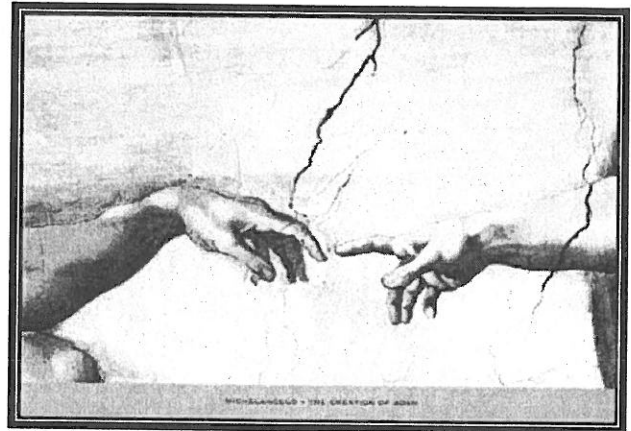


# The Renaissance Begins the Modern World

## SECTION 1: The Renaissance in Italy

### Key Words

Renaissance	Medici family	Florence
Patrons	Giotto	perspective
Da Vinci	mercenaries	Michelangelo



1. What wealthy group supported art and education in Italy during the Renaissance?
2. What new ways of thinking arose in Italy?
3. In what ways did the style of art change?
4. How did warfare and politics change around the end of the Italian Renaissance?

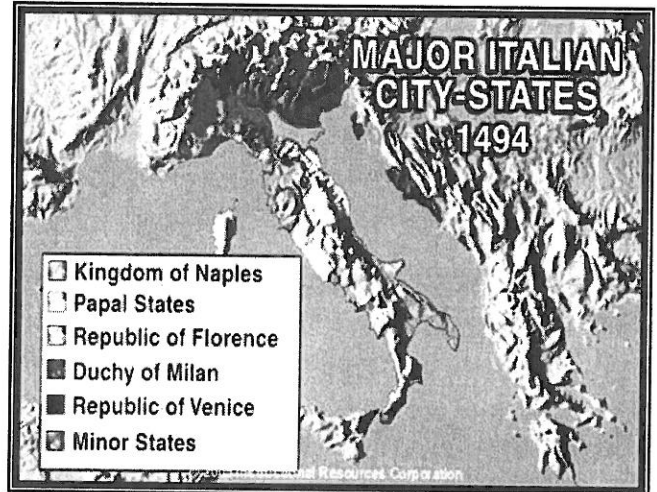
Toward the end of the Middle Ages, Europeans changed many of their ideas. We call this period between about 1400 and 1600 the Renaissance which means "rebirth." The Renaissance came to different parts of Europe in different ways and at different times. It came first to Italy in the fifteenth century.

Italy's position on the Mediterranean gave it an advantage in the sea trade between Europe and the Middle East. Such cities as Naples, Genoa, and Venice became wealthy centers of trade. With trade came new ideas, which may explain why the Renaissance began in Italy.

### THE ITALIAN CITY-STATES

Italy during the Renaissance was divided into several independent city-states. Like the ancient Greeks, people of the Italian city-states believed that it was a citizen's duty to take part in public life. Several city-states had constitutions and elected governments. The real power in most city-states, however, was held by families of rich "merchant princes."

**Florence**, a city-state on the Arno River, was where many Renaissance ideas began. Florence was controlled by the Medici family. The Medici's were bankers. They and other "merchant princes" held courts, or social gatherings. People at their courts were expected to have excellent manners, wide-ranging education, and skills in many fields.



The "princes" themselves often had many talents. For example, Lorenzo de Medici was not only a shrewd banker and a clever politician, but also a scholar, and a poet.

Families like the Medicis were patrons of the arts. *Patron* comes from the Latin word for "father." Wealthy patrons paid artists generously to create paintings and sculptures. They paid writers and educators to work at their courts. Their money and encouragement made the masterpieces of Renaissance art possible.



## Learning about the World

The merchants of Italy were practical in business and had strong views about the importance of education. They made sure their sons could read, write, and do arithmetic. These skills, as well as the study of law, were needed in business. The merchants also wanted their children to study the writings of ancient Greeks and Romans. The practical thinking of the Romans and the Greeks' love of beauty strongly appealed to the Renaissance merchants.

