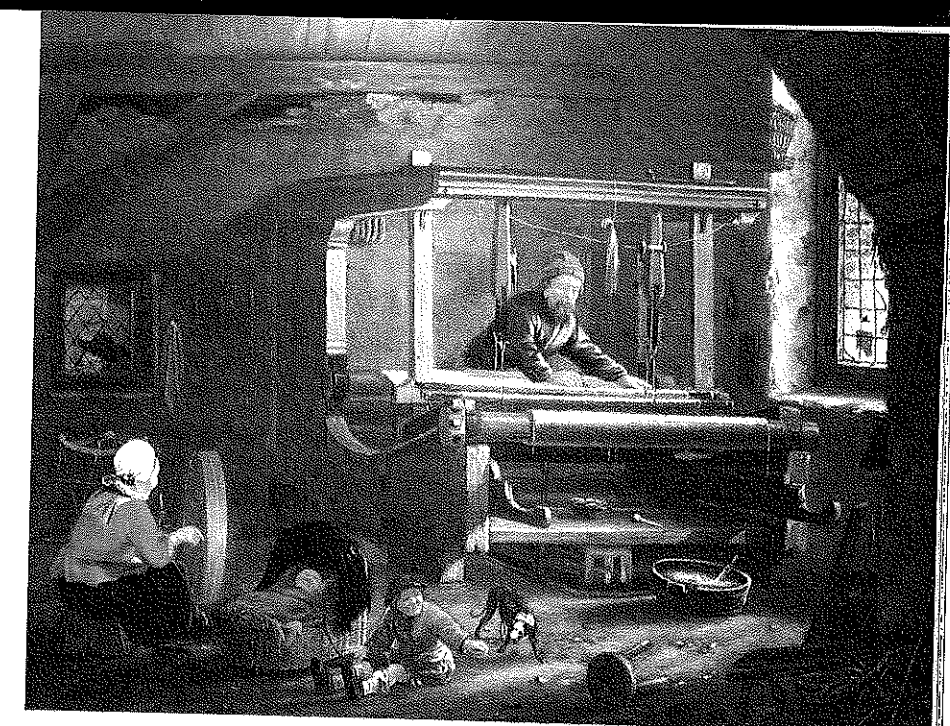
In this chapter, you learned about the Age of Exploration. Beginning in the 1400s, European explorers went on great voyages of discovery. Their voyages had a major impact on Europe and on the lands they explored.

European explorers sought wealth, land, knowledge, and adventure. They also wanted to spread Christianity. A number of advances in knowledge and technology made their journeys possible.

The Portuguese explored Africa's coasts, charted a sea route to Asia, and claimed Brazil. The voyages of Christopher Columbus led to Spanish colonization in the Americas. England, France, and the Netherlands sent explorers to North America.

Millions of people living in the Americas died as a result of European colonization and conquest. The Inca and Aztec Empires were destroyed. West Africans suffered greatly when they were brought to the Americas to work as slaves.

The Age of Exploration vastly increased Europeans' knowledge of the world. In the next chapter, you will learn about another source of new knowledge: the Scientific Revolution.



Weaving cloth became a growing cottage industry as families set up looms and workshops in their homes.

**cottage industry** a small-scale business in which people work mostly at home  
**mercantilism** an economic policy by which nations try to gather as much gold and silver as possible by controlling trade and establishing colonies