



A French traveler in the 1400s illustrated workers harvesting pepper in southern India; a clove plant is shown at left.

## The Search Is On

Cinnamon, pepper, nutmeg, cloves . . . these and other spices were a vital part of the world economy in the 1400s. Because the spice trade was controlled by Arab merchants and traders, Europeans didn't know how to get the spices they desperately wanted. Even when Europeans learned that spice plants could be obtained in Asia, they didn't have a hope of growing them in Europe. As an Indonesian ruler boasted to a European trader,

**“You may be able to take our plants, but you will never be able to take our rain.”**

Europeans knew that the only way they could take control of the spice trade would be to establish sea routes to Asia—at any cost.

**Focus Question** How did the search for spices lead to global exploration?

# The Search for Spices

## Objectives

- Understand European motivations for exploring the seas.
- Analyze early Portuguese and Spanish explorations.
- Describe European searches for a direct route to Asia.

## Terms, People, and Places

Moluccas	Line of Demarcation
Prince Henry	Treaty of Tordesillas
cartographer	Ferdinand Magellan
Vasco da Gama	circumnavigate
Christopher Columbus	

## Note Taking

### Reading Skill: Identify Causes and Effects

Examine the text for clues that signal cause and effect. Then use a flowchart like this one to record major causes and effects of European exploration.



Throughout history, groups of people—from the ancient Greeks to Muslim Arabs and the Vikings of Scandinavia—had explored the seas, trading and migrating over long distances. The European sailors of the 1400s began a dramatic new period of exploration.

## Motivations for Exploring the Seas

Europeans traded with Asians long before the Renaissance. The Crusades introduced Europeans to many luxury goods from Asia, carried on complex overland routes through the Mongol empire of the 1200s and 1300s. The Black Death and the breakup of the Mongol empire disrupted that trade. By the 1400s, though, Europe's population was growing, along with its demand for trade goods. The most valued items were spices, used to preserve food, add flavor to meat, and make medicines and perfumes. The chief source of spices was the **Moluccas**, an island chain in present-day Indonesia, which Europeans then called the Spice Islands.

In the 1400s, Arab and Italian merchants controlled most trade between Asia and Europe. Muslim traders brought prized goods to eastern Mediterranean ports, and Italian traders carried them to European markets. Europeans outside Italy knew that it would be more profitable to gain direct access to Asia. They were also driven by Renaissance curiosity to seek new lands.

