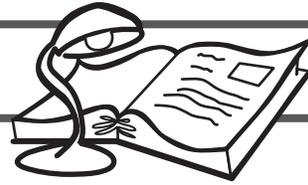


Reading Essentials and Study Guide



Chapter 17, Section 1

For use with textbook pages 511–517

THE SCIENTIFIC REVOLUTION

KEY TERMS

- geocentric** (Earth-centered) placing Earth at the center of the universe (page 513)
- Ptolemaic system** a model of the universe constructed by philosophers of the Middle Ages that was based on the ideas of Ptolemy, a second-century astronomer (page 513)
- heliocentric** (sun-centered) placing the Sun at the center of the universe (page 513)
- universal law of gravitation** a law of nature defined by Isaac Newton that states that every object in the universe is attracted to every other object by a force called gravity (page 514)
- rationalism** a system of thought based on the belief that reason is the chief source of knowledge (page 517)
- scientific method** a systematic procedure for collecting and analyzing evidence (page 517)
- inductive reasoning** reasoning from particular facts to general principles (page 517)

DRAWING FROM EXPERIENCE

What field of science do you find most interesting? What aspects of the science make it most interesting to you?

In this section, you will learn how changes in scientific thought during the sixteenth and seventeenth centuries gave Europeans a new way to view the universe and their place in the universe.

ORGANIZING YOUR THOUGHTS

Use the chart below to help you take notes. Identify the contributions that the following people made to the Scientific Revolution.

Scientist/Philosopher	Contributions to the Scientific Revolution
Copernicus	1.
Kepler	2.
Galileo	3.
Newton	4.
Bacon	5.

Reading Essentials and Study Guide



Chapter 17, Section 1 (continued)

READ TO LEARN

- **Background to the Revolution** (page 511)

Medieval scientists were known as “natural philosophers.” They did not make observations of the natural world. They relied on a few ancient philosophers, especially Aristotle, for their scientific knowledge. In the fifteenth and sixteenth centuries, natural philosophers began to give up their old views and develop new ones. Renaissance humanists had learned Greek and Latin. They were able to read works by Ptolemy, Archimedes, and Plato. These writings made it obvious that some ancient thinkers disagreed with Aristotle. At the same time, the invention of new instruments, such as the telescope and microscope, made new scientific discoveries possible. The printing press helped spread new ideas quickly and easily.

Mathematics played an important role in the scientific achievements of the sixteenth and seventeenth centuries. Nicholas 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 the ideas of the ancient mathematicians, they sometimes rejected these ideas. They developed new theories that became the foundation of the Scientific Revolution.

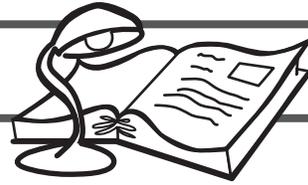
6. What developments in the fifteenth and sixteenth centuries caused natural philosophers to give up their old ideas and develop new ones?

- **A Revolution in Astronomy** (page 512)

Discoveries in astronomy were an important part of the Scientific Revolution. These discoveries changed how Westerners viewed the universe. During the Middle Ages, philosophers had created a model of the universe known as the **Ptolemaic system**. Ptolemy was the greatest astronomer of antiquity. He lived during the second century A.D. It was from his ideas and those of Aristotle that philosophers had built the Ptolemaic system. This system is called **geocentric** because it places Earth at the center of the universe. According to this system, the universe is a series of concentric spheres (spheres one inside the other). Earth is fixed, or motionless, at the center of these spheres. The rotation of these spheres makes the heavenly bodies rotate around Earth.

In 1543, Nicolas Copernicus published his famous book, *On the Revolutions of the Heavenly Spheres*. Copernicus believed in a **heliocentric**, or sun-centered, model of the universe. He believed that the Sun, not Earth, was at the center

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Chapter 17, Section 1 (continued)

of the universe. The planets, including Earth, revolved around the Sun. Another mathematician, Johannes Kepler, used detailed astronomical data to create laws of planetary motion. His observations confirmed that the Sun was at the center of the universe. He also discovered that the orbits of the planets around the Sun were not circular, as Copernicus had thought. Instead, the orbits were elliptical (egg-shaped).

Another mathematician, Galileo Galilei, was the first European to make regular observations of the heavens with a telescope. He discovered mountains on the Moon, four moons revolving around Jupiter, and sunspots. His observations indicated that heavenly bodies were not pure orbs of light, but were composed of material substance like Earth. After Galileo published his discoveries in *The Starry Messenger* in 1610, the Catholic Church ordered him to abandon the Copernican system. The new system threatened the Church's view of the universe and seemed to contradict the Bible. In spite of the Church's position, by the 1630s and 1640s, most astronomers had come to accept the heliocentric model. However, the problem of explaining motion in the universe had not been solved.

