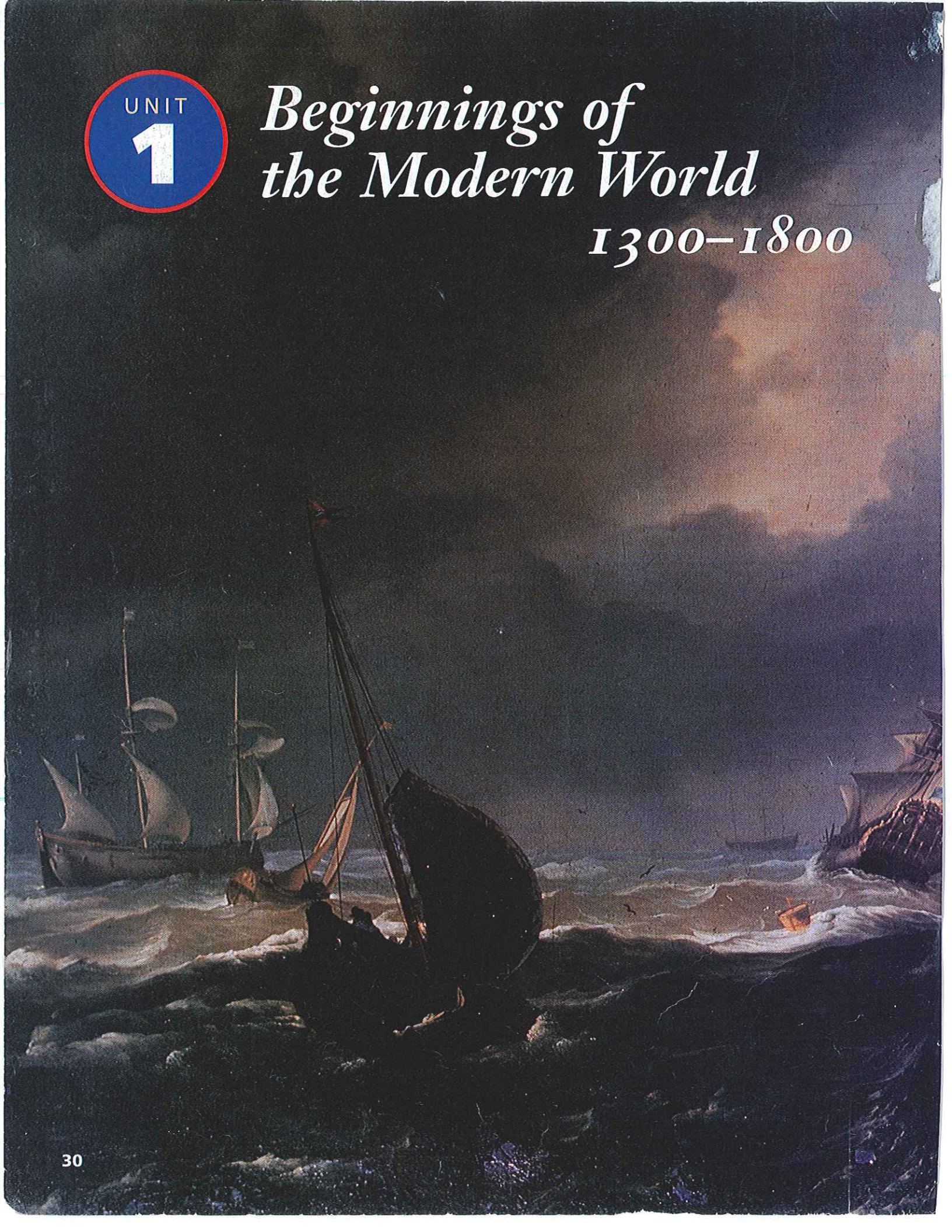
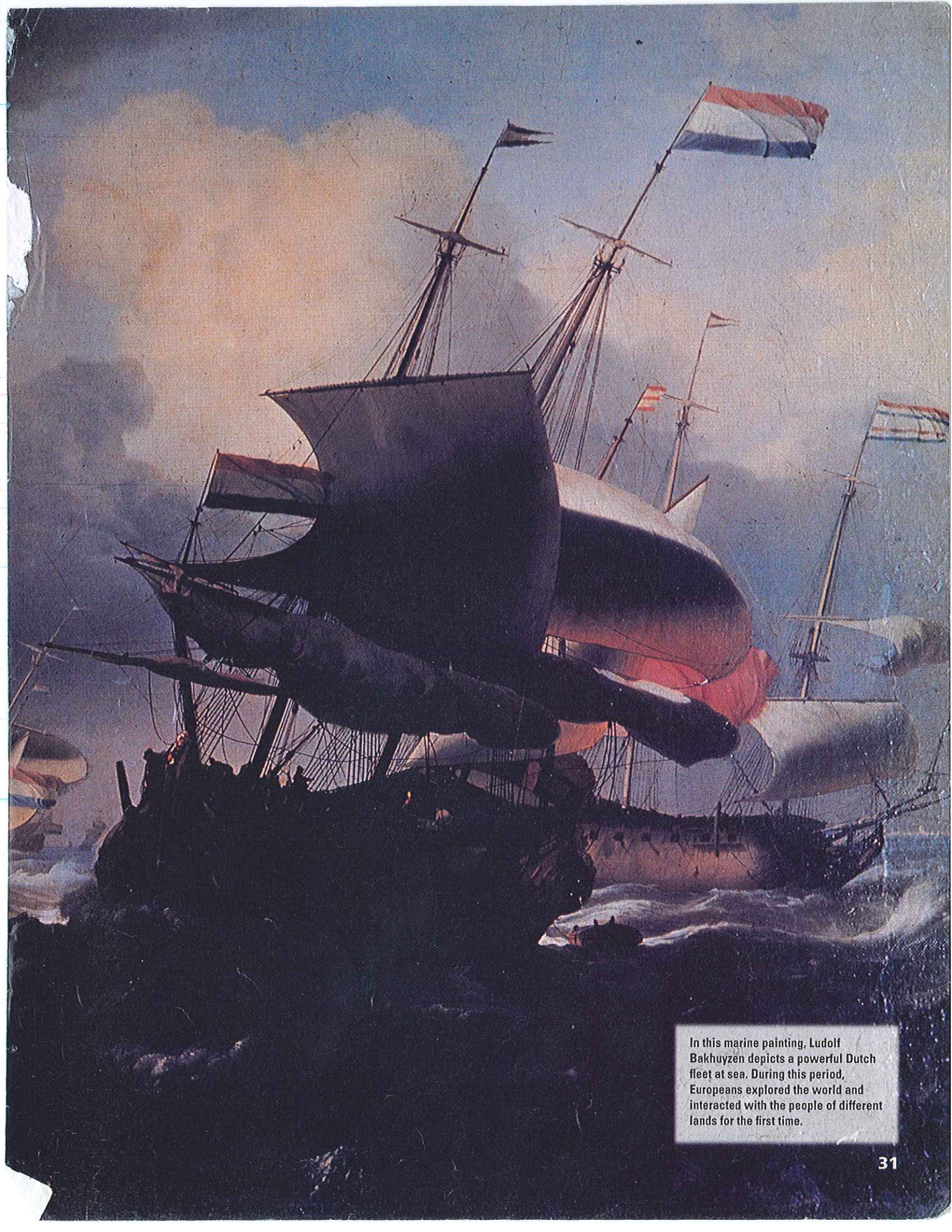




Beginnings of the Modern World

1300–1800





In this marine painting, Ludolf Bakhuizen depicts a powerful Dutch fleet at sea. During this period, Europeans explored the world and interacted with the people of different lands for the first time.

1300

1400

CHAPTER 1 1300-1600

European Renaissance and Reformation

1300 *Italy*
Renaissance begins

1353 *Italy*
Boccaccio finishes writing the *Decameron*

CHAPTER 2 1300-1700

The Muslim World Expands

1400s *Anatolia* ▶



1300 *Anatolia*
Osman establishes Ottoman states

1361 *Anatolia*
Ottoman Orkhan I captures Adrianople

CHAPTER 3 1400-1800

An Age of Exploration and Isolation

1400s *China* ▶



1368 *China*
Hong Wu founds Ming Dynasty

CHAPTER 4 1492-1800

The Atlantic World

1300

1400

Living History Unit 1 Portfolio Project

THEME Cultural Interaction

Your portfolio for Unit 1 will trace the ways cultures interact with one another and show the results of those influences. Types of interaction include conquest, trade, migration, and heritage. Results include the sharing of technology, religious concepts, political ideas, goods, crops, foods, diseases, and knowledge of all kinds.

Living History Project Choices

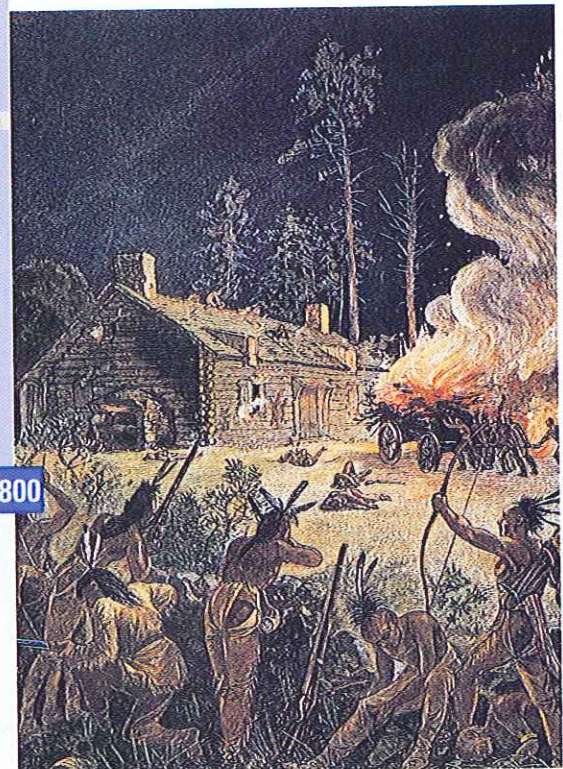
Each Chapter Assessment offers you choices of ways to show the cultural interaction in that chapter. Activities include the following:

- Chapter 1** magazine, letter, role-play, painting, interview
- Chapter 2** letter, political cartoon, inscription
- Chapter 3** letter, reply, editorial
- Chapter 4** description, collage, debate



▲ 1500s England

▼ 1675 North America



1400 1500 1600 1700 1800

1455 Germany
Gutenberg Bible produced on printing press

1497 Italy
Leonardo da Vinci paints *The Last Supper*

1400 India Timur the Lane devastates India

1453 Europe
Ottomans conquer Constantinople

1498 Portugal
Vasco da Gama sails to India

1420 Portugal
Prince Henry starts navigation school

1433 China Last voyage of Zheng He

1494 Spain
Portugal Treaty of Tordesillas splits "New World"

1492 Americas
Columbus sails to Hispaniola

1508 Italy
Michelangelo begins painting Sistine Chapel

1517 Germany
Martin Luther begins Reformation

1534 England
Henry VIII breaks from Church

1501 Persia
Safavid Isma'il conquers Persia

1526 India
Babur founds Mughal Empire

1529 Anatolia
Suleiman the Magnificent rules Ottoman Empire

1514 China
First Portuguese ships reach China

1522 Spain
Magellan's crew sails around world

1502 Africa
First slaves exported for work in the Americas

1521 Mexico
Cortés conquers Aztec

1532 Peru Pizarro conquers Inca

1601 England
William Shakespeare writes *Hamlet*

1603 England
Queen Elizabeth I dies, ending Tudor rule

1631 India Shah Jahan builds Taj Mahal

1658 India
Aurangzeb rules Mughal Empire

1603 Japan
Tokugawa Regime begins

1636 China
Manchus conquer Korea

1644 China
Manchus found Qing Dynasty

1607 North America English settle Jamestown

1608 Canada
Champlain founds Quebec

1675 North America Colonists and Indians clash in King Philip's War

1721 Japan
Edo (Tokyo) becomes world's largest city

1793 China
British seek trade concessions with Chinese

1739 North America
South Carolina slaves lead Stono Rebellion

1754 North America
French and Indian War begins

1400 1500 1600 1700 1800

European Renaissance and Reformation, 1300–1600

PREVIEWING THEMES

Cultural Interaction

Most medieval European art expressed either the values of Christianity or the code of chivalry. During the Renaissance, scholars and artists developed new cultural and artistic ideas based on the rediscovery of the literature of classical Greece and Rome.

Religious and Ethical Systems

For centuries, religious leaders had sought to reform the Catholic Church. They wanted to make it live up to its ideals. In the 1500s, Martin Luther began a reform movement called the Reformation. This led to the founding of Protestant churches.

Revolution

European scholars gained access to classical documents that they thought had been lost after the fall of Rome. This revolutionized their thinking. New ideas and values swept Europe. The invention of the printing press aided the spread of these revolutionary ideas. The printing press also spread ideas that called for a revolutionary rejection of the pope's authority.

