

Underwater archaeologists investigate the remains of a 17th-century ship.



Why do you think divers might use measurements?



What do you think these tools help divers to do?



What might this diver be writing?

How and Why Europeans Came to the New World

4

What did explorers take to and from the New World during the Age of Exploration?

4.1 Introduction

In Chapter 3, you read about American Indian cultural regions. In this chapter, you will learn how and why Europeans set out for the lands across the Atlantic, which they called the **New World**. Of course, to American Indians this was not a new world. Their tribes had lived here for thousands of years.

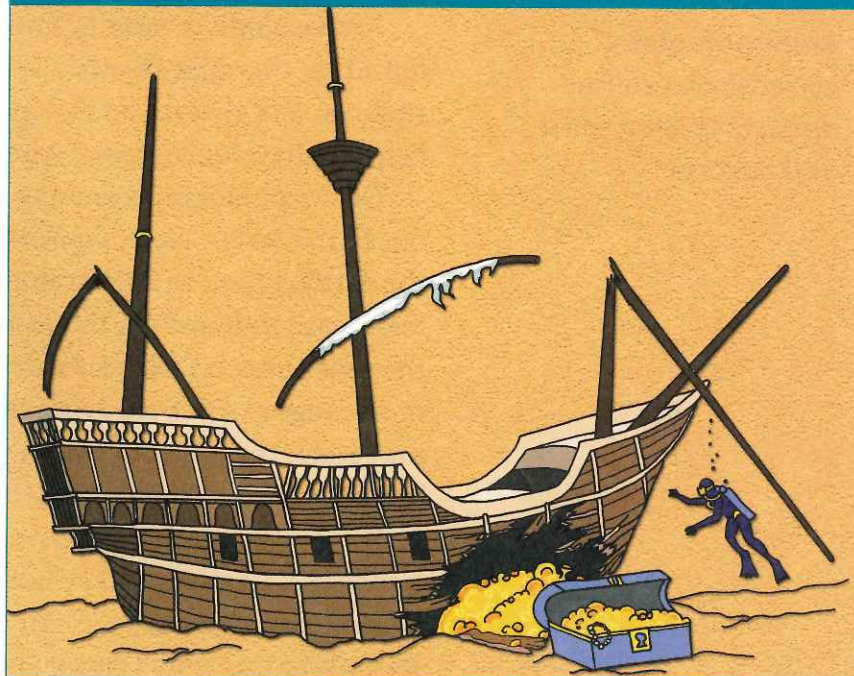
The European **Age of Exploration** began in the late 1400s. The earliest **explorers** did not set out to find new continents. They sailed unknown seas, looking for routes to Asia. Europeans wanted spices and silks from Asia. Merchants from Italy and the eastern Mediterranean controlled this trade. To share in this business, other countries sought their own trade routes. Thus, the Age of Exploration was born.

Few people in the 1400s had traveled far from Europe. Then, in 1492, Christopher Columbus sailed to North America. Other explorers followed. They used special navigation tools to help them cross the ocean. They brought back things of value.

Sometimes, ships were lost at sea. Today, scientists search for these sunken ships. They study artifacts that remain at the wrecks. These objects tell us about the explorers' expeditions.

As you read this chapter, picture yourself as a diver examining a sunken ship like this one. What objects might you find? What clues would these objects give you about how and why Europeans came to North America?

Examining a Sunken Ship





This is a team of scientists called archaeologists. They record and measure pottery that divers have brought to the surface.

archaeologist a scientist who studies artifacts to learn about past cultures

4.2 Underwater Archaeology

Underwater **archaeologists** study sunken ships. Some study the ships that explorers used to come to the Americas. How do these scientists find a sunken ship? They look at old ship records kept by European merchants. They read tales told by shipwreck survivors. They use new machines and methods to locate a ship's anchors or cannons. For example, sonar uses sound waves to detect sunken objects.

Archaeologists want to know the position of each artifact found on the ship. Divers use cables to mark off the site in squares. The divers use this grid to note exact location. This helps archaeologists learn who used the objects and how.