Isaac Newton is considered the greatest genius of the Scientific Revolution. His major work, *Mathematical Principles of Natural Philosophy*, is also known as *Principia* (the first word of its Latin title). In the *Principia*, Newton defined the three laws of motion that govern both the planetary bodies and objects on Earth. The **universal law of gravitation** explains why the planetary bodies do not go off in straight lines but continue in elliptical orbits around the Sun. The law states that every object in the universe is attracted to every other object by a force called gravity. Newton's laws created a new picture of the universe. It was now seen as a huge machine that worked according to natural laws.

7. What is the main difference between the geocentric and heliocentric models of the universe?

- **Breakthroughs in Medicine and Chemistry** (page 515)

A revolution in medicine also began in the sixteenth century. In 1543, Andreas Vesalius wrote *On the Fabric of the Human Body*. In this book, he discussed what he had found when dissecting human bodies. He presented a careful and accurate examination of human organs and the general structure of the human body. In 1628, William Harvey published *On the Motion of the Heart and Blood*. His work was based on close observations and experiments.

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Chapter 17, Section 1 (continued)

Harvey showed that the heart was the beginning point for the circulation of blood in the body. He also proved that the same blood flowed in both veins and arteries and that it makes a complete circuit as it passes through the body. These observations disproved many of the theories of Galen, a second century Greek physician. His theories had dominated medicine in the Middle Ages.

The science of chemistry also arose in the seventeenth and eighteenth centuries. Robert Boyle was one of the first scientists to conduct controlled experiments. His work on the properties of gas led to Boyle's Law. This law states that the volume of a gas varies with the pressure exerted on it. In the eighteenth century, Antoine Lavoisier invented a system of naming the chemical elements. He is considered by many to be the founder of modern chemistry.

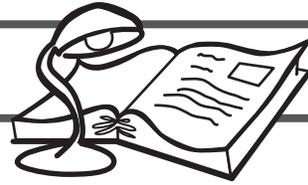
8. Whose theories were disproved by William Harvey's observations?

- **Women and the Origins of Modern Science** (page 515)

Women as well as men were involved in the Scientific Revolution. Margaret Cavendish was one of the most prominent female scientists of the seventeenth century. She wrote a number of works on scientific matters, including *Observations Upon Experimental Philosophy*. In her work, she was critical of the belief that humans, through science, were masters of nature. In Germany, many of the women who were involved in science were astronomers. The most famous of the female astronomers in Germany was Maria Winkelmann. She made some original contributions to astronomy, including the discovery of a comet. However, when Winkelmann applied for a position as an assistant astronomer at the Berlin Academy, she was denied the position because she was a woman, even though she was highly qualified. Women scientists often faced these kinds of obstacles because scientific work was considered to be men's work.

9. What obstacles did women scientists face in the seventeenth century?

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Chapter 17, Section 1 (continued)

- **Descartes and Reason** (page 516)

The Scientific Revolution strongly influenced the Western view of man. This is especially evident in the work of the seventeenth-century French philosopher René Descartes. The starting point for Descartes was doubt. In his most famous work, *Discourse on Method*, Descartes decided to set aside everything that he had learned and to begin again. One fact seemed to him to be beyond doubt—his own existence. From his first principle—“I think, therefore I am”—Descartes used his reason to arrive at a second principle, the separation of mind and matter. He argued that because “the mind cannot be doubted but the body and material world can, the two must be radically different.” Descartes’s idea that mind and matter were completely separate allowed scientists to view matter as something that was totally detached from themselves and that could be investigated by reason. Descartes has been called the father of modern **rationalism**. This system of thought is based on the belief that reason is the chief source of knowledge.

10. What were Descartes’s first two principles?

- **The Scientific Method** (page 517)

During the Scientific Revolution, the **scientific method** was created. The scientific method is a systematic procedure for collecting and analyzing evidence. The person who developed the scientific method was Francis Bacon. He believed that instead of relying on the ideas of ancient authorities, scientists should use **inductive reasoning** to learn about nature. Scientists should proceed from the particular to the general. Systematic observations and carefully organized experiments to test hypotheses (theories) would lead to general principles. Bacon also believed that science could give humans power over nature.

