

Chapter 17 Revolution and Enlightenment 1550-1800

I. The Scientific Revolution

A big part of this scientific revolution was the changes in the way Europeans looked at _____ and their _____.

A. Causes of the Scientific Revolution

“_____” as medieval scientists were known did not make observations of the natural world. Relied on ancient authorities like Aristotle for their scientific knowledge.

1. Impact of the Renaissance

Renaissance humanists had mastered

_____ as well

as _____. This allowed them access to newly discovered works by Ptolemy, (TAH luh mec) Archimedes and Plato.

2. New technology and mathematics

Technical problems that required careful observation and accurate measurements served to stimulate scientific activity. Invention of new instruments like the

_____ and _____ made new

discoveries possible. The

_____ helped spread new ideas quickly and

easily. _____ played a key role in the scientific achievements. Modern day studied olden days and developed new theories that became the foundation of the _____.

B. Scientific Breakthroughs

Discoveries in astronomy led to a new conception of the universe.

1. The Ptolemaic System

Philosophers of the Middle Ages constructed a model of the universe known as the _____

system. This system is geocentric because it places _____ at the center of the universe.

The tenth sphere is the
“_____.” Beyond the tenth
sphere is _____, where gods resides.
The _____
would like this view of the universe.

2. Copernicus and Kepler

Nicolas Copernicus thought that the universe was

_____,
or_____.

He told people the
apparent movement of the sun around the Earth was
caused by the _____ of the Earth on
its _____.

Johannes Kepler used detailed astronomical data to arrive
at his laws of planetary motion. Proved that planets
orbits were_____.

(_____)

3. Galileo’s Discoveries

User of a_____. Used it to
prove sun _____ and that
the heavenly bodies were composed of material
substances just like _____. He found
himself in conflict with _____.
Church told him to _____ his
thoughts as they were against the church doctrines.
Most people agreed with Galileo but motion in the
universe had not been explained.

4. Newton’s View of the Universe

He defined

_____ that governed the planetary bodies. Crucial was the
universal law of _____

which explains why the planetary bodies
continue their _____

about the sun. Explained
by _____ of gravity. He also talked

about the _____
concept of the universe.

5. Breakthroughs in Medicine

_____ had dominated teachings here. Many ideas are to be proven _____.

_____ showed that the beginning point for the circulation of blood was the _____.

6. Breakthroughs in Chemistry

_____ was one of the first to conduct controlled experiments in _____. His work on the properties of _____ led to Boyle's law-the volume of _____ with the pressure exerted on it.

_____ invented a system for naming chemical elements, still used today, founder of _____.

C. Women's Contributions

1. _____
Was especially critical of the growing belief that human through science were the masters of nature.

2. _____
Female astronomer-discovered a _____.

D. Philosophy and Reason

1. Descartes and Rationalism
_____ began by thinking and writing about the doubt and uncertainty that seemed to be everywhere. One fact seemed to him to be beyond doubt-his _____. He emphasized the importance of his _____.

He would accept only those things that reason said were true. “_____.”
Was called the father of modern
_____. This system of
thought is based on the belief that _____
is the chief source of_____.

2. Bacon and the Scientific Method

_____-systematic
procedure for collecting and analyzing evidence. Was
crucial to evolution of science in the modern world. Was
developed by _____.
_____ believed that
scientist should learn about nature by using
_____-proceeding
from the particular to the general. Was more concerned
with practical matters than pure science. Observe natural
events, propose a _____(theory),
or possible explanation, then do experiments to test
theory. This will lead to
_____.

II. The Enlightenment

A. Path to the Enlightenment

Was an 18th century philosophical movement of intellectuals
who were greatly impressed with the achievements of the
Scientific Revolution.

1. _____
Argued that every person was born with a tabula rasa or
_____. He suggested that people
were mold by the _____
that came through their senses from the surrounding
_____. Believe that if
_____ were
_____ and people were
exposed to the right influences, then people could be
changed to create a new and better society.

2. _____

World machine operated according to natural laws, which could be uncovered through systematic investigation. If use scientific methods would be able to discover the natural laws that governed human society.