Divers photograph and tag each artifact. Then they bring it out of the water. Next, someone records and measures it. Finally, the artifact goes to a laboratory where it is studied. Everyone takes care in handling the artifacts. Metal artifacts are usually the most intact. Objects made of plant or animal products are more fragile. After studying hundreds of artifacts, archaeologists may learn the name of the ship, where it was going, and why. They might also figure out who was on board.

It can take years to find a sunken ship. Bringing up the remains can take weeks. Understanding what the objects mean is another long process. Read on to learn how artifacts give clues about how and why Europeans sailed to the New World.

4.3 Ocean Crossing

When sailors cross the ocean, they need a way to stay on course. They have no landmarks to guide them in the open sea. Explorers in the late 1400s and in the 1500s used astrolabes to find their position.

An **astrolabe** is a circular piece of metal with marks around its edges. A bar attached to it can be rotated about the center as a pointer. A sailor would hold the astrolabe by a loop at the top. He would then tilt the bar so it lined up against the sun, the North Star, or another known star. He would measure the latitude of his ship by measuring the angle of the star above the horizon (where Earth and sky meet). The angle would tell him how far north or south the ship was from the equator. Astrolabes enabled explorers to sail accurately by day or night.

4.4 Directions

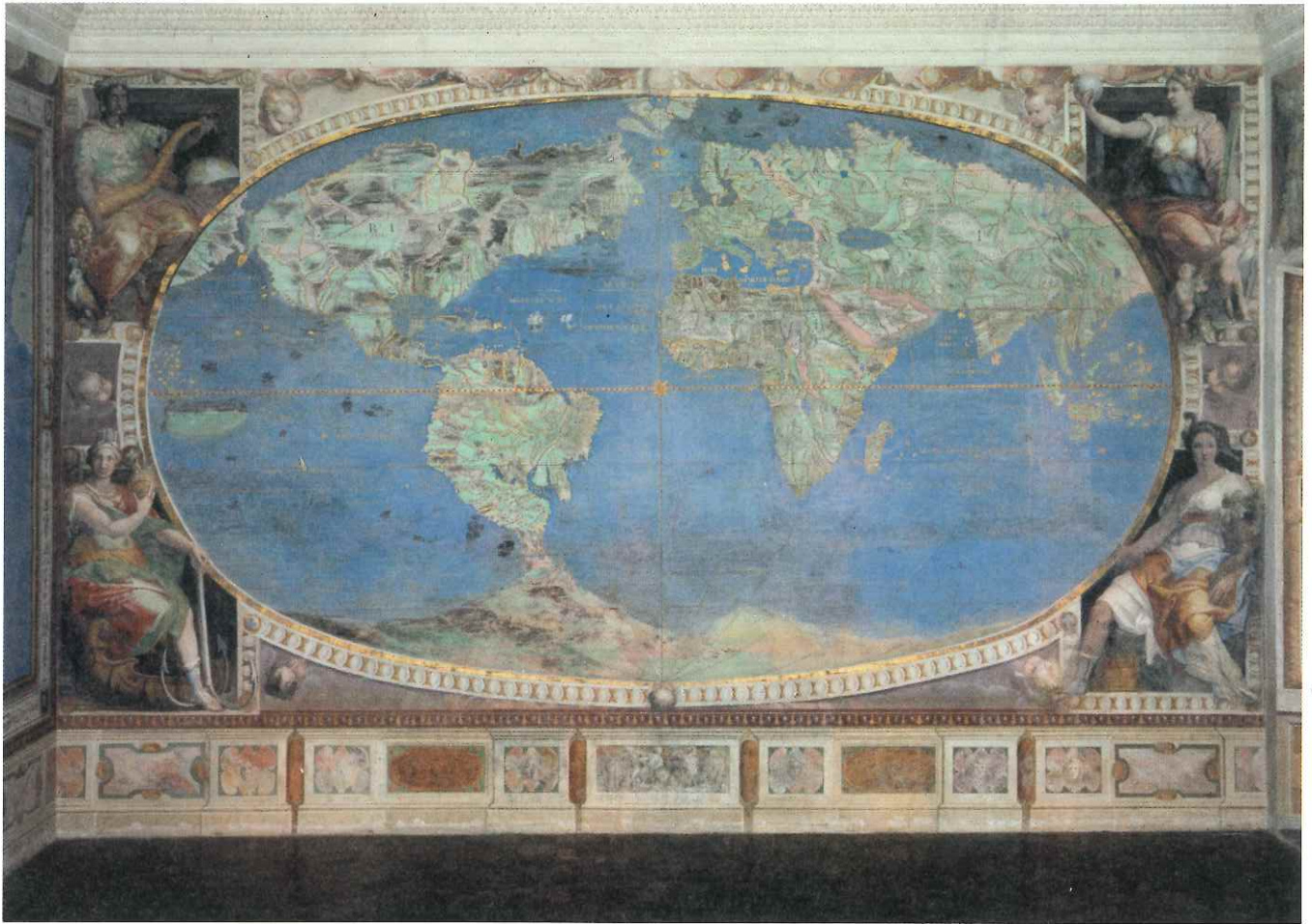
European explorers used another tool for figuring out direction—a compass. We still use this tool today. The compass has a magnetic needle balanced on a small metal post. The needle is allowed to spin freely. The needle's point is attracted by the powerful magnetic field that lines up close to the North Pole. So the compass needle always points north.