11. According to Francis Bacon, how should scientists learn about nature?

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Chapter 17, Section 2

For use with textbook pages 518–525

THE ENLIGHTENMENT

KEY TERMS

philosophe an intellectual of the Enlightenment (page 519)

separation of powers the division of a government into executive, legislative, and judicial branches that limit and control each other in a system of checks and balances (page 520)

deism an eighteenth-century religious philosophy based on the idea that the world is a machine and that God is a mechanic who created the world and allows it to run without his interference, according to its own natural laws (page 520)

laissez-faire (“to let [people] do [what they want]”) the belief that government should not interfere in economic matters (page 521)

social contract in the theories of philosophers such as Locke and Rousseau, an agreement among individuals that they will be governed by the general will (page 522)

salon elegant drawing rooms of the wealthy upper class, in which writers, artists, aristocrats, and government officials gathered to take part in conversations that were often centered on the ideas of the philosophes (page 524)

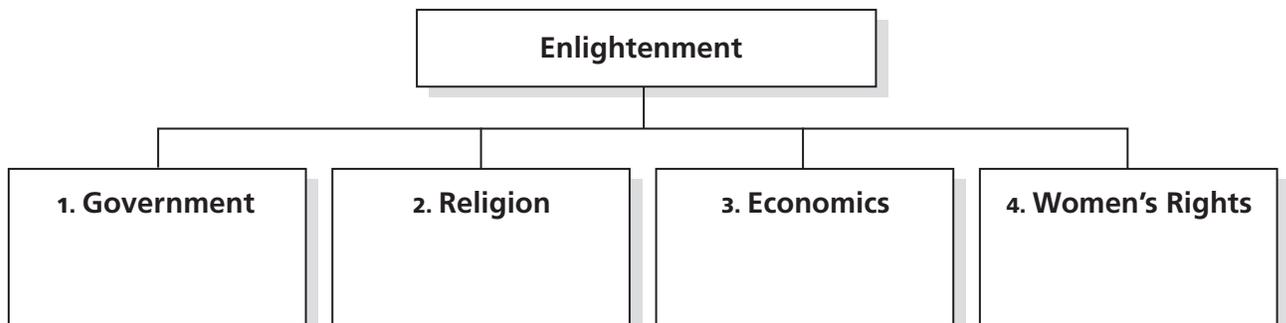
DRAWING FROM EXPERIENCE

Imagine that you are hosting a gathering of famous musicians, artists, writers, and politicians. Who would you ask to the gathering? Why?

In the last section, you read about the Scientific Revolution during the sixteenth and seventeenth centuries. In the eighteenth century, intellectuals used the ideas of the Scientific Revolution to reexamine all aspects of life. They often held gatherings to discuss these new Enlightenment ideas.

ORGANIZING YOUR THOUGHTS

Use the diagram below to help you take notes. Summarize the influence of Enlightenment ideas on government, religion, economics, and women’s rights.



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Chapter 17, Section 2 (continued)

READ TO LEARN

- **Path to the Enlightenment** (page 518)

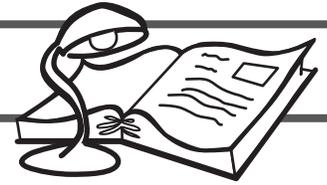
The Enlightenment was an eighteenth-century philosophical movement of intellectuals who were impressed with the achievements of the Scientific Revolution. They hoped that by using the scientific method, they could make progress toward a better society. Words such as *reason*, *natural law*, *hope*, and *progress* were common words to the thinkers of the Enlightenment. The Enlightenment was especially influenced by the ideas of Isaac Newton and John Locke. To Newton, the physical world and everything in it was a giant machine. Because Newton had discovered natural laws that governed the physical world, the intellectuals of the Enlightenment thought they could discover the natural laws that governed human society. John Locke's theory of knowledge also greatly affected eighteenth-century intellectuals. Locke believed that people were born with blank minds and were molded by the experiences that came through their senses from the surrounding world. He believed that if environments were changed and people were exposed to the right influences, people could be changed and a new society could be created.

5. How did the ideas of Isaac Newton and John Locke influence the intellectuals of the Enlightenment?

- **Philosophes and Their Ideas** (page 519)

The intellectuals of the Enlightenment were known by the French name **philosophe**. To the philosophes, the purpose of philosophy was to change the world. A spirit of rational criticism was to be applied to everything, including religion and politics. Three French philosophers, Montesquieu, Voltaire, and Diderot, dominated Enlightenment thought. Montesquieu's most famous work, *The Spirit of the Laws*, was published in 1748. This work was a study of governments. Montesquieu tried to use the scientific method to find the natural laws that govern the social and political relationships of human beings. He identified three basic kinds of governments: republics, despotism, and monarchies. In his study of the English monarchy, he identified three branches: the executive, the legislative, and the judicial. The government functioned through a **separation of powers**. In this separation, the three branches 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. Montesquieu's work was translated into English and influenced the U.S. Constitution.

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Chapter 17, Section 2 (continued)

The greatest figure of the Enlightenment was François-Marie Arouet, known simply as Voltaire. He wrote many pamphlets, novels, plays, letters, essays, and histories, which brought him both fame and wealth. He was especially well known for his criticism of Christianity and his strong belief in religious tolerance. He believed in **deism**, an eighteenth-century religious philosophy based on reason and natural law. Deism was built on the idea of the Newtonian world-machine. In the Deists' view, a mechanic (God) had created the universe. The universe was like a clock. God had created it, set it in motion, and allowed it to run without his interference, according to its own natural laws.

