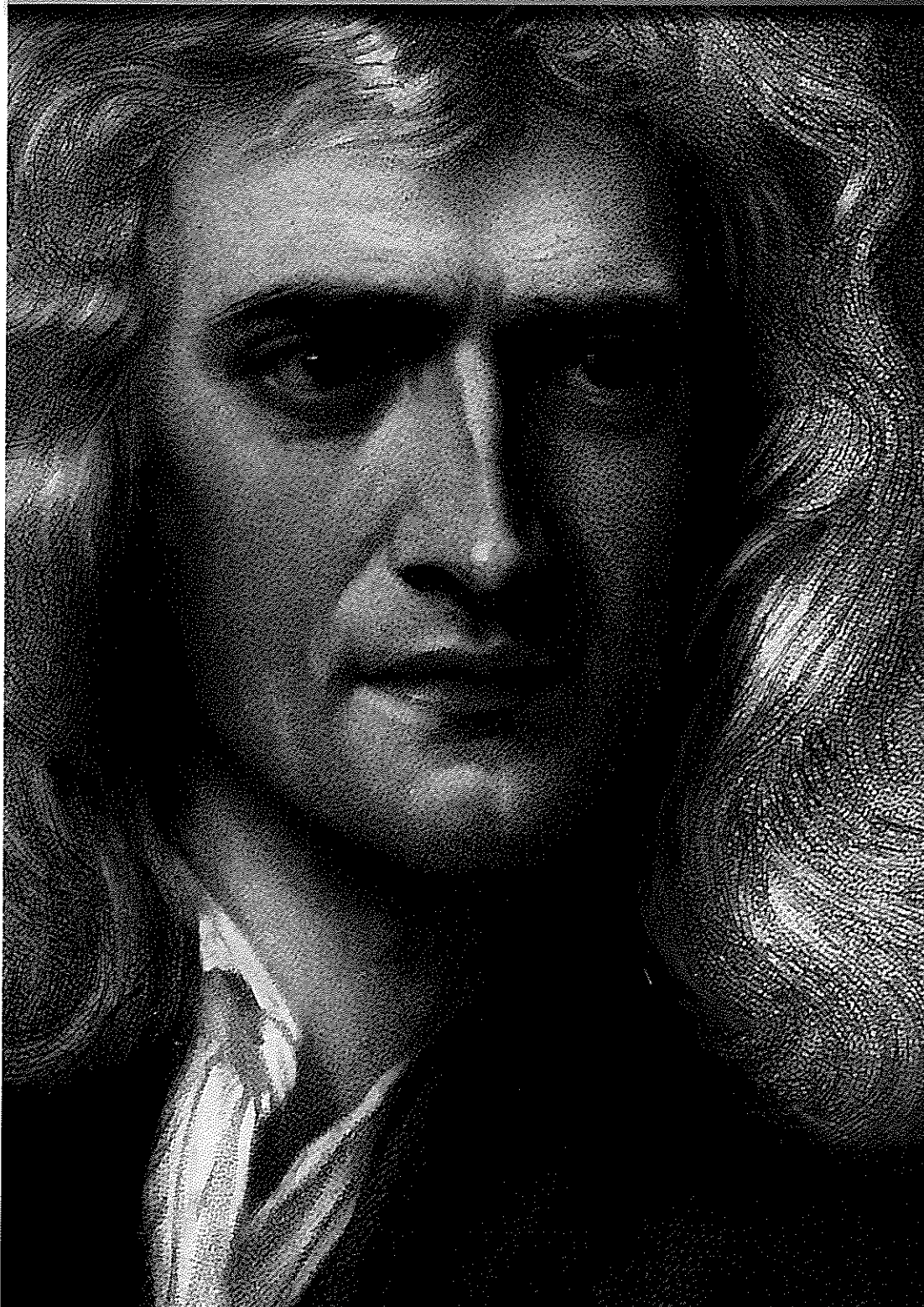


The Enlightenment and Revolutions

1550–1800

ESSENTIAL QUESTIONS • *Why do new ideas often spark change?*
• *How do new ways of thinking affect the way people respond to their surroundings?*



networks

There's More Online! about the Enlightenment and revolutions.

CHAPTER 21

Lesson 1
The Scientific Revolution

Lesson 2
The Ideas of the Enlightenment

Lesson 3
Enlightened Absolutism and the Balance of Power

Lesson 4
The American Revolution

The Story Matters...

The Scientific Revolution led to the Enlightenment, a major European intellectual movement that applied reason to all human experience. The English mathematician Sir Isaac Newton was a key figure in the Scientific Revolution. His fundamental scientific insight, that the physical world operated according to natural laws discovered through scientific investigation, influenced every area of Enlightenment thought.

◀ This engraving was based on a portrait of Newton by Sir Godfrey Kneller. The poet Alexander Pope summed up Newton's contribution to human understanding: "Nature and Nature's laws lay hid in night: / God said, Let Newton be! and all was light."

PHOTO: The Granger Collection, NYC. All rights reserved.

CHAPTER 21

Place and Time: Europe and the World 1550–1800

The seventeenth and eighteenth centuries witnessed the Scientific Revolution and the Enlightenment. Philosophers and scientists produced new theories about the structure of the universe and humankind's relationship to it. As European powers explored the world and expanded their colonial empires, conflicts erupted. This first age of global warfare culminated in the Seven Years' War, fought in Europe, North America, and India.

Step Into the Place

Read the quotes and look at the information presented on the map.

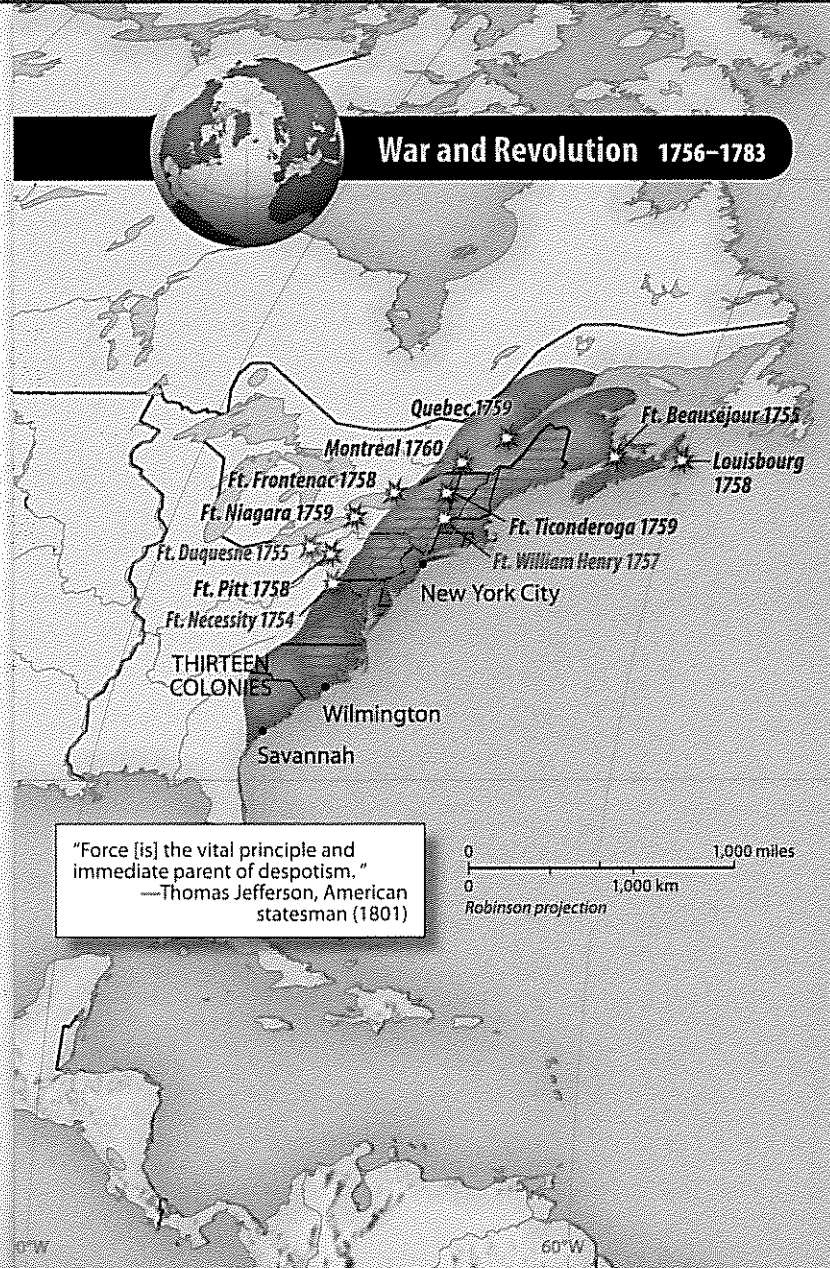
DBQ

Analyzing Historical Documents How would you generalize the attitude of the Enlightenment toward a conflict between colonial empires, such as the Seven Years' War? Reference specific primary sources in your answer.

PRIMARY SOURCE

“Though . . . politics [cannot] be founded on any thing but the consent of the people . . . in the noise of war, which makes so great a part of the history of mankind, this consent is little taken notice of; and therefore many have mistaken the force of arms for the consent of the people, and reckon conquest as one of the originals of government. But conquest is as far from setting up any government, as demolishing an [sic] house is from building a new one in the place.... Without the consent of the people, [one] can never erect a new one.”

—John Locke, from *Two Treatises of Government*, 1690



Step Into the Time

Making Connections

Choose several events from the time line and use them to write a paragraph summarizing the key interests of Enlightenment thinkers.

EUROPE

THE WORLD

1550

1600

1562 Beginning of Akbar's reign in India

1588 Shah 'Abbās comes to power in Persia

1603 Tokugawa shogunate begins in Japan

1607 Founding of Jamestown Colony in Virginia

1632–53 Construction of Taj Mahal

1610 Galileo Galilei publishes *The Starry Messenger*

1637 René Descartes publishes *Discourse on Method*

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There's More Online!