If a ship's navigator knew which direction was north, he could find the other directions. South is the opposite of north. When facing north, east is to the right and west is to the left. A compass did not tell the navigator where he was. But it did show which direction the ship was heading, even when it sailed through fog or in total darkness.

astrolabe an early scientific tool used to observe and calculate the position of the sun and other stars

The compass (left) and the astrolabe (right) were used in the 1500s. These tools helped explorers sail across the Atlantic Ocean to the New World.





This world map is a mural that was painted in 1574. It covers an entire wall of an Italian palace. Can you find North America? South America?

the Americas the land masses of North America, Central America, and South America

4.5 Maps

Maps are drawings of the shapes of bodies of land and water. They also show where key physical features are. Maps use a scale, which shows how the distance on the map relates to the actual distance on Earth. Ocean maps show such features as rocky shores and safe ports. Navigational charts are maps that show where winds blow and ocean currents flow. European explorers carried these maps and maps of the places to which they journeyed.

Mapmakers in Europe got new information from sailors, explorers, and scientists. They added these details to their maps. In the 1400s, mapmakers knew that the world was round. But before Columbus sailed, they didn't know about the New World. No one realized how wide the Atlantic Ocean was. For centuries after Columbus's trip, maps of **the Americas** still had many blank spots. They showed places that remained unknown. Often, maps also had drawings of imaginary sea monsters, such as undersea dragons.

4.6 Claimed Lands

During the Age of Exploration, rulers wanted to spread their power to the New World. Sometimes they paid for the explorers' ships and crews. These explorers carried flags or banners to honor their kings and queens. Spanish ships often flew a flag that showed a cross. Their flags also had the letter "F" for King Ferdinand and a "Y" for Queen Ysabel ("Isabella" in English). Once explorers reached a new land, they planted a flag to claim, or take, that land for their country.

Flags have always been symbols of the power of countries and their rulers. And more power was what King Ferdinand and Queen Isabella wanted. Gaining more land and natural resources would strengthen their kingdom of Spain.

4.7 Religious Beliefs

Christianity began in the Middle East. It reached Europe almost 2,000 years ago. This was in the time of the Roman Empire. Later, Europeans spread this religion to other parts of the world.

Christians in Europe belonged either to the Roman Catholic Church or to Protestant churches. Many believed that all people should share their beliefs. Catholic rulers sent priests and armies to other lands. Part of their mission was to convert people to the Catholic Church.

In the 1500s, explorers from Europe were Christians. Many carried a Bible with them. The Bible contains the stories and teachings of the Christian faith. It has two parts. The Old Testament contains writings from the Jewish religion. The New Testament contains writings by the followers of Jesus Christ.



European explorers brought along Bibles. This one was written in Latin and published in 1455.

4.8 Wealth

Europeans counted wealth in gold and silver. They made their most valuable coins from these metals. In the late 1400s, Spain had just fought a costly war. So its king and queen wanted to build up their country's supply of gold and silver. They hoped that the explorers they sent to the New World would bring back these precious metals.