Love of ancient Greek and Roman culture played a major part in the Renaissance. Scholars eagerly studied all the old manuscripts they could find. The finding of a "new" manuscript caused excitement. Writers and artists often imitated Greek and Roman works.

Practical ideas in everyday life and interest in the past combined in a new way of thinking about the world. After the hard times of the Middle Ages, people awakened to a more interesting life. They wanted to learn about and enjoy nature. Like the ancient Greeks, they felt that each individual person was important.

These new ideas appeared first in literature. During the Renaissance, writers chose many different subjects about which to write. They chose to write in the languages of their own countries rather than in Latin. Some works were serious; others were humorous.

## A New Kind of Art

Renaissance artists were encouraged to create new kinds of art. Merchant patrons wanted art that showed the same joy in human beauty and life's pleasures that they felt. The art they bought was lifelike. It was more like the art of Greece and Rome than like the art of the early Middle Ages.

The people in Renaissance art are real human beings of flesh and blood. They show individual feelings. Even the backgrounds of Renaissance art looked real for the first time. Renaissance artists studied **perspective** or the differences in the way things look when they are close to a person and when they are far away. The artists painted in a way that showed these differences. As a result, their paintings seem to have depth.

The first painter of this new style of art was called **Giotto**. Giotto lived in Florence in the early fourteenth century. People in his religious paintings show real feeling in their faces. Their bodies look solid. The backgrounds of his paintings are beginning to show perspective.

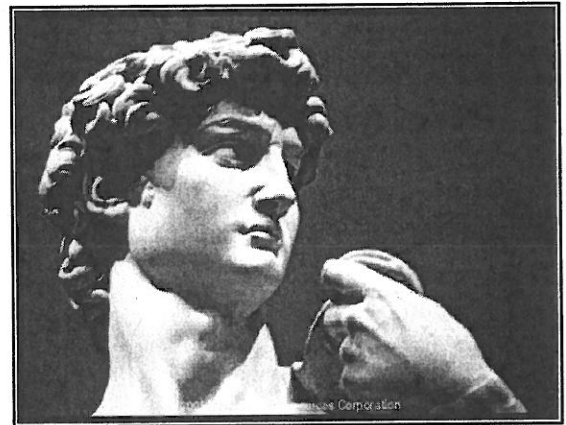




There was an explosion of great art in Italy during the fifteenth and early sixteenth centuries. One of the finest artists of this time was Leonardo da Vinci. People have been trying to guess the secret behind the mysterious smile of his *Mona Lisa* ever since he painted it around 1505. *His Last Supper*, though faded, shows clearly the different feelings of Christ and his disciples.

Da Vinci was the perfect "Renaissance man," skilled in many fields. He was a scientist and inventor as well as an artist. He made notes and drawings of everything he saw. He drew plants, animals, and bones and muscles of the human body. He invented clever machines for warfare. He even designed imitation wings that he hoped would let a person fly like a bird.

Michelangelo Buonarroti of Florence was one of the great artists of all time. He was a sculptor, a painter, and an architect. His famous statue of David shows the hero of the Bible story of David and Goliath. His figure of Moses is equally famous. Both sculptures have dignity and power like the finest Greek statues. Michelangelo also designed the dome of St. Peter's Church in Rome. Nearby, his paintings cover the whole ceiling of the Sistine Chapel. The Christian Church, like the merchant princes, acted as a patron of the arts. Some of the finest Renaissance art is found in the churches of Europe.



### **The Invasion of Italy**

When French troops invaded Italy in 1494, the Italians were completely surprised. Italy had not been attacked from outside for almost 200 years. Even the Italian city-states had kept an uneasy peace with each other for more than 40 years. The French did little damage during their invasion, and they went home the following year. Unfortunately for Italy, however, they soon returned, followed by the Spanish. Later, the soldiers of the Holy Roman Empire invaded as well. The rulers of these regions were trying to enforce old claims to parts of Italy.

Italy became a battleground for more than 50 years. At the time of these invasions; warfare was changing in important ways. Cannons and crude handguns began to play a part in European battles in the second half of the fourteenth century. They were often used during the Renaissance. Foot soldiers were taking the place of soldiers on horseback. They served for pay, not out of loyalty. Such hired soldiers were called mercenaries.