Denis Diderot was a writer who studied and read in many subjects and languages. His most famous contribution to the Enlightenment was his *Encyclopedia*. This was a 28-volume collection of knowledge that he edited. The purpose of the *Encyclopedia* was to “change the general way of thinking.” Many of its articles attacked religious superstition and supported religious toleration. Other articles called for social, legal, and political improvements that could lead to a more tolerant and humane society. The *Encyclopedia* was sold to doctors, clergymen, teachers, and lawyers, and helped to spread the ideas of the Enlightenment.

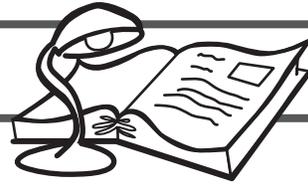
6. How did the ideas of Newton affect religious beliefs in the eighteenth century?

• Toward a New Social Science (page 521)

The philosophes' belief that there are natural laws that govern human society led to the development of the social sciences (areas such as economics and political science). The Physiocrats and Adam Smith are considered the founders of the social science of economics. The Physiocrats believed that if individuals were free to pursue their own economic self-interest, all society would ultimately benefit. They believed that government should not interrupt the free play of natural economic forces by imposing regulations on the economy. This doctrine became known by its French name, **laissez-faire**, meaning to “let (people) do (what they want).” The best statement of laissez-faire was made by Adam Smith in his work *The Wealth of Nations*. Smith believed that government should not interfere in economic matters. He believed that government should only have three basic roles: protecting society from invasion (the army); defending citizens from injustice (the police); and keeping up certain public works, such as roads and canals.

By the eighteenth century, most European states had developed a system of courts to deal with crime. Punishments for crimes were often cruel. It was believed that extreme punishments were needed to deter crime. One

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Chapter 17, Section 2 (continued)

philosophe proposed a new approach to justice. His name was Cesare Beccaria. He argued that punishments should not be cruel. He also opposed capital punishment. He did not believe that it stopped people from committing crimes.

7. What roles did Adam Smith believe that governments should and should not have?

- **The Later Enlightenment** (page 522)

By the late 1760s, there was a new generation of philosophes. The most famous was Jean-Jacques Rousseau. In his *Discourse on the Origins of the Inequality of Mankind*, Rousseau argued that people had adopted laws and government in order to protect their property. In the process, they had become enslaved by government. In another work, *The Social Contract*, Rousseau explained his concept of the **social contract**. Through a social contract, an entire society agrees to be governed by its general will. Individuals who wish to follow their own self-interests must be forced to abide by the general will.

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

8. What was Rousseau’s concept of the social contract?

- **Rights of Women** (page 523)

By the eighteenth century, female writers began to express their ideas about improving the condition of women. Mary Wollstonecraft is often viewed as the founder of the movement for women’s rights. In her book, *A Vindication of the Rights of Women*, Wollstonecraft identified two problems with the views of many Enlightenment thinkers. She argued that if government based on the arbitrary power of monarchs was wrong, the power of men over women was equally wrong. She also argued that the Enlightenment was based on the idea of reason in all human beings. Because women have reason, they are entitled to the same rights as men.

9. What two arguments did Mary Wollstonecraft use to show that women should have equal rights?

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Chapter 17, Section 2 (continued)

- **Social World of the Enlightenment** (page 523)

The common people, especially the peasants, were mostly unaware of the Enlightenment. The Enlightenment had its greatest appeal with the aristocrats and upper classes in large cities. In the eighteenth century, publishing and reading began to grow. This was important to the spread of the Enlightenment. Many books were now directed at the new reading public of the middle classes, which included women and artisans. The development of daily newspapers and magazines for the general public began in the eighteenth century. The first daily newspaper was printed in London in 1702.

Enlightenment ideas were also spread through the **salon**. Salons were elegant drawing rooms of the wealthy upper class. Guests gathered in these salons and discussed the 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 influence literary and artistic taste.

10. How did the salons help to spread Enlightenment ideas?

- **Religion in the Enlightenment** (page 525)

Although many philosophes attacked Christianity, most Europeans in the eighteenth century were still Christians. Many people sought a deeper personal devotion to God. In England, the most famous new religious movement was Methodism. This was the work of John Wesley, an Anglican minister. Wesley preached to the masses in open fields. He appealed especially to the lower classes. His sermons often caused people to have conversion experiences. Many of these converts joined Methodist societies in which they helped each other do good works. In this way, Methodism gave the lower and middle classes a sense of purpose and community. It proved that the need for spiritual experience had not been eliminated by the eighteenth-century search for reason.