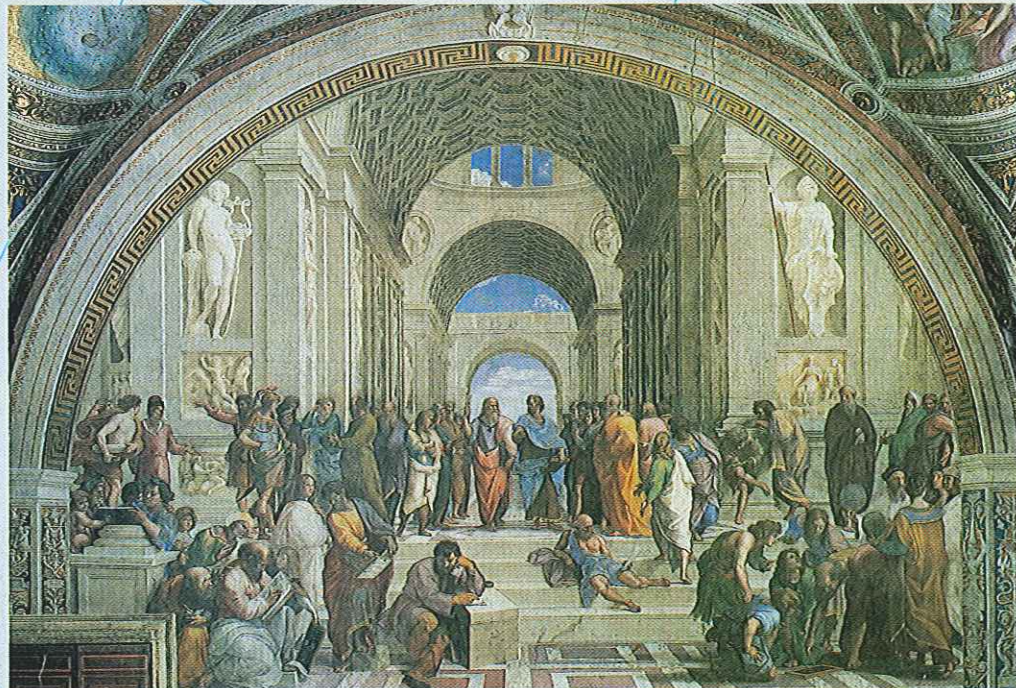
INTERNET CONNECTION

Visit us at www.mcdougallittell.com to learn more about Renaissance artists, the Reformation, and related topics.

EUROPE, 1500



By 1527, King Henry VIII of England was sure that his queen was too old to bear a son. **Anne Boleyn** caught his eye. Anne was pretty and young enough to have children. When the pope refused to end Henry's first marriage, Henry started his own church. An English archbishop ended Henry's marriage and Anne became Henry's second wife.





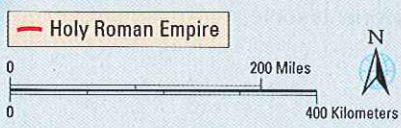
PREVIEWING THE CHAPTER

Section 1	Italy: Birthplace of the Renaissance	37
Section 2	The Northern Renaissance	43
Section 3	Luther Starts the Reformation	48
Section 4	The Reformation Continues	53



In 1401, the wool manufacturers of Florence decided to pay for new doors for the baptistery of the cathedral. They held a contest to choose the artist. The designs of **Lorenzo Ghiberti** won. Ghiberti labored on the bronze doors more than 20 years. Each door was divided into panels, showing Biblical scenes. This panel shows the Old Testament story of Jacob and Esau.

Raphael's painting *School of Athens* was finished in 1508 in Rome. It shows the influence of Greek thought on the Renaissance. Under the center arch stand Plato and Aristotle. To their left, Socrates argues with several young men. Pythagoras draws a lesson on a slate and Ptolemy holds a globe. Other people in the crowd are Renaissance artists and philosophers.



Interact *with* History

You are a historian looking at primary sources from the Renaissance. One of them is this painting by Jan van Eyck.

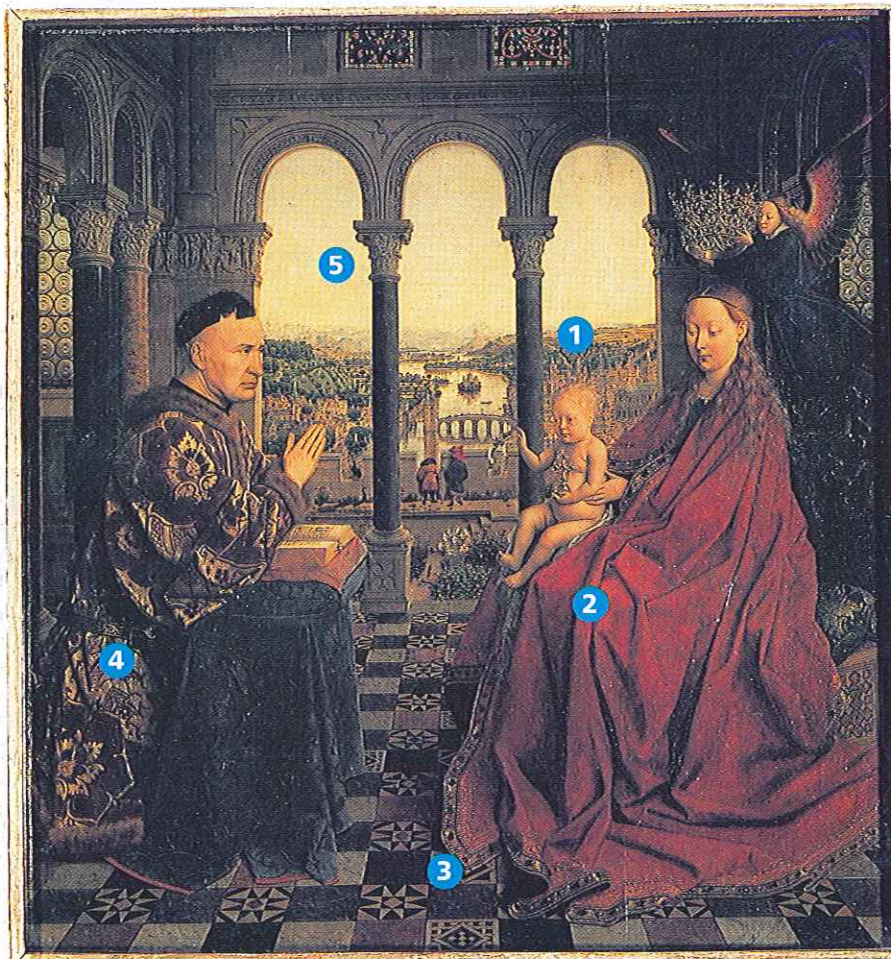
Chancellor Rolin, a powerful government official in Burgundy (later part of France), asked the artist to paint this portrait. You are analyzing it to discover Rolin's values and how he wanted to be viewed by others. You can also use the art to learn about the times.

What do we learn from art?

1 Van Eyck used a recently rediscovered technique called perspective, which makes distant objects look smaller than close ones. He also used oil paints, a new invention.

2 This painting shows the infant Jesus and his mother Mary in 15th century Europe. By portraying biblical characters in their own time, Renaissance artists showed the importance of religion in their lives.

5 Renaissance artists were influenced by classical art. The columns and arches show classical influence.



3 Van Eyck included many details simply for the sake of beauty. These include the fancy design on the floor, the folds of Mary's cloak, and the scenery outside the arches.

4 Renaissance artists portrayed the importance of individuals. Chancellor Rolin is kneeling to show respect, but he wears a fur-trimmed robe that shows his high status.

EXAMINING *the* ISSUES

- What does art tell us about the values and beliefs of the society that produced it?
- What does art show about how people of that society viewed themselves?
- How does art reflect a society's standards of beauty?

As a class, discuss these questions. In your discussion, review what you know about art in other places such as Egypt, India, China, and Benin.

As you read about the Renaissance, notice what the art of that time reveals about European society.

1

Italy: Birthplace of the Renaissance

TERMS & NAMES

- Renaissance
- humanism
- secular
- patron
- perspective
- vernacular

MAIN IDEA

The European Renaissance, a rebirth of learning and the arts, began in Italy in the 1300s.

WHY IT MATTERS NOW

Renaissance ideas about classical studies, art, and literature still influence modern thought.

SETTING THE STAGE During the late Middle Ages, Europeans suffered from both war and plague. Those who survived wanted to enjoy life. As a result, they questioned the Church, which taught Christians to endure suffering to get a heavenly reward. They also questioned the structures of medieval society, which blocked social advancement. Educated people gradually began to reject medieval values and look to the classical past for ideas.

Italy's Advantages

The years 1300 to 1600 saw an explosion of creativity in Europe. Historians call this period the **Renaissance** (REIN-ih-SAHNS). The term means rebirth—in this case a rebirth of art and learning. The Renaissance began in northern Italy around 1300 and later spread north. One reason northern Europe lagged behind is that France and England were locked in the Hundred Years' War. Italy also had three advantages that fostered the Renaissance: thriving cities, a wealthy merchant class, and the classical heritage of Greece and Rome.

Urban Centers Overseas trade, spurred by the Crusades, had led to the growth of large city-states in northern Italy. The region also had many sizable towns. Thus, northern Italy was urban while the rest of Europe was still mostly rural. Since cities are often places where people exchange new ideas, they were an ideal breeding ground for an intellectual revolution.

The bubonic plague struck these cities hard, killing up to 60 percent of the population. This brought economic changes. Because there were fewer laborers, survivors could demand higher wages. In addition, the reduced population shrank opportunities for business expansion. Wealthy merchants began to pursue other interests, such as art.

Merchants and the Medici Milan, Florence, and other Italian city-states ran their own affairs. Each collected taxes and had its own army. Because city-states were relatively small, a high percentage of citizens could be intensely involved in political life. Merchants were the wealthiest, most powerful class, and they dominated politics. Unlike nobles, merchants did not inherit social rank. Success in business depended mostly on their own wits. As a result, many successful merchants believed they deserved power and wealth because of their individual merit. Individual achievement was to become an important Renaissance theme.

Florence came under the rule of one powerful family, the Medici (MEHD-ih-chee). They had made a fortune in trade and banking. Cosimo de' Medici was the wealthiest European of his time. In 1434, he won control of Florence's government. He did not seek political office for himself, but instead influenced members of the ruling council by giving them loans. For 30 years, he was virtually dictator of Florence.

SPOTLIGHT ON

Other Renaissances

A Renaissance can be a rebirth of the arts and learning at any time in history. For example, the Tang (618–907) and Song (960–1279) dynasties in China oversaw a period of great artistic and technological advances.

Like the Italian Renaissance, the achievements of the Tang and the Song had roots in an earlier time—the Han Dynasty (202 B.C. to A.D. 220). After the Han collapsed, China experienced turmoil.

When order was restored, Chinese culture flourished. The Chinese invented gunpowder and printing. The most famous Chinese poets of all time wrote literary masterpieces. Breakthroughs were made in architecture, painting, and pottery. In many ways, the Tang and Song period was a true Renaissance.

Background

Florence lost up to 55,000 out of a population of 85,000.

THINK THROUGH HISTORY

A. Making

Inferences Why do you suppose Cosimo de' Medici preferred to rule from behind the scenes rather than openly?

HISTORY MAKERS

Medici Family

Giant banks with branches in many cities are nothing new. The Medici bank had branch offices not only throughout Italy but also in the major cities of Europe.

A rival family grew so jealous of the Medici that they plotted to kill Lorenzo (see bust below) and his brother Giuliano. As the Medici attended Mass, assassins murdered Giuliano at the altar. Drawing his sword, Lorenzo escaped to a small room and held off his attackers until help arrived. Then he had the killers brutally, publicly executed.

More positively, Lorenzo was a generous patron of the arts who collected many rare manuscripts. Eventually the Medici family made their library available to the public.



Cosimo de' Medici died in 1464, but his family retained control of Florence. His grandson, Lorenzo de' Medici, came into power in 1469. He became known as Lorenzo the Magnificent. Like his grandfather, Lorenzo ruled as a dictator yet kept up the appearance of having an elected government. Although the Medici did not foster true republican government, they aided the Renaissance by supporting the arts.

Classical Heritage Renaissance scholars looked down on the art and literature of the Middle Ages and wanted to return to the learning of the Greeks and Romans. One reason the Renaissance began in Italy is that artists and scholars drew inspiration from the ruins of Rome that surrounded them.

In the 1300s, scholars studied ancient Latin manuscripts, which had been preserved in monasteries. Then, when Constantinople fell to the Ottoman Turks in 1453, Byzantine scholars fled to Rome with ancient Greek manuscripts—which Italian scholars had assumed were lost forever.

Classical and Worldly Values

As scholars studied these Greek works, they became increasingly influenced by classical ideas. These ideas helped them to develop a new outlook on life, which had several characteristics.

Classics Lead to Humanism The study of classical texts led to **humanism**, which focused on human potential and achievements. Instead of trying to make classical texts agree with Christian teaching as medieval scholars had, humanists studied them to understand ancient Greek values. Humanists influenced artists and architects to carry on classical traditions. In addition, humanists popularized the study of subjects common to classical education, such as history, literature, and philosophy. These subjects are called the humanities.

Enjoyment of Worldly Pleasures In the Middle Ages, some religious people had proved their piety by wearing rough clothing and eating the plainest foods. However, humanists suggested that a person might enjoy life without offending God. In Renaissance Italy, the

wealthy openly enjoyed material luxuries, fine music, and tasty foods.

Most people remained devout Catholics. However, the basic spirit of Renaissance society was **secular**—worldly and concerned with the here and now. Even church leaders became more worldly. They lived in beautiful mansions, threw lavish banquets, and wore expensive clothes.

Patrons of the Arts In addition to seeking pleasure, Renaissance popes beautified Rome by spending huge amounts of money for art. They became **patrons** of the arts by financially supporting artists. Renaissance merchants also were patrons of the arts. Wealthy families such as the Medici generously supported artists. By having their portraits painted or by donating public art to the city, the wealthy demonstrated their own importance.

The Renaissance Man Renaissance writers first introduced the idea that some people were artistic geniuses. Though genius was rare, all educated people were expected to create art. In fact, the ideal individual strove to master almost every area of study. A man who excelled in many fields was praised as a “universal man.” Later ages called such people “Renaissance men.”