- ✓ BIOGRAPHY Francis Bacon
- ✓ BIOGRAPHY Galileo Galilei
- ✓ BIOGRAPHY Isaac Newton
- ✓ CHART/GRAPH Intellectuals of the Scientific Revolution
- ✓ GAME Terms from the Scientific Revolution
- ✓ GRAPHIC ORGANIZER The Scientific Method
- ✓ INTERACTIVE SELF-CHECK QUIZ
- ✓ PRIMARY SOURCE Meditations on First Philosophy
- ✓ VIDEO The Scientific Revolution

Reading HELPDESK

Academic Vocabulary

- philosopher • sphere

Content Vocabulary

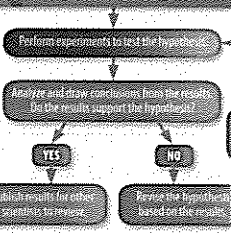
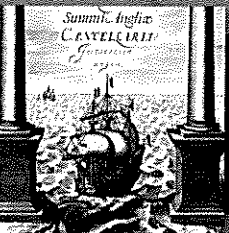
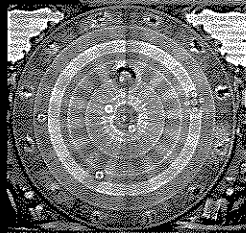
- geocentric
- heliocentric
- universal law of gravitation
- rationalism
- scientific method
- inductive reasoning

TAKING NOTES:

Key Ideas and Details

Summarizing Use a table like this one to list the contributions of Copernicus, Kepler, Galileo, and Newton to a new concept of the universe.

Copernicus	
Kepler	
Galileo	
Newton	



LESSON 1

The Scientific Revolution

ESSENTIAL QUESTIONS • Why do new ideas often spark change?
• How do new ways of thinking affect the way people respond to their surroundings?

IT MATTERS BECAUSE

Of all the changes that swept Europe in the sixteenth and seventeenth centuries, the most widely influential was the Scientific Revolution. This revolution often is associated with the various scientific and technological changes made during this time. However, the Scientific Revolution was also about changes in the way Europeans looked at themselves and their world.

Causes of the Scientific Revolution

GUIDING QUESTION What developments were the foundation of the Scientific Revolution?

In the Middle Ages, many educated Europeans took great interest in the world around them. However, these “natural philosophers,” as medieval scientists were known, did not make observations of the natural world. Instead they relied on a few ancient authorities—especially Aristotle—for their scientific knowledge. During the fifteenth and sixteenth centuries, a number of changes occurred that caused the natural philosophers to abandon their old views.

Renaissance humanists had mastered Greek as well as Latin. These language skills gave them access to newly discovered works by Archimedes and Plato. These writings made it obvious that some ancient thinkers had disagreed with Aristotle and other accepted authorities of the Middle Ages.

Other developments also encouraged new ways of thinking. Technical problems that required careful observation and accurate measurements, such as calculating the amount of weight that ships could hold, served to stimulate scientific activity. Then, too, the invention of new instruments, such as the telescope and microscope, made fresh scientific discoveries possible. Above all, the printing press helped spread new ideas quickly and easily.

Mathematics played a key role in the scientific achievements of the time. It was promoted in the Renaissance by the rediscovery of the works of ancient mathematicians. Moreover, mathematics was seen as the key to navigation, military science, and geography.

Renaissance thinkers also believed that mathematics was the key to understanding the nature of things in the universe. Nicolaus Copernicus, Johannes Kepler, Galileo Galilei, and Isaac Newton were all great mathematicians who believed that the secrets of nature were written in the language of mathematics. After studying, and sometimes discarding, the ideas of the ancient mathematicians, these intellectuals developed new theories that became the foundation of the Scientific Revolution.

READING PROGRESS CHECK

Drawing Conclusions Why might new inventions such as the telescope and microscope change the way people saw the world?

Scientific Breakthroughs

GUIDING QUESTIONS *What role did scientific breakthroughs play during the Scientific Revolution? What obstacles did participants in the Scientific Revolution face?*

During the Scientific Revolution, discoveries in astronomy led to a new conception of the universe. Breakthroughs advanced medical knowledge and launched the field of chemistry as well.

The Ptolemaic System

Ptolemy, who lived in the A.D. 100s, was the greatest astronomer of antiquity. Using Ptolemy's ideas, as well as those of Aristotle and of Christianity, **philosophers** of the Middle Ages constructed a model of the universe known later as the Ptolemaic (TAH • luh • MAY • ihk) system. This system is **geocentric** because it places Earth at the center of the universe.

In the Ptolemaic system, the universe is seen as a series of concentric **spheres**—one inside the other. Earth is fixed, or motionless, at the center. The heavenly bodies—pure orbs of light—are embedded in the crystal-like, transparent spheres that rotate about Earth. The moon is embedded in the first sphere, Mercury in the second, Venus in the third, and the sun in the fourth. The rotation of the spheres makes these heavenly bodies rotate about Earth and move in relation to one another.

The tenth sphere in the Ptolemaic system is the “prime mover.” This sphere moves itself and gives motion to the other spheres. Beyond the tenth sphere is Heaven, where God resides. God was at one end of the universe, then, and humans were at the center.

Copernicus and Kepler

In May 1543, Nicolaus Copernicus, a native of Poland, published his famous book, *On the Revolutions of the Heavenly Spheres*. Copernicus, a mathematician, thought that his **heliocentric**, or sun-centered, conception of the universe offered a more accurate explanation than did the Ptolemaic system. In his system, the sun, not Earth, was at the center of the universe. The planets revolved around the sun. The moon, however, revolved around Earth. Moreover, according to Copernicus, the apparent movement of the sun around Earth was caused by the rotation of Earth on its axis and its journey around the sun.

Johannes Kepler, a German mathematician, took the next step in destroying the Ptolemaic system. Kepler used detailed astronomical data to arrive at his laws of planetary motion. His observations confirmed that the

philosopher a person who seeks wisdom or enlightenment; a scholar or a thinker

geocentric Earth-centered; a system of planetary motion in which the sun, moon, and other planets revolve around the Earth

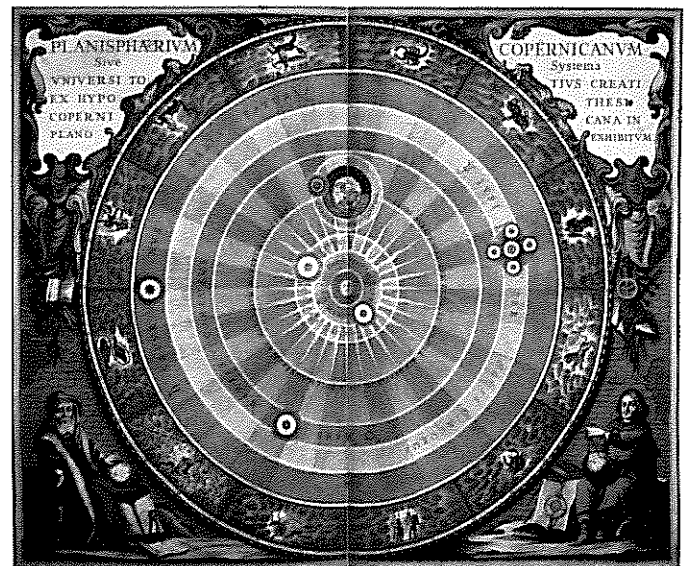
sphere any of the concentric, revolving, spherical transparent shells in which, according to ancient astronomy, the stars, sun, planets, and moon are set

heliocentric sun-centered; the system of the universe in which the Earth and planets revolve around the sun

▼ Diagram of the Copernican system, Andreas Cellarius, 1660

CRITICAL THINKING

Analyzing Information How does this diagram illustrate the workings of the universe?



sun was at the center of the universe and also added new information. In his first law, Kepler showed that the planets' orbits around the sun were not circular, as Copernicus had thought. Rather, the orbits were elliptical (egg-shaped), with the sun toward the end of the ellipse instead of at the center. This finding, known as Kepler's First Law, contradicted the circular orbits and crystal-like spheres that were central to the Ptolemaic system.

Galileo's Discoveries

Scientists could now think in terms of planets revolving around the sun in elliptical orbits. Important questions remained unanswered, however. Of what are the planets made? How does one explain motion in the universe? An Italian scientist answered the first question. As the first European to make regular observations of the heavens using a telescope, mathematician Galileo Galilei made a series of remarkable discoveries: mountains on Earth's moon, four moons revolving around Jupiter, and sunspots.

Galileo's observations seemed to destroy another aspect of the Ptolemaic conception. Heavenly bodies had been seen as pure orbs of light. They now appeared to be composed of material substance, just as Earth was.

Galileo's discoveries, published in *The Starry Messenger* in 1610, did more to make Europeans aware of the new view of the universe than did the works of Copernicus and Kepler. But in the midst of his newfound

fame, Galileo found himself under suspicion by the Catholic Church. The Church ordered him to abandon the Copernican idea, which threatened the Church's entire conception of the universe. In the Copernican view, humans were no longer at the center of the universe; God was no longer in a specific place.

In spite of the Church's position, by the 1630s and 1640s, most astronomers had accepted the heliocentric idea of the universe. However, motion in the universe had not been explained. The ideas of Copernicus, Kepler, and Galileo had yet to be tied together. An Englishman—Isaac Newton—would make this connection; he is considered the greatest genius of the Scientific Revolution.



▲ Galileo appears before officials in the Vatican in 1663.

► CRITICAL THINKING

Interpreting Significance Why would the Church be concerned that Galileo's ideas contradicted its worldview?

universal law of gravitation one of Newton's three rules of motion; it explains that planetary bodies continue in elliptical orbits around the sun because every object in the universe is attracted to every other object by a force called gravity

Newton's View of the Universe

Born in 1642, Isaac Newton attended Cambridge University and later became a professor of mathematics there. His major work was *Mathematical Principles of Natural Philosophy*, known simply as the *Principia*, from a shortened form of its Latin title.