**Checkpoint** What factors encouraged European exploration?

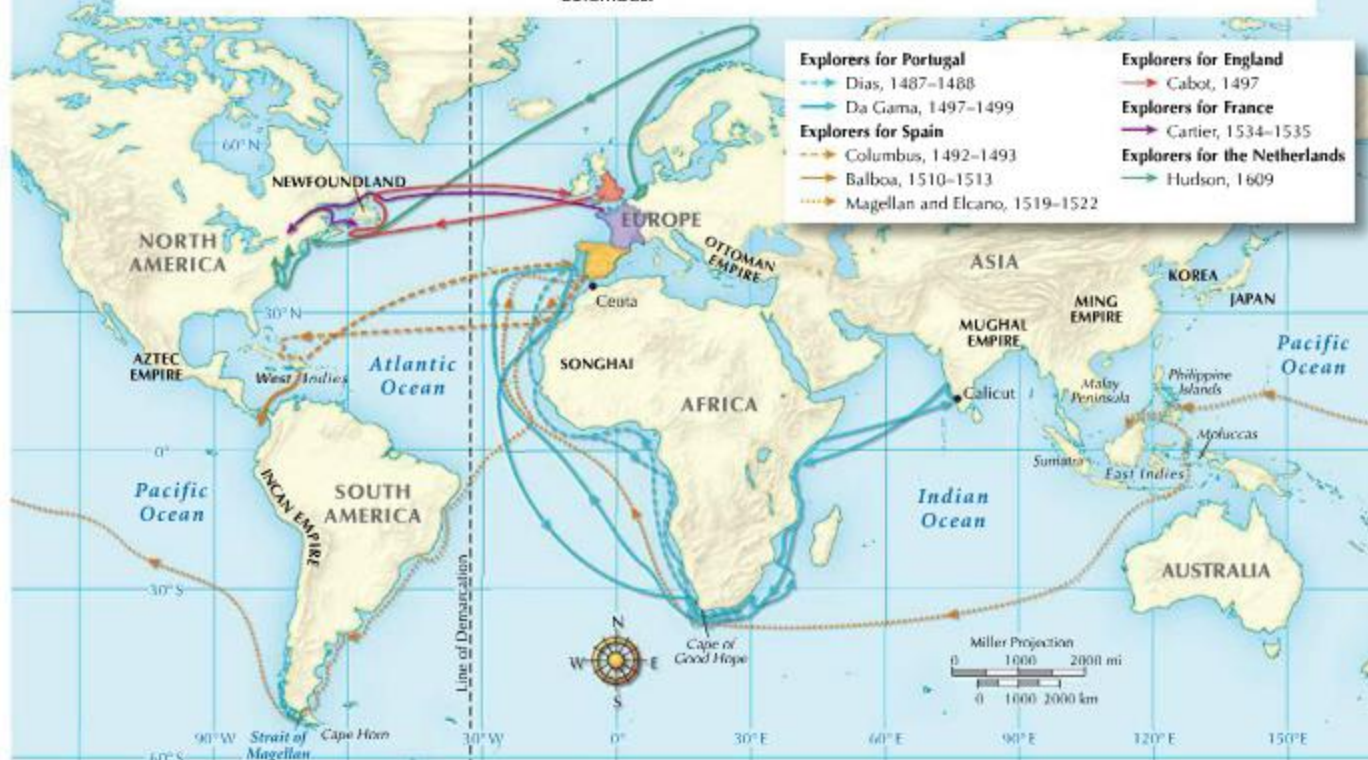
## Early Voyages of European Exploration, 1487–1609

WEB CODE: 1487-1491

**Map Skills** Spain, England, France, and the Netherlands quickly followed Portugal's lead in exploring the world by ship.

- 1. Locate** (a) West Indies (b) East Indies (c) Line of Demarcation (d) Strait of Magellan
- 2. Describe** Describe the route of Columbus.

- 3. Draw Inferences** Why do you think explorers from different countries followed similar routes?



## Portugal Sails East

**Prince Henry** led the way in sponsoring exploration for Portugal, a small nation next to Spain. First, Prince Henry's navigators discovered and claimed the Madeira and Azores islands to the west and southwest of Portugal. By 1415, Portugal had expanded into Muslim North Africa, seizing the port of Ceuta (SYOO tah) on the North African coast.

**Mapping the African Coast** Prince Henry saw great promise in Africa. The Portuguese could convert Africans—most of whom practiced either Islam or tribal religions—to Christianity. He also believed that in Africa he would find the sources of riches the Muslim traders controlled.

Finally, Prince Henry hoped to find an easier way to reach Asia, which meant going around Africa. The Portuguese felt that with their expert knowledge and technology, they could accomplish this feat. At Sagres, in southern Portugal, Henry gathered scientists, **cartographers**, or map-makers, and other experts. They redesigned ships, prepared maps, and trained captains and crews for long voyages. Henry's ships then slowly worked their way south to explore the western coast of Africa.

Henry died in 1460, but the Portuguese continued their quest. In 1488, Bartholomeu Dias rounded the southern tip of Africa. Despite the turbulent seas around it, the tip became known as the Cape of Good Hope because it opened the way for a sea route to Asia.



**Seeking India** In 1497, Portuguese navigator **Vasco da Gama** followed in Dias's footsteps, leading four ships around the Cape of Good Hope. Da Gama, however, had plans to go farther. After a ten-month voyage, da Gama reached the great spice port of Calicut on the west coast of India. On the long voyage home, the Portuguese lost half their ships, and many sailors died of hunger, thirst, and scurvy, a disease caused by a lack of vitamin C in the diet.