A book called *The Courtier* (1528) by Baldassare Castiglione (KAHS-teel-YOH-nay) taught how to become such a person. A young man, said Castiglione, should be

THINK THROUGH HISTORY

B. Analyzing

Causes What were the three advantages that caused the Renaissance to start in Italy?

Background

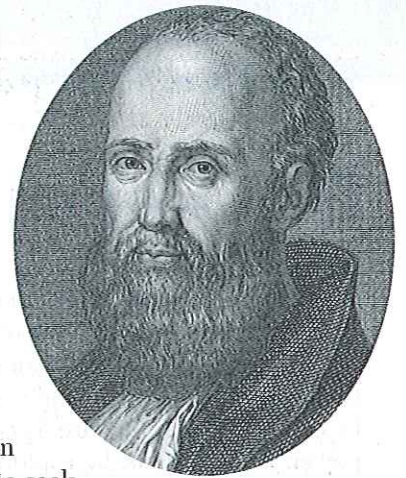
The words *humanist* and *humanities* come from the Latin word *humanitas*, which referred to the literary culture that every educated person should know.

charming, witty, and well educated in the classics. He should dance, sing, play music, and write poetry. In addition, he should be a skilled rider, wrestler, and swordsman. Above all, he should have self-control:

A VOICE FROM THE PAST

Let the man we are seeking be very bold, stern, and always among the first, where the enemy are to be seen; and in every other place, gentle, modest, reserved, above all things avoiding ostentation [showiness] and that impudent [bold] self-praise by which men ever excite hatred and disgust in all who hear them.

BALDASSARE CASTIGLIONE, *The Courtier*



This is a 19th-century engraving of the Renaissance writer Baldassare Castiglione.

The Renaissance Woman According to *The Courtier*, upper-class women also should know the classics and be charming. Yet they were not expected to seek fame. They were expected to inspire art but rarely to create it. Upper-class Renaissance women were far better educated than the women of the Middle Ages. However, most Renaissance women had less influence than medieval women had.

A few women, such as Isabella d'Este, did exercise power. Born into the ruling family of the city-state of Ferrara, she married the ruler of another city-state, Mantua. She brought many Renaissance artists to her court and acquired an art collection that was famous throughout Europe. She was also skilled in politics. When her husband was taken captive in war, she defended Mantua and won his release.

Renaissance Revolutionizes Art

Supported by patrons like Isabella d'Este, dozens of talented artists worked in northern Italy. As the Renaissance advanced, artistic styles changed. Medieval artists used religious subjects and tried to convey a spiritual ideal. Renaissance artists also often portrayed religious subjects, but they used a realistic style copied from classical models. Greek and Roman subjects also became popular.

Following the new emphasis on individuals, painters began to paint prominent citizens. These realistic portraits revealed what was distinctive about each person. In addition, artists such as the sculptor and painter Michelangelo glorified the human body. (See page 40.)

New Techniques Donatello (DAHN-uh-TEHL-oh) made sculpture more realistic by carving natural postures and expressions that reveal personality. He revived a classical form by carving the statue *David*. It was the first European sculpture of a large, free-standing nude since ancient times. Renaissance artists, such as the painter Masaccio (muh-SAH-chee-oh), also rediscovered the technique of **perspective**, which indicates three dimensions.

THINK THROUGH HISTORY
C. Synthesizing
Merchants believed in their own individual merit. How did this belief affect artistic styles?

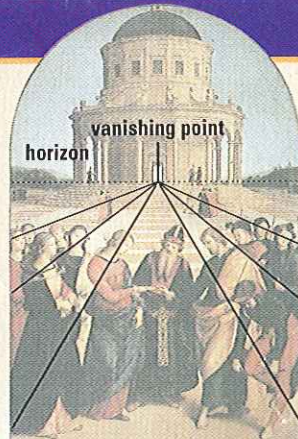


Marriage of the Virgin (1504), Raphael

Perspective in Paintings

Perspective is a technique that creates the appearance of three dimensions. Classical artists used perspective, but medieval artists abandoned the technique. In the 1400s, Italian artists rediscovered perspective. Since then, it has remained an important part of Western art.

Perspective is based on an optical illusion. As parallel lines stretch away from a viewer, they seem to draw together—until they meet at a spot on the horizon called the vanishing point.



Michelangelo—Renaissance Artist

Like Leonardo da Vinci, Michelangelo Buonarroti was a true Renaissance man. He excelled at almost every area of study. Michelangelo was a painter, a sculptor, an architect, and a poet.

Michelangelo is most famous for the way he portrayed the human body in painting and sculpture. Influenced by classical art, he created figures that are forceful and show heroic grandeur and power. By doing this, he explored the Renaissance theme of human potential.

St. Peter's Basilica

As an architect, he designed this dome to top St. Peter's Basilica [Church] in Rome. Michelangelo began working on the church in 1546. It still wasn't finished when he died in 1564. Another architect had to finish the dome.



Sistine Chapel

From 1508 to 1512, Michelangelo painted the ceiling of the Sistine Chapel in Rome. This detail shows the Biblical prophet Joel. Many of the panels show classical influences, such as the two youths who stand behind Joel instead of angels. Like many Renaissance artists, Michelangelo blended Christian and Greek ideals.

Connect to History

Clarifying How does the work of Michelangelo show that he was influenced by Renaissance values? Explain.

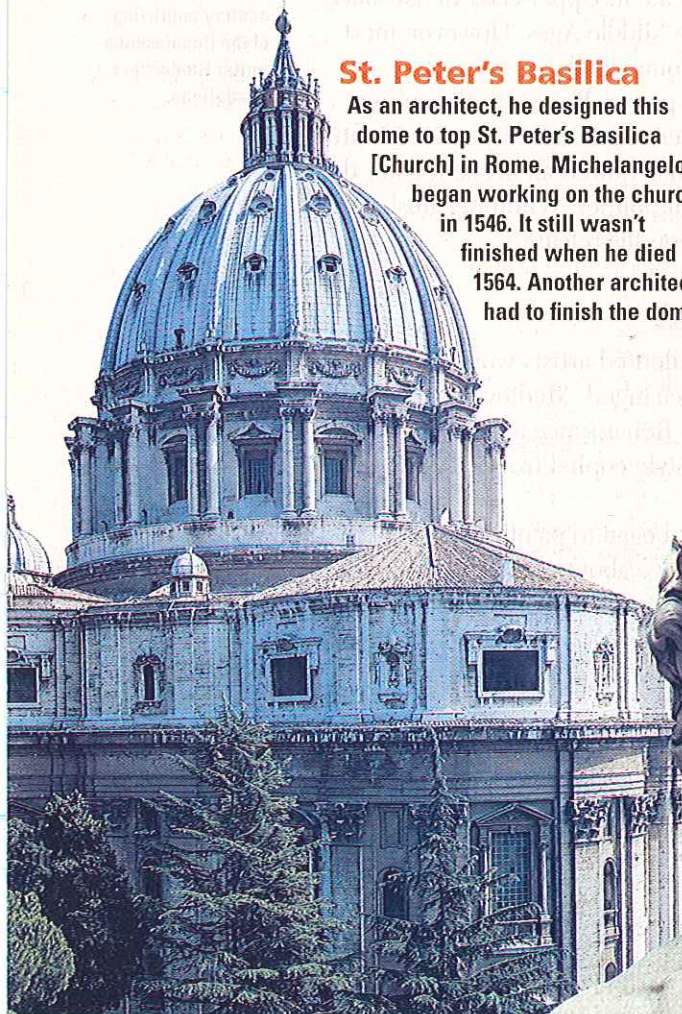
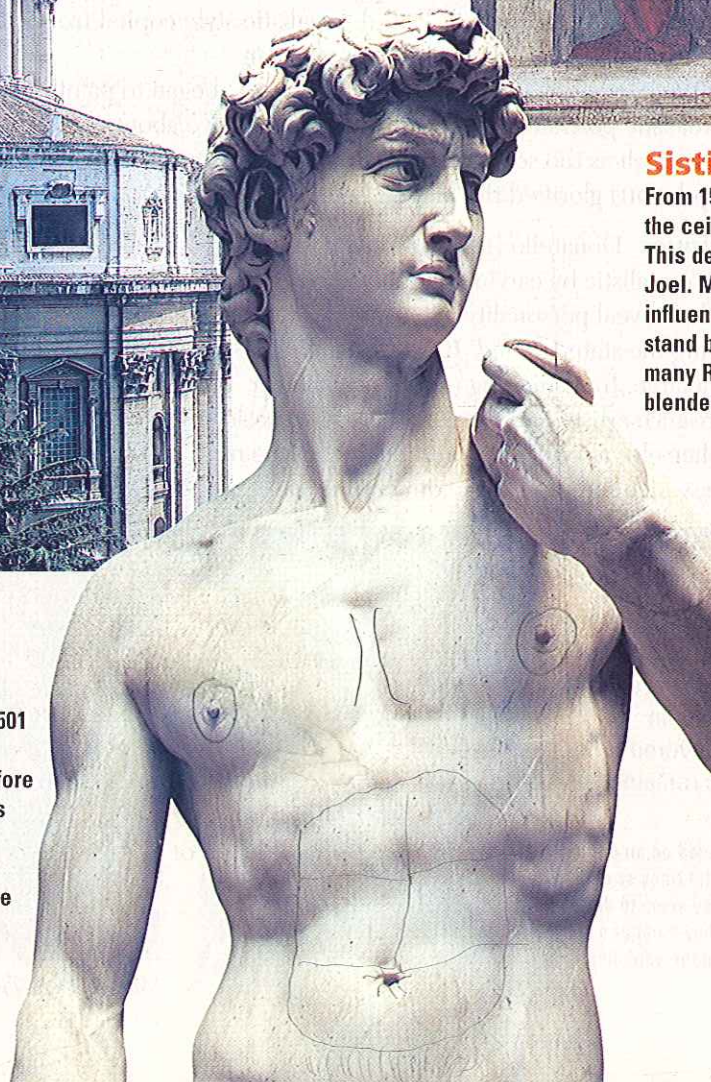
SEE SKILLBUILDER HANDBOOK, PAGE 650

Connect to Today

Researching Look through books on 20th century art to find artists who work in more than one medium, such as painting and sculpture. Share your findings with the class.

David

Influenced by classical statues, Michelangelo sculpted *David* from 1501 to 1504. Michelangelo portrayed the Biblical hero in the moments just before battle. His posture is graceful, yet his figure also displays strength. The statue, which is 18 feet tall, towers over the viewer. This conveys a sense of power.



Leonardo, Renaissance Man

Leonardo da Vinci (LAY-uh-NAHR-doh duh-VIHN-chee) was a painter, sculptor, inventor, and scientist. A true “Renaissance man,” he was deeply interested in how things worked. He studied how a muscle moves or how veins are arranged in a leaf. He filled his notebooks with observations and sketches of new inventions, and he incorporated his findings in his art.

Among his many masterpieces, Leonardo painted one of the best-known portraits in the world, the Mona Lisa. The woman in the portrait seems so real that many writers have tried to explain the thoughts behind her slight smile. Leonardo also produced a famous religious painting, *The Last Supper*. It shows the personalities of Jesus’ disciples through facial expressions.

Raphael Advances Realism

Raphael (RA-F-ee-uhl) was younger than Michelangelo and Leonardo. He learned from studying their works. One of Raphael’s favorite subjects was the Madonna and child. Raphael often portrayed their expressions as gentle and calm.

In his greatest achievement, Raphael filled the walls of Pope Julius II’s library with several paintings. One of these, *School of Athens* (page 34), conveys the classical influence of the Renaissance. It shows classical and Renaissance figures together. Listening to Greek philosophers are Raphael and Michelangelo, among others.

Women Painters Although Renaissance society generally restricted women’s roles, a few Italian women became painters. Sofonisba Anguissola (ahng-GWEES-soh-lah) was the first woman artist to gain an international reputation. She is known for portraits of her sisters and of prominent people such as King Phillip II of Spain. Artemisia Gentileschi (JAYN-tee-LEHS-kee) trained with her painter father and helped with his work. In her own paintings, Gentileschi painted pictures of strong, heroic women.

Renaissance Writers Change Literature

Renaissance writers produced works that not only reflected their time but also used techniques that writers rely on today. Some followed the example of the medieval writer Dante. He wrote in the **vernacular**, his native language, instead of classical Latin. Dante’s native language was Italian. In addition, Renaissance writers wrote either for self-expression or to portray the individuality of their subjects. In these ways, writers of the Renaissance began trends that modern writers still follow.

HISTORY MAKERS



Leonardo da Vinci
1452–1519

Leonardo da Vinci’s notebooks—and life—are mysterious in many ways. Some 3,500 pages closely covered with writings and drawings survive, but these may be only one-fourth of what Leonardo produced.

His writing is clear and easy to read—but only if you look at it in a mirror. He wrote backwards in “mirror-writing.” No one knows why he took the time to do this.

Leonardo planned scholarly works that he never wrote, and he planned great feats of engineering that were never built. Only 17 of his paintings survive, and several of those were unfinished. The drawing above is the only self-portrait known to exist. And yet the work that Leonardo did produce is so amazing that his reputation as one of the world’s geniuses is secure.



Raphael
1483–1520

One of the artists influenced by Leonardo, Raphael began his career early. His father, Giovanni Santi, was a painter, and Raphael learned the basics of his art in his father’s studio. At a young age, Raphael went to study with a painter named Perugino. He stayed there about ten years and then went to Florence.

In 1508, Raphael was asked by Pope Julius II to work for him in Rome. Raphael created a series of magnificent frescoes, paintings done on wet plaster, for the pope’s private rooms in the Vatican.

Raphael, unlike many of his fellow artists, was easy to like. When he died on his 37th birthday after a short illness, many Romans—including the pope and his court—were stricken with grief and went into mourning.

