



## Focus Activity

### READ TO LEARN

What was Portugal's role in European exploration?

### VOCABULARY

- Renaissance
- navigation
- astrolabe
- caravel

### PEOPLE

- Marco Polo
- Johannes Gutenberg
- Prince Henry
- Bartholomeu Dias
- Vasco da Gama

### PLACES

- Portugal
- Spain
- Italy
- England
- France
- Cape of Good Hope

## LESSON 3

# Europe's Age of Exploration

## Read Aloud

In 1274 Marco Polo was one of the first Europeans to reach Asia. When he returned 20 years later, he brought back many treasures, among them ivory, jade, and silk. Marco Polo also wrote a book about his travels. Stories about China's emperor and his pet leopard, for example, buzzed all over Europe. Like people elsewhere, Europeans wanted to learn about the rest of the world.

## THE BIG PICTURE

Starting in 1271, **Marco Polo** traveled from Persia to China along the Silk Road. The voyage took three years. When he returned to Europe in 1292, he knew more about China than any European of his time. Before then few Europeans were interested in China or any other part of Asia.

By the 1400s Europeans saw what wonderful goods Asia had to offer. They began searching to find a direct sea route there. In the middle of the 1400s the countries of **Portugal** and **Spain** sent explorers throughout the world in search of this sailing route.

## EUROPE'S RENAISSANCE

Why were Europeans looking for new places to explore? One reason is that people were influenced by the **Renaissance** (ren uh SAHNS), which began in **Italy** in the 1300s. It later spread throughout Europe.

**Renaissance** is a French word that means "rebirth." In Europe there was a rebirth in art, music, and learning. People wanted to learn, but books were rare. All books had to be copied by hand. The invention of the printing press by **Johannes Gutenberg** in about 1436 helped to spread learning through books. By 1500 Europe had close to 6 million books from Gutenberg's presses.

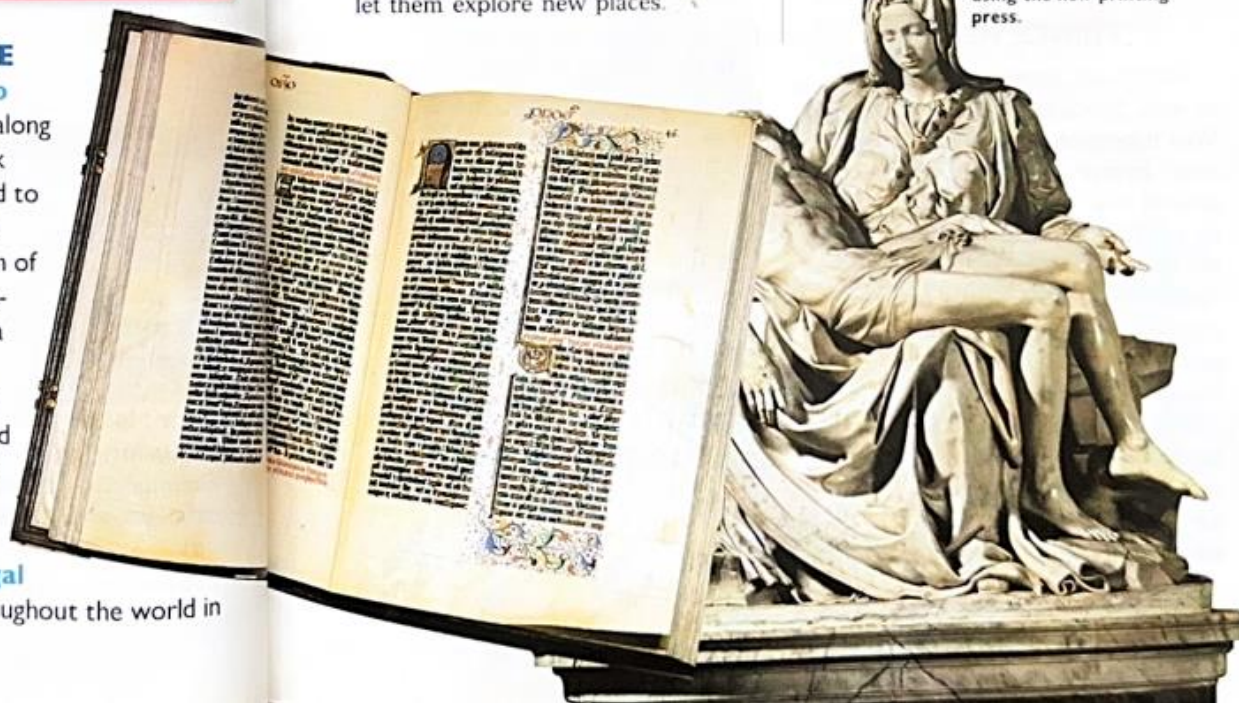
New knowledge of science led people to new ideas. New inventions let them explore new places.