International politics was changing; too, Countries began to form alliances, agreements to help each other keep rival countries from gaining too much power. These alliances kept the "balance of power."

The invasions of Italy meant the end of the city-states' political power. The discovery of new routes to Asia and the Americas by Spanish and Portuguese explorers in the 1490s meant a sharp decline in the Italians' trading wealth. Because of the decline in trade, it was more difficult for artists and scholars to find wealthy patrons.

The Renaissance did not come suddenly to a halt in Italy. Despite the decline in power, Italy's masters continued to produce great works. However, in the sixteenth century, leadership in art and ideas passed to other parts of Europe.

### Reading Check

1. Which family ruled Florence during the Renaissance?
2. Which ancient cultures played a major part in the Renaissance?
3. How did warfare change during the Renaissance?

### Think Beyond

Who would you consider to be a "Renaissance man" or "Renaissance woman" today?

## SECTION 2: The Renaissance Elsewhere in Europe

### *Reading for a Purpose*

#### **Key Words**

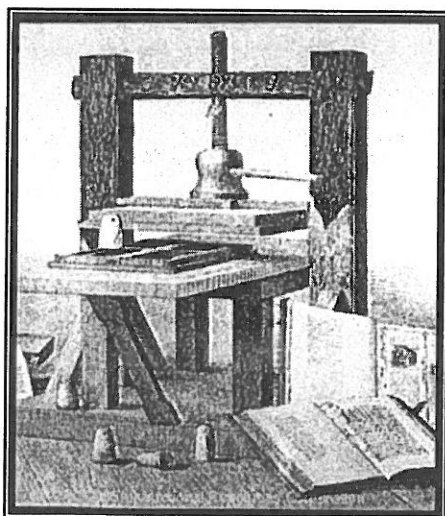
Printing press	movable type	heresy
Reformation	Moors	monarchs
Heir	Gutenberg	Martin Luther
Philip II	Henry VII	Elizabeth Tudor
Joan of Arc	Wittenberg	Low Countries

#### **Look for answers to these questions:**

1. How was the Renaissance elsewhere in Europe like the Renaissance in Italy? How was it different?
2. What enabled more books to spread throughout Europe?
3. What led to major changes in the Christian Church?
4. Under whose reign did England reach its height during the Renaissance?

Visitors to Italy spread Renaissance ideas to the rest of Europe. The Renaissance in other parts of Europe, however, had a stronger religious base than it had in Italy. People learned Greek and Latin so that they could read the Bible, not the works of Homer or Cicero. Sixteenth-century Europe saw the founding of new forms of Christianity and the fighting of bitter religious wars.

Most thinkers of Renaissance Europe agreed with the Italians on certain points. They felt that life on Earth was important. They felt that people had both the ability and the right to think for themselves. This interest in learning led to new inventions. In turn, new inventions led to the spreading of knowledge, which sparked an even wider interest in learning.

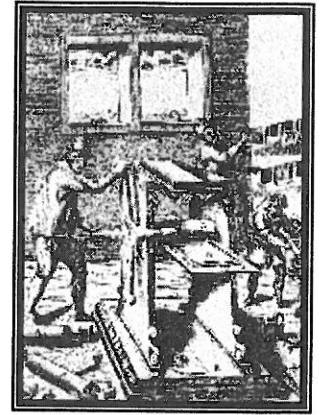


#### **Gutenberg's Printing Press**

Renaissance ideas spread through Europe with the help of an invention from Germany. During the fourteenth century the wood-block method of printing was used. The words and pictures on each page of a book were carved on a block of wood. The block was then inked and stamped onto paper. The whole block had to be carved over if anything needed to be changed.

Around 1450 a German named Johann Gutenberg invented a better way of printing. Instead of wood blocks, Gutenberg's printing press used small pieces of metal. Each piece had a single alphabet letter. The metal pieces could be placed in trays to form lines of print. Movable type, as it was called, could be used over and over.

Bookmaking further improved with the introduction of paper to Europe. Muslims had learned about making paper from the Chinese. They then introduced the method to Europeans. Printing on paper was quicker and less expensive than writing by hand on parchment.