Vocabulary

Madonna: a term for Mary, the mother of Jesus; it comes from a former Italian title for women, meaning “my lady.”

Background

During most of the Middle Ages, educated Europeans wrote everything in Latin.

Petrarch and Boccaccio Francesco Petrarch (PEE·trahrk) was one of the earliest and most influential humanists. He was also a great poet. Petrarch wrote both in Italian and in Latin. In Italian, he wrote sonnets—14-line poems. They were about a mysterious woman named Laura, who was his ideal. (Little is known of Laura except that she died of the plague in 1348.) In classical Latin, he wrote letters to his many important friends.

The Italian writer Boccaccio (boh·KAH·chee·oh) is best known for the *Decameron*, a series of realistic, sometimes off-color stories. The stories are supposedly told by a group of worldly young people waiting in a villa to avoid the plague sweeping through Florence. The humor of the *Decameron* is cutting. Boccaccio presents the follies of his characters—and all humans—with some sarcasm.

Machiavelli Advises Rulers *The Prince* (1513), by Niccolò Machiavelli (MAK·ee·uh·VEHL·ee), also examines the imperfect conduct of human beings. He does so in the form of a political guidebook. In *The Prince*, Machiavelli examines how a ruler can gain power and keep it in spite of his enemies. In answering this question, he began with the idea that most people are selfish, fickle, and corrupt.

To succeed in such a wicked world, Machiavelli said, a prince must be strong as a lion and shrewd as a fox. He might have to trick his enemies and even his own people for the good of the state. In *The Prince*, Machiavelli was not concerned with what was morally right, but with what was politically effective:

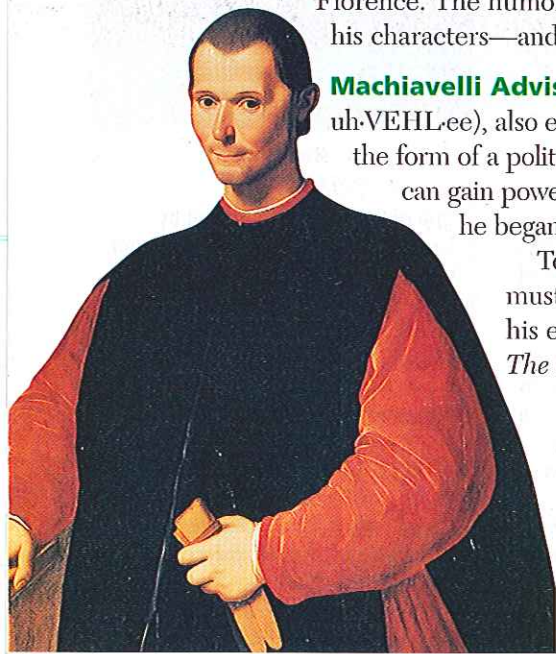
A VOICE FROM THE PAST

Everyone admits how praiseworthy it is in a prince to keep faith, and to live with integrity and not with craft. Nevertheless our experience has been that those princes who have done great things have held good faith of little account, and have known how to circumvent the intellect of men by craft, and in the end have overcome those who have relied on their word.

NICCOLÒ MACHIAVELLI, *The Prince*

THINK THROUGH HISTORY

D. Supporting Opinions Do you think Machiavelli is right in his view that rulers must trick people and ignore morality? Explain.



Niccolò Machiavelli, shown here with his hand on a book, was much more than just a cynical political thinker. He was also a patriot, a poet, and a historian.

Women Writers The women writers who gained fame in the Renaissance usually wrote about personal subjects, not politics. Yet, some of them had great influence. Vittoria Colonna exchanged sonnets with Michelangelo and helped Castiglione publish *The Courtier*. Her own poems are often very personal. For example, when her husband was away at war, she wrote to him, “Your uncertain enterprises do not hurt you; / but we who wait, mournfully grieving, / are wounded by doubt and fear.”

Toward the end of the 15th century, Renaissance ideas began to spread north from Italy to countries such as France, Germany, and England. Northern artists and thinkers would adapt the Renaissance ideals in their own ways.

Section 1 Assessment

1. TERMS & NAMES

Identify

- Renaissance
- humanism
- secular
- patron
- perspective
- vernacular

2. TAKING NOTES

Using a big-idea outline like the one below, record the main ideas from the section about the Italian Renaissance.

Renaissance

I. Italy's advantages

A.

B.

C.

II. Classical and worldly values

3. SUPPORTING OPINIONS

Name three people from this section whom you regard as a “Renaissance man” or a “Renaissance woman.” Explain your choices.

THINK ABOUT

- the idea of the “universal man”
- Castiglione’s description of such a person
- which people from this section seem to match that description

4. ANALYZING THEMES

Revolution How did the Renaissance revolutionize European art and thought?

THINK ABOUT

- changes in ideas since medieval times
- changes in artistic techniques
- changes in artistic subjects

The Northern Renaissance

TERMS & NAMES

- Utopia
- printing press
- Gutenberg Bible

MAIN IDEA

In the 1400s, northern Europeans began to adapt the ideas of the Renaissance.

WHY IT MATTERS NOW

Renaissance ideas such as the importance of the individual are a strong part of modern thought.

Background

Flanders was a region in northern Europe. It included part of France and part of the Netherlands. The people of Flanders are the Flemish.

SETTING THE STAGE The work of such artists as Leonardo da Vinci, Michelangelo, and Raphael showed the Renaissance spirit. All three artists demonstrated an interest in classical culture, a curiosity about the world, and a belief in human potential. These ideas impressed scholars and students who visited Italy. Merchants also carried these ideas when they traveled out of Italy. By the late 1400s, Renaissance ideas had spread to northern Europe—especially England, France, Germany, and Flanders.

The Northern Renaissance Begins

By 1450 the population of northern Europe, which had been shattered by the bubonic plague, was beginning to recover. In addition, the destructive Hundred Years' War between France and England ended in 1453. Many cities grew rapidly. Urban merchants became wealthy enough to sponsor artists. This happened first in Flanders, which was rich from long-distance trade and the cloth industry. Then it happened in other countries.

As Section 1 explained, Italy was divided into city-states. In contrast, England and France were unified under strong monarchs. These rulers often sponsored the arts. For example, Francis I of France purchased Renaissance paintings. He also invited Leonardo da Vinci to retire in France, and hired Italian artists and architects to rebuild his castle at Fontainebleau (FAHN-tihn-BLOH). When completed, Fontainebleau became a showcase of the French Renaissance. Because of monarchs like Francis, royal courts played a major role in introducing Renaissance styles to northern Europe.

As Renaissance ideas spread out of Italy, they mingled with northern traditions. As a result, the northern Renaissance developed its own character. Many humanists there were more interested in religious ideas than in the secular themes popular in Italy. The Renaissance ideal of human dignity inspired some northern humanists to develop plans for social reform based on Christian values.

Artistic Ideas Spread

In 1494, a French king claimed the throne of Naples in southern Italy and launched an invasion through northern Italy. As the war dragged on, many Italian artists and writers left for a safer life in northern Europe. With them, they brought the styles and techniques of the Renaissance. In addition, artists who studied in Italy also carried Renaissance ideas north.

THINK THROUGH HISTORY

A. Analyzing

Causes How did the war in Italy spread the Renaissance?

Albrecht Dürer painted *Adoration of the Trinity* after returning from studying in Italy.



German Painters Perhaps the most famous person to do this was the German artist Albrecht Dürer (DYUR-ulhr). The son of a goldsmith, Dürer decided to become a painter. After serving an apprenticeship, he traveled to Italy to study in 1494.

After returning to Germany, Dürer produced woodcuts and engravings that became influential. Many of his prints portray religious subjects such as the one on page 43. Others portray classical myths. He also painted realistic landscapes and a self-portrait in which he portrayed himself as a Renaissance man. The popularity of Dürer's work helped to spread Renaissance styles. His work inspired other German artists.

Dürer's emphasis upon realism influenced the work of another German artist, Hans Holbein (HOHL-byen) the Younger. Holbein specialized in painting portraits that are almost photographic in detail. He enjoyed great success in England, where he painted portraits of King Henry VIII and other members of the royal family.

Flemish Painters As in Italy, wealthy merchant families in Flanders were attracted to the Renaissance emphasis on individualism and worldly pleasures. Their patronage helped to make Flanders the artistic center of northern Europe.

As in Italy, the Renaissance in Flanders was marked by an interest in realism. The first great Flemish Renaissance painter was Jan van Eyck (yah-n van YK). Van Eyck lived from sometime in the late 1300s to 1441 and worked at the height of the Italian Renaissance.

Oil-based paints had recently been developed. Van Eyck used them to develop techniques that painters still use. Because oil paint does not dry quickly, it can be blended more easily than other paints. By applying layer upon layer of paint, van Eyck was able to create a variety of subtle colors in clothing and jewels. Oil painting became popular and spread to Italy.

THINK THROUGH HISTORY

B. Contrasting

How was the development and spread of oil painting different from many other Renaissance developments?

Daily Life

Flemish Peasant Life

The Flemish painter Pieter Bruegel often portrayed peasants. Many of his paintings provide information about peasant life in the 1500s.

Peasant Wedding (1568), shown below, portrays a wedding feast in a rough but clean barn. The bride sits under the paper crown hanging on a piece of green cloth. Two young men who may be her brothers are pouring drinks and passing out plates.

Who, then, is the groom? Possibly the man sitting across the table from the bride and leaning back on a three-legged stool.

Children and at least one dog have come to the party. The couple to the right of the bride and the man on the far right with a sword are dressed more elegantly than the other guests. They may be wealthy townfolk related to the groom.



In addition to new techniques, van Eyck's paintings display unusually realistic details and reveal the personality of their subjects. His work influenced later artists in northern Europe.

Flemish painting reached its peak after 1550 with the work of Pieter Bruegel (BROY-guhl) the Elder. Like van Eyck, Bruegel was interested in realistic details and individual people. He captured scenes from everyday peasant life such as weddings, dances, harvests, and the changing seasons. Bruegel also produced paintings that illustrated proverbs or taught a moral. Some of his paintings protested harsh Spanish rule over his country.

In all his work, Bruegel's rich colors, vivid details, and balanced use of space give a sense of life and feeling. He was also very skillful in portraying large numbers of people. Not only did Bruegel produce a large number of paintings, he inspired two sons and three grandsons to also become painters.

Northern Writers Try to Reform Society

Just as Italian art influenced northern European painters, so did Renaissance ideas influence the writers and philosophers of northern Europe. These writers adopted the ideal of humanism. However, some gave it a more religious slant. Because of this, some northern humanists are also called Christian humanists.

Christian Humanists The best known of the Christian humanists were Desiderius Erasmus (DEIIZ-ih-DEER-ee-uhs ih-RAZ-muhs) of Holland and Thomas More of England. The two were close friends.

Born in Rotterdam, Erasmus received honors from princes, kings, and cardinals for his brilliant writings. In 1509, while he was a guest in More's house, Erasmus wrote his most famous work, *The Praise of Folly*. This book poked fun at greedy merchants, heartsick lovers, quarrelsome scholars, and pompous priests. Although some of Erasmus's most stinging barbs were aimed at the clergy, his work is strongly Christian. Erasmus believed in a Christianity of the heart, not one of ceremonies or rules. He thought that in order to improve society, all people should study the Bible.

Also concerned with society's flaws, Thomas More tried to show a better model. In 1516, he wrote the book *Utopia* about an imaginary land inhabited by a peace-loving people. In Greek, **Utopia** means "no place," but in English it has come to mean an ideal place because of More's book. In Utopia, greed, corruption, war, and crime had been weeded out. Because the Utopians weren't greedy, they had little use for money:

A VOICE FROM THE PAST

Gold and silver, of which money is made, are so treated . . . that no one values them more highly than their true nature deserves. Who does not see that they are far inferior to iron in usefulness since without iron mortals cannot live any more than without fire and water?

THOMAS MORE, *Utopia*

The French humanist François Rabelais (RAB-eh-LAY) provided a contrast to Erasmus and More in several ways. They wrote in Latin, while Rabelais wrote his comic adventure *Gargantua and Pantagruel* in vernacular French. More secular than either Erasmus or More, Rabelais believed that human beings were basically good. They should live by their instincts rather than religious rules. As he told of the wild adventures of the giants Gargantua and Pantagruel, he poked fun at his society. Rabelais's humor was uproarious and earthy, although he made many serious points about the nature of humanity, education, and government.

William Shakespeare William Shakespeare wrote in Renaissance England. Many people regard him as the greatest playwright of all time. Shakespeare was born in

The Christian humanist Thomas More wrote about a nearly perfect society called Utopia. He did this to show his own society how to improve.



THINK THROUGH HISTORY

C. Making

Inferences What point do you think More was making about his own society?

CONNECT to TODAY

William Shakespeare

Shakespeare's plays were very popular in London in the 1600s. They are popular today as well, but they appear in many places besides London. Shakespearean festivals are regularly held in such places as Stratford-upon-Avon, England; Stratford, Ontario, Canada; and Austin, Texas.

Even though he has been dead for almost 400 years, Shakespeare is one of Hollywood's favorite writers. In the 1990s, two film versions of *Hamlet* hit the theaters, as did a version of *Romeo and Juliet*. The poster below is from the 1990 version of *Hamlet*, starring Mel Gibson and Glenn Close.

1564 in Stratford-upon-Avon, a small town about 90 miles northwest of London. By 1592 he was living in London and writing poems and plays.