11. How does Methodism prove that the need for spiritual experience had not been eliminated in the eighteenth century?

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Chapter 17, Section 3

For use with textbook pages 526–534

THE IMPACT OF THE ENLIGHTENMENT

KEY TERMS

rococo an artistic style in the eighteenth century that emphasized grace, charm, and gentle action (page 527)

enlightened absolutism a type of monarchy in which rulers tried to govern by Enlightenment principles, while maintaining their royal powers (page 529)

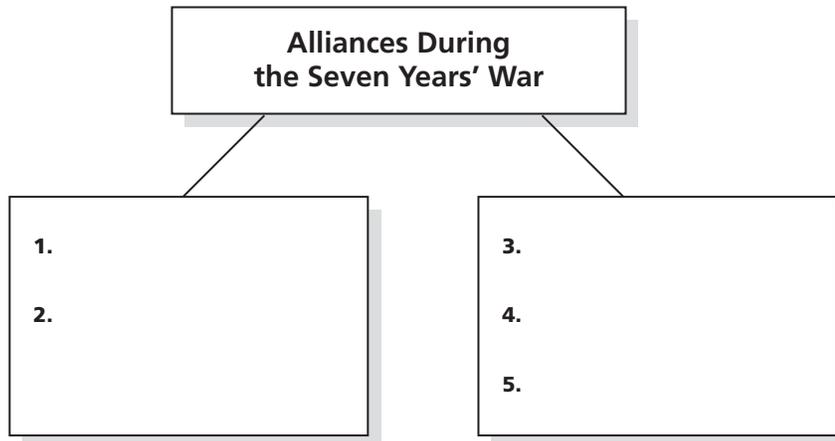
DRAWING FROM EXPERIENCE

Do you like classical music? Do you enjoy attending symphony performances? What composers do you like best?

In the last section, you read about the ideas of the Enlightenment. In this section, you will learn how these ideas had an impact on art, music, literature, and politics during the eighteenth century. Some of the world's greatest composers lived during this period.

ORGANIZING YOUR THOUGHTS

Use the diagram below to help you take notes. During the Seven Years' War, new alliances developed in Europe. Identify the members of the two new alliances.



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Chapter 17, Section 3 (continued)

READ TO LEARN

- **The Arts** (page 526)

During the eighteenth century, important achievements were made in architecture, art, music, and literature. After Louis XIV built the palace of Versailles in the seventeenth century, other European rulers began to build elaborate palaces. Most of these palaces were modeled after the Italian baroque style of the 1500s and 1600s. One of the greatest architects of the eighteenth century was Balthasar Neumann. His two masterpieces are the Church of the Fourteen Saints in southern Germany and the Residence, the palace of the prince-bishop of Würzburg.

The baroque and neoclassical styles continued into the eighteenth century. By the 1730s, however, a new artistic style had spread all over Europe. It is known as **rococo**. Rococo emphasized grace, charm, and gentle action. It made use of delicate designs with graceful curves. Its lightness and charm spoke of the pursuit of happiness, pleasure, and love. One of the most famous rococo painters was Antoine Watteau. In his paintings, upper-class men and women are depicted in a world of pleasure and joy. Another aspect of rococo was a sense of enchantment and enthusiasm. This is especially evident in the works of Giovanni Battista Tiepolo. His masterpiece is the ceiling of the bishop's residence at Würzburg.

The eighteenth century was one of the greatest periods in the history of European music. Johann Sebastian Bach and George Frederick Handel were two musical geniuses who composed music during the first half of the century. They perfected the baroque musical style. During the second half of the century, two other geniuses, Franz Joseph Haydn and Wolfgang Amadeus Mozart, wrote music called classical.

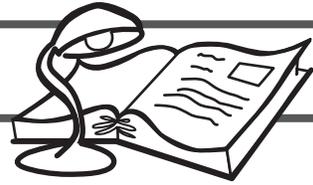
The eighteenth century was also important in the development of the European novel. Middle-class readers especially enjoyed the novel. The English author Henry Fielding wrote novels about people without morals who survive by their wits. His characters reflect real types in eighteenth-century English society.

6. What four musical geniuses lived during the eighteenth century?

- **Enlightenment and Enlightened Absolutism** (page 528)

The philosophes believed in natural rights for all people. These rights included equality before the law; freedom of religious worship; freedom of

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Chapter 17, Section 3 (continued)

speech; freedom of the press; and the rights to assemble, hold property, and pursue happiness. Most philosophes believed that people needed to be governed by enlightened rulers. Enlightened rulers allow religious toleration, freedom of speech and of the press, and the rights of private property. They promote the arts, sciences, and education. Above all, they obey the laws and enforce them fairly for all people. Many historians once assumed that a new type of monarchy emerged in the eighteenth century, which they called **enlightened absolutism**. In the system of enlightened absolutism, rulers tried to govern by Enlightenment principles while maintaining their royal powers. This idea has since been questioned. Of the major rulers in Europe in the eighteenth century, only Joseph II of Austria made truly radical changes based on Enlightenment ideas. Most rulers were guided primarily by a concern for the power and well-being of their states.

