

What might this diver be doing?



What is the device this diver is holding? What is she doing with it?



What do you think these white plastic tubes are used for?

Why Europeans Left for the New World

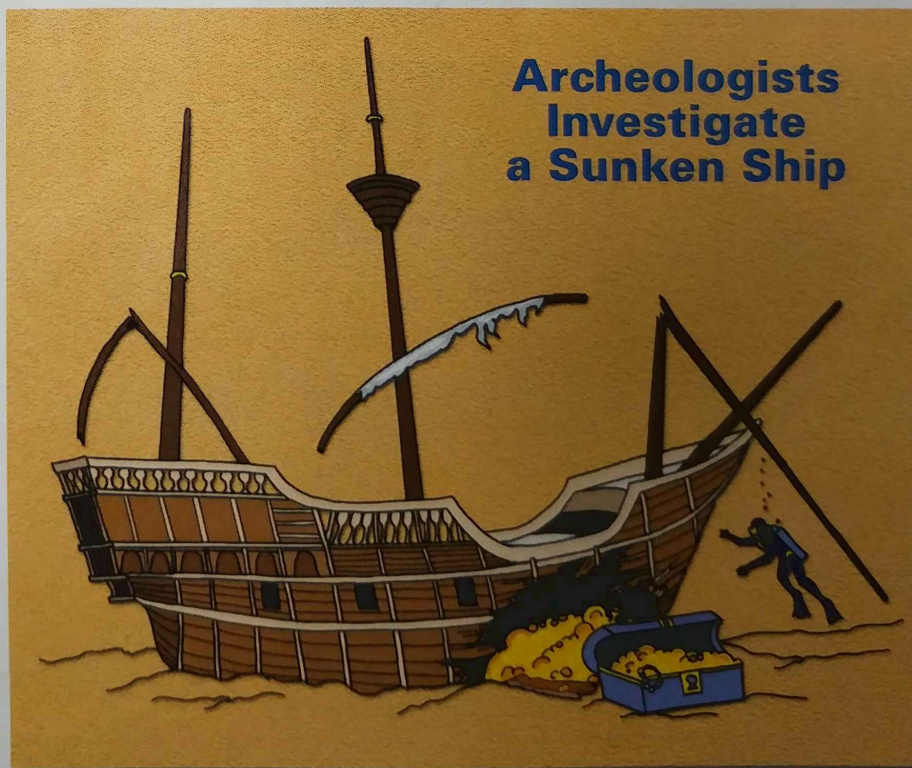
4.1 Introduction

In Chapter 3, you read about Native American cultural regions. In this chapter, you will learn why Europeans sailed to the Americas, which they called the **New World**. Of course, to Native Americans this was not a “new” world. They had lived here for thousands of years.

The 1500s were the **Age of Exploration** for Europeans. Prior to this time, only a few people had traveled very far from Europe. Beginning with Columbus’s famous voyage to North America in 1492, Europeans wanted to search lands unknown to them. **Explorers** sailed small ships across large oceans that few had crossed before.

Ocean storms and rocky shores sometimes destroyed their ships. Today, people find and excavate, or dig up, such sunken ships. They look for artifacts, such as tools and gold coins, on the nearby ocean floor. These objects reveal why explorers sailed to “new” lands and what they found there.

Look at the drawing of the sunken ship to the right. As you read this chapter, imagine that you are a diver investigating a sunken ship to learn about European exploration. What objects might you find? What clues do they give about why Europeans came to the continent of North America?



Archeologists Investigate a Sunken Ship

archeologists: scientists who study human artifacts to learn about past cultures

4.2 Underwater Archeology

Archeologists often look for sunken ships in order to understand the Europeans who first explored the Americas. To find a sunken ship, archeologists examine old ship records kept by European merchants. They read tales from shipwreck survivors. Sometimes, they use machines to help find a ship's anchors or cannons. For example, *sonar* is a technology that uses sound to locate sunken objects.

Archeologists need to know the location of each artifact on a sunken ship. So, divers mark off the site in squares with cables or plastic tubing. Using this grid, they can carefully record each object's location. This information will help archeologists decide who probably used the objects and for what purposes.

Each artifact must be photographed, brought to the surface, tagged, recorded on a list, and cleaned. Metal artifacts usually survive longest. Objects made of plants or animal products may disappear. After studying hundreds of artifacts, archeologists may be able to tell the name of the ship, where it was going, and why—perhaps even who was on it!

Finding a sunken ship often takes many years. Bringing up the remains can take weeks or even years. Understanding what the objects mean takes even longer. Read on to learn about artifacts that give clues about why Europeans sailed to the New World.

A team of archeologists tags, measures, and cleans ancient pottery that divers have brought to the surface.



