

AP World History Chapter 16

Transformation of the West

1450-1750

1300 c.e.	1450 c.e.	1500 c.e.	1550 c.e.	1650 c.e.	1750 c.e.
1300–1450 Italian Renaissance	1450–1519 Life of Leonardo da Vinci 1450–1600 Northern Renaissance 1455 First European printing press, Mainz, Germany 1469–1527 Life of Machiavelli 1475–1514 Life of Michelangelo 1490s France and Spain invade Italian city-states; beginning of Italian decline	1500–1600 Commercial revolution 1515–1547 Reign of Francis I, France 1517 Luther's 95 theses; beginning of Protestant Reformation 1534 Beginning of Church of England 1541–1564 Calvin in Geneva 1543 Copernican revolution; Copernicus's work on astronomy	1550–1649 Religious wars in France, Germany, and Britain 1555–1603 Reign of Elizabeth I, England 1564–1642 Life of Galileo 1588 English defeat the Spanish Armada 17th century Scientific Revolution 1600 Independence of Netherlands 1618–1648 Thirty Years War 1642–1649 English Civil War 1642–1727 Life of Isaac Newton 1643–1715 Reign of Louis XIV, France; absolute monarchy 1647–1648 Culmination of popular rebellions in western Europe	1670–1692 Decline of witchcraft trials 1682–1699 Habsburgs drive Turks from Hungary 1689–1690 Glorious Revolution in Britain; parliamentary monarchy; some religious toleration; political writing of John Locke 18th century Enlightenment 1712–1786 Life of Frederick the Great of Prussia, enlightened despot 1730–1850 European population boom 1733 James Kay invents flying shuttle loom 1736 Beginnings of Methodism	1756–1763 Seven Years War; France, Britain, Prussia, and Austria 1776 Adam Smith's <i>Wealth of Nations</i> 1780–1790 Reign of Joseph II, first Habsburg emperor 1792 Mary Wollstonecraft's <i>Vindication of the Rights of Women</i>

The Italian Renaissance

Begins 14th, 15th centuries

- In northern Italy

Italy

- Urbanized
 - Merchant class
 - Political rivalry
- Petrarch, Boccaccio

- Use Italian
- Secular topics



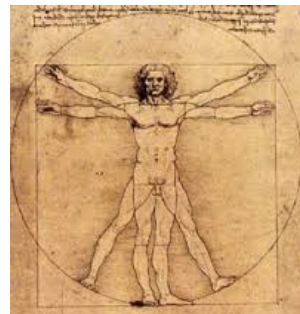
MAPPING THE WEST Renaissance Europe, c. 1500