Despite the hard journey, the venture proved highly profitable. In India, da Gama had acquired a cargo of spices that he sold at an enormous profit. He quickly outfitted a new fleet, seeking greater profits. In 1502, he forced a treaty on the ruler of Calicut. Da Gama then left Portuguese merchants there whose job was to buy spices when prices were low and store them until the next fleet could return. Soon, the Portuguese had seized key ports around the Indian Ocean, creating a vast trading empire. Da Gama's voyages confirmed Portugal's status as a world power.

✓ **Checkpoint** How did Portuguese exploration lead to the creation of a trading empire?

## INFOGRAPHIC

# NAVIGATING THE WORLD

In the 1400s, European knowledge of the world—and how to navigate it—greatly expanded. Geographers gave navigators more accurate maps, and shipmakers built ships more suitable for crossing the ocean. Navigators began to use existing instruments like the compass and astrolabe in new ways. With each voyage, they added to their knowledge, resulting in even better maps and improved technology.

### The portolan map ▶

Navigators used portolan maps with magnetic compasses. The lines on the portolan map radiated out from compass points, showing navigators how to find their way to key ports.

### A better compass ▲

The Chinese had used the compass for centuries, but the magnetic compass did not become a customary navigational tool until the 1400s. The magnetic compass uses an iron needle, magnetized by a mineral called lodestone, that aligns with Earth's north-south poles. Navigators used it to find their bearings and chart courses.



## Columbus Sails West

News of Portugal's successes spurred other people to look for a sea route to Asia. An Italian navigator from Genoa, named **Christopher Columbus**, wanted to reach the East Indies—a group of islands in Southeast Asia, today part of Indonesia—by sailing west across the Atlantic. Like most educated Europeans, Columbus knew that Earth was a sphere. A few weeks sailing west, he reasoned, would bring a ship to eastern Asia. His plan made sense, but Columbus greatly underestimated Earth's size. And he had no idea that two continents lay in his path.

**Reaching Faraway Lands** Portugal refused to sponsor him, but Columbus persuaded Ferdinand and Isabella of Spain to finance his voyage. To increase their authority, the Spanish rulers had taken radical measures, including expelling Jews from Spain. They hoped their actions would strengthen Catholicism. However, the loss of some of Spain's most affluent and cultured people weakened the nation. The rulers hoped Columbus's voyage would bring wealth and prestige.

### Vocabulary Builder

**authority**—(uh THAWR uh tee) *n.* the power to give commands and enforce obedience



#### ◀ A more accurate world map

In the 1400s, world maps showed Europe accurately (far left) but the rest of the world as one giant landmass. By 1560, the geographer Abraham Ortelius had produced a map (left) that showed all of the continents with accurate shapes.

#### ▼ A faster ship

The light, fast caravel was developed in the 1400s. Unlike most heavy European ships, it was easily maneuvered along coasts and could travel long distances.

#### ◀ A new use for an old tool

Astronomers had used astrolabes in ancient times. Renaissance sailors found them useful for navigation. Navigators looked through the astrolabe at the sun or a star, and determined its angle using the degrees marked on the instrument. The angle of the sun or star helped them to determine their ships' latitude as well as the local time.

### Thinking Critically

1. **Synthesize Information** Why would a portolan map be inappropriate as a resource for a geography class?
2. **Draw Inferences** What limitations did the astrolabe have that the magnetic compass did not?



## BIOGRAPHY

### Henry the Navigator

All of the European explorers owed a debt to Prince Henry (1394–1460), whose Christian faith, curiosity, and national pride ushered in the great age of European exploration. The English nicknamed Henry “the Navigator.” Yet Henry himself, who sponsored and encouraged navigators, geographers, and merchants, never traveled the seas. Henry’s work required financial risks, and his enthusiasm motivated his navigators to take great personal risks. Henry also inspired generations of later explorers. **What characteristics does the artist ascribe to Henry (center figure in black)?**




On August 3, 1492, Columbus sailed west with three small ships, the *Niña*, the *Pinta*, and the *Santa María*. Although the expedition encountered good weather and a favorable wind, no land came into sight for many weeks. Provisions ran low, and the crew became anxious. Finally, on October 12, land was spotted.