His works display a masterful command of the English language and a deep understanding of human beings. He revealed the souls of men and women through scenes of dramatic conflict. His most famous plays include the tragedies *Macbeth*, *King Lear*, *Hamlet*, *Romeo and Juliet*, and the comedy *A Midsummer Night's Dream*. Many of these plays frankly examine human flaws. However, Shakespeare also had one of his characters deliver a speech that expresses the Renaissance's high view of human nature:

A VOICE FROM THE PAST

What a piece of work is a man, how noble in reason, how infinite in faculties, in form and moving, how express and admirable in action, how like an angel in apprehension [understanding], how like a god! the beauty of the world; the paragon of animals.

WILLIAM SHAKESPEARE, *Hamlet*

Like many Renaissance writers, Shakespeare revered the classics and drew on them for inspiration and plots. One of his great tragedies, for example, tells the story of the assassination of Julius Caesar—the Roman general and statesman.

The Elizabethan Age The Renaissance in England is also called the Elizabethan Age, for Queen Elizabeth I. She reigned from 1558 to 1603. Elizabeth was well-educated and knew French, Italian, Latin, and Greek. In addition to running a kingdom (see page 52), she also wrote poetry. As queen, she patronized artists and writers. Poet Edmund Spenser dedicated his long poem *The Faerie Queene* (1590) to her with these words: "To the most high, mighty, and magnificent Empress, renowned for piety, virtue, and all gracious government, Elizabeth."

Printing Spreads Renaissance Ideas

One thing that helped spread Renaissance ideas throughout Europe was a new invention that adapted Chinese technology. The Chinese had invented block printing, in which a printer carved a word or letter on a wooden block, inked the block, and then used it to print on paper. Around 1045, Bi Sheng invented movable type,

or a separate piece of type for each character in the language. However, since the Chinese writing system contained thousands of different characters, most Chinese printers found movable type impractical.

Gutenberg Invents the Printing Press During the 13th century, block-printed items reached Europe from China. European printers began to use block printing to create whole pages to bind into books. However, this process was too slow to satisfy the Renaissance demand for knowledge and books. Johann Gutenberg, a craftsman from Mainz, Germany, reinvented movable type around 1440. The method was practical for Europeans because their languages have a very small number of letters in their alphabets.

Gutenberg then invented the **printing press**. The printing press is a machine that presses paper against a tray full of inked movable type. Using this invention, Gutenberg printed a complete Bible, the **Gutenberg Bible**, in about 1455. It was the first full-size book printed with movable type.

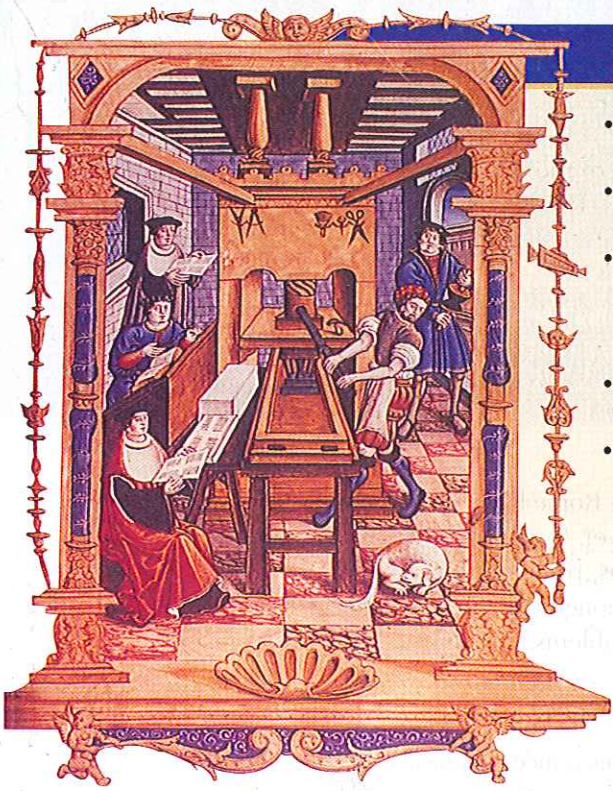
THINK THROUGH HISTORY

D. Summarizing

State at least two ways in which Shakespeare's work showed Renaissance influences.



History of Book Making



- 2700 B.C., Egyptians write books on papyrus scrolls.
- 1000 B.C., Chinese make books by writing on strips of bamboo.
- A.D. 300, Romans write on sheets of parchment (treated animal skin). These are sewn together into books.
- 800, Irish monks hand-write and hand-illustrate *The Book of Kells*.
- About 1455, Gutenberg prints the first complete book on a printing press—similar to the one shown at left.



Only 46 copies of the Gutenberg Bible still exist in the world. Because of this, each copy is considered priceless. A part of a page is shown above.

Printing Spreads Learning The printing press had a revolutionary impact on European society. It enabled a printer to produce hundreds of copies, all exactly alike, of a single work. For the first time, books were cheap enough that many people could buy them. Printing

spread quickly to other cities in Europe. By 1500, presses in about 250 cities had printed between 9 and 10 million books.

New ideas spread more quickly than ever before. At first printers produced many religious works. Soon they began to provide books on other subjects such as travel guides and medical manuals. The availability of books encouraged people to learn to read and so caused a rise in literacy.

Writing in vernacular languages also increased because even people who could not afford a classical education could now buy books. Printers produced the Bible in the vernacular, which allowed more people to read it. People began to interpret the Bible for themselves and to become more critical of priests and their behavior. This eventually led to demands for religious reform.

The End of the Renaissance In both Italy and northern Europe, the Renaissance had stirred a burst of creative activity. Artists in both regions studied classical culture, praised individual achievement, and produced works using new techniques. During the 1600s, new ideas and artistic styles appeared. Nonetheless, Renaissance ideals continued to influence European thought. For example, the Renaissance belief in the dignity of the individual played a key role in the gradual rise of democratic ideas.

THINK THROUGH HISTORY
E. Recognizing Effects What were the major effects of the invention of the printing press?

Section 2 Assessment

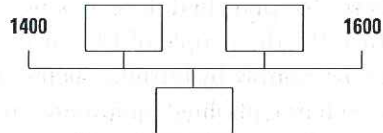
1. TERMS & NAMES

Identify

- Utopia
- printing press
- Gutenberg Bible

2. TAKING NOTES

On a time line like the one below, show important events in the Northern Renaissance.



Which of the events do you think was most important? Explain.

3. RECOGNIZING EFFECTS

Choose one Northern Renaissance figure. Explain how he or she was influenced by Renaissance ideas.

THINK ABOUT

- the influence of humanism
- the use of new techniques
- the concept of the Renaissance man or woman

4. THEME ACTIVITY

Cultural Interaction Working in a small team, reproduce a map of Europe in 1500. On the map, use arrows, pictures, and captions to show the spread of Renaissance ideas and developments. Include not only the spread of ideas north from Italy, but also innovations that spread southward from northern Europe.

Luther Starts the Reformation

TERMS & NAMES

- indulgence
- Reformation
- Lutheran
- Protestant
- Peace of Augsburg
- annul
- Anglican

MAIN IDEA

Martin Luther's protest over abuses in the Catholic Church led to the founding of Protestant churches.

WHY IT MATTERS NOW

Nearly one-fourth of the Christians in today's world are Protestants.

SETTING THE STAGE By the tenth century, the church in Rome had come to dominate religious life in northern and western Europe. However, the Roman Catholic Church had not won universal approval. Over the centuries, rulers, scholars, and members of the clergy criticized church practices. Even though church leaders made several important reforms during the Middle Ages, the problems lingered.

Causes of the Reformation

By 1500, additional forces weakened the Church. The Renaissance emphasis on the secular and the individual challenged Church authority. The printing press spread these secular ideas. In addition, rulers resented the popes' attempts to control them. In Germany—divided into many competing states—it was difficult for the pope or the emperor to impose central authority. Finally, northern merchants resented paying church taxes to Rome. Spurred by political and social forces, a new movement for religious reform began in Germany. It then swept much of Europe.

Problems in the Catholic Church Critics of the Church claimed that its leaders were corrupt. The popes who ruled during the Renaissance patronized the arts, spent extravagantly on personal pleasure, and fought wars. Pope Pius II admitted, "If the truth be confessed, the luxury and pomp of our courts is too great." Another pope, Alexander VI, publicly admitted that he had several children. These popes were too busy pursuing worldly affairs to have much time for spiritual duties.

The lower clergy had problems as well. Many priests and monks were so poorly educated that they could scarcely read, let alone teach people. Others broke their priestly vows by marrying, or by gambling or drinking to excess.

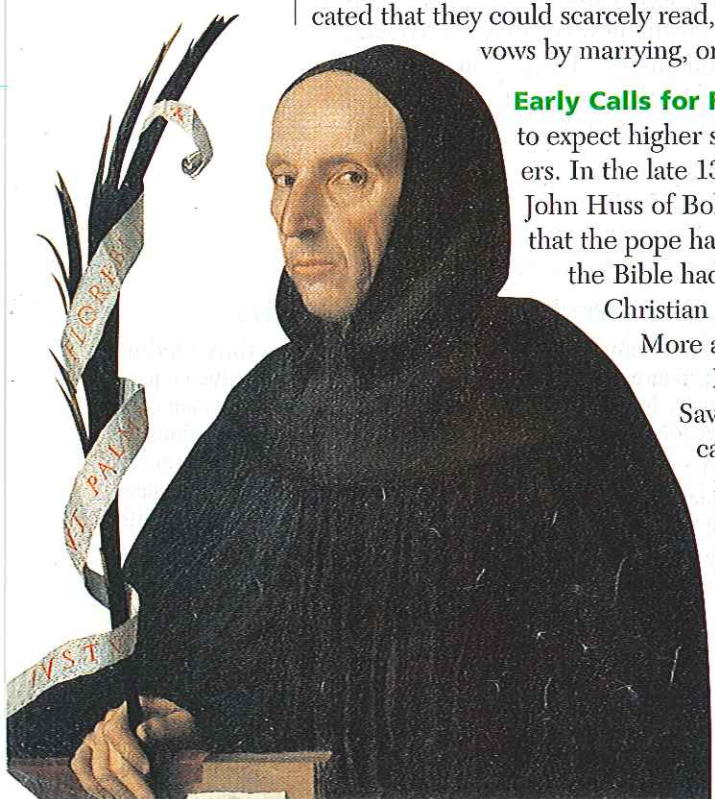
Early Calls for Reform Influenced by reformers, people had come to expect higher standards of conduct from priests and church leaders. In the late 1300s and early 1400s, John Wycliffe of England and John Huss of Bohemia had advocated church reform. They denied that the pope had the right to worldly power. They also taught that the Bible had more authority than Church leaders. In the 1500s, Christian humanists like Desiderius Erasmus and Thomas More added their voices to the chorus of criticism.

In the 1490s, an Italian friar named Girolamo Savonarola (jih-RAHL-uh-MOH SAV-uh-nuh-ROH-luh) came to Florence. He preached fiery sermons calling for reform. In 1497, the people of Florence responded to Savonarola by burning their worldly possessions, such as gambling equipment, in a giant bonfire. Only a year later, the Florentines turned against Savonarola, and he was executed for heresy.

As this portrait shows, the friar Girolamo Savonarola was a serious-minded man. Disapproving of the worldly values of his time, he urged the people of Florence to give up their luxuries.

THINK THROUGH HISTORY

A. Analyzing Causes How did political, social, and economic forces weaken the Church?



Luther Challenges the Church

Although some reformers died for their beliefs, their calls for change lived on. In addition, many Europeans were reading religious works for themselves and forming their own opinions about the Church. The atmosphere in Europe was ripe for reform by the early 1500s.

Martin Luther The son of a miner, Martin Luther became a monk in 1505. From 1512 until his death he taught scripture at the University of Wittenberg in the German state of Saxony. All he wanted was to be a good Christian, not to lead a religious revolution.

In 1517 Luther decided to take a public stand against the actions of a friar named Johann Tetzel. Tetzel was raising money to rebuild St. Peter's Cathedral in Rome. He did this by selling indulgences. An **indulgence** was a pardon. It released a sinner from performing the penalty—such as saying certain prayers—that a priest imposed for sins. Indulgences were not supposed to affect God's right to judge. Unfortunately, Tetzel gave people the impression that by buying indulgences, they could buy their way into heaven.

The 95 Theses Luther was troubled by Tetzel's tactics. He wrote 95 Theses, or formal statements, attacking the "pardon-merchants." On October 31, 1517, he posted his theses on the door of the castle church in Wittenberg and invited other scholars to debate him. Someone copied Luther's words and took them to a printer. Quickly, Luther's name became known all over Germany. His actions began the **Reformation**, a movement for religious reform. It led to the founding of Christian churches that did not accept the pope's authority.

Soon Luther went far beyond criticizing indulgences. He wanted a full reform of the Church. His teachings rested on three main ideas:

- People could win salvation only by faith in God's gift of forgiveness. The Church taught that faith and "good works" were needed for salvation.
- All Church teachings should be clearly based on the words of the Bible. The pope and church traditions were false authorities.
- All people with faith were equal. Therefore, people did not need priests to interpret the Bible for them.

The Response to Luther

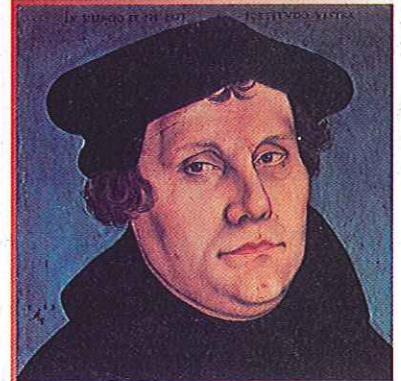
Luther himself was astonished at how rapidly his ideas spread and attracted followers. Many rulers and merchants had been unhappy with the Church for political and economic reasons. They saw Luther's protests as an excuse to throw off Church control.