In the *Principia*, Newton defined the three laws of motion that govern the planetary bodies, as well as objects on Earth. Crucial to his whole argument was the **universal law of gravitation**. This law explains why the planetary bodies continue their elliptical orbits about the sun. The law states, in mathematical terms, that every object in the universe is attracted to every other object by a force called gravity. This one universal law, mathematically proved, could explain all motion in the universe.

Newton's ideas created a new picture of the universe. It was now seen as one huge, regulated, uniform machine that worked according to natural laws. Newton's concept dominated the modern worldview until Albert Einstein's concept of relativity gave a new picture of the universe.

Breakthroughs in Medicine and Chemistry

The teachings of Galen, a Greek physician in the A.D. 100s, dominated medicine in the Late Middle Ages. Relying on animal, rather than human, dissection to picture human anatomy, Galen was wrong in many instances.

A revolution in medicine began in the sixteenth century. During this time Andreas Vesalius and William Harvey added to the understanding of human anatomy. By dissecting human bodies at the University of Padua, Vesalius accurately described the individual organs and general structure of the human body. William Harvey showed that the heart—not the liver, as Galen had thought—was the beginning point for the circulation of blood. He also proved that the same blood flows through the veins and arteries and makes a complete circuit through the body.

The French scientist Blaise Pascal experimented with how liquids behaved under pressure. This led him to the principle known as Pascal's Law. He applied this principle to the development of tools such as the syringe and the hydraulic press.

Robert Boyle was one of the first scientists to conduct controlled experiments in chemistry. His work on the properties of gases led to Boyle's Law, which states that the volume of a gas varies with the pressure exerted on it. In the eighteenth century, Antoine Lavoisier invented a system for naming chemical elements still used today. Many people consider him the founder of modern chemistry.

Women's Contributions

Although scholarship was considered the exclusive domain of men, there were women who contributed to the Scientific Revolution. Margaret Cavendish, a philosopher, and Maria Winkelmann, an astronomer, helped advance science through their work.

Margaret Cavendish came from an English aristocratic family and was tutored on subjects considered suitable for girls of proper upbringing—music, dancing, reading, and needlework. She was not formally educated in the sciences. However, Cavendish wrote a number of works on scientific matters, including *Observations Upon Experimental Philosophy*. In this work, Cavendish was especially critical of the growing belief that humans, through science, were the masters of nature:

PRIMARY SOURCE

“We have no power at all over natural causes and effects. . . for man is but a small part, his powers are but particular actions of Nature, and he cannot have a supreme and absolute power.”

—from *Observations Upon Experimental Philosophy*

Cavendish published under her own name at a time many female writers had to publish anonymously. Her contribution to philosophy is widely recognized today; however, many intellectuals of the time did not take her work seriously.

In Germany, many of the women who were involved in science were astronomers. These women had received the opportunity to become astronomers from working in family observatories where their fathers or husbands trained them. Between 1650 and 1710, women made up 14 percent of all German astronomers.

The most famous female astronomer in Germany was Maria Winkelmann. She received training in astronomy from a self-taught astronomer. When she married Gottfried Kirch, Prussia's foremost astronomer, she became his assistant and began to practice astronomy.

Connections to TODAY

Women in Science

The important position of women in the sciences today can be traced back to the Enlightenment's ideas about human equality and natural rights. The careers of Enlightenment-era women like Margaret Cavendish and the astronomer Caroline Herschell (1750–1848), who was a pioneer in the study of nebulae and star clusters, gained acceptance for the female scientists who would follow them. For example, half of the engineers operating the Large Hadron Collider, a powerful particle accelerator, are women.

Winkelman made some original contributions to astronomy, including the discovery of a comet. When her husband died, Winkelman applied for a position as assistant astronomer at the Berlin Academy. She was highly qualified, but as a woman—with no university degree—she was denied the post. Members of the Berlin Academy feared that they would set a bad example by hiring a woman.

READING PROGRESS CHECK

Speculating Why might changes in the way people saw the universe change the questions they asked about the natural world?

Philosophy and Reason

GUIDING QUESTION *How did the Scientific Revolution change people's worldview?*

New conceptions of the universe brought about by the Scientific Revolution strongly influenced the Western view of humankind.

Descartes and Rationalism

Nowhere is this more evident than in the work of the seventeenth-century French philosopher René Descartes (day • KAHRT), who brought a philosophical perspective to the natural sciences. He began by considering the doubt and uncertainty that seemed to be everywhere in the confusion of the seventeenth century. He ended with a philosophy that largely dominated Western thought until the twentieth century.

The starting point for Descartes's new system was doubt. In his most famous work, *Discourse on Method*, written in 1637, Descartes decided to set aside all that he had learned and to begin again. One fact seemed to him to be beyond doubt—his own existence.

Descartes emphasized the importance of his own mind, accepting only those things that his reason said were true. From his first principle—"I think, therefore I am"—Descartes used his reason to arrive at a second principle. He argued that because "the mind cannot be doubted but the body and material world can, the two must be radically different."

From this idea came the principle of the separation of mind and matter (and of mind and body). Descartes's idea that mind and matter were completely separate allowed scientists to view matter as dead or inert. That is, matter was something that was totally detached from the mind and that could be investigated independently by reason. Descartes has rightly been called the father of modern **rationalism**. This system of thought is based on the belief that reason is the chief source of knowledge.

Bacon and the Scientific Method

During the Scientific Revolution, people became concerned about how they could best understand the physical world. The result was the creation of the **scientific method**—a systematic procedure for collecting and analyzing evidence. The scientific method was crucial to the evolution of science in the modern world.

The person who developed the scientific method was not a scientist, but an English philosopher with few scientific credentials. Francis Bacon believed that scientists should not rely on the ideas of ancient authorities. Instead, they should learn about nature by using **inductive reasoning**—proceeding from the particular to the general. Knowledge of the natural world should be achieved through observation and experimentation.

Analyzing PRIMARY SOURCES

Discourse on Method

“But I immediately became aware that while I was thus disposed to think that all was false, it was absolutely necessary that I who thus thought should be something; and noting that this truth *I think, therefore I am*, was so steadfast and so assured . . . I concluded that I might without scruple accept it as being the first principle of the philosophy I was seeking.”

—René Descartes, from *Discourse on Method*

DBQ **ANALYZING INFORMATION** What is the first principle of Descartes's philosophy?

Before beginning this reasoning, scientists try to free their minds of opinions that might distort the truth. Then they start with detailed facts and proceed toward general principles. From observing natural events, scientists propose hypotheses, or possible explanations, for the events. Then systematic observations and carefully organized experiments to test the hypotheses would lead to correct general principles.

Bacon was clear about what he believed his scientific method could accomplish. He stated that “the true and lawful goal of the sciences is none other than this: that human life be endowed with new discoveries and powers.” He was much more concerned with practical matters than pure science. Bacon wanted science to benefit industry, agriculture, and trade. He said, “I am laboring to lay the foundation, not of any sect or doctrine, but of human utility and power.”

Bacon believed this “human power” could be used to “conquer nature in action.” The control and domination of nature became an important concern of science and the technology that accompanied it.

READING PROGRESS CHECK

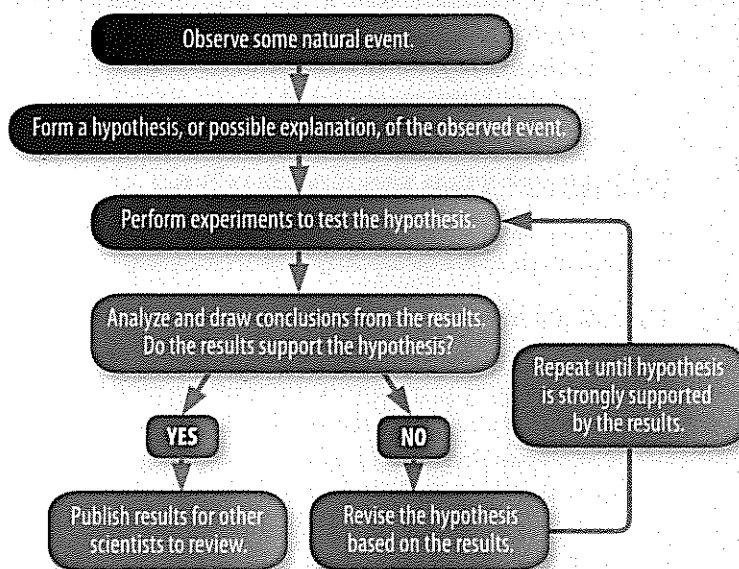
Describing What did Bacon believe was the purpose of the scientific method?

rationalism a system of thought expounded by René Descartes based on the belief that reason is the chief source of knowledge

scientific method a systematic procedure for collecting and analyzing evidence that was crucial to the evolution of science in the modern world

inductive reasoning the doctrine that scientists should proceed from the particular to the general by making systematic observations and carefully organized experiments to test hypotheses or theories, a process that will lead to correct general principles

THE SCIENTIFIC METHOD



CHARTS/GRAPHS

Bacon's method began a systematic approach to collecting and analyzing evidence that today is known as the scientific method.

CRITICAL THINKING

1. **Explaining** What do scientists do when the results of their experiments disagree with their proposed explanation?
2. **Analyzing** How does the scientific method help to arrive at a true explanation of a natural event?

LESSON 1 REVIEW

Reviewing Vocabulary

1. **Making Connections** Write a paragraph explaining how the scientific method exemplified the new emphasis on reason.

Using Your Notes

2. **Summarizing** Use your graphic organizer on Copernicus, Kepler, Galileo, and Newton to write a paragraph summarizing how each contributed to a new concept of the universe.

Answering the Guiding Questions

3. **Identifying Central Issues** What developments were the foundation of the Scientific Revolution?

4. **Identifying Cause and Effect** What role did scientific breakthroughs play during the Scientific Revolution?

5. **Identifying** What obstacles did participants in the Scientific Revolution face?

6. **Drawing Conclusions** How did the Scientific Revolution change people's worldview?