Columbus spent several months cruising the islands of the Caribbean. Because he thought he had reached the Indies, he called the people of the region “Indians.” In 1493, he returned to Spain to a hero’s welcome. In three later voyages, Columbus remained convinced that he had reached the coast of East Asia. Before long, though, other Europeans realized that Columbus had found a route to previously unknown continents.

**Dividing the Globe in Half** In 1493 Ferdinand and Isabella appealed to the Spanish-born Pope Alexander VI to support their claim to the lands of the new world. The pope set a **Line of Demarcation**, dividing the non-European world into two zones. Spain had trading and exploration rights in any lands west of the line. Portugal had the same rights east of the line. The specific terms of the Line of Demarcation were agreed to in the **Treaty of Tordesillas**, signed between the two countries in 1494. The actual line was unclear, because geography at the time was imprecise. However, the treaty made it obvious to both Spain and Portugal—and to other European nations, eager to defy what they saw as Spain and Portugal’s arrogance—that they needed to build their own empires quickly.

**Naming the Western Hemisphere** An Italian sea captain named Amerigo Vespucci wrote a journal describing his voyage to Brazil. In 1507, a German cartographer named Martin Waldseemüller used Vespucci’s descriptions of his voyage to publish a map of the region, which he labeled “America.” Over time, the term “Americas” came to be used for both continents of the Western Hemisphere. The islands Columbus had explored in the Caribbean became known as the West Indies.


 **Checkpoint** How did Columbus influence the Treaty of Tordesillas?

## The Search for a Direct Route Continues

Though Europeans had claimed vast new territories, they had not yet found a direct route to Asia. The English, Dutch, and French explored the coast of North America unsuccessfully for a “northwest passage,” or a route from the Atlantic Ocean to the Pacific through the Arctic islands. Meanwhile, in 1513 the Spanish adventurer Vasco Núñez de Balboa, helped by local Indians, hacked a passage westward through the tropical forests of Panama. From a ridge on the west coast, he gazed at a huge body of water. The body of water that he named the South Sea was in fact the Pacific Ocean.

On September 20, 1519, a minor Portuguese nobleman named **Ferdinand Magellan** set out from Spain with five ships to find a way to reach the Pacific. Magellan’s ships sailed south and west, through storms and calms and tropical heat. At last, his fleet reached the coast of South America. Carefully, they explored each bay, hoping to find one that would lead to the Pacific. In November 1520, Magellan’s ships entered a bay at the southern tip of South America. Amid brutal storms, rushing tides, and unpredictable winds, Magellan found a passage that later became known as the Strait of Magellan. The ships emerged into Balboa’s South Sea. Magellan renamed the sea the Pacific, from the Latin word meaning *peaceful*.

Their mission accomplished, most of the crew wanted to return to Spain the way they had come. Magellan, however, insisted that they push on across the Pacific to the East Indies. Magellan underestimated the size of the Pacific. Three more weeks, he thought, would bring them to the Spice Islands. Magellan was wrong. For nearly four months, the ships plowed across the uncharted ocean. Finally, in March 1521, the fleet reached the Philippines, where Magellan was killed. On September 8, 1522, nearly three years after setting out, the survivors—one ship and 18 sailors—reached Spain. The survivors had been the first people to **circumnavigate**, or sail around, the world. Antonio Pigafetta, one of the few survivors of the expedition, observed: “I believe of a certainty that no one will ever again make such a voyage.”

 **Checkpoint** What was the significance of Balboa’s discovery?

Section

## 1 Assessment

### Progress Monitoring Online

For: Self-quiz with vocabulary practice  
Web Code: naa-1411

#### Terms, People, and Places

1. For each term, person, or place listed at the beginning of the section, write a sentence explaining its significance.

#### Note Taking

2. **Reading Skill: Identify Causes and Effects** Use your completed flowchart to answer the Focus Question: How did the search for spices lead to global exploration?