Not too long after Gutenberg made the first one, printing presses were being built all over Europe. People no longer had to be rich or belong to the Church in order to have books. The printing press allowed the Bible, the Greek and Roman classics, and the works of Renaissance writers to spread throughout Europe.

### Luther and the Reformation

In a public square in the German town of Wittenberg, a priest was beating a drum. "God's forgiveness is yours!" he cried. Then he held out a box and asked for money. Another priest stood in the audience. His name was Martin Luther. The year was 1517.



Luther had seen something similar when he had visited Rome six years earlier. The idea that forgiveness could be bought with money had shocked him then. It shocked him now.

The next day, Martin Luther nailed some pieces of paper to the door of the church in Wittenberg. They contained 95 complaints against the Church of Rome. Luther offered to debate Germany's religious leaders on these ideas. A Church court quickly put Luther on trial. It convicted him of denying the beliefs of the Church, a crime called heresy. Later the Holy Roman Emperor, Charles V, put Luther on trial as well. In both trials, Luther explained that he did not want to harm the Church. He wanted only to correct its weaknesses. However, he refused to deny or change any of his ideas.

Charles V issued an order forbidding any citizen of the empire to give Luther food or shelter. A German prince defied the order and gave Luther a place to live. From this safe shelter, Luther wrote constantly. He said that people could find their way to God through their own faith.

Luther also said that people should read the Bible themselves rather than letting priests interpret it for them. To aid people in this task, Luther translated the Bible into German. He used the printing press to spread his German Bible and other writings to large numbers of people. His ideas eventually led to the formation of the Lutheran Church. Many Germans became Lutherans. When certain German princes protested attempts to stamp out the new religion, they became known as "Protestants." Later, that name was used for churches that did not acknowledge the Pope as their religious leader. The Protestant religious movement was called the Reformation because it began as an attempt to reform the Roman Catholic Church. The Reformation spread throughout Europe.

The Roman Catholic Church remained powerful in Spain, Portugal, France, Italy, Ireland, and most of Eastern Europe. England, Scotland, Germany, Scandinavia, and the Netherlands became largely Protestant. Religious rivalry led to many wars during the Renaissance.

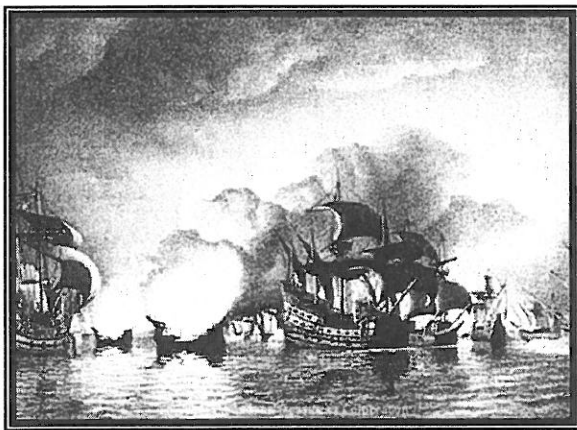
### **Spain and Portugal**

During the Middle Ages, most of the Iberian Peninsula was controlled by Muslim people called **Moors**. Toward the end of this time Christian armies began driving the Moors out of the peninsula.

Ferdinand of Aragon and Isabella of Castile were next in line for the thrones of their large Spanish kingdoms. After their marriage in 1469, they united most of Spain under their joint rule. They drove out the last of the Moors in 1492.

In that same year Ferdinand and Isabella sent an Italian explorer, Christopher Columbus, to look for a new sea route to the rich lands of Asia. As you know, Columbus instead reached the "New World" of the Americas. Soon after that, explorers from one of Spain's neighbors, Portugal, sailed around Africa to reach India. Silver and gold from the Americas made Spain incredibly rich. Trade with Asia did the same for Portugal.

The Spanish kings spent most of their money on wars as they tried to gain power in other parts of Europe. Most of their efforts failed; In 1588 Philip II of Spain planned an invasion of England. He was angered by English attacks on Spanish ships; He also wanted to force Protestant England to rejoin the Catholic Church.