Two Prussian kings, Frederick William I and Frederick II, made Prussia a major European power in the eighteenth century. Frederick William I tried to maintain a highly efficient bureaucracy of civil service workers. He also doubled the size of the army. Because of its size and its reputation as one of the best armies in Europe, the army was the most important institution in Prussia. Frederick II (also called Frederick the Great) was cultured and well educated. He was well informed about the ideas of the Enlightenment. He, too, enlarged the Prussian army, and he kept a strict watch over the bureaucracy. He made some enlightened reforms. He abolished the use of torture except in treason and murder cases. He also granted limited freedom of speech and press and greater religious toleration. However, he did not abolish serfdom or the rigid social structure in Prussia.

By the beginning of the eighteenth century, the Austrian Empire had become one of the great European states. It was difficult to rule, however, because it was made up of many different nationalities, languages, religions and cultures. Empress Maria Theresa, who inherited the throne in 1740, worked to centralize the Austrian Empire and strengthen the power of the state. Her successor was Joseph II. He was determined to make changes. He abolished serfdom, eliminated the death penalty, established the principle of equality of all before the law, and enacted religious reforms. Most of his reforms failed, however. He made the nobles upset by freeing the serfs. The Catholic Church was unhappy with his religious reforms. Even the serfs were unhappy, because they were confused by the drastic changes in his policies.

In Russia, Peter the Great was followed by six weak czars. After the last of the six czars, Peter III, was murdered, his German wife became the ruler of Russia. Catherine II (also known as Catherine the Great) ruled Russia from 1762 to 1796. She was an intelligent woman who was familiar with the works of the philosophes, but she thought many of their ideas were impractical. She did consider the idea of a new law code that would recognize the equality of all people. In the end, however, she did nothing because she knew that her

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Chapter 17, Section 3 (continued)

success depended on the support of the Russian nobility. Her policies led to worse conditions for the Russian peasants and eventually to rebellion. The rebellion spread across southern Russia, but soon collapsed. Catherine took stronger measures against the peasants. All rural reform was halted, and serfdom was expanded into newer parts of the empire. Under Catherine, Russia spread southward to the Black Sea. To the west, Russia gained about 50 percent of Poland's territory.

7. What European ruler made major changes based on Enlightenment ideas?

- **War of the Austrian Succession** (page 531)

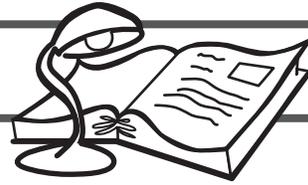
In 1740, a major war broke out in connection with the succession to the Austrian throne. When the Austrian emperor Charles VI died, he was succeeded by his daughter, Maria Theresa. King Frederick II of Prussia took advantage of the situation and invaded Austrian Silesia. France then entered the war against Austria, its traditional enemy. Maria Theresa made an alliance with Great Britain. The War of Austrian Succession was fought in three parts of the world. In Europe, Prussia seized Silesia, and France occupied the Austrian Netherlands. In the Far East, France took Madras in India from the British. In North America, the British captured the French fortress of Louisbourg at the entrance to the St. Lawrence River. After seven years of war, all parties were exhausted and agreed to the Treaty of Aix-la-Chapelle in 1748. This treaty returned all occupied territories except Silesia to their original owners. Prussia's refusal to return Silesia meant another war between Prussia and Austria.

8. In what three parts of the world was the War of Austrian Succession fought?

- **The Seven Years' War** (page 532)

Maria Theresa refused to accept the loss of Silesia. She rebuilt her army and worked to separate Prussia from its chief ally, France. French-Austrian rivalry had been a fact of life in Europe 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 allied with Austria. Russia joined the new alliance

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Chapter 17, Section 3 (continued)

with France and Austria. In turn, Britain allied with Prussia. This diplomatic revolution led to another worldwide war. The war had three major areas of conflict: Europe, India, and North America.

There were now two major alliances in Europe: the British and Prussians against the Austrians, Russians, and French. Frederick the Great of Prussia was able to defeat the Austrian, French, and Russian armies for a time. However, his forces were eventually worn down. He faced disaster until Peter III, a new Russian czar, 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, and Austria officially recognized Prussia's control of Silesia.

The struggle between Britain and France 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 British ultimately won in India. With the Treaty of Paris in 1763, the French withdrew and left India to the British.