The Pope's Threat Initially, the Church officials in Rome viewed Luther simply as a rebellious monk who needed to be punished by his superiors. However, as Luther's ideas became increasingly radical, the pope realized that the monk was a serious threat. In one angry reply to Church criticism, Luther actually suggested that Christians drive the pope from the Church by force.

In 1520, Pope Leo X issued a decree threatening Luther with excommunication unless he took back his statements. Luther did not take back a word. Instead, his students at Wittenberg gathered around a bonfire and cheered as he threw the pope's decree into the flames. Leo excommunicated Luther.

The Emperor's Opposition A devout Catholic, the Holy Roman emperor also opposed Luther's teaching. Although only 20 years old, Emperor Charles V controlled

HISTORY MAKERS



Martin Luther
1483–1546

Martin Luther was sometimes unhappy as a child. Like many parents of that time, his father and mother were very strict. Luther later told stories of their beating him.

In one way, fear led Luther to become a monk. His father wanted him to go to law school, but at the age of 21, Luther was caught in a terrible thunderstorm. Lightning struck close to him. Convinced he would die, he cried out, "Saint Anne, help me! I will become a monk."

Even as a monk, Luther felt sinful, lost, and rejected by God. He confessed his sins regularly, fasted, and did penance. However, by studying the Bible, Luther came to the conclusion that faith alone was the key to salvation. Only then did he experience peace.

Background

The door of the church served as a type of bulletin board for the University of Wittenberg. If scholars wanted to debate a subject, they would post their opinions on the door.

THINK THROUGH HISTORY

B. Synthesizing

Review the list of Luther's teachings above. Which of these points help you to understand why he felt it was all right to defy the pope?

a vast empire, including Germany. He summoned Luther to the town of Worms in 1521 to stand trial. German princes and bishops crowded into the hall to witness the testimony. Told to recant, or take back his statements, Luther refused.

A VOICE FROM THE PAST

I am bound by the Scriptures I have quoted and my conscience is captive to the Word of God. I cannot and I will not retract anything, since it is neither safe nor right to go against conscience. I cannot do otherwise, here I stand, may God help me. Amen.

LUTHER, quoted in *The Protestant Reformation* by Lewis W. Spitz

A month after Luther made that speech, Charles issued an imperial order, the Edict of Worms. It declared Luther an outlaw and a heretic. According to this edict, no one in the empire was to give Luther food or shelter. All his books were to be burned. However, the ruler of the state where Luther lived disobeyed the emperor. For almost a year after the trial, Prince Frederick the Wise of Saxony sheltered Luther in one of his castles. While there, Luther translated the New Testament into German.

Luther returned to Wittenberg in 1522. There he discovered that many of his ideas were already being put into practice. Priests dressed in ordinary clothes and called themselves ministers. They led services in German instead of in Latin. Some ministers had married, because Luther taught that the clergy should be free to wed. Instead of continuing to seek reforms in the Catholic Church, Luther and his followers had become a separate religious group, called **Lutherans**.

The Peasants' Revolt Some people began to apply Luther's revolutionary ideas to society. In 1524, German peasants, excited by reformers' talk of Christian freedom,

demanded an end to serfdom. Bands of angry peasants went about the countryside raiding monasteries, pillaging, and burning.

The revolt horrified Luther. He wrote a pamphlet urging the German princes to show the peasants no mercy. With brutal thoroughness, the princes' armies crushed the revolt. They massacred as many as 100,000 people. Feeling betrayed by Luther, many peasants rejected his religious leadership. However, through writings and lectures, Luther remained influential until the end of his life.



SPOTLIGHT ON

Witch Hunts

Soon after the Reformation began, the number of people executed for being witches rose dramatically. From 1561 to 1670 in Germany, 3,229 people accused of witchcraft were burned at the stake, as the engraving above shows. Between 1559 and 1736 in England, almost 1,000 witches were put to death. Eighty percent of the people accused of witchcraft were women.

Some historians think that people felt so frightened by the ongoing religious conflicts they blamed them on witches. Other historians believe that religious reformers stirred up negative feelings about women that had long been part of Western culture. All agree that those executed for witchcraft were innocent victims.

Germany at War In contrast to the bitter peasants, many northern German princes supported Lutheranism. While some princes genuinely shared Luther's beliefs, others liked Luther's ideas for selfish reasons. They saw his teachings as a good excuse to seize Church property and to assert their independence from Charles V.

In 1529, German princes who remained loyal to the pope agreed to join forces against Luther's ideas. Princes who supported Luther signed a protest against that agreement. These protesting princes came to be known as Protestants. Eventually, the term **Protestant** was applied to Christians who belonged to non-Catholic churches.

Still determined that his subjects remain Catholic, Holy Roman Emperor Charles V went to war against the Protestant princes of Germany. Even though he defeated them in 1547, he failed to force them back into the Catholic Church.

Weary of fighting, Charles ordered all German princes, both Protestant and Catholic, to assemble in the city of Augsburg. At that meeting, the princes agreed that the religion of each German state was to be decided by its ruler. This famous religious settlement, signed in 1555, was known as the **Peace of Augsburg**.

THINK THROUGH HISTORY

C. Drawing

Conclusions Why would Luther and his followers want the Bible and sermons to be in German?

THINK THROUGH HISTORY

D. Analyzing

Motives Explain the different motives that German princes had for becoming Lutheran.

England Becomes Protestant

The Catholic Church soon faced another great challenge to its authority. Unlike Luther, the man who broke England's ties to the Roman Catholic Church did so for political and personal, not religious, reasons.

Henry VIII Wants a Son When Henry became king of England, he was a devout Catholic. Political needs soon tested his religious loyalty. He needed a male heir. Henry's father had become king after a long civil war. Henry feared that a similar war would start if he died without a son as his heir. He and his wife, Catherine of Aragon, had one living child—a daughter, Mary—but no woman had ever successfully claimed the English throne.

By 1527, Henry was convinced that the 42-year-old Catherine would have no more children. He wanted to divorce her and take a younger queen. Church law did not allow divorce. However, the pope could **annul**, or set aside, Henry's marriage if he could find proof that it had never been legal in the first place. Excuses were frequently found to annul royal marriages if they produced no heirs. In 1527, King Henry asked the pope to annul his marriage, but the pope turned him down. The pope did not want to offend Catherine's powerful nephew, the Holy Roman Emperor Charles V.

The Reformation Parliament Henry solved his marriage problem himself. In 1529, he called Parliament into session and asked it to pass a set of laws that ended the pope's power in England. This Parliament is known as the Reformation Parliament.

In 1533, Henry secretly married Anne Boleyn (BUL-ihn), who was in her twenties. Parliament legalized Henry's divorce from Catherine. In 1534, Henry's break with the pope was made complete when Parliament voted to approve the Act of Supremacy. This act made the English king, not the pope, the official head of England's Church.

Consequences of Henry's Changes Soon after making himself supreme head of the Church of England, Henry closed all English monasteries. He seized their wealth and lands. The monasteries had owned perhaps 20 percent of the land in England, so this act vastly increased royal power and enriched Henry's treasury.

Henry did not get the male heir he sought immediately. After Anne Boleyn gave birth to a girl, she fell out of Henry's favor. Eventually, he ordered her imprisoned in the Tower of London and later beheaded in 1536. Before his death, Henry married four more times. His third wife gave him a son named Edward.

Background

The pope had taken the losing side in a war against Emperor Charles V, who was now holding him prisoner. The pope did not dare annul Henry's marriage to Charles's aunt.

HISTORYMAKERS

Henry VIII 1491–1547

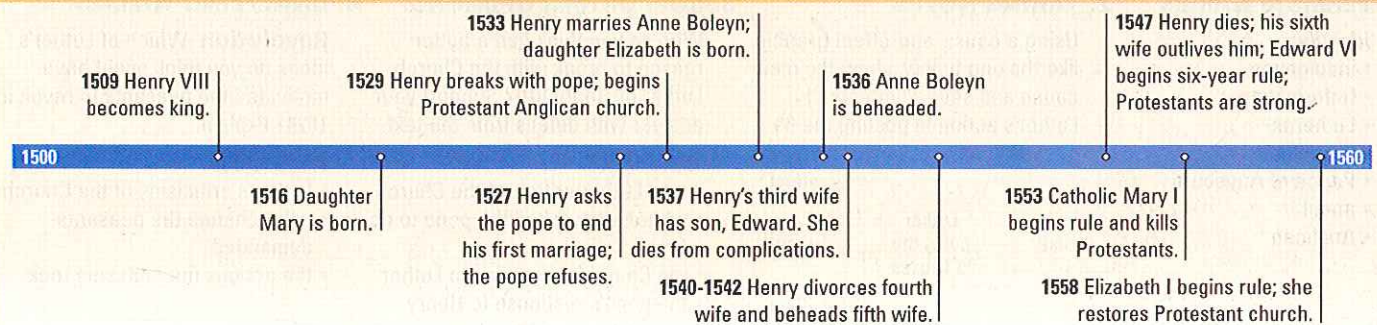
When Henry became king in 1509, he was young, strong, handsome, and intelligent. He loved sports, literature, music, and food. He also loved his Roman Catholic faith.

In 1521, he wrote a pamphlet attacking Martin Luther and his teachings. Impressed by Henry's loyalty, the pope gave him a special title, "Defender of the Faith."

Even Henry's religious actions were driven by political ambition. One of his motives for defending Catholicism was to keep up with his fellow European monarchs. Earlier popes had granted Spanish monarchs the title "Catholic Sovereigns" and French monarchs the title "Most Christian." Although Henry was proud of his papal honor, eventually his political needs drove him to break with the Church.



Henry VIII's Family Causes Religious Turmoil



After Henry's death in 1547, each of his three children eventually ruled. This created religious turmoil. Edward VI became king at age nine and ruled only six years. During his reign, the Protestants gained power. Edward's half-sister Mary ruled next. She was a Catholic who returned the English Church to the rule of the pope. Mary had many Protestants killed. England's next ruler was Anne Boleyn's daughter, Elizabeth.

HISTORY MAKERS



Elizabeth I
1533–1603

Elizabeth I was the third of Henry VIII's children to rule England. Like her father, Elizabeth had a fierce temper and a robust nature. Athletic as a girl, she showed amazing energy and strength into her sixties.

When the Spanish Armada threatened England, Elizabeth rode into the camp of soldiers preparing to defend their country. For this occasion, she wore her brightest red wig adorned with two white plumes that were easy for all to see above the soldier's long pikes.

From her horse, Elizabeth gave encouragement to her soldiers:

I know I have the body of a weak and feeble woman, but I have the heart and stomach of a king, and a king of England, too, and I think foul scorn [of] . . . any prince of Europe [who] should dare invade the borders of my realm.

Elizabeth Restores Protestantism Inheriting the throne in 1558, Elizabeth I returned her kingdom to Protestantism. In 1559, Parliament followed Elizabeth's request and set up a national church much like the one under Henry VIII. This was to be the only legal church in England. People were required to attend its services or pay a fine. Parliament declared that Elizabeth was head of the Church of England, or **Anglican** Church.

Elizabeth decided to establish a state church that moderate Catholics and moderate Protestants might both accept. As a concession to Protestants, priests in the Church of England were allowed to marry. They could deliver sermons in English, not Latin. As a concession to Catholics, the Church of England kept some of the trappings of the Catholic service such as rich robes and golden crucifixes. Under Elizabeth, the Book of Common Prayer was revised to be somewhat more acceptable to Catholics.

The Spanish Armada While Elizabeth was able to restore religious peace to her country, she soon faced the threat of invasion from the king of Catholic Spain. Philip II planned to attack England for several reasons. One reason was that Elizabeth had supported Protestant subjects who rebelled against him. In 1588, Philip assembled an invasion force of 130 ships, 8,000 sailors, and 19,000 soldiers. This force—known as the Spanish Armada—reached the southwest coast of England on July 29. However, bad weather and the English fleet defeated the Spanish completely.

Although Elizabeth's reign was triumphant, she had some difficulties. Money was one problem. In the late 1500s, the English began to think about building an American empire as a new source of income. (See Chapter 3.) While colonies strengthened England economically, they did not enrich the queen directly. The queen's constant need for money would carry over into the next reign and lead to bitter conflict between the monarch and Parliament. In the meantime, other countries experienced bloody religious conflicts.

THINK THROUGH HISTORY

E. Recognizing Effects How did Henry VIII and his three children cause religious turmoil in England?

Section 3 Assessment

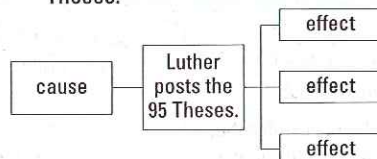
1. TERMS & NAMES

Identify

- indulgence
- Reformation
- Lutheran
- Protestant
- Peace of Augsburg
- annul
- Anglican

2. TAKING NOTES

Using a cause-and-effect graphic like the one below, show the main cause and several effects of Luther's action in posting the 95 Theses.



Which effect do you think had the most permanent impact? Explain.

3. SUPPORTING OPINIONS

Who do you think had a better reason to break with the Church, Luther or Henry VIII? Support your answer with details from the text.

THINK ABOUT

- why Luther criticized the Church
- what Henry asked the pope to do for him
- the Church's response to Luther
- the pope's response to Henry

4. ANALYZING THEMES

Revolution Which of Luther's ideas do you think might have motivated the peasants to revolt in 1524? Explain.

THINK ABOUT

- Luther's criticisms of the Church
- what change the peasants demanded
- the actions the peasants took

The Reformation Continues

TERMS & NAMES

- predestination
- Calvinism
- theocracy
- Presbyterian
- Anabaptist
- Catholic Reformation
- Jesuits
- Council of Trent

MAIN IDEA

John Calvin and other Reformation leaders began new Protestant churches. The Catholic Church also made reforms.

