Chapter 32 – The Age of Exploration

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 the world.

A major reason for these voyages was the desire to find ocean 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 reached the Americas. Columbus thought he had reached the Indies. In time, Europeans would realize that Columbus had found what they called the “New World.” The Indies in the Atlantic became the West Indies. European nations soon rushed to claim lands in the Americas and elsewhere.

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 Asia lay west of South America. But Magellan had no idea how vast the Pacific Ocean was. He thought his crew would sail 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, nearly starving to death. One sailor wrote about the 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. You will learn about the voyages of explorers from Portugal, Spain, and other European countries. You will also learn how the Age of Exploration changed the way people viewed the world.
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 to make the Age of Exploration 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 difficult and very expensive. Muslims and Italians controlled the flow of goods. Muslim traders carried goods to the east coast of the Mediterranean Sea. Italian merchants then brought the goods into 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 the 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.

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. 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 beyond Europe. Both Protestant and Catholic nations were eager to make new converts. Missionaries of both faiths followed the paths blazed by explorers.

**Advances in Knowledge and Technology** The Age of Exploration began during the Renaissance. The Renaissance was a time of new learning. A number of advances during that time 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 was written by the thinker Ptolemy (TOL-eh-mee) in the 2nd century C.E. Printed copies of the book inspired new interest in cartography. European mapmakers used Ptolemy’s work as a basis for drawing more accurate maps.

Discoveries by explorers gave mapmakers new information with which to work. The result was a dramatic change in Europeans’ view of the world. By the 1500s, Europeans made globes, showing Earth as a sphere. In 1507, a German cartographer made the first map that clearly showed North and South America as separate from Asia.

In turn, better maps made navigation easier. The most important Renaissance geographer, Gerardus Mercator (mer-KAY-tur), 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 a new type of ship called a caravel. These ships were small, fast, and easy to maneuver. Their special bottoms made it easier for explorers to travel along coastlines where the water was not deep. Caravels also used lateen sails, a triangular style adapted 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 travel more safely on the open seas. By the end of the 1400s, the compass was much improved. Sailors used compasses to find their bearing, or direction of travel. The astrolabe helped sailors determine 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.
Section 3 – Portuguese Exploration

Key Portuguese Explorers  The major figure in early Portuguese exploration was Prince Henry, the son of King John I of Portugal. Nicknamed “the Navigator,” Prince Henry was not an explorer himself. Instead, he encouraged exploration and planned 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 ship 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 Asian trade.

Gradually, Portuguese explorers made their way farther and farther south. In 1488, Bartolomeu Dias became the first European to sail around the southern tip of Africa.

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 from there, they were able to across 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. 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 (kah-BRAHL) set sail for India with a fleet of 13 ships. Cabral first sailed southwest to avoid 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 back to the east and rounded Africa. Arriving in Calicut, he established a trading post and signed trade treaties. He returned to Portugal in June 1501.
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 enslaved Africans. They also found a sea route to India. From India, explorers brought back spices, such as cinnamon and pepper, and other 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 (GOH-uh) 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 Muslims and Italians had on Asian trade. With the increased competition, prices of Asian goods—such as 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 forced them to work on sugar plantations, or large farms. They also tried to get them to give up their religion and convert to Christianity. Missionaries sometimes tried to protect them from abuse, but countless numbers of native peoples died from overwork and from European diseases. Others fled into the interior of Brazil.
The colonization of Brazil also had a negative 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.

Section 4 – Early Spanish Exploration

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

**Key Explorers for Spain**  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 reach it.

When Columbus failed to win Portuguese support for his idea, Ferdinand and Isabella agreed to pay for the risky voyage. They wanted to beat Portugal in the race to control the trade 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 sighted land. Columbus went ashore on an island in the Caribbean Sea, and claimed it for Spain.

For three months, Columbus and his men explored nearby islands with the help of native islanders, whom the Spanish called Taino (TY-noh). 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 ten years, he made three more voyages to what he called the 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 was Ferdinand Magellan (muh-JEL-uhn), 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 support for a voyage to find the strait. In August 1519, he set sail with five ships and about two hundred and fifty men.

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. Continuing west, Magellan visited the Philippines. There he became involved in a conflict 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. The 18 sailors on board were the first people to travel completely around Earth.

**Routes of Early Spanish Explorations**

**The Impact of Early Spanish Exploration**  The early Spanish explorations changed Europeans’ view of the world a great deal. The voyages of Christopher 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. It also proved that Columbus had indeed found a “New World”—one that Europeans hadn’t realized was there. Columbus’s voyages marked 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 brought new crops, such as sweet potatoes and pineapples, to Europe.

For the native people of the West Indies, however, Spanish settlement was extremely **detrimental**. The Spanish forced native people to work as slaves in the mines and on the plantations. Priests forced many of them to become Christians. When the Spanish arrived, perhaps one or two million Taino lived on the islands. Within fifty years, fewer than five hundred Taino were left. The rest had died of starvation, overwork, or European diseases.

Like Portugal, Spain looked to West Africa for new laborers. From 1518 through the mid-1800s, the Spanish brought millions of enslaved Africans to work in their American colonies.
After Columbus’s voyages, Spain was eager to claim even more lands in the New World. To explore and conquer "New Spain," the Spanish turned to adventurers called conquistadors, or conquerors. The conquistadors were allowed to establish settlements and seize the wealth of natives. In return, the Spanish government claimed some of the treasures they found.

**Key Explorers** In 1519, Spanish explorer Hernán Cortés (er–NAHN koor–TEZ), with and a band of fellow conquistadors, set out to explore present-day Mexico. Native people in Mexico told Cortés about the Aztecs. The Aztecs had built a large and wealthy empire in Mexico.

With the help of a native woman named Malinche (mah–LIN–chay), Cortés and his men reached the Aztec capital, Tenochtitlán (tay–nawh–tee–TLAHN). The Aztec ruler, Moctezuma II, welcomed the Spanish with great honors. Determined to break the power of the Aztecs, Cortés took Moctezuma hostage.

Cortés now controlled the Aztec capital. In 1520, he left the city of Tenochtitlán to battle a rival Spanish force. While he was away, a group of conquistadors attacked the Aztecs in the middle 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, Cortés 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 the Aztec 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 predicted the arrival of a white-skinned god. When Cortés appeared, the Aztecs welcomed him because they thought he might be this god, Quetzalcoatl. Second, Cortés was able to make allies of the Aztecs’ enemies. Third, their horses, armor, and superior weapons gave the Spanish an advantage in battle. 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. The Incas ruled an empire that extended throughout most of the Andes Mountains. By the time Pizarro arrived, however, a civil war had weakened that empire. In April 1532, the Incan emperor, Atahualpa (ah–tuh–WAHL–puh), greeted the Spanish as guests. Following Cortés’s example, Pizarro launched a surprise attack and kidnapped the emperor. Although the Incas paid a roomful of gold and silver in ransom, the Spanish killed Atahualpa. Without their leader, the Inca 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 from the Americas brought corn and potatoes to Spain. These crops grew well in Europe. The increased food supply helped spur a population boom. Conquistadors also introduced Europeans to new luxury items, such as chocolate.

In the long run, however, gold and silver from the Americas hurt Spain’s economy. Inflation, or an increase in the supply of money, led to a loss of its value. It now cost people a great deal more to buy goods with the devalued money. Additionally, monarchs and the wealthy spent their riches on luxuries, instead of building 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 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 twenty-five million native people in 1519. By 1605, this number had dwindled to one million.