4.3 Bible

The Christian Bible is the sacred book of Christians. In the Bible, the Old Testament contains writings from the Jewish religion. The New Testament contains writings by the followers of Jesus Christ.

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

European Christians belonged either to the Roman Catholic Church or to Protestant churches. Many of them believed that everyone in the world should become a Christian. Christian nations sent priests and armies to teach or to force people in other lands to join their churches. European explorers took the Bible wherever they went because it contained the stories and teachings of their faith.



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

4.4 Flag

Flags are symbols of the power of countries and rulers. They were probably invented in ancient China or India and were brought to Europe by traders from the Middle East.

In the 15th and 16th centuries, explorers carried flags or banners to honor the kings and queens who permitted them to go exploring. Sometimes, rulers also paid for their ships and crews. Spanish ships often flew a flag that showed a cross. Their flags also had the letter “F” for King Ferdinand and “Y” for Queen Ysabel (Isabella).

A flag is a proud signal to people on land and to other ships at sea. Planting a flag on a new land means, “My country and my ruler now own this land.” When mapmakers drew maps of newly claimed land, they usually decorated them with that nation’s flag.

4.5 Gold and Silver

Europeans counted wealth in gold and silver. They made their most valuable coins from these metals. In the late 1400s, Spain fought an expensive war. So, its king and queen wanted to build up their treasury (gold and silver owned by a country). They were happy to learn that the New World might have gold.

In Mexico and South America, the Spanish found gold and silver. They forced Indian slaves to work in the mines. Slaves made gold and silver **ore** into bars, coins, and other objects. They stamped a special number on each gold bar and a date on each coin. The Spanish kept track of each numbered bar, making sure it wasn't stolen and was put on the right ship. Ships carried this wealth back to Spain.

ore: rock or earth from which metal can be taken



Corn is a New World plant. The Spaniards were amazed by its seeds, which are much larger than seeds of wheat.

4.6 Food

Each continent has its own native plants. Many New World plants provided new foods. All over the Americas, Indians were growing many types of corn, for roasting, boiling, popping, and grinding into flour. The Spanish were delighted by this new food. It was as healthful and versatile (useful) as wheat, but its seeds were much bigger and tastier.

Spanish explorers brought back tomatoes from Central American Indians. At first, some Europeans wouldn't eat tomatoes because they are related to *deadly nightshade*, a poisonous plant. Italians were the first to grow tomatoes as a food crop.

The Spanish also found another fruit, which looked

like a giant pine cone. They called it "piña de Indias." The English later added "apple" to the name and called the fruit *pineapple*. Portuguese traders spread pineapple farming to other tropical parts of the world.

4.7 Tobacco

Throughout the Americas, explorers found people growing a tall, leafy plant called *tobacco*. Native Americans dried the leaves and smoked them in pipes or in cigars. Others chewed tobacco or inhaled it as a powder, which Europeans called *snuff*. In almost every tribe, men were addicted to tobacco. They thought it was good for their health and made it part of religious and peacemaking ceremonies. Native American women did not generally use tobacco.

Thinking tobacco was a medicine, explorers took it back to Europe. They, too, became addicted to it. Because tobacco grew better in the New World than in Europe, American colonists planted huge fields of it and sold it to Europeans. Tobacco became an enormous **cash crop** that helped colonists buy goods from Europe.



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

4.8 Astrolabe

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 15th and 16th centuries used an *astrolabe* (AS-tro-layb) to find their position.

The astrolabe was a circular piece of metal with marks around its edges. A bar attached to it could be rotated about the center as a pointer. The sailor held the astrolabe on its edge. He then tilted the bar so it pointed to the sun, the North Star, or another known star. He could measure the latitude of his ship by measuring the angle of the star above the horizon (where the Earth and sky meet). The angle told him how far north or south the ship was from the equator. Astrolabes enabled explorers to sail accurately by day or night.

cash crop: a crop that is grown in large quantities for sale to other people

4.9 Compass

European explorers used another tool for figuring direction: a compass. This tool 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.