In Mexico and South America, the Spanish found gold and silver. They forced American Indians to work in mines as slaves. The Spanish turned the gold and silver ore from the mines into bars, coins, and other valuable objects. Ships carried these riches back to Spain.

4.9 New Foods

However, some of the most valuable things explorers found and brought back were new foods. These are natural products, not artifacts. Historical records tell us about them. For example, all over the New World, American Indians grew different types of corn. They roasted, boiled, and popped the corn. They ground it into flour. The explorers liked this new food. It was as healthful and had as many uses as wheat, but its seeds were bigger and tastier.

New foods from the Americas changed what people ate around the world. Some vegetables that came from the Americas include potatoes, sweet potatoes, beans, and squash. Fruits such as tomatoes and pineapple were first grown by American Indians, too. As these foods spread, people began to eat a more healthful diet. Populations grew in many places. Do you like chocolate? American Indians were the first to grow cacao, from which chocolate is made. They used it in drinks and in medicines.

American Indians introduced European explorers to corn (below) and to beans in cacao pods (below right).



4.10 Cash Crops

Explorers saw a tall, leafy plant called tobacco. It grew throughout the Americas. American Indians dried the leaves. Some people smoked them in pipes or in cigars. Others chewed tobacco or inhaled it as a powder, which Europeans called snuff. In most tribes, men were addicted to tobacco. They thought it was good for their health. Tobacco was a part of religious and peacemaking ceremonies. Few women used tobacco.

Explorers took tobacco back to Europe. Some thought it was a medicine. Many Europeans became addicted to it. Soon, tobacco was in great demand. It grew well in the New World. American colonists planted large fields of tobacco. They sold the crop to Europeans. Tobacco became a valuable **cash crop**. The money colonists earned from tobacco sales helped them buy goods from Europe.



Tobacco is a New World crop that Europeans soon became addicted to.

cash crop a crop that is grown in large quantities for sale

Summary

In this chapter, you read about artifacts that might have been found on ships that sank during the Age of Exploration. These objects give us clues about how and why Europeans came to the New World.

You learned about navigation tools of that time. These tools helped explorers sail across the Atlantic Ocean. You also found out why some explorers set out for the New World. They wanted to spread Christianity. They also hoped to gain new lands and wealth for their countries.

Finally, you read about the valuable cargo of New World plants that explorers brought back to Europe. People in Europe soon began to eat new foods, such as corn and potatoes. As tobacco became popular, the colonists grew it as a cash crop that they sold to Europeans.

In the next pages, you will read more about why European nations became interested in the Americas.

Reading Further

4

Changes in Europe Spur Exploration

The late 1400s and the early 1500s brought great changes to Europe. One old religious conflict ended. Then a new one began. How did Europe's conflicts help spur the Age of Exploration?

Walking up the hill, King Ferdinand and Queen Isabella smiled. Before them stood the magnificent palaces of Granada. This elegant city had been a stronghold of Muslim Spain for centuries. Christians had tried to regain control of the land many times. At last, in 1492, Ferdinand and Isabella succeeded. Their armies had defeated the Muslims and retaken Spain. Now the city was theirs. Happily, they accepted the keys to their new home. Boabdil, the Muslim ruler of the city, gave them over with a sigh.

This painting shows King Ferdinand and Queen Isabella accepting control of Granada from the leader of the Muslims in 1492.

Muslims are people who follow the religion of Islam. The Muslim world began in Southwest Asia. But it quickly spread. In the 700s, the Muslims crossed the Mediterranean Sea. They gained control of the land we now call Spain.

The Muslims built a great center of culture and learning in Spain. Much of the rest of Europe, however, followed the Christian religion. Many European Christians were troubled by the Muslim presence. They did not want to allow the practice of other religions in the region. Groups of Christians fought to drive the Muslims out of Spain off and on for centuries.

But finally, Isabella and Ferdinand had completed the reconquest of Spain. All the lands of Spain were now under Christian rule.