Philip built a huge fleet of ships to carry soldiers to England. He called this fleet the Armada. He was sure that nothing could conquer it. The English heard about the Armada, however, and prepared for it. Fast-moving English ships attacked the Spanish fleet as it neared their shores. The English sank many Spanish ships. A tremendous storm finished the Armada's destruction. Only half of Spain's 130 ships returned home. As a result, Spain was weakened while England proved itself a powerful nation. In addition, England began to challenge Spain for the wealth of the Americas.

### **The Elizabethan Age**

The Tudors were the ruling monarchs, or kings and queens, in England during the Renaissance. The first Tudor king, Henry VII, took power in 1485. His rule ended a long period of civil war. Henry VII was followed to the throne by his son, Henry VIII. Henry VIII was handsome, intelligent, and popular. He loved hunting and other sports, music, and poetry.

In 1534 Henry established a new kind of Protestant Church. He made himself its leader. Unlike Luther, Henry acted for selfish reasons. He wanted to take over the lands and riches that the Catholic Church owned in England. He also wanted to divorce his wife and remarry, an action which the Pope would not permit. Henry was able to make his break with the Pope because most of the English people supported him. The Pope seemed more like a foreign king than a spiritual leader to them. They did not want the Pope to own English land and take English tax money.

Henry VIII married six times. He did so partly because he wanted a male heir. An heir is one who inherits, or receives, possessions or a social position after the death of a parent. Henry had two daughters, Mary and Elizabeth. However, he did not think the English people would accept a queen. He was afraid civil war would break out again after his death if he did not leave a son on the throne.

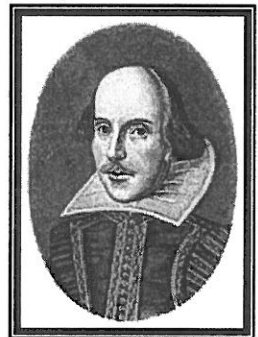
Henry finally had a son named Edward. Edward died, however, soon after Henry did. Edward's oldest sister, Mary, then became queen. Mary was a devoted Catholic. She ordered the deaths of many nobles who would not rejoin the Catholic Church. The English called her "Bloody Mary."



Mary died in 1558, and Elizabeth Tudor took the throne. A shrewd and intelligent woman, Elizabeth I was even more popular with the English people than her father had been. She never lost that popularity. Elizabeth restored her father's church, the Church of England. Unlike Mary, she usually did not punish people whose religion was different from her own.

The Renaissance reached its height in England during Elizabeth's rule. She made herself the center of a glittering court. She wore elaborate dresses, stiff with lace and jewels. She attended plays and balls. She listened as men read poems about her and paid her compliments, though she never married.

Some of England's finest poetry and drama was written during Elizabeth's rule. England's most famous playwright, William Shakespeare, lived during this time. His plays appealed to noble and commoner alike and are still popular today.



Elizabeth surrounded herself with wise government leaders as well as brilliant poets. Often her decisions proved wisest of all. She encouraged trade, business, and exploration. Sir Francis Drake and other bold sailors claimed land in the Americas

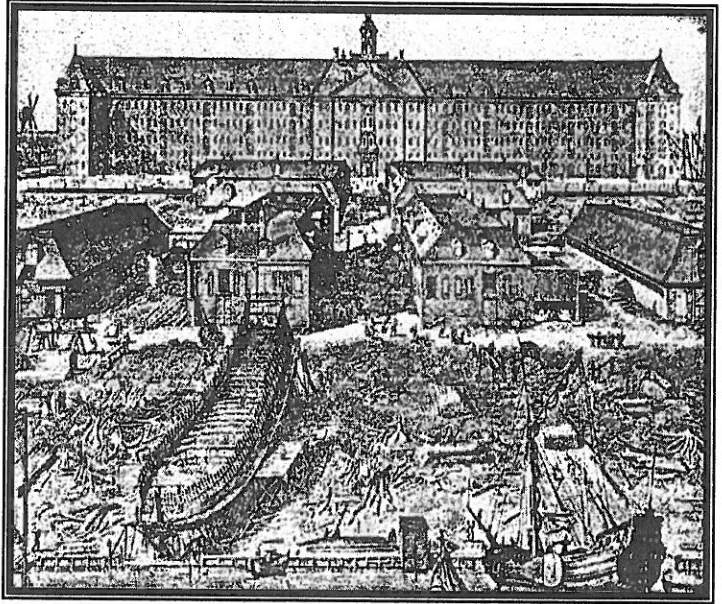


for her. They brought her a share of the wealth that Spain was gaining there. Elizabeth ruled England for 45 years. She was a better leader than most of the country's monarchs had been. England gained steadily in wealth and power during her rule. For centuries afterward, English people referred to Elizabeth's time as the "Golden Age."



