

## **Chapter 16--Toward a New Heaven and a New Earth: The Scientific Revolution and the Emergence of Modern Science**

### **Key Terms**

#### Background to the Scientific Revolution

Natural philosophers

Aristotelian-Ptolemaic worldview

Copernicus

Geocentric

Heliocentric

Tycho Brahe

Johannes Kepler

3 Laws of Planetary Motion

Galileo

Telescope

Inertia

Isaac Newton

Paradigm

#### Advances in Medicine

Galen

Four humors

Paracelsus

Vesalius

William Harvey

#### Women in the Origins of Modern Science

Margaret Cavendish

Querelles des femmes

#### Toward a New Earth

Rene Descartes

Cogito ergo sum

Cartesian dualism

Rationalism

#### The Scientific Method

Francis Bacon

Deductive Method

Inductive Method

Science and Religion in the 17<sup>th</sup> C.

Spinoza

Pantheism

Pascal

The Spread of Scientific Knowledge

Scientific societies

## **Chapter 17—The 18<sup>th</sup> Century: An Age of Enlightenment**

### **Key Terms**

The Enlightenment

Immanuel Kant

“Dare to Know”

Reason

Bernard de Fontenelle

Skepticism

Pierre Bayle

Textual Criticism

Cultural relativism

Newton

Locke

Philosophes

Montesquieu

Voltaire

Calas affair

Deism

Diderot

“Science of man”

Physiocrats

Adam Smith

Natural Laws

Laissez-faire

Labor theory of value

Baron d'Holbach

Atheism

Rousseau

Social contract

General will

Mary Wollstonecraft

Salon

Marie Therese de Geoffrin

Freemasonry

Culture and Society in An Age of Enlightenment

Rococo

Neoclassicism

Jacques Louis David

Classical music

Opera and oratorio

Sonata

Concerto

Symphony

Bach

Handel

Haydn

Mozart

Novel

Edward Gibbon

High culture

Popular culture

Cesare Beccaria

Festival

Carnival

Commercialization of leisure

Religion and the Churches

Toleration

Pietism

John Wesley

Methodism

### **Free Response Questions**

1. Discuss the causes of the Scientific Revolution and evaluate the impact of it on European thought and culture.
2. To what extent did the Enlightenment express optimistic ideas in 18<sup>th</sup> century Europe? Illustrate your answer with references to specific individuals and their works.
3. Explain the development of the scientific method in the 17<sup>th</sup> century and the impact of scientific thinking on the traditional sources of authority.
4. Both Jean-Baptiste Colbert (1619-1683) and Adam Smith (1723-1790) both sought to increase the wealth of their respective countries. How did their recommendations differ?
5. Compare and contrast two theories of government introduced in the period from 1640 to 1780.
6. Describe and analyze the influence of the Enlightenment on both elite culture and popular culture in the 18<sup>th</sup> century.