(Basically, if people _____ what is happening in society then they can _____ new ways to _____ which makes a better society.)

B. Ideas of the Philosophies

Intellectuals of enlightenment called philosophes which means _____. Most leaders of the enlightenment were_____.

1. The Role of Philosophy

Role was to _____ the world.

2. Montesquieu (French Noble)

Did a study of governments. Three basic kinds of government: 1. _____ for small states
2. _____ for large states
3. _____ for moderate

Used England as an example of a monarchy.

_____ had 3 branches of government-

_____ (_____),

_____, and the

_____. Used separation of powers with a system of

_____.
Used his principles in the

3. Voltaire

Greatest figure was Francois Marie Arouet known as _____. Especially known for his criticism of _____

and his strong belief in religious_____.
He championed_____, which is based on
reason and natural law. In this view a mechanic
(_____) had created the universe. The
universe was like _____.
God had created it, set it in _____ and
allowed it to run _____
his interference and according to its own natural laws.

4. Diderot
Denis Diderot, wrote the _____
to collect all the new information being brought into the
world. Was a _____ volume set of information.

C. New Social sciences

1. Smith on Economics
Was a physiocrat who was interested in identifying the
natural economic laws that governed human society.
Maintained that if individuals were _____ to
pursue their own _____
all society would benefit.
The state should not interrupt the free play of natural
economic forces by imposing regulations on the
economy. Became known
_____.
_____,
in his work, _____, he
gave government 3 roles: should
_____ from
invasion, 2nd should _____
from _____ and finally should
keep up certain public works that private individuals
alone _____.
(Roads, canals-used for social interaction and
trade.)

2. Beccaria on Justice
Cesare Beccaria believed that punishment should not be exercised in brutality. Was against _____.

D. The Spread of Ideas

1. The Social Contract

_____ was one of the most famous of later enlightenment. Argued that people had adopted laws and government in order to preserve their private property. Rousseau presented his concept of the social contract. Through a social contract the _____

agrees to be governed by its general will. So _____ is

achieved by being forced to follow what is _____ for the

_____ because the general will represents what is best for the _____.

He sought a balance between heart and mind, between emotions and reason.

2. Women's rights

_____ advanced the strongest statement for the rights of women. She noted that the same people who argued that women must also _____ said that government based on arbitrary power of _____ over their _____ was _____.

She also argued that enlightenment was based on an idea of _____ in all human beings. So women _____ to same rights as men because women have _____.

3. The Growth of Reading

Great importance to enlightenment was the spread of ideas to the _____. Many new books were written and directed at the new reading _____. _____ had the first daily newspapers.

4. The Salon
Were the elegant drawing rooms of the _____ great urban house. Brought writers and artists together with aristocrats, government official, and wealthy middle class people. _____ was one of the greatest. Here they would _____ and _____ and artistic taste.

5 Religion in the Enlightenment
_____ yet most enlightened thinkers were still _____. In England the most famous new religious and evangelical movement- _____ was started by _____. His sermons often caused people to have conversion experiences.

III. The Impact of the Enlightenment

A. Enlightenment and Absolutism

Enlightenment thought influenced politics through _____ like freedom of religious worship, freedom of speech, press, etc. To establish and preserve these natural rights believed that people needed to be _____ by enlightened rulers. Only strong _____ monarchs could _____.

1. Enlightened Absolutism

Rulers try to rule by

_____ while maintaining their _____.

Examples to follow

2. Prussia: Army and Bureaucracy

Frederick William I and Fredrick II made

_____ a major European power.

Created a highly efficient government and an army that was the _____ in Europe.

Frederick II or

_____, was one of the best educated and most cultured monarchs of the time. Was a dedicated ruler. He

_____ the use of

_____ except in treason and murder. Granted _____ of speech and press.

3. The Austrian Empire

One of the great European states. Composed of many

_____. _____ inherits throne.

Worked to centralize and strengthen the state.

_____ had many reforms.

Abolished _____ and eliminated the _____.