## France and the Low Countries

Between 1337 and 1453 England and France fought the Hundred Years' War. Most of the fighting was in France. In 1429 a peasant girl, Joan of Arc, said that heavenly voices told her to drive the English out of France. An inspired army followed her to victory in many battles. After her death the English were defeated. France became a powerful nation-state.



After France invaded Italy in 1494, Italian Renaissance artists inspired the French. French kings and queens encouraged Renaissance fashions in art and architecture. After the Reformation, France, like its neighbors, was torn by fighting between Catholics and Protestants. These civil wars continued until the late 1500s.

The lands between France and Germany were called the Low Countries because they were almost at sea level. They became part of the Holy Roman Empire in 1477. Later, large numbers of their people became Protestants. The Holy Roman Emperor, who was Catholic, punished these people. The punishments became worse when the emperor's son, Philip II of Spain, took over the rule of the Low Countries.

At last, in 1566, the northern provinces of the Low Countries rebelled against Philip. They had to fight for almost a century before they gained their independence in 1648. Their land became the Netherlands. The southern regions remained loyal to Spain. They later became Belgium.

Even while the Dutch people were fighting for their freedom, their skill in trade and business was making them rich. Dutch-built ships carried their own goods and those of others through European waters and beyond.

### Reading Check

1. What invention helped spread Renaissance ideas in Europe?
2. Who were the first "Protestants"?
3. Why did Henry VIII establish a new church in England?

**Think Beyond** What ingredients do you think are necessary to produce a "golden age" in your lifetime?

## SECTION 3: *The Beginning of Modern Science*

### Key Words

- heliocentric • Nicholas Copernicus
- telescope • Galileo
- gravity • Isaac Newton

### Look for answers to these questions:

1. What new idea did Nicholas Copernicus propose, and how was it proved?
2. For what do we remember Isaac Newton?
3. What principle does the scientific method state?

As European countries were establishing their identities during the Renaissance, nations formed or were strengthened. Religions spread their influence. Art flourished. European power was growing and moving to other parts of the world.

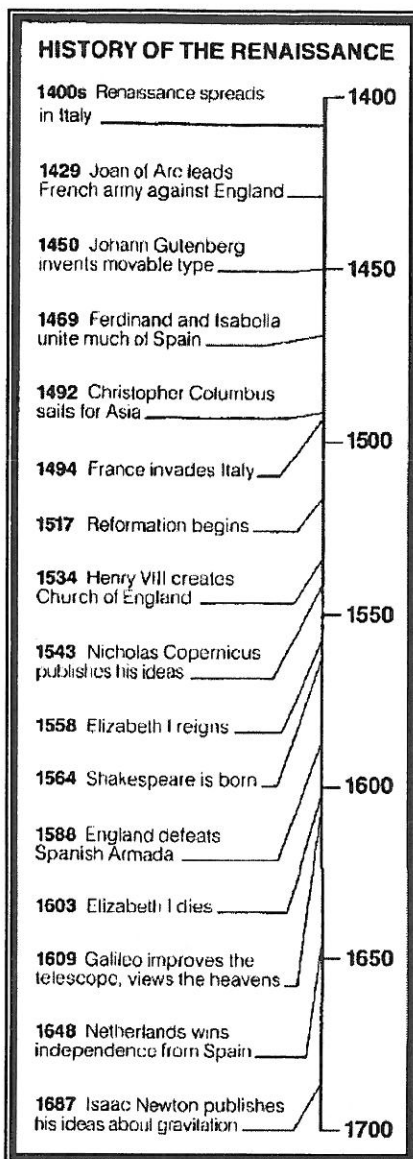
During this period, too, Europeans sought new knowledge of the world around them. For the first time since the days of Greece and Rome, people were interested in science.