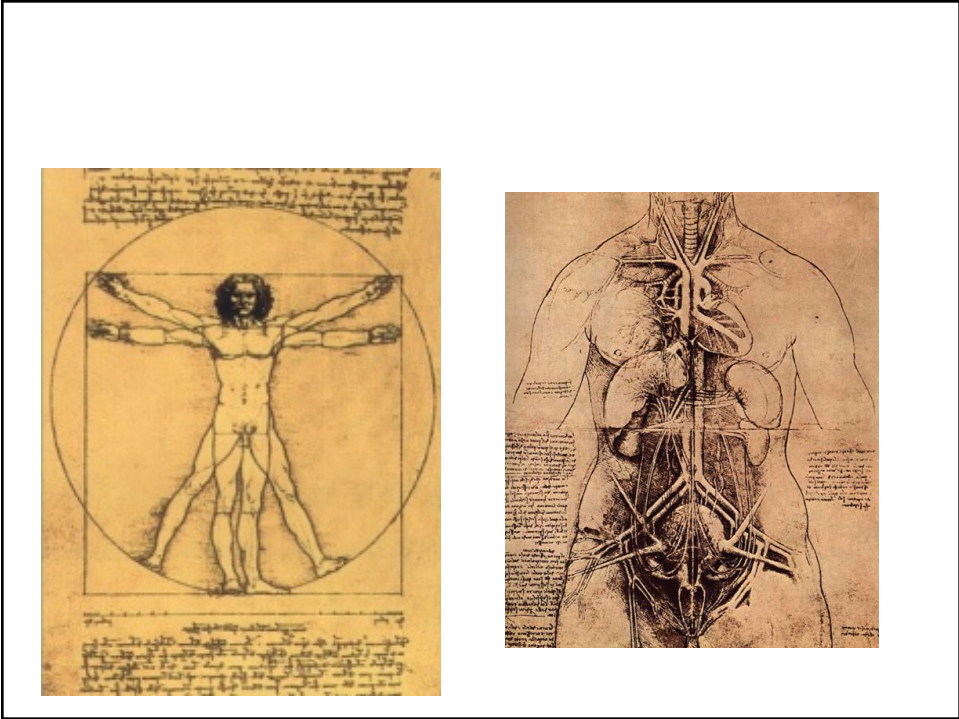
The Golden Age of the Arts

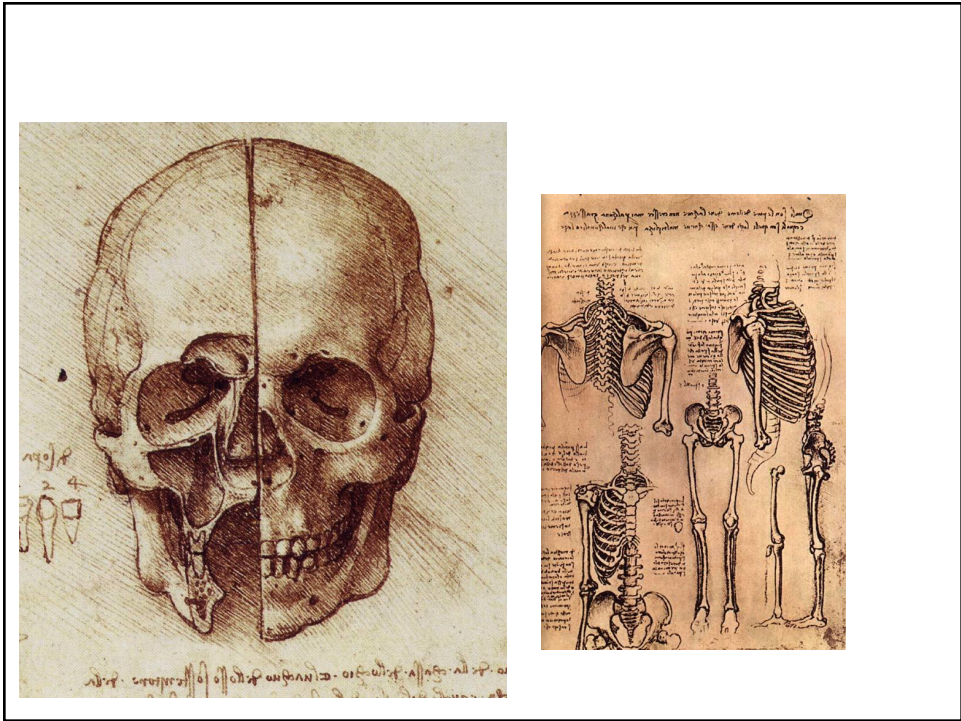
- The Renaissance attained its most glorious expression in its paintings, sculptures, and architecture.
- Renaissance artists revived many of the artistic styles of the Romans and Greeks.
- Renaissance artists also developed the new form of art known as *perspective*.
- Renaissance architects adopted the Roman and Greek styles of architecture.