The Queen Meets Columbus

Not long after taking control, Queen Isabella met a newcomer to her land. He came from Genoa, Italy. His name was Christopher Columbus and he needed her help.

Columbus wanted to sail ships west across the Atlantic Ocean in search of a new trade route to Asia. This would help Spain expand its trade in spices and other goods from China and the islands of the East. Columbus also hoped to find and bring back gold and silver. Both the route and the riches could make Spain more powerful.

But exploration by sea was still a new idea in 1492. Sailors from the country of Portugal had sailed as far as the coast of Africa. Nobody really knew what lay beyond the Atlantic Ocean.

Many people in Spain did not take Columbus's ideas seriously. Queen Isabella rejected his plans twice. But the reconquest of Spain had inspired her. She now ruled over a unified, Christian Spain—a great and powerful **nation-state**.

Her victory over the Muslims filled her with deep religious feeling. She was determined to continue to spread her Catholic faith beyond Spain. This was one reason that Columbus's ideas finally caught her attention.

Queen Isabella met with Columbus. She finally decided that Columbus's voyage could mean new wealth and a chance to spread Spain's rule and religion to other lands.

Queen Isabella agreed to support Columbus. She and her husband gave him ships and money. Now, Columbus could make the journey to search out new places to claim for Spain. He would seek to bring more people to God—and more power and wealth to Spain. A new age of discovery had begun.



Columbus showed his plans to Queen Isabella and King Ferdinand. The queen gave Columbus ships and funds for his journey. She wanted to spread the Catholic religion and to gain wealth for Spain.

nation-state an independent country whose people mostly share a common identity

Religious Wars in Europe

Twenty-five years had passed since Christopher Columbus set sail. A man named Martin Luther stood before a Catholic church. In his hands was a document. It included 95 reasons why he questioned the authority of the Catholic Church. Some say that Luther nailed his questions to the church door. Europe—and the world—would never be the same.

In 1517, there was only one type of Christian religion in Europe—the Catholic Church. Luther's questions challenged this Church.

Luther hoped to improve, or reform, the Church. For this reason, he is known as the founder of a movement called the Reformation. Luther's actions started a great conflict. Catholic Church leaders rejected his complaints. But many people agreed with Luther. Some of them left the Catholic Church. They formed new churches and became known as Protestants. The term *Protestant* comes from the word *protest*.

The Reformation divided Europe. At that time, people did not easily accept religious differences. Catholic leaders launched a movement called the Counter Reformation. The word *counter* means "against." Kings and queens waged war with one another over religion. Many people were forced to follow their rulers' beliefs. Europe in the 1500s became a bloody battleground. Thousands died in religious wars.

Wars spread across Europe in the 1500s. Protestants and Catholics fought each other.





The launching of the Spanish Armada showed how powerful Spain had become. But England's navy defeated Spain's ships.

Conflict Between England and Spain

Tensions between England and Spain had been high for many years. One major reason was religion. In the 1530s, England's King Henry VIII had broken with the Catholic Church. As a Protestant country, England found that it had new enemies. Among them were Spain's Catholic rulers, who were deeply religious.

Queen Elizabeth I came to power in England in 1558. She spent much of her reign in disputes with Spain. For a time, Queen Elizabeth helped pirates who preyed on Spanish ships in the English Channel. She also assisted Protestants who fought against Spanish rule. Meanwhile, the Spanish king supported plots against Queen Elizabeth.

The conflict reached a peak in 1588. Spain had assembled a huge fleet of warships. This Spanish Armada was one of the most powerful forces ever gathered. Its 130 ships carried 30 thousand sailors and bristled with guns. When it set sail for England, the future looked dark for Queen Elizabeth and her country. But the English navy fought fiercely against the Spanish. In one of history's greatest naval battles, the English navy defeated the Spanish Armada.

However, Spain's power remained a threat. England had been slower than many other European nations to explore overseas. Queen Elizabeth now chose a new course. England, too, would seek wealth and power across the ocean. The conflicts and rivalries among the nations of Europe would spread to the Americas. These struggles would spur exploration and settlement.



This medal has an anti-Catholic message. It was worn by Dutch pirates who attacked Spanish ships. Queen Elizabeth supported these pirates.