By far the greatest conflicts of the Seven Years' War took place in North America. French North America (Canada and Louisiana) was run by the French government as a vast trading area. It was valuable for its fur, leather, fish and timber. British North America consisted of 13 colonies on the eastern coast of the present United States. The British and French fought over two primary areas in North America. One was the waterway of the Gulf of St. Lawrence. The other was the Ohio River Valley. The French began to establish forts in the Ohio River Valley. This threatened the ability of British settlers to expand into this area. The French were able to gain the support of the Indians, because they were traders, not settlers. At first, the French had a number of victories. The French had more troops in North America than the British, but not enough naval support. The defeat of French fleets in major naval battles gave the British an advantage. A series of British victories soon followed. In 1759, British forces defeated the French on the Plains of Abraham, outside Quebec. 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, they transferred Canada and the lands east of the Mississippi to England. Their ally Spain transferred Florida to British control. By 1763, Great Britain had become the world's greatest colonial power.

9. Where did the greatest conflicts of the Seven Years' War take place?

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Chapter 17, Section 4

For use with textbook pages 536–540

COLONIAL EMPIRES AND THE AMERICAN REVOLUTION

KEY TERMS

mestizo the offspring of Europeans and Native Americans (page 537)

mulatto the offspring of Africans and Europeans (page 537)

federal system a system of government in which power is shared between the national, or federal, government and the state governments (page 540)

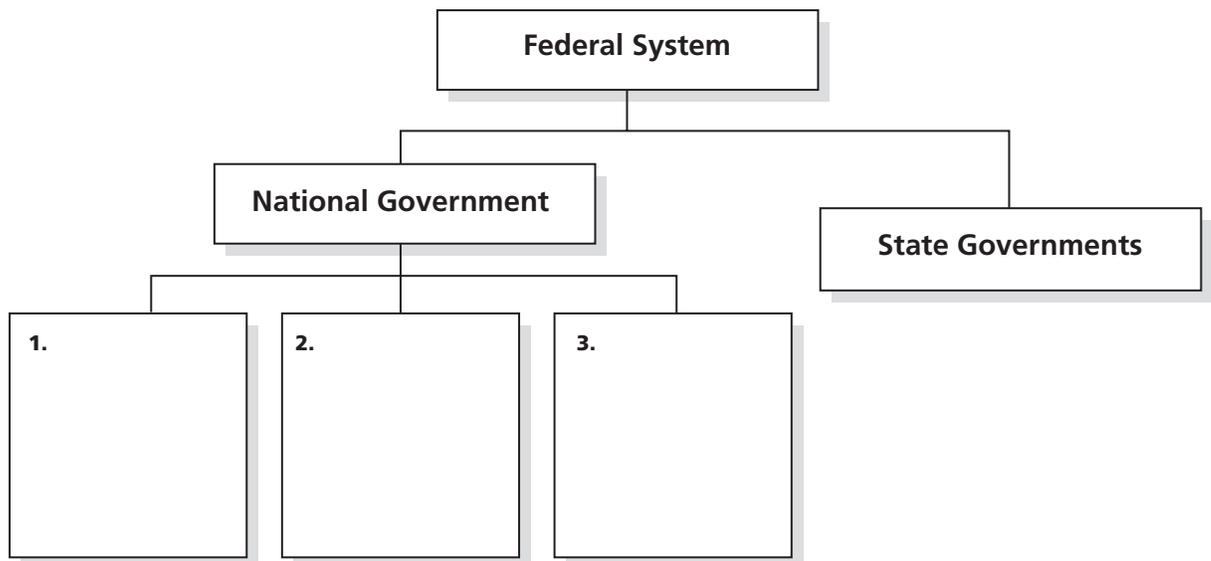
DRAWING FROM EXPERIENCE

What rights are guaranteed to all Americans by the Constitution? Which of these rights do you consider most important? Why?

In the last two sections, you read about the impact of Enlightenment ideas on European life during the eighteenth century. The ideas of the Enlightenment also made a strong impact on the colonies in North America, which eventually led to the American Revolution. Many of these ideas were incorporated into the Declaration of Independence and the Constitution of the United States.

ORGANIZING YOUR THOUGHTS

Use the diagram below to help you take notes. The Constitution created a federal system in which power was shared between the national and state governments. The national, or federal, government was divided into three branches. Identify and describe these three branches.



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Chapter 17, Section 4 (continued)

- **Colonial Empires in Latin America** (page 536)

In the sixteenth century, Portugal dominated Brazil. At the same time, Spain established an enormous colonial empire that included parts of North America, Central America, and most of South America. Within the lands of Central and South America, a new civilization arose, which we call Latin America. Latin America was a multiracial society. Spanish rulers permitted intermarriage between Europeans and Native Americans. Their offspring were known as **mestizos**. As many as 8 million African slaves were brought to Latin America to work the plantations. The offspring of Africans and Europeans were known as **mulattoes**. The society of Latin America was a combination of Europeans, Africans, Native Americans, mestizos, and mulattoes.

The Portuguese and Spanish both profited from their colonies in Latin America. The abundant supplies of gold and silver were one source of wealth. Other products that were shipped to Europe included sugar, tobacco, diamonds, and animal hides. Latin American agriculture was dominated by large landowners. Native Americans either worked on the estates of the large landowners or worked as poor farmers on marginal lands. This system of large landowners and dependent peasants has remained a lasting feature of Latin American society.