Writing Activity

7. **INFORMATIVE/EXPLANATORY** Write a paragraph analyzing the passage from Descartes's *Discourse on Method* from this lesson. Explain how his rationalism relates to the inductive reasoning used in the scientific method.

There's More Online!

- ✓ BIOGRAPHY Adam Smith
- ✓ BIOGRAPHY Montesquieu
- ✓ BIOGRAPHY Voltaire
- ✓ CHART/GRAPH The Philosophes
- ✓ IMAGE The 18th-Century Salon
- ✓ INTERACTIVE SELF-CHECK QUIZ
- ✓ PRIMARY SOURCE The Social Contract
- ✓ PRIMARY SOURCE Vindication of the Rights of Woman
- ✓ SLIDE SHOW Enlightenment Arts
- ✓ VIDEO The Ideas of the Enlightenment

Reading **HELPDESK**

Academic Vocabulary

- generation • arbitrary

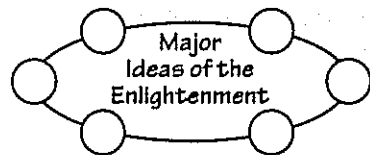
Content Vocabulary

- philosophe
- separation of powers
- deism
- laissez-faire
- social contract
- salons
- rococo

TAKING NOTES:

Key Ideas and Details

Summarizing As you read, use a diagram like the one below to list some of the concepts introduced by intellectuals during the Enlightenment.



LESSON 2

The Ideas of the Enlightenment

ESSENTIAL QUESTIONS • *Why do new ideas often spark change?*
 • *How do new ways of thinking affect the way people respond to their surroundings?*

IT MATTERS BECAUSE

Applying the scientific method to their physical world, Enlightenment thinkers, or philosophes, reexamined all aspects of life—from government and justice to religion and women's rights. They created a movement that influenced the entire Western world.

Ideas of the Philosophes

GUIDING QUESTIONS *What role did philosophes play in the Enlightenment? How did the belief in logic and reason promote the beginnings of the social sciences?*

The Enlightenment was an eighteenth-century philosophical movement of intellectuals who were greatly impressed with the achievements of the Scientific Revolution. One of the favorite words of these intellectuals was *reason*. By this, they meant the application of the scientific method to an understanding of all life. They hoped that by using the scientific method, they could make progress toward a better society than the one they had inherited. *Reason, natural law, hope, progress*—these were common words to the thinkers of the Enlightenment. The ideas of the Enlightenment would become a force for reform and eventually revolution.

The intellectuals of the Enlightenment were especially influenced by the ideas of two seventeenth-century Englishmen—John Locke and Isaac Newton. In his *Essay Concerning Human Understanding*, Locke argued that every person was born with a *tabula rasa*, or blank mind. Locke's ideas suggested that people were molded by the experiences that came through their senses from the surrounding world. Enlightenment thinkers began to believe that if environments were changed and people were exposed to the right influences, then they could be changed to create a new, and better, society.

The ideas of Isaac Newton also influenced eighteenth-century intellectuals. Newton believed that the physical world and everything in it was like a giant "world machine," operating according to natural laws that could be uncovered through systematic investigation.

PHOTO: French School / Bridgeman; Getty Images; Corbis / Christel Gerstenberg; © Library of Congress; Bettman / Corbis; Super Stock

The Enlightenment thinkers reasoned that if Newton was able to discover the natural laws that governed the physical world, then by applying his scientific methods, they would be able to discover the natural laws that governed human society. If all institutions would then follow these natural laws, the result would be an ideal society.

The Role of Philosophy

The intellectuals of the Enlightenment were known by the French word **philosophe** (FEE • luh • ZAWF), meaning “philosopher.” Not all philosophers were French, however, and few were philosophers in the strict sense of the term. They were writers, professors, journalists, economists, and above all, social reformers. They came chiefly from the nobility and the middle class.

Most leaders of the Enlightenment were French, although the English had provided the philosophical inspiration for the movement. It was the French philosophes who affected intellectuals elsewhere and created a movement that influenced the entire Western world.

To the philosophes, the role of philosophy was to change the world. The use of reason and a spirit of rational criticism were to be applied to everything, including religion and politics. In the first half of the eighteenth century, three individuals dominated the intellectual landscape—Montesquieu (MAHN • tuhs • KYOO), Voltaire, and Diderot (dee • DROH).

Montesquieu

Charles-Louis de Secondat, the baron de Montesquieu, was a French noble. His famous work *The Spirit of the Laws* (1748) was a study of governments. In it, Montesquieu tried to find the natural laws that govern the social and political relationships of human beings.

Montesquieu stated that England’s government had three branches: the executive (the monarch), the legislative (Parliament), and the judicial (the courts of law). The government functioned through a **separation of powers**. In this separation, the executive, legislative, and judicial powers of the government limit and control each other in a system of checks and balances. By preventing any one person or group from gaining too much power, this system provides the greatest freedom and security for the state.

The system of checks and balances through separation of powers was Montesquieu’s most lasting contribution to political thought. Translation of his work into English made it available to American philosophes, who worked his principles into the United States Constitution.

Voltaire

The greatest figure of the Enlightenment was François-Marie Arouet, known simply as Voltaire. A Parisian, Voltaire came from a prosperous middle-class family. His numerous writings during the eighteenth century brought him both fame and wealth.

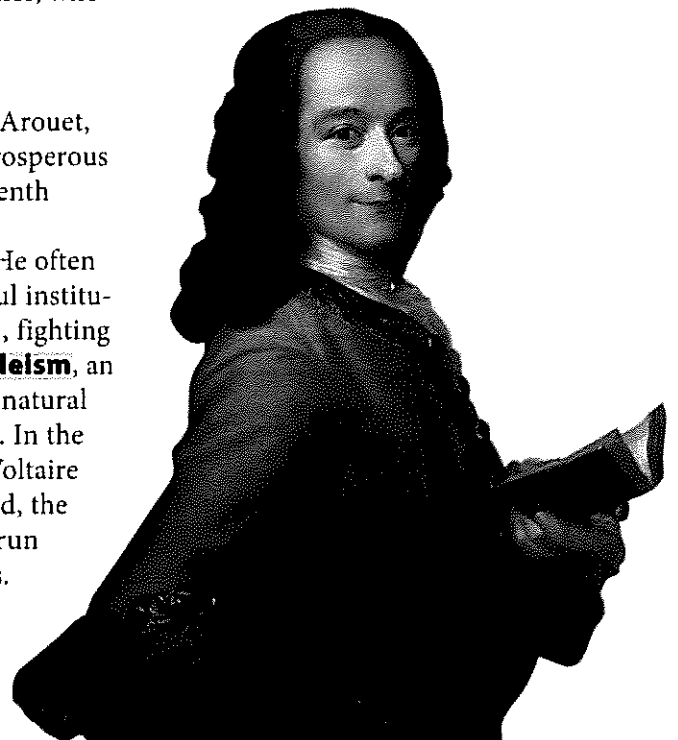
Voltaire was well known for his criticism of Christianity. He often challenged the actions of the Church, one of the most powerful institutions of the time. He had a strong belief in religious toleration, fighting against religious intolerance in France. Voltaire championed **deism**, an eighteenth-century religious philosophy based on reason and natural law. Deism built on the idea of the Newtonian world machine. In the Deists’ view, a mechanic (God) had created the universe. To Voltaire and most other philosophes, the universe was like a clock. God, the clockmaker, had created it, set it in motion, and allowed it to run without his interference and according to its own natural laws.

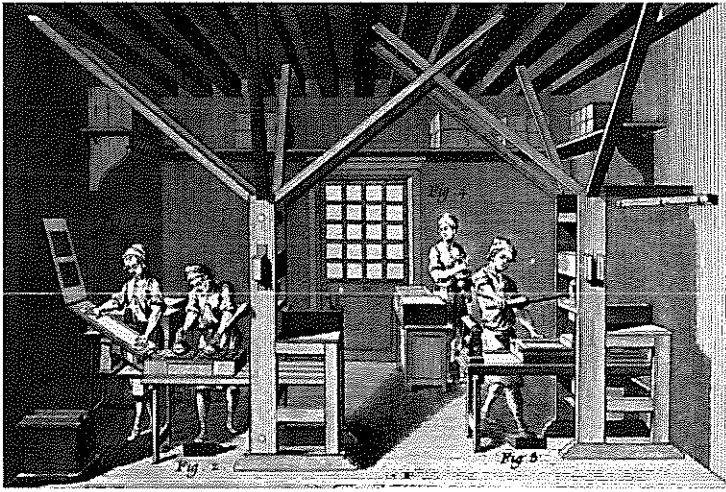
philosophe French for “philosopher”; applied to all intellectuals during the Enlightenment

separation of powers a form of government in which the executive, legislative, and judicial branches limit and control each other through a system of checks and balances

deism an eighteenth-century religious philosophy based on reason and natural law

▼ Voltaire helped spread Enlightenment ideas through his writings.





▲ The press room of a print shop, from Diderot's *Encyclopédie*, 1751

► **CRITICAL THINKING**

Drawing Conclusions How did both printing and the *Encyclopédie* contribute to the promotion of Enlightenment ideas?

Diderot

Denis Diderot went to the University of Paris. His father hoped Denis would pursue a career in law or the Church. He did neither. Instead, he became a writer, covering many subjects. Diderot's most famous contribution to the Enlightenment was the *Encyclopédie, or Classified Dictionary of the Sciences, Arts, and Trades*, a 28-volume collection of knowledge that he edited. Published between 1751 and 1772, the purpose of the *Encyclopédie*, according to Diderot, was to “change the general way of thinking.”

The *Encyclopédie* became a weapon against the old French society. Many of its

articles attacked religious superstition and supported religious toleration. Others called for social, legal, and political reforms. Sold to doctors, clergymen, teachers, and lawyers, the *Encyclopédie* spread Enlightenment ideas.

☑ **READING PROGRESS CHECK**

Identifying Central Issues What are two ways in which philosophes sought to change the world?