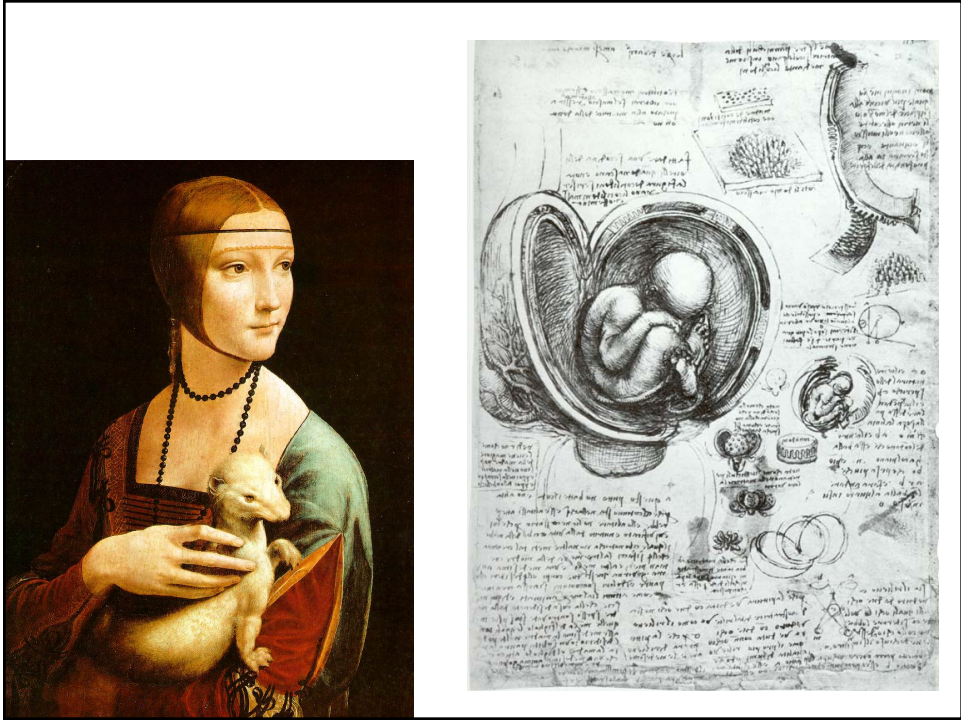
Leonardo

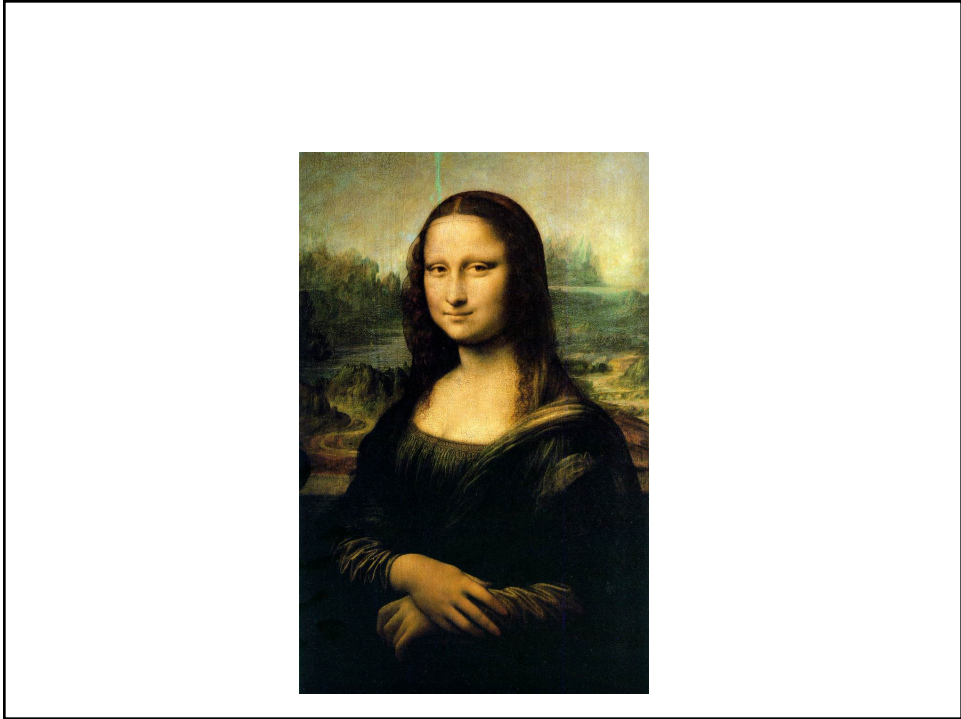
- Leonardo da Vinci was born in 1452.
- He was an engineer and an artist.
- He would dissect corpses to learn how bones and muscles worked.
- His paintings are known for their realistic nature.
- Leonardo put many inventions to paper unfortunately not all of them were ever built.