#### Comprehension and Critical Thinking

3. **Recognize Cause and Effect** How did the Renaissance motivate European explorers?
4. **Recognize Ideologies** How did Prince Henry’s Christian faith shape his role as a sponsor of exploration?
5. **Identify Alternatives** If Columbus had understood the real geography of the world, would he still have made his voyage? Why or why not?
6. **Predict Consequences** What effect might Magellan’s circumnavigation of the world have on English, Dutch, and French explorers?

#### Writing About History

##### Quick Write: Gather Information

Choose one of the following people from this section for a biographical essay: Prince Henry, Christopher Columbus, or Ferdinand Magellan. Gather information about the person you chose. Note events that were both directly and indirectly influenced by this person.



# SECTION 2

A Benin ivory carving (right) depicts a Portuguese sailor in a ship. Iron weights (top) were used in western Africa to weigh gold.



## WITNESS HISTORY AUDIO

### Great Seabirds Arrive

A Portuguese captain named Alvise Cadamosto reached West Africa in the mid-1400s. He described the reaction of the West Africans to the sight of his ship:

“It is said that the first time they saw sails . . . they believed they were great seabirds with white wings, which were flying and had come from some strange place. . . . Some thought the ships were fishes, others that they were ghosts that went by night, at which they were terrified.”

—Alvise Cadamosto, 1455

**Focus Question** What effects did European exploration have on the people of Africa?

## Turbulent Centuries in Africa

### Objectives

- Describe how the Portuguese established footholds on Africa's coasts.
- Analyze how European actions affected the slave trade and the rise of African states.
- Explain how the European presence in Africa expanded.

### Terms, People, and Places

Mombasa	Osei Tutu
Malindi	monopoly
plantation	Oyo empire
Afonso I	Cape Town
missionary	Boers
Asante kingdom	

### Note Taking

**Reading Skill: Identify Effects** As you read, record effects of European exploration in Africa in a chart like the one below.

Effects of European Exploration		
European Footholds	Slave Trade	New African States

European encounters with Africa had occurred for hundreds of years. Yet the European explorers who arrived in the 1400s brought great and unforeseen changes to Africa's peoples and cultures.


### Portugal Gains Footholds

As you have read, the Portuguese who explored Africa's coasts in the 1400s were looking for a sea route to Asia that bypassed the Mediterranean. They also wanted to buy goods directly from their source, rather than trading through Arab middlemen.

The Portuguese began carrying out their strategy in West Africa, building small forts to collect food and water and to repair their ships. They also established trading posts to trade muskets, tools, and cloth for gold, ivory, hides, and slaves. These were not colonies peopled by settlers. Instead, the Portuguese left just enough men and firepower to defend their forts.

From West Africa, the Portuguese sailed around the continent. They continued to establish forts and trading posts, but they also attacked existing East African coastal cities such as **Mombasa** and **Malindi**, which were hubs of international trade. With cannons blazing, they expelled the Arabs who controlled the East African trade network and took over this thriving commerce for themselves. Each conquest added to their growing trade empire.

Over the next two centuries, some Portuguese explorers managed to reach parts of present-day Congo, Zambia, and Zimbabwe, establishing limited trade. In general, however, the Portuguese did not venture far from the coasts. They knew little about Africa's interior, and they lacked accurate maps or other resources to help them explore there. Furthermore, Africans in the interior, who wanted to control the gold trade, resisted such exploration. As a result of all these factors, when the Portuguese empire declined in the 1600s, the Portuguese did not leave a strong legacy in Africa.

 **Checkpoint** Why did the Portuguese establish a presence mainly along the African coast?



## The African Slave Trade Explodes

In the 1500s and 1600s, Europeans began to view slaves as the most important item of African trade. Slavery had existed in Africa, as elsewhere around the world, since ancient times. Egyptians, Greeks, Romans, Persians, Indians, and Aztecs often enslaved defeated foes. The English word *slave* comes from the large number of Slavs taken from southern Russia to work as unpaid laborers in Roman times.