He did _____ the _____

by freeing the serfs, the _____

with religious reforms, and _____ were

unhappy because they

_____ the changes.

4. Catherine the Great

Catherine II, was familiar with the works of the philosophes and seemed to _____ them.

She did consider the idea of a new law code that would recognize the principle of the

_____ in the

eyes of the law. In end did very _____
because needed the support of
the_____. She did expand
Russian _____ by taking half of
Poland.

5. Enlightened Absolutism?

Only _____ sought truly radical
changes based on enlightenment. Most were guided
primarily by their interest in the power and
_____ of their state. Used power to collect
more taxes and create armies.

B. The Seven Years War

Stage was set when a war broke out over
_____ for the
throne.

1. Austrian Succession p.559

_____ to succeed to
throne but _____
did not want it to happen so
_____. Maria allies
with _____—The War of Austrian
Succession. Was fought in _____, in
_____ and in
_____ where the British
captured the French fortress of Louisbourg. After
_____ signed Treaty of
_____.
Guaranteed the return of all occupied territories except
_____. Maria refused to accept the
loss of Silesia.

2. The War in Europe

Two new rivalries appeared _____ and

_____ over colonial areas and Austria and Russia over _____. New world war. In the end, Austria officially recognized Prussia's permanent control of Silesia

3. The War in India

Britain and France struggle called the _____, was fought in _____ and _____. Britain more persistent and _____ in India. With _____ the French withdrew and left India to the British.

4. The War in North America

Greatest conflict of 7 Years War took place in North America. British and French fought over two main areas—_____ and the unsettled _____. French gained support of _____ Americans. When _____ to power in England things change. Britain began to totally _____ the French in battle and at sea as well. Came down to battle of _____ where the _____ were eventually forced to _____, Treaty of Paris the _____ gave _____ and lands _____ to _____. _____ also gave up _____ to _____ because they were France's allies.

C. Enlightenment and Arts

1. Architecture and Art

Architecture was of the grand style. Art was a new style called _____. Emphasized grace,

char, and gentle action. Used _____ designs.

2. Music

Johann Sebastian _____-composer and one of the greatest of all times. George Frideric

_____.
Both _____
the_____.

Classical style—Franz Joseph Haydn-and Wolfgang Amadeus Mozart

2. Literature

Novelists began to choose

_____ themes.
_____wrote novels about people without morals who survive by their wits.

IV. THE AMERICAN REVOLUTION

A. Britain and the American Revolution

The

_____ came into existence in 1707 so the term British came to refer to both the _____ and the_____. Last Stuart ruler replaced by _____ dynasty. The first kings name _____ could not speak English so had to have advisors to help rule.

_____ served as head of cabinet (_____). Britain controlled Canada as well as the _____ in America.

1. The American Revolutions Begins

After 7 Years War British leaders wanted to _____
_____. Parliament imposed _____ requiring certain printed materials to carry a stamp. Led to _____ and eventual repeal of the act. Led to a series of actions and reactions from each side. Colonies organized the _____
_____ to take up arms and organize militias, Fighting broke out in _____ and _____.
_____ took place and _____ served as its commander in chief.
_____ approved the _____ written by _____.

2. British Defeat

Great importance to colonies was _____ from _____ countries. They were eager to gain revenge for earlier defeats at hands of British. _____ were the first to give USA recognition followed by Dutch and Spain. _____ was forced to surrender at Yorktown. _____ recognized the independence of the American colonies. The treaty also granted the _____ of the western territory from the _____
_____.

B. The Birth of a New Nation

Feared strong central government so

_____ created a government that _____ the _____ to deal with the nations problems. Met in _____ to write a plan for a better government.

1. The Constitution

Created a FEDERAL government in which the national government and the state governments _____ with _____

2. The Bill of Rights

As promised during negotiations over ratification, the new Congress proposed _____ to the Constitution. The _____ of the amendments. Became known as the _____ to people. Many of the rights were derived from the natural rights proposed by the philosophers. _____ seen as the _____ of the _____.

The premises of the Enlightenment seemed confirmed. A new age and a _____ could _____.