New Social Sciences

GUIDING QUESTION *How did the belief in logic and reason promote the beginnings of the social sciences?*

The philosophes, as we have seen, believed that Newton's methods could be used to discover the natural laws underlying all areas of human life. This led to what we would call the social sciences—areas such as economics and political science.

The Physiocrats and Scottish philosopher Adam Smith have been viewed as the founders of the modern social science of economics. The Physiocrats, a French group, were interested in identifying the natural economic laws that governed human society. They maintained that if individuals were free to pursue their own economic self-interest, all society would benefit. The state, then, should not interrupt the free play of natural economic forces by imposing regulations on the economy. Instead, the state should leave the economy alone. This doctrine became known by its French name, **laissez-faire** (LEH • SAY • FEHR), meaning “to let (people) do (what they want).”

The best statement of laissez-faire was made in 1776 by Adam Smith in his famous work, *The Wealth of Nations*. Like the Physiocrats, Smith believed that the state should not interfere in economic matters. Indeed, Smith gave to government only three basic roles. First, it should protect society from invasion (the function of the army). Second, the government should defend citizens from injustice (the function of the police). And finally, it should keep up certain public works that private individuals alone could not afford—roads and canals, for example—but which are necessary for social interaction and trade.

☑ **READING PROGRESS CHECK**

Summarizing What roles did Adam Smith believe the government should fulfill in society?

laissez-faire the concept that the state should not impose government regulations but should leave the economy alone

The Spread of Ideas

GUIDING QUESTIONS *How did Enlightenment ideas influence society and culture?*

By the late 1760s, a new **generation** of philosophes had come to maturity. Ideas about liberty and the condition of women were spread through an increasingly literate society.

The Social Contract

The most famous philosophe of the later Enlightenment was Jean-Jacques Rousseau (ru • SOH). In his *Discourse on the Origins of the Inequality of Mankind*, Rousseau argued that people had adopted laws and government in order to preserve their private property. In the process, they had become enslaved by government and needed to regain their freedom.

In his major work *The Social Contract*, published in 1762, Rousseau presented his concept of the **social contract**. Through a social contract, an entire society agrees to be governed by its general will. Individuals who wish instead to follow their own self-interests must be forced to abide by the general will. “This means nothing less than that [they] will be forced to be free,” said Rousseau. Thus, liberty is achieved by being forced to follow what is best for “the general will” because the general will represents what is best for the entire community.

Unlike many Enlightenment thinkers, Rousseau believed that emotions, as well as reason, were important to human development. He sought a balance between heart and mind, between emotions and reason.

Women’s Rights

For centuries, male intellectuals had argued that the nature of women made them inferior to men and made male domination of women necessary. By the eighteenth century, however, female thinkers began to express their ideas about improving the condition of women. Mary Wollstonecraft, an English writer, advanced the strongest statement for the rights of women. Many see her as the founder of the modern European and American movements for women’s rights.

In *A Vindication of the Rights of Women*, Wollstonecraft identified two problems with the views of many Enlightenment thinkers. She noted that the same people who argued that women must obey men also said that government based on the **arbitrary** power of monarchs over their subjects was wrong. Wollstonecraft pointed out that the power of men over women was equally wrong.

Wollstonecraft further argued that the Enlightenment was based on an ideal of reason in all human beings. Therefore, because women have reason, they are entitled to the same rights as men. Women, Wollstonecraft declared, should have equal rights in education, as well as in economic and political life.

The Growth of Reading

Of great importance to the Enlightenment was the spread of its ideas to the literate elite of European society. The growth of both publishing and the reading public during the eighteenth century was noticeable. Books had previously been aimed at small groups of the educated elite. Now many books were directed at the new reading public of the middle classes, which included women and urban artisans. Especially appealing to these readers were the works of novelists who began to use realistic social themes. The English writer Henry Fielding wrote novels about people without morals

generation a group of individuals born and living at the same time

social contract the concept that an entire society agrees to be governed by its general will and all individuals should be forced to abide by it since it represents what is best for the entire community



▲ Mary Wollstonecraft was an advocate of women’s rights.

arbitrary at one’s discretion; random

who survive by their wits. Fielding's best-known work is *The History of Tom Jones, a Foundling*, which describe the adventures of a young scoundrel.

An important aspect of the growth of publishing and reading in the eighteenth century was the development of magazines and newspapers for the general public. The first daily newspaper was printed in London in 1702. Newspapers were relatively cheap and were even provided free in many coffeehouses. Coffeehouses also served as gathering places for the exchange of ideas.



▲ An eighteenth-century coffeehouse in London

► **CRITICAL THINKING**

Constructing Arguments Do the coffeehouses of today serve the same purpose as early ones? Why or why not?

salons the elegant urban drawing rooms where, in the eighteenth century, writers, artists, aristocrats, government officials, and wealthy middle-class people gathered to discuss the ideas of the philosophes

Enlightenment ideas were also spread through the salon. **Salons** were the elegant drawing rooms of the wealthy upper class's great urban houses. Invited guests gathered in these salons and took part in conversations that were often centered on the new ideas of the philosophes. The salons brought writers and artists together with aristocrats, government officials, and wealthy middle-class people. The women who hosted the salons were in a position to sway political opinion and helped spread the ideas of the Enlightenment.

Religion in the Enlightenment

Although many philosophes attacked the Christian churches, most Europeans in the eighteenth century were still Christians. People also sought a deeper personal devotion to God. The desire of ordinary Protestants for greater depths of religious experience led to new religious movements.

In England, the most famous new religious and evangelical movement—Methodism—was the work of John Wesley, an Anglican minister. Wesley had a mystical experience in which “the gift of God’s grace” assured him of salvation. This experience led him to become a missionary to the English people to bring them the “glad tidings” of salvation. Wesley often preached two or three times a day.

His sermons often caused people to have conversion experiences. Many converts then joined Methodist societies to do good works. One notable reform they influenced was the abolition of the slave trade in the early 1800s. After Wesley’s death, Methodism became a separate Protestant group.

READING PROGRESS CHECK

Evaluating How did Mary Wollstonecraft use the Enlightenment ideal of reason to advocate rights for women?

Enlightenment and the Arts

GUIDING QUESTION *How did Enlightenment ideas influence society and culture?*

The ideas of the Enlightenment also had an impact on the world of culture. Eighteenth-century Europe witnessed both traditional practices and important changes in art, music, and literature.

Architecture and Art

The palace of Louis XIV at Versailles, in France, had made an enormous impact on Europe as other European rulers also built grand residences. These palaces were modeled more on the Italian baroque style of the 1500s and 1600s than on the late seventeenth-century French classical style of Versailles.

One of the greatest architects of the eighteenth century was Balthasar Neumann. Neumann’s two masterpieces are the Church of the Fourteen Saints in southern Germany and the Residence, the palace of the prince bishop of Würzburg. In these buildings, secular and spiritual become one, as lavish and fanciful ornament, light, bright colors, and elaborate detail greet the visitor. The baroque and neoclassical styles that had dominated

seventeenth-century art continued into the eighteenth century. By the 1730s, however, a new artistic style, known as **rococo**, had spread all over Europe. Unlike the baroque style, which stressed grandeur and power, rococo emphasized grace, charm, and gentle action. Rococo made use of delicate designs colored in gold with graceful curves. The rococo style was highly secular. Its lightness and charm spoke of the pursuit of pleasure, happiness, and love.

Rococo's appeal is evident in the work of Antoine Watteau. In his paintings, gentlemen and ladies in elegant dress reveal a world of upper-class pleasure and joy. Underneath that exterior, however, is an element of sadness. The artist suggests such sadness in his paintings by depicting the fragility and passing nature of pleasure, love, and life. One of his masterpieces, the *Embarkation for Cythera*, shows French rococo at its peak.



▲ *The Swing*, by Jean-Honoré Fragonard, 1767

Music

Eighteenth-century Europe produced some of the world's most enduring music. Two geniuses of the second half of the eighteenth century, Franz Joseph Haydn and Wolfgang Amadeus Mozart, were innovators who wrote classical music rather than the baroque music of Bach and Handel. Haydn spent most of his adult life as musical director for wealthy Hungarian princes. Visits to England introduced him to a world in which musicians wrote for public concerts rather than princely patrons. This "liberty," as he called it, led him to write two great works, *The Creation* and *The Seasons*.

Mozart was truly a child prodigy. He gave his first harpsichord concert at age six and wrote his first opera at twelve. His failure to get a regular patron to support him financially made his life miserable. Nevertheless, he wrote music passionately. His works *The Marriage of Figaro*, *The Magic Flute*, and *Don Giovanni* are three of the world's greatest operas. Haydn remarked to Mozart's father, "Your son is the greatest composer known to me . . ."

rococo an artistic style that replaced baroque in the 1730s; it was highly secular, emphasizing grace, charm, and gentle action

READING PROGRESS CHECK

Making Inferences How do Haydn's interests as a composer reflect the influence of Enlightenment ideas?

PHOTO: Super Stock

LESSON 2 REVIEW

Reviewing Vocabulary

- Explaining** Write a paragraph explaining what Montesquieu meant by the phrase *separation of powers* and where he saw this principle applied.

Using Your Notes

- Summarizing** As you read, use your graphic organizer to list some of the main ideas introduced during the Enlightenment.

Answering the Guiding Questions

- Identifying** How did Enlightenment thinkers use the ideas of the Scientific Revolution?

- Questioning** What role did the philosophes play in the Enlightenment?

- Understanding Relationships** How did the belief in logic and reason promote the beginnings of the social sciences?

- Interpreting** How did Enlightenment ideas influence society and culture?

Writing Activity

- NARRATIVE** Write a paragraph giving your personal opinion of the ideas of one of the intellectuals discussed in this lesson. Explain why you agree or disagree with that person's work. Be sure to give specific details of the chosen topic as part of your response.

networks

There's More Online!