Spanish and Portuguese monarchs tried to oversee their empires, but the difficulties of communication and travel made this virtually impossible. As a result, colonial officials in Latin America had a great deal of freedom in carrying out imperial policies. Spanish and Portuguese rulers were determined to Christianize the native peoples. This policy gave the Catholic Church an important role in the Americas. Catholic missionaries went to different parts of the Spanish Empire. To make their efforts easier, the missionaries brought Native Americans together into villages, or missions, where the native peoples could be converted, taught trades, and encouraged to grow crops. The missions made it possible for the missionaries to control the lives of the Native Americans. The Catholic Church also built cathedrals, hospitals, orphanages, and schools in the colonies. The Catholic Church also allowed women who did not wish to marry to enter convents and become nuns. Many nuns worked outside their convents by running schools and hospitals.

4. What role did the Catholic Church play in Latin America?

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Chapter 17, Section 4 (continued)

- **Britain and British North America** (page 538)

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 eighteenth-century Britain, the monarch and the Parliament shared power, with the Parliament gradually gaining more power. In 1714, a new dynasty, the Hanoverians, 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 two Hanoverian kings, George I and George II, did not know the British system very well and allowed their chief ministers to handle Parliament. Robert Walpole was the head of cabinet (later called prime minister) from 1721 to 1742. He pursued a peaceful foreign policy. The growing middle class favored expansion of trade and the British Empire. When William Pitt the Elder became head of cabinet in 1757, he expanded the British Empire by acquiring Canada and India in the Seven Years' War.

The British colonies in North America were thickly populated, containing more than one million people by 1750. The colonies were supposedly run by the British Board of Trade, the Royal Council, and Parliament. But the colonies had legislatures that tended to act independently. Merchants in many cities did not want the British government to run their affairs.

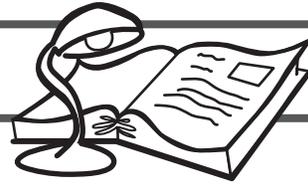
5. Why did British heads of cabinet become more powerful in the eighteenth century?

- **The American Revolution** (page 539)

After the Seven Years' War, British leaders wanted to get new revenues from the colonies. These revenues would be used to cover war costs, as well as to pay for the expenses of maintaining an army to defend the colonies. In 1765, the Parliament imposed the Stamp Act on the colonies. Certain printed materials, such as legal documents and newspapers, had to carry a stamp showing that a tax had been paid. Opposition was widespread and often violent. The act was repealed in 1766, but the crisis was not over.

To counteract British actions, the colonies organized the First Continental Congress. It met in Philadelphia in 1774. Fighting erupted between colonists and the British army in April 1775 in Lexington and Concord, Massachusetts. The Second Continental Congress met soon afterward and formed an army,

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Chapter 17, Section 4 (continued)

called the Continental Army. They named George Washington as commander in chief. On July 4, 1776, the Second Continental Congress approved a declaration of independence written by Thomas Jefferson. The American Revolution had formally begun.

The colonies had support from foreign countries. These countries wanted 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. Spain and the Dutch Republic also entered the war against Great Britain. When the army of General Cornwallis was forced to surrender to American and French forces under Washington at Yorktown in 1781, the British decided to end the war. The Treaty of Paris, signed in 1783, recognized the independence of the American colonies. It also gave the Americans control of the western territory from the Appalachians to the Mississippi River.

6. What countries supported the American colonies in their war against the British?

• The Birth of a New Nation (page 539)

The 13 American colonies had gained their independence. They were now states, but each one was primarily concerned about its own interests. At first, the states were not enthusiastic about creating a united nation with a strong central government. The Articles of Confederation were approved in 1781. This first American constitution did not provide for a strong central government. It soon became clear that the government under the Articles lacked the power to deal with the new nation’s problems. In the summer of 1787, 55 delegates met in Philadelphia to revise the Articles. The delegates decided to write a plan for an entirely new national government.

The proposed Constitution created a **federal system** in which power would be shared between the national government and the state governments. The national, or federal, government was given the power to levy taxes, raise an army, regulate trade, and create a national currency. The federal government was divided into three branches, each with some power to check the workings of the other branches. The first branch was the executive. A president served as the chief executive. The second branch was the legislative branch. It consisted of the Senate and the House of Representatives. The third branch was the judicial branch. It consisted of the Supreme Court and other courts.

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Chapter 17, Section 4 (continued)

Important to the eventual adoption of the Constitution was a promise to add a bill of rights. In 1789, the new Congress proposed 12 amendments, and the 10 that were approved by the states became known as the Bill of Rights. These 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 were derived from the natural rights proposed by the eighteenth-century philosophes.

7. How did the Articles of Confederation differ from the Constitution?