One of the greatest Renaissance scientists was a Polish thinker named **Nicholas Copernicus**. In 1543 he wrote a book that said the Earth traveled around the sun. This idea went against Church teachings and popular beliefs. Most people at the time believed that Earth was the center of the heavens. In time, however, Copernicus's **heliocentric** or sun-centered, idea was accepted.



Other scientific advancements followed. In the early 1600s an Italian named **Galileo** learned about a Dutch invention that used glass lenses to make distant objects appear nearer. Working at home, he turned this invention into a larger device that could magnify objects in space. Thus Galileo has been credited with improving the **telescope**. What Galileo saw through his telescope helped prove the ideas of Copernicus. The discoveries of Copernicus and Galileo inspired an English scholar named **Isaac Newton**. In 1687 Newton published a book to explain why people and objects do not fall off the Earth as it moves. He proved that objects are held to the Earth by a force, called gravity. He said that this same force kept the planets circling the sun.

Newton and other scientists of his time developed what is now called the "scientific method." This method states that no idea should be accepted as true unless it is thoroughly tested. Many people complimented Newton on his work and his method. He said, "If I have been able to see farther than others, it is because I have stood on the shoulders of giants."



Copernicus, Galileo, and Newton were not the only scientists to make advances. Scholars studying medicine and mathematics made important breakthroughs, too. Scientific discoveries during the Renaissance, like Renaissance ideas about government, education, religion, and art, helped shape the world we know today.

### Reading Check

1. How did the ideas of Copernicus differ from popular beliefs of his time?
2. Who improved the telescope?
3. What force keeps people and objects from falling off the Earth?

**Think Beyond** How might you use the scientific method today?

### Thinking Back

- The Renaissance began in Italy as trade grew and people explored new ideas.
- Members of the Medici family, patrons of the arts ruled Florence.
- Education, especially in the Greek and Roman classics, was very important during the Renaissance.
- Perspective was a new artistic technique used by Giotto, Leonardo da Vinci, and Michelangelo to show realism.
- Invasions and a decline in trade ended Italy's leadership of the Renaissance.
- Gutenberg's printing press helped spread Renaissance ideas throughout Europe.

1. Martin Luther tried to reform Church practices and brought on the Reformation, Religious differences led to many wars.
2. Ferdinand and Isabella drove the Moors out of Spain and sent Columbus to the New World. The English defeated Philip II's mighty Armada. Henry VIII became head of the Church of England. Elizabeth I ruled during England's Golden Age.
3. Part of the Low Countries rebelled against Philip II and finally gained freedom as *the Netherlands*.
4. Renaissance thinkers such as Copernicus, Galileo, and Newton launched the beginning of modern science.

## Reviewing Facts

1. Why did the Renaissance appear first in Italy?
2. How did "merchant, princes" contribute to the growth of Renaissance Europe?
3. How did the cultures of ancient Greece and Rome influence the Renaissance?
4. In what ways was Renaissance art more true to life than art of the early Middle Ages?
5. What man of the Renaissance was an artist, scientist, and inventor?
6. What caused Renaissance leadership to pass from Italy to the rest of Europe?
7. How did the Reformation affect the countries of Europe?
8. Which monarch united Spain?
9. In what ways did Elizabeth I improve the wealth and power of England?
10. How did the discoveries of Copernicus, Galileo, and Newton contribute to our knowledge of the planets?

## Thinking Critically

1. The Renaissance is sometimes called the Age of Exploration. France, England, Portugal, and Spain explored distant lands. How were artists, scientists, inventors, and religious thinkers involved in exploration of a different kind?
2. How did the use of paper, movable type, and—languages other than Latin help change Europe during the Renaissance? What new forms of communication have had similar effects in recent times?
3. Think about the monarchs of the Renaissance. Often they were concerned with wars and religious struggles. How do you think they were able to pay for these conflicts and for their lavish courts?

## Writing about It

Write an obituary, or death notice, as it would appear in a newspaper today for one of the following people: Lorenzo de Medici, Leonardo da Vinci, Elizabeth I, or Galileo. The obituary should summarize major events and accomplishments in the person's life.

## Check for Understanding

Define each word and use it correctly in a sentence.

1. alliances
2. gravity
3. heir
4. heliocentric
5. heresy
6. mercenaries
7. monarchs
8. patrons
9. perspective
10. Reformation