- BIOGRAPHY Catherine the Great
- BIOGRAPHY Frederick II
- BIOGRAPHY Maria Theresa
- CHART/GRAPH Rulers of Prussia, Austria, and Russia, 1714–1796
- GRAPHIC ORGANIZER Austrian Succession, 1658–1740
- INTERACTIVE SELF-CHECK QUIZ
- MAP The Seven Years' War
- PRIMARY SOURCE Treaty of Paris
- TIME LINE The Seven Years' War
- VIDEO Enlightened Absolutism and the Balance of Power

Reading HELPDESK

Academic Vocabulary

- rigid
- eventually

Content Vocabulary

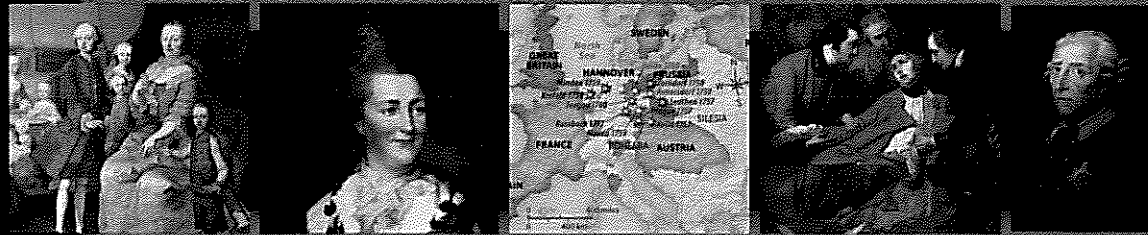
- **enlightened absolutism**
- **successors**

TAKING NOTES:

Key Ideas and Details

Describing Use a graphic organizer like the one below to list details that help show the political philosophies of Frederick II, Joseph II, and Catherine II.

Ruler	Details That Show Political Philosophy
Frederick II	
Joseph II	
Catherine II	



LESSON 3

Enlightened Absolutism and the Balance of Power

ESSENTIAL QUESTIONS

- Why do new ideas often spark change?
- How do new ways of thinking affect the way people respond to their surroundings?

IT MATTERS BECAUSE

Enlightenment ideas had an impact on the politics of eighteenth-century Europe. While they liked to talk about enlightened reforms, most rulers were more interested in the power and stability of their nations. Their desire for balancing power, however, could also lead to war. The Seven Years' War became global as war broke out in Europe, India, and North America.

Enlightenment and Absolutism

GUIDING QUESTION How were European rulers guided by Enlightenment thought?

Enlightenment thought influenced European politics in the eighteenth century. The philosophes believed in natural rights for all people. These rights included equality before the law; freedom of religious worship; freedom of speech; freedom of the press; and the rights to assemble, hold property, and pursue happiness. To establish and preserve these natural rights, most philosophes believed that people needed to be governed by enlightened rulers. Enlightened rulers must allow natural rights and nurture the arts, sciences, and education. Above all, they must obey and enforce the laws fairly for all subjects. Only strong monarchs could bring about the enlightened reforms society needed.

Many historians once assumed that a new type of monarchy, **enlightened absolutism**, emerged in the later eighteenth century. In this system, rulers tried to govern by Enlightenment principles while maintaining their royal powers. Did Europe's rulers actually follow the advice of the philosophes and become enlightened? To answer this question, we examine three states—Prussia, Austria, and Russia.

Two able Prussian kings, Frederick William I and Frederick II, made Prussia a major European power in the eighteenth century. Frederick William I maintained a highly efficient bureaucracy of civil service workers.

They observed the supreme values of obedience, honor, and, above all, service to the king. As Frederick William asserted: "One must serve the king with life and limb, ... and surrender everything except salvation. The latter is reserved for God. But everything else must be mine."

Frederick William's other major concern was the army. By the end of his reign in 1740, he had doubled the army's size. Although Prussia was a small state, it had the fourth-largest army after France, Russia, and Austria. The Prussian army, because of its size and its good reputation, was the most important institution in the state.

Members of the nobility, who owned large landed estates with many serfs, were the officers in the Prussian army. These officers, too, had a strong sense of service to the king or state. As Prussian nobles, they believed in duty, obedience, and sacrifice.

Frederick II, or Frederick the Great, who ruled from 1740 to 1786, was one of the best educated monarchs of the time. He was well versed in Enlightenment ideas and was also a dedicated ruler. He, too, enlarged the Prussian army by actively recruiting the nobility into civil service. Frederick kept a strict watch over the bureaucracy.

For a time, Frederick seemed quite willing to make enlightened reforms. He abolished the use of torture except in treason and murder cases. He also granted limited freedom of speech and press, as well as greater religious toleration. However, Frederick kept Prussia's serfdom and **rigid** social structure intact and avoided any additional reforms.

The Austrian Empire had become one of the great European states by the start of the eighteenth century. It was hard to rule, however, because it was a sprawling empire composed of many nationalities, languages, religions, and cultures. Empress Maria Theresa, who inherited the throne in 1740, worked to centralize and strengthen the state. While not open to the philosophes' calls for reform, she did work to improve the condition of the serfs.

Her son, Joseph II, believed in the need to sweep away anything standing in the path of reason: "I have made Philosophy the lawmaker of my empire." Joseph abolished serfdom and eliminated the death penalty. He established the principle of equality of all before the law and enacted religious reforms, including religious toleration.

Joseph's reform program largely failed, however. He alienated the nobles by freeing the serfs. He alienated the Catholic Church with his religious reforms. Even the serfs were unhappy because they could not understand the drastic changes. Joseph realized his failure when he wrote his own epitaph for his gravestone: "Here lies Joseph II who was unfortunate in all his enterprises." His **successors** undid almost all of Joseph II's reforms.

In Russia, Peter the Great was followed by six weak successors who were often put in power and deposed by the palace guard. A group of nobles murdered the last of these six successors, Peter III. His German wife emerged as ruler of all the Russians.

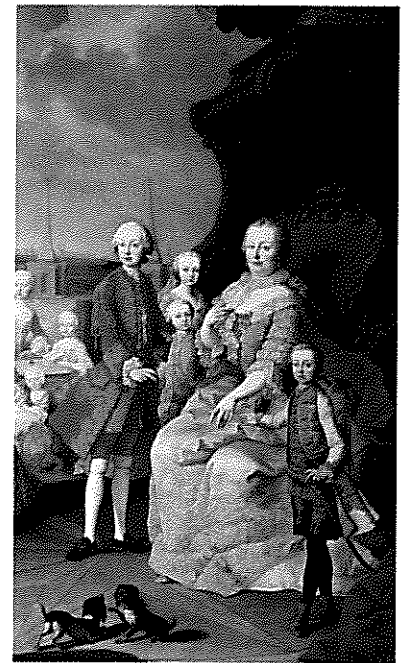
Catherine II, or Catherine the Great, ruled Russia from 1762 to 1796. She was an intelligent woman who was familiar with the works of the philosophes and seemed to favor enlightened reforms. She considered the idea of a new law code that would recognize the principle of equality of all people in the eyes of the law.

In the end, however, Catherine did nothing because she knew that her success depended on the support of the Russian nobility. Her policy of favoring the landed nobility led to worse conditions for the Russian peasants

enlightened absolutism

a system in which rulers tried to govern by Enlightenment principles while maintaining their full royal powers

rigid inflexible, unyielding



▲ Maria Theresa, empress of Austria, and some of her children

successor one that follows, especially one who takes over a throne, title, estate, or office

eventually in the end

and **eventually** to rebellion. Led by an illiterate Cossack (a Russian warrior), Yemelyan Pugachov, the rebellion spread across southern Russia but soon collapsed. Catherine took stronger measures against the peasants. Rural reform was halted, and serfdom was expanded into newer parts of the empire.

Catherine proved to be a worthy successor to Peter the Great in her policies of territorial expansion. Russia spread southward to the Black Sea by defeating the Turks under Catherine's rule. To the west, Russia gained about 50 percent of Poland's territory, with the remainder split between Prussia and Austria. The Polish state disappeared until after World War I.

Of the rulers under discussion, only Joseph II sought truly radical changes based on Enlightenment ideas. Both Frederick II and Catherine II liked to talk about enlightened reforms. They even attempted some, but their priority was maintaining the existing system.

In fact, all three of these enlightened absolutists—Frederick, Joseph, and Catherine—were guided primarily by their interest in the power and welfare of their state. When they did manage to strengthen their position as rulers, they did not undertake enlightened reforms to benefit their subjects. Rather, their power was used to collect more taxes and thus to create armies, to wage wars, and to gain even more power.

The philosophes condemned war as a foolish waste of life and resources. Despite their words, the rivalry among states that led to costly struggles remained unchanged in eighteenth-century Europe. Europe's states were chiefly guided by their rulers' self-interest.

The eighteenth-century monarchs were concerned with the balance of power. This concept meant that states should have equal power in order to prevent any one from dominating the others. Large armies created to defend a state's security, however, were often used to conquer new lands as well. As Frederick II of Prussia said, "The fundamental rule of governments is the principle of extending their territories." This rule led to two major wars in the eighteenth century.

READING PROGRESS CHECK

Comparing Describe two similarities between the reigns of Frederick II of Prussia and Catherine the Great of Russia.

The Seven Years' War

GUIDING QUESTION *How did changing alliances in Europe lead to the Seven Years' War and how was the war carried out on a global scale?*

The stage was set for the Seven Years' War when, in 1740, a major war broke out over the succession to the Austrian throne. When the Austrian emperor Charles VI died without a male heir, his daughter, Maria Theresa, succeeded him. King Frederick II of Prussia took advantage of the confusion surrounding the succession of a woman to the throne by invading Austrian Silesia, a piece of land that he hoped to add to Prussia. By this action, Frederick refused to recognize the legitimacy of the empress of Austria. France then entered the war against Austria, its traditional enemy. In turn, Maria Theresa allied with Great Britain.

The War of the Austrian Succession (1740–1748) was fought in three areas of the world. In Europe, Prussia seized Silesia while France occupied some Austrian territory. In Asia, France took Madras (today called Chennai) in India from the British. In North America, the British captured the French fortress of Louisbourg at the entrance of the St. Lawrence River.