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

4.10 Maps

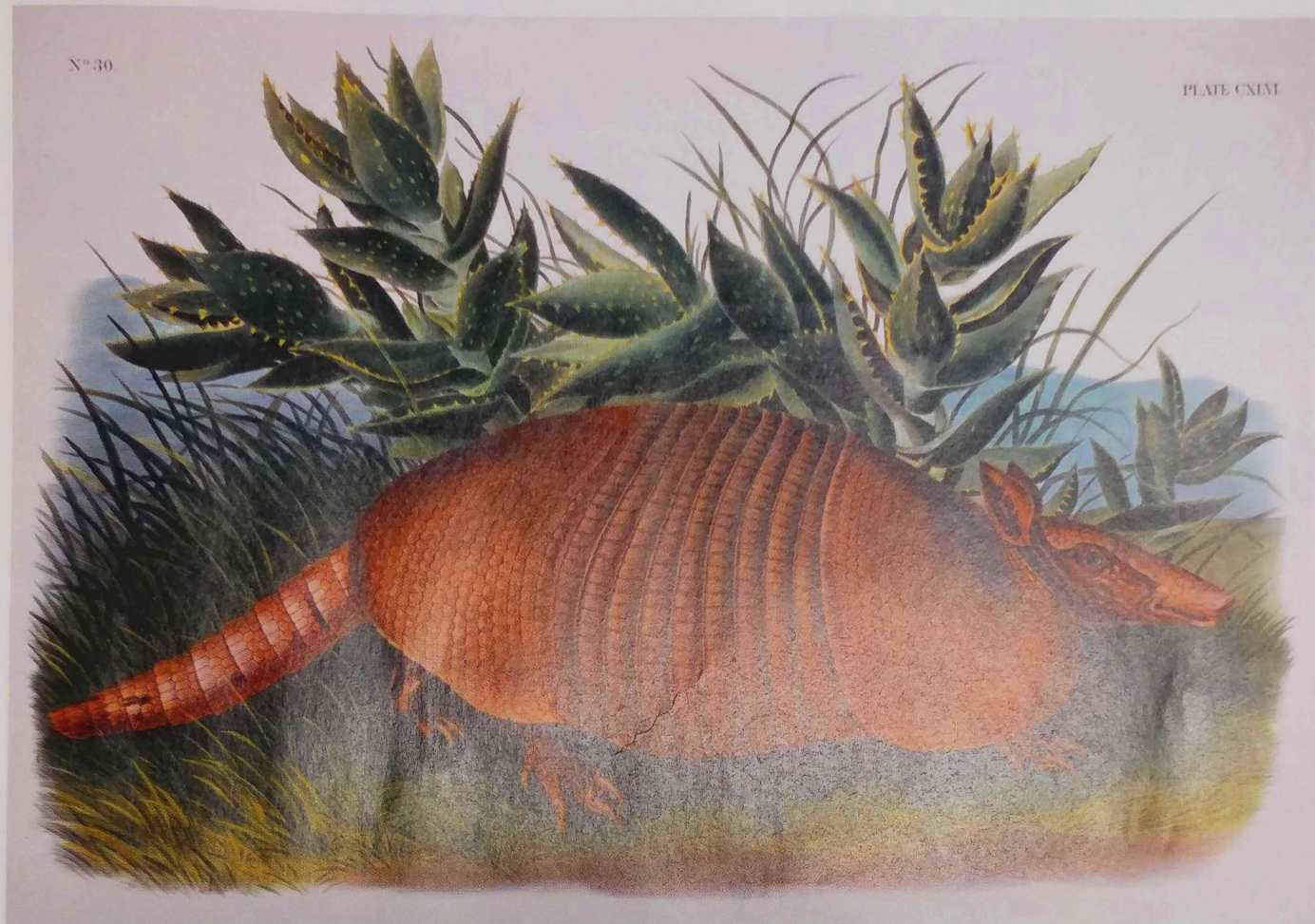
Maps are drawings of the shapes of bodies of land and water. They also show the locations of important physical features. Ocean maps include such features as rocky shores and safe ports. Maps for navigation also show where winds blow and ocean currents flow. European explorers carried maps of the ocean and maps of the territories to which they journeyed.

European mapmakers got new information from sailors, explorers, and scientists. They then

added this information to their maps. In the 15th century, mapmakers understood that the world was round. But before Columbus, they didn't know about the "New World." And no one knew how wide the Atlantic Ocean was. For centuries after Columbus, maps of the Americas still had many blank spots for places that remained unknown. Many maps also had drawings of imaginary sea monsters, such as under-sea dragons.



This world map is actually a mural painted in 1574 on an entire wall of an Italian palace. Can you find North America? South America?



4.11 Chapter Summary

In this chapter, you read about artifacts that might have been found on the ships of European explorers. They provided clues about why Europeans came to the New World.

The artifacts you read about included a Bible, which the Europeans brought along to help them spread Christianity. You also learned about navigation tools that helped explorers reach the New World. Finally, you learned about New World plants, such as tobacco and corn, which explorers brought back to sell in Europe.

In the next chapter, you will read about European explorers who made this journey across the Atlantic. Did they find what they wanted in the New World? Read on to find out.

European artists were fascinated by the New World plants and animals they heard about from explorers. This painting shows an armadillo and cactus from the American Southwest.