The Arab empire also used slave labor, often captives from East Africa. In the Middle East, enslaved Africans often worked on farming estates. Others became artisans, soldiers, or merchants. Some rose to prominence in the Muslim world even though they were slaves.

**Europeans Enter the Slave Trade** Portuguese traders quickly joined the profitable slave trade, followed by other European traders. Europeans bought large numbers of slaves to perform labor on their **plantations**—large estates run by an owner or an owner's overseer—in the Americas and elsewhere. Rich Europeans also bought slaves as exotic household servants. By the 1500s, European participation had encouraged a much broader Atlantic slave trade.

Europeans seldom went into Africa's interior to take part in slave raids. Instead, they relied on African rulers and traders to seize captives in the interior and bring them to coastal trading posts and forts. There, the captives were exchanged for textiles, metalwork, rum, tobacco, weapons, and gunpowder. Over the next 300 years, the slave trade grew into a huge and profitable business to fill the need for cheap labor. Each year, traders shipped tens of thousands of enslaved Africans across the Atlantic to work on sugar, rice, tobacco, and other plantations in the Americas. These slaves were considered to be property, and they had no hope of bettering their situations.

**African Leaders Resist** Some African leaders tried to slow down or stop the transatlantic slave trade. But in the end, the system that supported the trade was simply too strong for them. An early voice raised against the slave trade was that of **Afonso I**, ruler of Kongo in west-central Africa. As a young man, Afonso had been tutored by Portuguese **missionaries**, who hoped to convert Africans to Christianity.

### A Valuable Commodity

Since ancient times, gold was a valuable trade good in western Africa. Beginning in the 1500s, it became an important part of the slave trade. Europeans melted down African gold jewelry like the pieces above to make gold coins.

A Portuguese observer described the first ship of African slaves arriving in Portugal in 1444 from West Africa. Judging from the writer's words, what was his opinion of what he saw?

#### Primary Source

“Some kept their heads low and their faces bathed in tears, looking at each other . . . others struck themselves in the face and threw themselves to the ground; and others sang sad songs—although we did not understand their words, the sound told of their great sorrow. . . . The mothers threw themselves flat on the ground. They were beaten but they refused to give up their children.”

—From *Chronicle of the Discovery and Conquest of Guinea*





## Major African States About 1700



**Map Skills** By about 1700, many of Africa's states and kingdoms were involved in the slave trade.

- 1. Locate** (a) Malindi (b) Kongo (c) Asante (d) Bornu
- 2. Describe** Which states were part of a major slave trading region?
- 3. Synthesize Information** In general, where were most slave trading regions located? Explain.

### Geography Interactive

For: Audio guided tour  
Web Code: nap-1421

### Vocabulary Builder

**dominate**—(DAHM uh nayt) *v.* to rule or control by superior power

### Vocabulary Builder

**unified**—(YOO nuh fyed) *v.* combined into one

After becoming king in 1505, he called on the Portuguese to help him develop Kongo as a modern Christian state. But he became alarmed as more and more Portuguese came to Kongo each year to buy slaves. Affonso wanted to maintain contact with Europe but end the slave trade. His appeal failed, and the slave trade continued.

In the late 1700s, another African ruler tried to halt the slave trade in his lands. He was the almany (from the Arabic words meaning “religious leader”) of Futa Toro, in present-day Senegal. Since the 1500s, French sea captains had bought slaves from African traders in Futa Toro. In 1788, the almany forbade anyone to transport slaves through Futa Toro for sale abroad. However, the inland slave traders simply worked out a new route to the coast. Sailing to this new market, the French captains easily purchased the slaves that the almany had prevented them from buying in Futa Toro.

**Checkpoint** How did the African slave trade expand?


## New African States Arise

The slave trade had major effects on African states in the 1600s and 1700s. In West Africa, for example, the loss of countless numbers of young women and men resulted in some small states disappearing forever. At the same time, there arose new states whose way of life depended on the slave trade. The rulers of these powerful new states waged war against other Africans to dominate the slave trade.