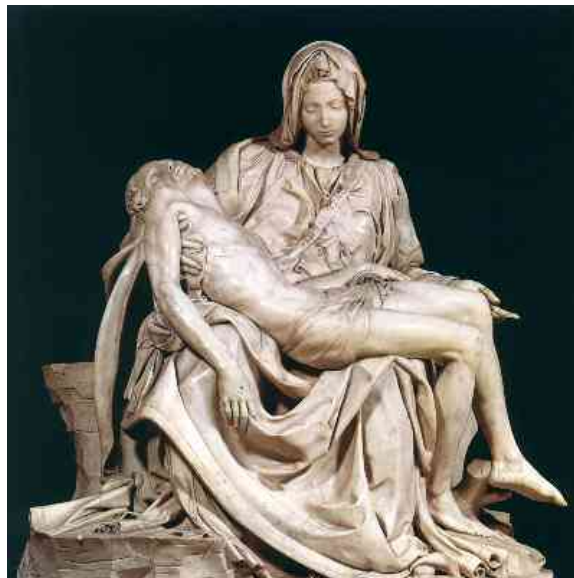




Michelangelo

- Born in 1475 Michelangelo was a many sided genius.
- He was a sculptor, engineer, painter, architect, and poet.

Pieta, Marble



David, Marble



Raphael

- Born in 1483 he was younger than Leonardo and Michelangelo. He blended elements of Leonardo and Michelangelo.
- He is best known for his paintings of the Madonna.