WHY IT MATTERS NOW

Many Protestant churches began during this period, and many Catholic schools are the result of Catholic reforms.

SETTING THE STAGE Under the leadership of Elizabeth I, the Church of England remained similar to the Catholic Church in many of its doctrines and ceremonies. Meanwhile, other forms of Protestantism were developing elsewhere in Europe.

Calvin Begins Another Protestant Church

In 1521, the year Luther stood trial at Worms, John Calvin was a 12-year-old boy. Born in France, Calvin grew up to have as much influence on Protestants as Luther did. Calvin would give order to the new faith that Luther had begun.

Calvin and His Teachings In 1536, Calvin published a book called *Institutes of the Christian Religion*. This work expressed Calvin's ideas about God, salvation, and human nature. It also created a system of Protestant theology.

Calvin taught that men and women are sinful by nature. Taking Luther's idea that humans cannot earn salvation, Calvin went on to say that God chooses a very few people to save. Calvin called these few the "elect." He believed that God has known since the beginning of time who will be saved. This doctrine is called **predestination**. The religion based on Calvin's teachings is called **Calvinism**.

Calvin Runs Geneva Calvin believed that the ideal government was a **theocracy**, a government controlled by religious leaders. In 1541, Protestants in Geneva, Switzerland, asked Calvin to lead their city. When Calvin arrived there in the 1540s, Geneva was a self-governing city of about 20,000 people.

Calvin and his followers ran the city according to strict rules. Everyone attended religion class. No one wore bright clothing or played card games. Authorities would imprison, excommunicate, or banish those who broke such rules. Anyone who preached different doctrines might be burned at the stake. Yet, to many Protestants, Calvin's Geneva was a model city of highly moral citizens.

Calvinism Spreads One of the admiring visitors to Geneva was a preacher from Scotland named John Knox. When he returned home in 1559, Knox put Calvin's ideas to work in Scottish towns. Each community church was governed by a small group of laymen called elders or presbyters (PREHZ·buh·tuhrs). Followers of Knox became known as **Presbyterians**. In the 1560s, Protestant nobles led by Knox succeeded in making Calvinism Scotland's official religion. They also deposed their Catholic queen in favor of her infant son.

Elsewhere, Swiss, Dutch, and French reformers adopted the Calvinist form of church organization. One reason Calvin is considered so influential is that many Protestant churches today

Background

The deposed queen was Mary, Queen of Scots—Elizabeth I's cousin and heir. Many English Catholics wanted Mary to rule. Eventually, Elizabeth had Mary executed for taking part in plots against her.

HISTORY MAKERS



John Calvin
1509–1564

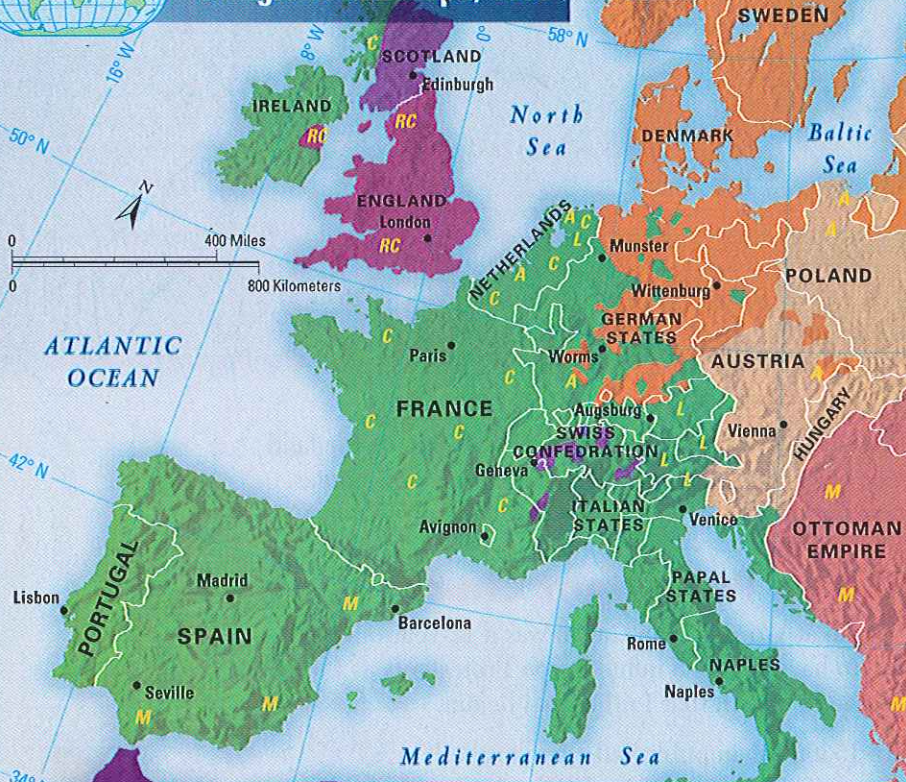
Unlike Luther, Calvin wrote little about his personal life. A quiet boy, he grew up to study law and philosophy at the University of Paris. Early in the 1530s, he came under the influence of French followers of Luther. When King Francis I ordered these Protestants arrested, Calvin fled. Eventually, he made his way to Geneva, Switzerland.

Calvin and his followers rigidly regulated morality in Geneva. Perhaps because of this, Calvinism is often described as strict and grim. However, Calvin taught that people should enjoy God's gifts. He wrote that it was not

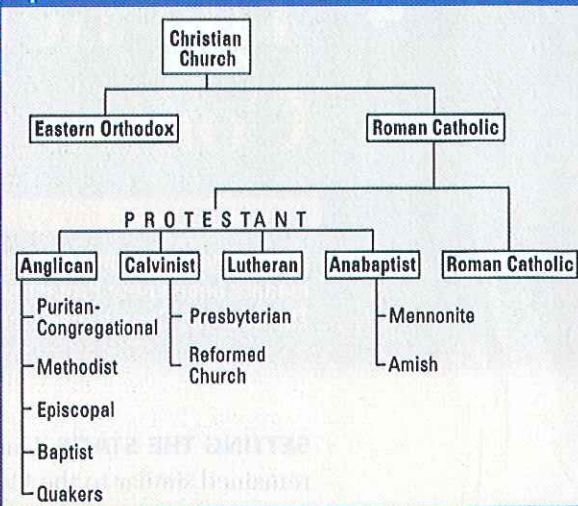
anywhere forbidden to laugh, or to enjoy food, or to add new possessions to old . . . or to be delighted with musical harmonies, or to drink wine.



Religions in Europe, 1560



Splits in the Christian Church



Dominant Religion		Minority Religion
Green	Roman Catholic	A Anabaptist
Orange	Lutheran	RC Roman Catholic
Purple	Calvinist	L Lutheran
Red	Eastern Orthodox	C Calvinist
Blue	Muslim	M Muslim
Yellow	Mixture of Calvinist, Lutheran and Roman Catholic	

GEOGRAPHY SKILLBUILDER: Interpreting Maps

- Region** Which European countries became mostly Protestant and which remained mostly Catholic?
- Location** Judging from the way the religions were distributed, where would you expect religious conflicts to take place? Explain.

trace their roots to Calvin. Over the years, however, many of them have softened Calvin's strict teachings.

In France, Calvin's followers were called Huguenots. Hatred between Catholics and Huguenots frequently led to violence. The worst outbreak of fury occurred in Paris on August 24, 1572—the Catholic feast of St. Bartholomew's Day. At dawn, Catholic mobs began hunting for Protestants and brutally murdering them. The massacres spread to other cities and lasted six months. Thousands, perhaps up to 12,000, Huguenots were killed.

Although Catholic, Marguerite of Navarre held unorthodox, mystical personal beliefs. She supported the call for reform in the Church.

Other Reformers

Protestants taught that the Bible is the source of all truth about religion and that all people should read it to discover those truths. As Christians began to interpret the Bible for themselves, new Protestant groups formed over differences in belief.

The Anabaptists One such group baptized only those persons who were old enough to decide to be Christian. They said that people who had been baptized as children should be rebaptized as adults. These believers were called **Anabaptists** from the Greek for "baptize again." Anabaptists also taught that church and state should be separate, and they refused to fight in wars. They shared their possessions. Viewing Anabaptists as radicals who threatened society, both Catholics and Protestants persecuted them. Yet, the Anabaptists survived and became the forerunners of the Mennonites and the Amish. Their teaching influenced the later Quakers and Baptists, who split from the Anglican church.

Women of the Reformation Many women played prominent roles in the Reformation, especially from 1519 to 1580. For example, Marguerite of Navarre, the sister of King Francis I, protected John Calvin from being



THINK THROUGH HISTORY

A. Analyzing Causes How did Protestant teaching cause further divisions in the Christian church?

executed for his beliefs while he lived in France. Other noblewomen played similar roles in protecting reformers.

Several wives of reformers also achieved fame. Katherina Zell, married to prominent reformer Matthew Zell of Strasbourg, once scolded a minister for speaking harshly of another. The minister responded by saying that she had “disturbed the peace.” Katherina Zell answered his criticism sharply:

A VOICE FROM THE PAST

Do you call this disturbing the peace that instead of spending my time in frivolous amusements I have visited the plague infested and carried out the dead? I have visited those in prison and under sentence of death. Often for three days and three nights I have neither eaten nor slept. I have never mounted the pulpit, but I have done more than any minister in visiting those in misery.

KATHERINA ZELL, quoted in *Women of the Reformation*

Luther’s wife Katherina von Bora played a more typical, behind-the-scenes role. However, her young life was unusual. Sent to a convent at about age 10, Katherina had taken the vows of a nun by 16. Inspired by Luther’s teaching, she escaped from her convent. Some stories claim she escaped by hiding in an empty barrel that had contained smoked herring.

After marrying Luther, Katherina had six children. She managed the family finances, fed all who visited their house, and supported her husband’s work. She submitted respectfully to Luther but also argued with him about woman’s equal role in marriage. Their well-run household became a model for others to follow.

As Protestant religions became more firmly established, their organization became more formal. Male religious leaders narrowly limited women’s activities to the home and discouraged them from being leaders.

THINK THROUGH HISTORY

B. Making

Inferences Why was it easier for women to take part in the earlier stages of the Reformation than the later stages?

The Catholic Reformation

While Protestant churches won many followers, millions remained true to Catholicism. Helping Catholics to remain loyal was a movement within the Catholic Church to reform itself. This movement is now known as the **Catholic Reformation**. One great Catholic reformer was Ignatius (ihg-NAY-shuhs) of Loyola.

Ignatius of Loyola Ignatius grew up in his father’s castle in Loyola, Spain. The great turning point in his life came in 1521 when he was injured in a war. During his recovery, Ignatius thought about his past sins and about the life of Jesus. His daily devotions, he believed, cleansed his soul. In 1522, he began writing a book called *Spiritual Exercises* that laid out a day-by-day plan of meditation, prayer, and study. Ignatius compared spiritual and physical exercise:

A VOICE FROM THE PAST

Just as walking, traveling, and running are bodily exercises, preparing the soul to remove ill-ordered affections, and after their removal seeking and finding the will of God with respect to the ordering of one’s own life and the salvation of one’s soul, are Spiritual Exercises.

IGNATIUS OF LOYOLA, *Spiritual Exercises*

For the next 18 years, Ignatius gathered followers. In 1540, the pope made Ignatius’s followers a religious order called the Society of Jesus. Members of the order were commonly called **Jesuits** (JEHZH-u-ihts).

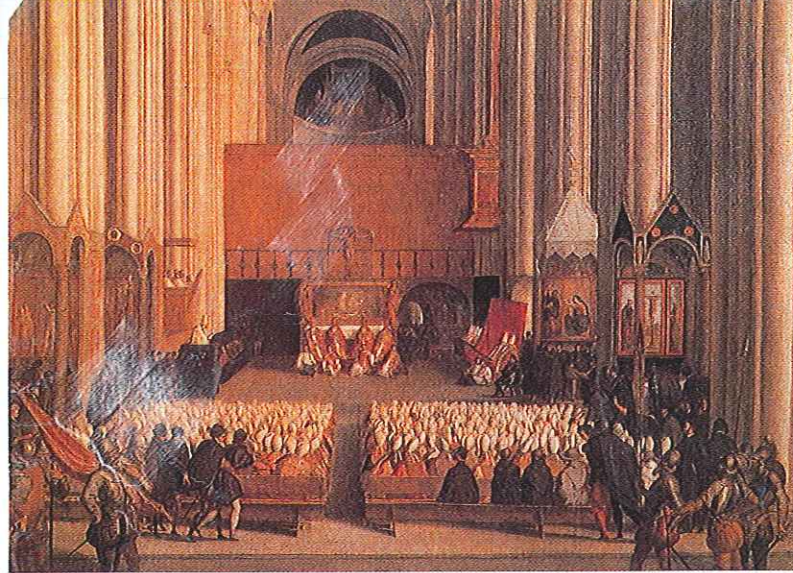
The Jesuits concentrated on three activities. First, they founded superb schools throughout Europe. Jesuit teachers were rigorously trained in both classical studies and theology. The Jesuits’ second mission was to convert non-Christians to Catholicism, so they sent out missionaries. Their third goal was to stop Protestantism from

GlobalImpact

Jesuit Missionaries

The work of Jesuit missionaries has had a lasting impact around the globe. By the time Ignatius died in 1556, about a thousand Jesuits were working in Europe, Africa, Asia, and the Americas. Two of the most famous Jesuit missionaries of the 1500s were Francis Xavier, who worked in India, and Matteo Ricci, who worked in China.