**The Asante Kingdom** The **Asante kingdom** (uh SAHN teh) emerged in the area occupied by present-day Ghana. In the late 1600s, an able military leader, **Osei Tutu**, won control of the trading city of Kumasi. From there, he conquered neighboring peoples and unified the Asante kingdom. The Asante faced a great challenge in the Denkyera, a powerful neighboring enemy kingdom. Osei Tutu realized that in order to withstand the Denkyera, the people of his kingdom needed to be firmly united. To do this, he claimed that his right to rule came from heaven, and that people in the kingdom were linked by spiritual bonds. This strategy paid off when the Asante defeated the Denkyera in the late 1600s.

Under Osei Tutu, government officials, chosen by merit rather than by birth, supervised an efficient bureaucracy. They managed the royal monopolies on gold mining and the slave trade. A **monopoly** is the exclusive control of a business or industry. The Asante traded with Europeans on the coast, exchanging gold and slaves for firearms. They also played rival Europeans against one another to protect themselves. In this way, they built a wealthy, powerful state.

**The Oyo Empire** The **Oyo empire** arose from successive waves of settlement by the Yoruba people of present-day Nigeria. It began as a relatively small forest kingdom. Beginning in the late 1600s, however, its leaders used wealth from the slave trade to build up an impressive army. The Oyo empire used the army to conquer the neighboring kingdom of Dahomey. At the same time, it continued to gain wealth by trading with European merchants at the port city of Porto-Novo.

 **Checkpoint** What caused some African states to grow?

## The European Presence Expands

Following the Portuguese example, by the 1600s several European powers had established forts along the western coast of Africa. As Portuguese power declined in the region, British, Dutch, and French traders took over their forts. Unlike the Portuguese, they established permanent footholds throughout the continent.

In 1652, Dutch immigrants arrived at the southern tip of the continent. They built **Cape Town**, the first permanent European settlement, to supply ships sailing to or from the East Indies. Dutch farmers, called **Boers**, settled around Cape Town. Over time, they ousted, enslaved, or killed the people who lived there. The Boers held a Calvinist belief that they were the elect, or chosen, of God. They looked on Africans as inferiors and did not respect their claims to their own land. In the 1700s, Boer herders and ivory hunters began to push north from the Cape Colony. Their migrations would eventually lead to battle with several African groups.

By the mid-1600s, the British and French had both reached present-day Senegal. The French established a fort in the region around 1700. In the late 1700s, stories about British explorers' search for the source of the Nile River sparked an interest in Africa among Europeans, especially the French and British. In 1788, the British established the African Association, an organization that sponsored explorers to Africa. Over the next century, European exploration of Africa would explode.

 **Checkpoint** How did the European presence in Africa expand?



### Elmina Castle

European traders called the places where they held and traded slaves "castles." Built by the Portuguese in 1482, Elmina Castle in present-day Ghana was used as a base for trading slaves, gold, and imported European products.

## SECTION 2 Assessment

### Progress Monitoring Online

For: Self-quiz with vocabulary practice  
Web Code: naa-1421

#### Terms, People, and Places

1. What do many of the key terms and people listed at the beginning of the section have in common? Explain.

#### Note Taking

2. **Reading Skill: Identify Effects** Use your completed chart to answer the Focus Question: What effects did European exploration have on the people of Africa?

#### Comprehension and Critical Thinking

3. **Determine Relevance** How did the Portuguese strategy of building forts instead of permanent colonies affect Portugal's history in Africa?
4. **Recognize Cause and Effect** How did Europeans change the nature of African slavery?
5. **Analyze Information** Why did the Asante and Oyo need to trade with Europeans to maintain power?
6. **Predict Consequences** Would the Europeans have taken the same course in Africa if the people there had been Christian like themselves?

#### Writing About History

**Quick Write: Write a Thesis Statement**  
Write a thesis statement that will support a biographical essay about either Osei Tutu or Afonso I. Remember that the facts and events you cite in your essay should support your thesis statement. For example, the following thesis statement is not supported by the facts in the text: Afonso I was instrumental in slowing the slave trade in Africa.