## Trade with Asia

Europeans needed spices from Asia. Since they could not refrigerate food, they had to use spices such as pepper and cloves to keep food from spoiling.

Spices were expensive. A single pound of pepper from India, for example, was traded dozens of times before it reached **England** or **France**. With each trade along the Silk Road, the price would rise. European traders had to find a cheaper route by which they could get goods from Asia.

The **Pietà** (below) was carved by the great **Renaissance** artist **Michelangelo** in 1498. The **Gutenberg Bible** (left) was one of the first books made using the new printing press.





## EUROPEAN VOYAGES TO AFRICA AND ASIA, LATE 1400s

## MAP WORK



The king of Portugal named the southernmost point of Africa to show his hope for further exploration. The Cape of Good Hope was the end of Bartholomeu Dias's journey, but Vasco da Gama went beyond.

1. Which sea separates Europe from northern Africa?
2. In what direction did both Dias and Da Gama sail from Portugal?
3. In what direction did Da Gama sail after he rounded the Cape of Good Hope? In what direction did he travel after reaching Malindi?

### PRINCE HENRY

Europeans needed another route to Asia. Study the map on this page. Was it possible to reach Asia by ship? **Prince Henry** of Portugal proved that it was, although he never went on any explorations himself. He was called Prince Henry the Navigator because of the improvements in **navigation** he made. Navigation is the science of finding out a ship's sailing direction and location. Scientists working for Henry improved such inventions as the **astrolabe** and magnetic compass.

### Portuguese Exploration

In the early 1400s Prince Henry brought shipbuilders, scientists, mapmakers, and ship captains to Europe. Together they created a new type of ship, the **caravel**. The caravel was about 70 feet long and could be steered more easily than other ships. It could sail fast in dangerous waters, even against the wind. The caravel had a hold for carrying large amounts of cargo.

Henry's caravels first sailed the coast

This is a model of a **caravel** that was used during the 1400s.



of West Africa. In 1445 he paid for voyages that reached Cape Verde, the western point of Africa. By 1460, when Henry died, his ships still had not reached southern Africa. As you can see on the map, though, other explorers did. In 1488 a Portuguese explorer named **Bartholomeu Dias** (bar TOH loh myoo DEE ush) rounded the dangerous tip of southern Africa, the **Cape of Good Hope**. In 1498 **Vasco da Gama**, a Portuguese sea captain, reached India by the same route.

This figure of Prince Henry (below) is part of a statue in Lisbon, Portugal.



## WHY IT MATTERS

Vasco da Gama's 1498 voyage to India showed Europe a way to Asia without using the Silk Road. By 1503 the price of pepper in Portugal was less than half of what it had been when the Silk Road was used. Portugal made huge profits using the new sea routes. Spain, seeking a shorter route to Asia, sailed the Atlantic Ocean—leading one of the most important voyages of Europe's age of exploration.

## Reviewing Facts and Ideas

### SUM IT UP

- Marco Polo's visit to China made Europeans interested in Asia.
- The demand for Asian goods and the expense of goods traded on the Silk Road caused Europeans to seek a sea route to Asia.
- Prince Henry of Portugal built ships in the early 1400s that eventually reached Africa and Asia.

### THINK ABOUT IT

1. What navigation equipment did European sailors use in the 1400s?
2. Why did Europeans want to find a sea route to Asia?
3. **FOCUS** What did Prince Henry do to find a sea route to Asia?
4. **THINKING SKILL** List the **cause** and **effect** connections between the beginning of the Renaissance and Vasco da Gama's arrival in India.
5. **GEOGRAPHY** Look at the map on page 126. Was the land or sea route from Europe to Asia longer?