Madonna



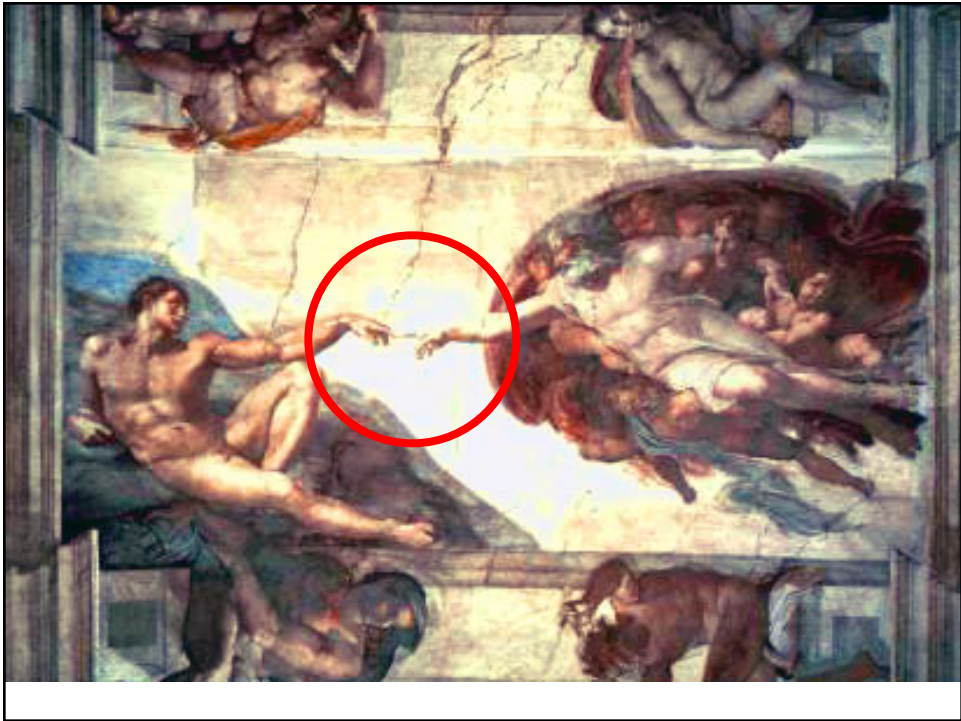
Donatello

- Born in 1386 Donatello became known for his shallow relief style of sculpting.
- He made a living as a goldsmith prior to becoming a sculptor.

David, Bronze







Machiavelli's "The Prince"

- The Prince is a book that was written by Niccolo Machiavelli in 1513.
- The book is a manual for how to gain and maintain power.
- "The Prince" does not discuss leadership using high ideals.
- The end always justified the means.

Shakespeare

- English poet and playwright.
- Folly's of young people in love.
- Power struggles of English kings.
- Tragedies of people being crushed by powerful forces or their own weaknesses.
- Expanded the English language.

The Renaissance Moves Northward

Northern Renaissance

- France, Low Countries, England, Germany
- William Shakespeare
- Miguel de Cervantes

Changes in Technology and Family

- Technology
 - printing
- Family
 - Marriage age common
 - Nuclear family common

Humanists

- Stressed education of Classics.
- Emphasized religious themes.
- Called for the Bible to be translated into every day language.
- Erasmus “Praise and Folly”
 - Humor to expose ignorant and immoral behavior.
- Miguel de Cervantes “ Don Quixote”
 - Mocks romantic notions of medieval chivalry.
- Thomas More “Utopia”
 - The ideal society.

The Printing Revolution

- Johann Gutenberg prints the first complete edition of the Bible using the first printing press and printing inks in the west in 1456.
- The printing revolution had begun that would transform Europe.
- By 1500 more than 20 million books had been printed.

The Protestant and Catholic Reformations

1517, Martin Luther's challenge

- Attacks church institutions
- Bible the only authority
- Vernacular translations

Protestant protest used for political gain

- German opposition to the papacy
- Rulers seize church lands



Spread of Luther's Ideas

- Many people supported Luther's ideas for many different reasons.
- German princes saw an opportunity to seize church lands.
- Priests saw it as a way to reform church corruption.
- Emperor Charles V of Germany fought several wars with German princes trying to force them back into the Catholic Church.
- He eventually signed the Peace of Augsburg. This signaled the end of hostilities in Germany. "Whose rule, his religion"

John Calvin

- John Calvin was another reformer who believed in reforming the Church to do away with corruption.
- Like Luther Calvin believed that salvation was gained through faith.
- Calvin was asked to lead a community in Geneva where he set up a theocracy.