▲ Catherine II (Catherine the Great) was a strong Russian ruler.

By 1748, all parties were exhausted and agreed to the Treaty of Aix-la-Chapelle. The treaty guaranteed the return of all occupied territories but Silesia to their original owners. Prussia's refusal to return Silesia meant yet another war, for Maria Theresa refused to accept the loss. She rebuilt her army while working diplomatically to separate Prussia from its chief ally, France. In 1756 Maria Theresa achieved what was soon labeled a diplomatic revolution.

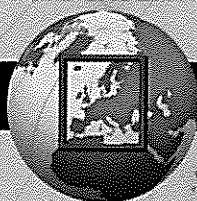
The War in Europe

French-Austrian rivalry had been a fact of European diplomacy since the late sixteenth century. However, two new rivalries now replaced the old one: the rivalry of Britain and France over colonial empires and the rivalry of Austria and Prussia over Silesia.

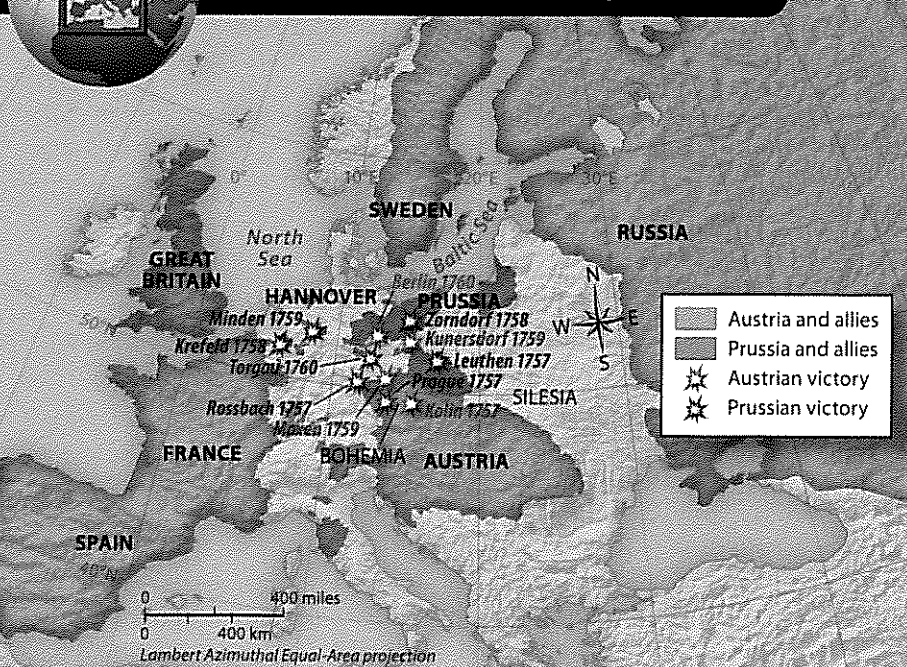
France abandoned Prussia and formed an alliance with Austria. Russia, which saw Prussia as a major threat to Russian goals in central Europe, joined the new alliance with France and Austria. In turn, Britain allied with Prussia. This diplomatic revolution of 1756 led to another worldwide war. The war had three major areas of conflict: Europe, India, and North America.

Europe witnessed the clash of the two major alliances: the British and Prussians against the Austrians, Russians, and French. The superb army and military skill of Frederick the Great of Prussia enabled him at first to defeat the Austrian, French, and Russian armies. Under attack from three different directions, however, his forces were gradually worn down.

Frederick faced disaster until Peter III, a new Russian czar who greatly admired Frederick, withdrew Russian troops from the conflict. This withdrawal created a stalemate and led to the desire for peace. The European war ended in 1763. All occupied territories were returned to their original owners, except Silesia. Austria officially recognized Prussia's permanent control of Silesia.



The Seven Years' War in Europe 1756–1763



GEOGRAPHY CONNECTION

Changing alliances led to the Seven Years' War in Europe.

1 PLACES AND REGIONS Identify the countries that belonged to each of the two European alliances.

2 THE WORLD IN SPATIAL TERMS In which countries did most of the battles take place?

The War in India

The struggle between Britain and France that took place in the rest of the world had more decisive results. Known as the Great War for Empire, it was fought in India and North America. The French had returned Madras to Britain after the War of the Austrian Succession, but the struggle in India continued. The British ultimately won out, not because they had better forces but because they were more persistent. With the Treaty of Paris in 1763, the French withdrew and left India to the British.

The War in North America

The greatest conflicts of the Seven Years' War took place in North America. On the North American continent, the French and British colonies were set up differently. The French government administered French North America (Canada and Louisiana) as a vast trading area. It was valuable for its fur, leather, fish, and timber, but its colonies were thinly populated.

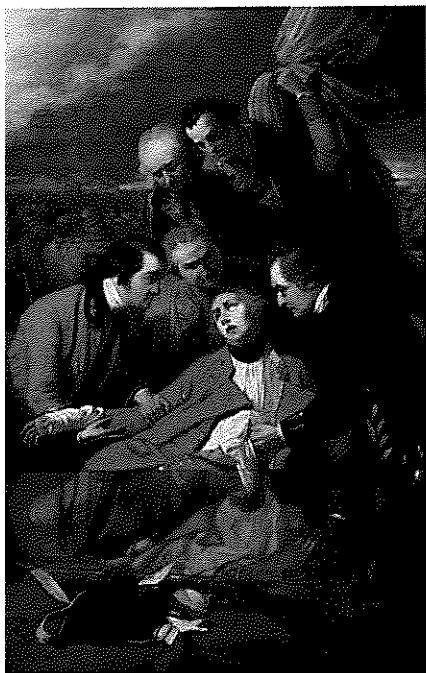
British North America consisted of thirteen prosperous colonies on the eastern coast of what is now the United States. Unlike the French colonies, the British colonies were more populated, containing more than one million people by 1750.

The British and French fought over two main areas in North America. One consisted of the waterways of the Gulf of St. Lawrence, which were protected by the fortress of Louisbourg and by forts that guarded French Quebec. The other area they fought over was the unsettled Ohio River valley. The French scored a number of victories at first. British fortunes were revived, however, by the efforts of William Pitt the Elder, Britain's prime minister. Pitt was convinced that the French colonial empire would have to be destroyed for Britain to create its own colonial empire.

A series of British victories soon followed. In 1759 British forces under General Wolfe defeated the French under General Montcalm on the Plains of Abraham, outside Quebec. Both generals died in the battle. The British went on to seize Montreal, the Great Lakes area, and the Ohio River valley. The French were forced to make peace. By the Treaty of Paris, the French transferred Canada and the lands east of the Mississippi to England. Spain, an ally of the French, transferred Spanish Florida to British control. In return, the French gave their Louisiana territory to the Spanish. By 1763, Great Britain had become the world's greatest colonial power.

READING PROGRESS CHECK

Explaining Explain the involvement of Great Britain and France in the Seven Years' War.



▲ This painting by Benjamin West shows the death of the British General James Wolfe.

PHOTO: Phillips, Fine Art Auctioneers, New York, USA

LESSON 3 REVIEW

Reviewing Vocabulary

1. **Identifying** Write a paragraph defining the term *enlightened absolutism*. Discuss one example of an eighteenth-century monarch and explain how he or she fulfilled or failed to fulfill this ideal.

Using Your Notes

2. **Evaluating** Use your graphic organizer to write a paragraph evaluating the degree to which Frederick II, Joseph II, and Catherine II did or did not embrace Enlightenment ideas.

Answering the Guiding Questions

3. **Making Connections** How were European rulers guided by Enlightenment thought?
4. **Identifying Cause and Effect** How did changing alliances in Europe lead to the Seven Years' War and how was the war carried out on a global scale?

Writing Activity

5. **NARRATIVE** Narrate a series of events that help tell the story of both the War of the Austrian Succession and the Seven Years' War. Use transitional words and phrases to show a clear sequence.

networks

There's More Online!

- BIOGRAPHY George Washington
- BIOGRAPHY Thomas Jefferson
- CHART/GRAPH Powers of the U.S. Federal Government
- INTERACTIVE SELF-CHECK QUIZ
- MAP Land Claims After the American Revolution, 1783
- PRIMARY SOURCE The Articles of Confederation
- PRIMARY SOURCE The Declaration of Independence
- TIME LINE The American Revolution
- VIDEO The American Revolution

Reading **HELPDESK**

Academic Vocabulary

- amendment
- guarantee

Content Vocabulary

- federal system

READING STRATEGY:

Key Ideas and Details

Summarizing As you read, use a chart like the one below to identify important elements of the government created by the American colonists.

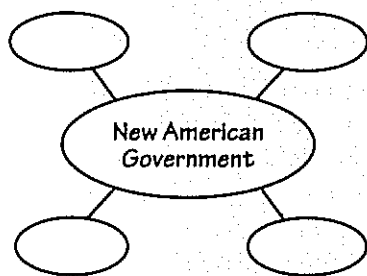
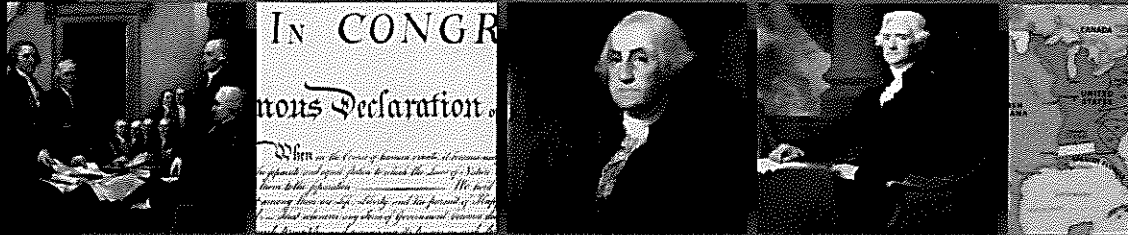


PHOTO: Powder/Stock/Corbis, National Archives and Records Administration, David David/Gallery/Super Stock, Super Stock.