One reason the Jesuits had such a permanent impact is that they founded schools, colleges, and universities throughout the world. For example, the Jesuits today run about 45 high schools and 28 colleges and universities in the United States. Two of these are Boston College and Marquette University.



This Italian painting of the Council of Trent shows the large number of church leaders who met to discuss Catholic reforms.

spreading. The zeal of the Jesuits overcame the drift toward Protestantism in Poland and southern Germany.

Reforming Popes Two popes of the 1500s took the lead in reforming the Catholic Church. Paul III, who was pope from 1534 to 1549, took four important steps toward reform. First, he directed a council of cardinals to investigate indulgence selling and other abuses within the Church. Second, he approved the Jesuit order. Third, he used the Inquisition to seek out and punish heresy in papal territory. Fourth, and most important, he

Background
This Inquisition was called the Roman Inquisition. It generally was more moderate than the Spanish Inquisition.

decided to call a great council of Church leaders to meet in Trent, in northern Italy. In the years between 1545 and 1563, at the **Council of Trent**, Catholic bishops and cardinals agreed on several doctrines:

- The church's interpretation of the Bible was final. Any Christian who substituted his or her own interpretation was a heretic.
- Christians need faith and good works for salvation. They were not saved by faith alone, as Luther argued.
- The Bible and Church tradition were equally powerful authorities for guiding Christian life.
- Indulgences were valid expressions of faith. (But the false selling of indulgences was banned.)

Another reforming pope, Paul IV, vigorously carried out the council's decrees. In 1559, he had officials draw up a list of books considered dangerous to the Catholic faith. This list was known as the Index of Forbidden Books. Catholic bishops throughout Europe were ordered to gather up the offensive books (including Protestant Bibles) and burn them in bonfires. In Venice alone, 10,000 books were burned in one day.

Legacy of the Reformation The Reformation had enduring effects. Protestant churches flourished, despite religious wars and persecutions. Because of the Reformation, religion no longer united Europe. As the Church's power declined, individual monarchs and states gained power. This paved the way for modern nation-states. In addition, the reformers' successful revolt against Church authority laid the groundwork for a rejection of Christian belief that occurred in Western culture in later centuries. Therefore, through its political and social effects, the Reformation helped to set the stage for the modern world.

Section 4 Assessment

1. TERMS & NAMES

Identify

- predestination
- Calvinism
- theocracy
- Presbyterianism
- Anabaptist
- Catholic Reformation
- Jesuits
- Council of Trent

2. TAKING NOTES

Using a chart like the one below, compare the ideas of the reformers who came after Luther.

Reformers	Ideas
John Calvin	
Anabaptists	
Catholic Reformers	

3. EVALUATING DECISIONS

Which of the steps taken by Popes Paul III and Paul IV to reform the Catholic Church do you think were wise? Which were unwise? Explain.

THINK ABOUT

- the goals of the reforming popes
- whether the steps clearly addressed those goals
- possible effects of each step

4. THEME ACTIVITY

Religious and Ethical Systems

In a group of three, hold a debate on whether Calvin was right to establish such a strict theocracy in Geneva. Debate such points as whether church leaders should be political rulers and whether government should try to control personal morality. One team member should support Calvin's policy, one should oppose it, and one should act as moderator.

The Reformation

Martin Luther's criticisms of the Catholic church grew sharper over time. Some Catholics, in turn, responded with personal attacks on Luther. In recent times, historians have focused less on the theological and personal issues connected with the Reformation. Instead, many modern scholars analyze political, social, and economic conditions that contributed to the Reformation.

LETTER

Martin Luther



Although Luther began by criticizing the practice of selling indulgences, he soon began to attack the whole system of church government. In 1520, he sent the pope the following criticism of the Church leaders who served under him in Rome.

The Roman Church has become the most licentious [sinful] den of thieves. . . . They err who ascribe to thee the right of interpreting Scripture, for under cover of thy name they seek to set up their own wickedness in the Church, and, alas, through them Satan has already made much headway under thy predecessors. In short, believe none who exalt thee, believe those who humble thee.

ENGRAVING

Anonymous

In the early 1500s, an anonymous Catholic author published an engraving attacking Luther's "game of heresy." The following lines are part of a poem that appeared on the engraving.

*I have in my simple way foreseen
What Luther's teaching promises
to bring:
Great rebellion and bloodletting,
Much hatred and strife.
The fear of God will vanish forever,
Together with the whole of Scripture,
And authority will everywhere
be despised.*

HISTORIAN'S COMMENTARY

Steven Ozment

In 1992, historian Steven Ozment published *Protestants: The Birth of a Revolution*. Here he comments on some of the political aspects of the Reformation.

Beginning as a protest against arbitrary, self-aggrandizing, hierarchical authority in the person of the pope, the Reformation came to be closely identified in the minds of contemporaries with what we today might call states' rights or local control. To many townspeople and villagers, Luther seemed a godsend for their struggle to remain politically free and independent; they embraced his Reformation as a conserving political force, even though they knew it threatened to undo traditional religious beliefs and practices.

HISTORIAN'S COMMENTARY

G. R. Elton

In *Reformation Europe*, published in 1963, G. R. Elton notes the role of geography and trade in the spread of Reformation ideas.

Could the Reformation have spread so far and so fast if it had started anywhere but in Germany? At any rate, the fact that it had its beginnings in the middle of Europe made possible a very rapid radiation in all directions; the whole circle of countries surrounding the Empire came one after the other under its influence. Germany's position at the center of European trade also helped greatly. German merchants carried not only goods but Lutheran ideas and books to Venice and France; the north German Hanse [a trade league] transported the Reformation to the Scandinavian countries, parceled up with bales of cloth and cargoes of grain; trading links with Germany did much to encourage the growth of Lutheranism in the eastern lands.

Connect to History

Analyzing Causes How did politics and economics help spread the Reformation?

Comparing Compare Luther's attitude toward Church leaders with the Catholic attitudes toward him.

SEE SKILLBUILDER HANDBOOK, PAGES 653 and 654

Connect to Today

Comparing How do religious leaders spread their ideas today?

CD-ROM For another perspective on the Reformation, see the World History: Electronic Library of Primary Sources.

Chapter 1 Assessment

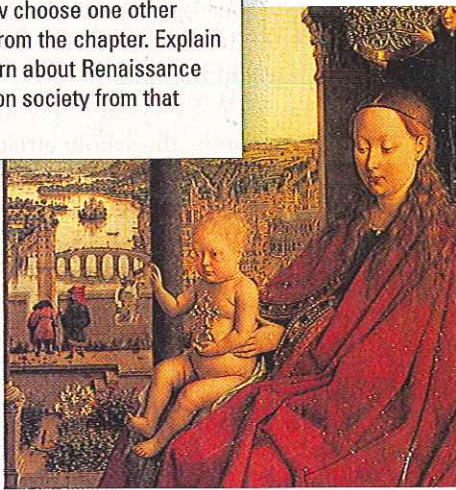
TERMS & NAMES

Briefly explain the importance of each of the following to European history from 1300 to 1600.

1. Renaissance
2. humanism
3. secular
4. printing press
5. indulgence
6. Reformation
7. Protestant
8. Peace of Augsburg
9. Catholic Reformation
10. Council of Trent

Interact with History

On page 36, you looked at a painting and discussed what you learned about Renaissance society from that painting. Now choose one other piece of art from the chapter. Explain what you learn about Renaissance or Reformation society from that piece of art.



REVIEW QUESTIONS

SECTION 1 (pages 37–42)

Italy: Birthplace of the Renaissance

11. How did the merchant class in northern Italy influence the Renaissance?
12. How did art change during the Renaissance?

SECTION 2 (pages 43–47)

The Northern Renaissance

13. How did northern European rulers encourage the spread of Renaissance ideas?
14. How does Albrecht Dürer's work reflect Renaissance ideas?
15. What did Christian humanists set out to do, and what method did they use?

SECTION 3 (pages 48–52)

Luther Starts the Reformation

16. What act by Martin Luther set off the Reformation?
17. Why did the Holy Roman Emperor go to war against Protestant German princes?
18. How did England establish a state church apart from the Catholic Church?

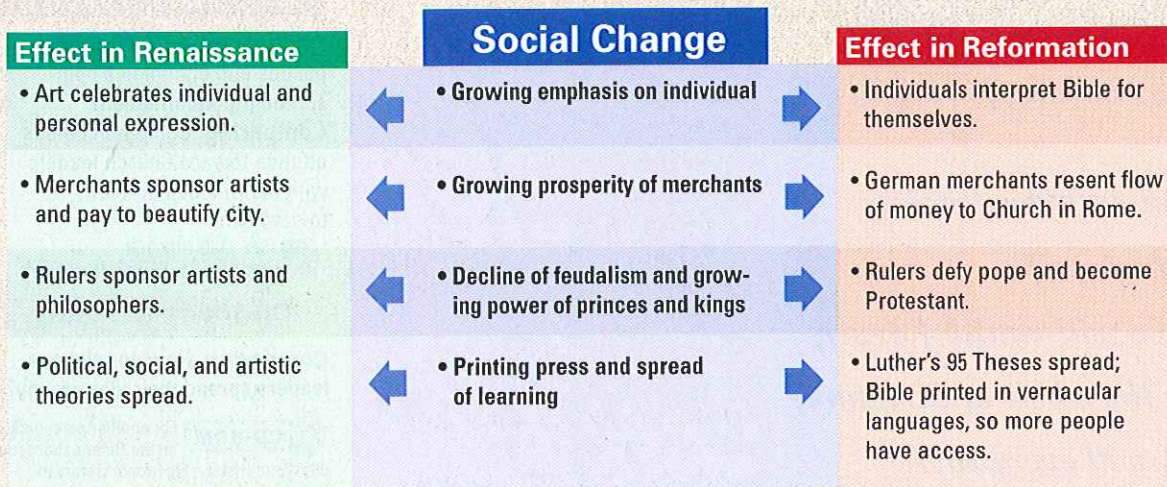
SECTION 4 (pages 53–56)

The Reformation Continues

19. What were the main teachings of John Calvin?
20. What role did the Jesuits play in the Catholic Reformation?

Visual Summary

European Renaissance and Reformation



CRITICAL THINKING

1. POWER OF THE WRITTEN WORD

THEME REVOLUTION Beginning in the 1300s, Europeans overturned many of the structures and ideas of the Middle Ages. How did the printing press contribute to this revolution? Explain.

2. REFORMING THE REFORMER

Choose one of the Protestant groups who came after Luther, such as Calvinists or Anabaptists. Do you think they thought Luther went too far in reforming Catholic Church practices or not far enough? Explain your answer by citing differences in their beliefs.

3. RENAISSANCE AND REFORMATION TODAY

Go back through the chapter and take note of Renaissance and Reformation developments that still influence modern life. Record your findings on a chart like the one shown.

Legacy of the Renaissance and Reformation in Modern Life	
Artistic	Political
Religious	Social

4. ANALYZING PRIMARY SOURCES

In the following excerpt from *The Prince*, Niccolò Machiavelli discusses what a ruler should do to win a good reputation among his subjects. Read the paragraph and answer the questions below it.

A VOICE FROM THE PAST

A prince must also show himself a lover of merit [excellence], give preferment [promotion] to the able, and honour those who excel in every art. Moreover he must encourage his citizens to follow their callings [professions] quietly, whether in commerce, or agriculture, or any other trade that men follow. . . . [The prince] should offer rewards to whoever does these things, and to whoever seeks in any way to improve his city or state.

- How was Machiavelli's description of a prince's duties influenced by Renaissance values?
- Do you agree with Machiavelli that a prince should do these things? Explain the effect you think such behavior would have on the prince's subjects.

CHAPTER ACTIVITIES

1. LIVING HISTORY: Unit Portfolio Project

THEME CULTURAL INTERACTION Your unit portfolio project focuses on the spread of ideas among cultures (see page 33). For Chapter 1, you might use one of the following ideas to add to your portfolio.

- Design the cover and prepare the table of contents for a 15th-century magazine devoted to Europe's classical heritage. The table of contents should include article titles and a brief summary of each article.
- As Francis I, write a letter to Leonardo da Vinci asking him to retire in France. Explain why you want Italian artists to come to your country.
- With a partner, role-play the reunion of two art students in 1500. One has returned from Italy; the other studied in Flanders. They should compare their techniques and views about art. Audiotape the role-play.

2. CONNECT TO TODAY: Cooperative Learning

THEME RELIGIOUS AND ETHICAL SYSTEMS During the late 20th century, both Protestants and Catholics made delayed responses to the Reformation. In the 1960s, the Catholic Church held a council called Vatican II to promote additional reforms. In 1997, several U.S. Protestant denominations signed a document agreeing to form closer ties with one another.

Work with a team to create a poster that explains one of these developments and how it is a response to the Reformation.



Use the Internet, news magazines, encyclopedias, or books to research the topic. Look for specific information about what was decided during Vatican II or in the Protestant agreement.

- In your group, decide what are the most important points about Vatican II or the Protestant agreement. Discuss how these points either carry on or undo the work of the Reformation.
- Display your information on a poster. You may convey the information in either a written or an illustrated form, as long as it is clear and accurate.

3. INTERPRETING A TIME LINE

Revisit the Unit Time Line on pages 32–33. On the Chapter 1 time line, identify important writers of the period. Did they write before or after the invention of the printing press?

FOCUS ON ART

Look carefully at this drawing of a machine from the notebooks of Leonardo da Vinci. Notice the blade that curves around the center shaft and the round mechanism at the bottom of the shaft.

- What might happen if the blade that curves around the center shaft started to turn?
- What do you think Leonardo was trying to invent when he drew this machine?
- What modern machine does this drawing remind you of?

Connect to History A ruler paid Leonardo for some of his ideas for machines. How might a ruler use a machine like the one shown here?