Nicolaus Copernicus 1473-1543

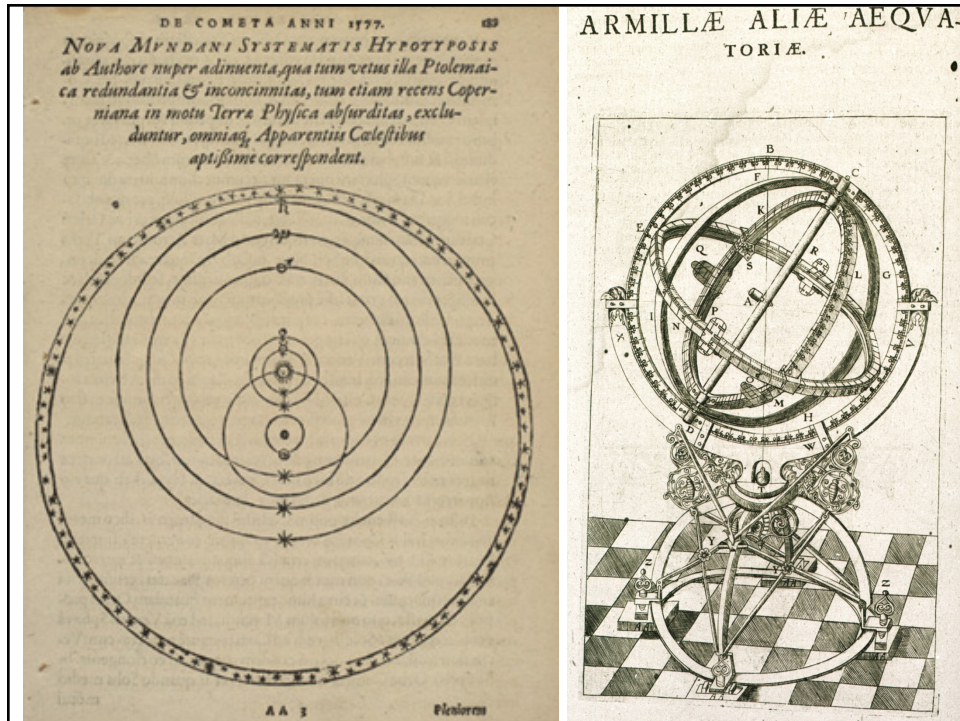
- A Polish priest who studied astronomy.
- He believed the earth was not the center of the universe.
- He developed the heliocentric theory.
 - The idea that the sun was the center of the universe and the moon orbited the earth.
- He did not publish his theories till he was dead for fear of attacks.



Tycho Brahe 1546-1601

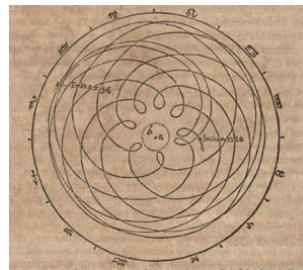
- Danish astronomer he create a measuring system to chart the positions of the planets.
- He built on the theories of Nicolaus Copernicus.
- He measured the positions of all the known planets and hundreds of stars.
- Hired Johannes Kepler to be assistant.





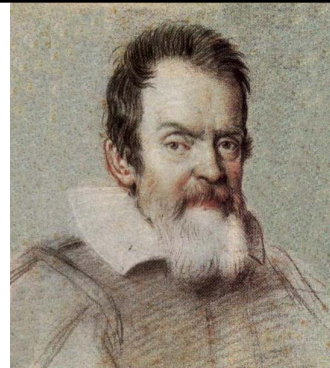
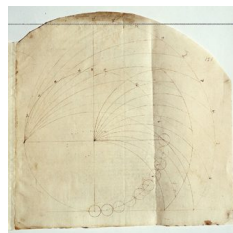
Johannes Kepler 1571-1630

- Using information from both Copernicus and Brahe he confirmed that the sun was the center of the universe.
- Discovered the orbits of planets to be oval and not circular.



Galileo Galilei 1564-1642

- Galileo was a Renaissance man in that he studied and worked with many different things.
- He discovered that all falling objects fall at the same speed no matter their weight.
- He built a telescope that magnified objects so that he could see sunspots, and mountains on the moon.
- Found four moons orbiting the planet of Jupiter.



The Scientific Method

- Collect measurable data.
- Explain data using reasoning.
- Hypothesis on what data means.
- Test theory with observation and experimentation.
- Reach a conclusion about Hypothesis.
- Test observation and experimentation again.

Bacon & Descartes

- Two scientists from England and France.
- They rejected Aristotle's scientific assumptions.
- Challenged the scholarly work of medieval universities that incorporated church doctrines.
- Bacon used traditional experimentation mixed with observation.
- Descartes used human reasoning. The doubter had to exist "I think, therefore I am"

Isaac Newton 1642-1727

- In 1687 Newton published *Mathematical Principles of Natural Philosophy*.
- He explained the law of gravity in the book.
- He believed that all motion of the universe can be explained mathematically.
- He linked physics and astronomy together.
- Developed a new branch of math called calculus.