LESSON 4

The American Revolution

ESSENTIAL QUESTIONS • Why do new ideas often spark change?
• How do new ways of thinking affect the way people respond to their surroundings?

IT MATTERS BECAUSE

The ideas of the Enlightenment clearly made an impact on the colonies in North America. In response to unfair taxation and other issues, the colonists revolted against British rule, formed their own army, and declared their independence. Many Europeans saw the American Revolution as the embodiment of the Enlightenment's political dreams.

Britain and the American Revolution

GUIDING QUESTION What were the causes of and influences on the American Revolution?

The United Kingdom of Great Britain came into existence in 1707, when the governments of England and Scotland were united. The term *British* came to refer to both the English and the Scots.

In 1688 the Glorious Revolution resulted in a Bill of Rights that affirmed Parliament's right to make laws. As a result, the monarch and Parliament shared power. The monarch chose ministers, who were responsible to the Crown. These ministers set policy and guided Parliament. Parliament's power to make laws, levy taxes, and pass the budget indirectly influenced the monarch's ministers.

In 1714 a new dynasty was established when the last Stuart ruler, Queen Anne, died without an heir. The crown was offered to her nearest relatives, Protestant rulers of the German state of Hanover. The first Hanoverian king, George I, did not speak English. Neither the first nor the second George knew the British system well, so their chief ministers were allowed to deal with Parliament.

In the meantime, growing trade and industry led to an ever-increasing middle class that favored the expansion of trade and of Britain's world empire. They found a spokesman in William Pitt the Elder, who became head of cabinet in 1757. He expanded the British Empire by acquiring Canada and India in the Seven Years' War.

In North America, then, Britain controlled Canada as well as the thirteen colonies on the eastern coast of what is now the United States. The British colonies were well populated, containing more than 1 million people by 1750. They were also prosperous.



▲ *The Declaration of Independence, 4 July, 1776, by John Trumbull*

► **CRITICAL THINKING**

Drawing Inferences What does this painting reveal about the process of the colonial break with Great Britain?

Analyzing PRIMARY SOURCES

Declaration of Independence

“We hold these truths to be self-evident; that all men are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty and the pursuit of happiness; that to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed . . . ”

—from the Declaration of Independence

DBQ **PARAPHRASING**
Rewrite the excerpt from the Declaration of Independence in your own words.

In theory, the British Board of Trade, the Royal Council, and Parliament controlled the colonies. In actuality, the colonies had legislatures that often acted independently. Merchants in port cities such as Charleston, New York, and Boston did not want the British government to run their affairs.

The American Revolution Begins

After the Seven Years’ War, British leaders wanted to get new colonial revenues from the colonies. These revenues would then be used to cover war costs. These would also pay for the expenses of maintaining an army to defend the colonies.

In 1765 Parliament imposed the Stamp Act on the colonies. The act required certain printed materials, such as legal documents and newspapers, to carry a stamp showing that a tax had been paid to Britain. Opposition was widespread and often violent. The act

was repealed in 1766, ending the immediate crisis, but the cause of the dispute was not resolved.

Crisis followed crisis in the 1770s. To counteract British actions, the colonies organized the First Continental Congress, which met in Philadelphia in September 1774. Members urged colonists to take up arms and organize militias.

Fighting finally erupted between colonists and the British army in April 1775 in Lexington and Concord, Massachusetts. Meeting soon afterward, the Second Continental Congress set up an army, called the Continental Army. George Washington served as its commander in chief.

More than a year passed before the colonies declared independence from the British Empire. On July 4, 1776, the Second Continental Congress approved the Declaration of Independence written by Thomas Jefferson. With this stirring political document, the American Revolution had formally begun.

British Defeat

Support from foreign countries was important to the colonies’ cause. These nations were eager to gain revenge for earlier defeats at the hands of the British. The French supplied arms and money to the rebels. French officers and soldiers also served in Washington’s army. In February 1778, following a British defeat, the French granted diplomatic recognition to the new United States. When Spain and the Dutch Republic entered the war, the British faced war with the Europeans as well as the Americans.

When General Cornwallis was forced to surrender to the American and French forces under Washington at Yorktown in 1781, the British decided to end the war. In 1783 the Treaty of Paris recognized the independence of the American colonies. The treaty also granted the Americans control of the western territory from the Appalachians to the Mississippi River.

READING PROGRESS CHECK

Explaining Why did some American colonists seek independence from Great Britain?

The Birth of a New Nation

GUIDING QUESTIONS *What were the effects of the American Revolution? Why did intellectuals believe the formation of the United States carried out Enlightenment thought?*

After overthrowing British rule, the former colonies feared the power of a strong central government. The states' first constitution, the Articles of Confederation (1781), created a weak central government that lacked the power to deal with the nation's problems. In 1787 delegates met in Philadelphia at the Constitutional Convention to revise the Articles of Confederation. The delegates decided to plan for an entirely new government.

The Constitution

The proposed Constitution created a **federal system** in which the national government and the state governments shared power. Based on Montesquieu's ideas, the national, or federal, government was separated into three branches: executive, legislative, and judicial. Each branch had power to check, or restrain, acts of the other branches.

A president served as the head of the executive branch, which is why it may be referred to as a presidential democracy. The legislative branch consisted of elected representatives in two houses—the Senate and the House of Representatives. The Supreme Court and other courts formed the judicial branch. After ratification by 9 of the 13 states, the Constitution took effect.

The Bill of Rights

As promised during negotiations over ratification, the new Congress proposed 12 **amendments** to the Constitution. The states approved 10 of the amendments. Together, these amendments became known as the Bill of Rights. As we have seen, the Glorious Revolution of 1688 in England had also resulted in a Bill of Rights.

These 10 amendments **guaranteed** freedom of religion, speech, press, petition, and assembly. They gave Americans the right to bear arms and to be protected against unreasonable searches and arrests. They guaranteed trial by jury, due process of law, and the protection of property rights.

Many of the rights in the Bill of Rights were derived from the natural rights proposed by the eighteenth-century philosophes and John Locke. European intellectuals saw the American Revolution as the confirmation of the premises of the Enlightenment. A new age and a better world could be achieved.

READING PROGRESS CHECK

Analyzing What was the purpose of separating the federal government into three separate branches?

federal system a form of government in which power is shared between the national and state governments

amendment an alteration proposed or effected by parliamentary or constitutional procedure

guarantee to assure fulfillment of a condition

LESSON 4 REVIEW

Reviewing Vocabulary

1. **Explaining** Describe the federal system of government.

Using Your Notes

2. **Summarizing** Use your graphic organizer to write a paragraph identifying important elements of the government created by the American colonists.

Answering the Guiding Questions

3. **Identifying Cause and Effect** What were the causes of and influences on the American Revolution?

4. **Making Connections** Why did intellectuals believe the formation of the United States carried out Enlightenment thought?

5. **Drawing Conclusions** What were the effects of the American Revolution?

Writing Activity

6. **INFORMATIVE/EXPLANATORY** Write an essay discussing the influence of Enlightenment philosophy on the American Revolution, the Declaration of Independence, and the Constitution.

CHAPTER 21 Assessment

Directions: On a separate sheet of paper, answer the questions below. Make sure you read carefully and answer all parts of the questions.

Lesson Review

Lesson 1

- 1 **HYPOTHESIZING** Describe two inventions that helped spark the Scientific Revolution and their impact.
- 2 **DESCRIBING** In what model of the universe did philosophers of the Middle Ages believe? Give details.

Lesson 2

- 3 **IDENTIFYING CENTRAL ISSUES** What was the goal of the philosophes? Did their movement have an impact on our lives today?
- 4 **STATING** What did Adam Smith believe should be the three roles of government?

Lesson 3

- 5 **SPECIFYING** Why did countries create their particular alliances during the Seven Years' War?
- 6 **DIFFERENTIATING** Was Catherine the Great an enlightened ruler? Why or why not?

Lesson 4

- 7 **FINDING THE MAIN IDEA** How did the Constitution attempt to balance concerns over a strong central government and the weaknesses of the Articles of Confederation?
- 8 **NAMING** What countries helped the American colonists win their independence from Great Britain and why?

21st Century Skills

- 9 **IDENTIFYING CONTINUITY AND CHANGE** How were the discoveries of Copernicus, Kepler, Galileo, and Newton related to each other?
- 10 **COMPARE AND CONTRAST** What was unique about the U.S. Declaration of Independence? What did it have in common with documents and ideas from other countries?

Exploring the Essential Questions

- 11 **IDENTIFYING PERSPECTIVES** Work with a partner to create a word web showing how the Enlightenment changed ways of thinking. Start with a circle labeled "Enlightenment." Draw three circles beyond it labeled "politics," "religion," and "the arts." Add circles to these three describing changes in attitudes and behaviors. To the side, place a circle labeled "Scientific Revolution." Draw circles beyond it labeled "natural laws," "rational criticism," and "rights for all." Add lines connecting circles where the values of the Scientific Revolution overlap those of the Enlightenment. You may include artwork, maps, and primary sources in your web.

DBQ Analyzing Historical Documents

Use the document to answer the following questions.

John Locke grew up during the English Civil War. He disagreed strongly with the concept of absolute monarchy and wrote his treatises on government in response.

PRIMARY SOURCE

“... But Freedom of Men under Government, is to have a standing Rule to live by, common to every one of that Society, and made by the Legislative Power erected in it; A Liberty to follow my own Will in all things where the Rule prescribes not; and not to be subject to the inconstant, uncertain, unknown, arbitrary Will of another Man ...”

—from *The Second Treatise of Government*, 1690

- 12 **ANALYZING** What does Locke believe true freedom is?
- 13 **THEORIZING** What is Locke's opinion of the kings making laws? Where did he acquire his distrust of rulers with absolute power?

Extended-Response Question

- 14 **INFORMATIVE/EXPLANATORY** Trace the belief in natural rights from its origins to 1776.

Need Extra Help?

If You've Missed Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14
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