

Renaissance

- . rebirth of interest in classical learning**
- . a time creativity and change - spirit of adventure**
- . began in Italy during the 1300s - peaked in the 1500s**

Humanism

- . intellectual movement that focused on worldly subjects rather than religious issues**
- . promoted the study of grammar, rhetoric (art of speaking and writing effectively), poetry, and history (based on Greek and Roman texts)**

Golden Age of the Arts: painting, sculpture, architecture

Realism of the Romans and idealistic

- . beauty of the Greeks**
- . perspective - making distant objects appear smaller than objects closer to the viewer**
- . rejected Gothic architecture in favor of the columns, arches, and domes of classical times**

Why Italy ?

- . center of Roman civilization - architectural and artistic remains of the "glory that was Rome"**
- . cities had survived during the Middle Ages and in the north had become prosperous centers of trade and manufacturing**
- . wealthy and powerful merchant class stressed education and individual achievement and had the financial resources to support the arts**

patron - financial supporter of the arts

- . Florence - controlled by the Medici (MEH dee chee) family - was the center of the Renaissance**

Leonardo da Vinci : Renaissance Man

- . person of wide interests and an expert in many areas**
- . artist and student of botany, anatomy, optics, music, architecture, and engineering**
- . sketched flying machines and undersea boats**

Northern Renaissance

- . 1400s - Flanders: northern France, Belgium, and the Netherlands**
- . 1500s - Spain, France, Germany, and England**
- . emphasis on religious themes**

- **believed the revival of ancient learning should be used to bring about religious and moral reform**

Printing Press

- **1456 - Johann Gutenberg of Mainz, Germany printed the Bible using movable metal type**
- **1500 - 20 million Bibles in print**

Scientific Revolution

- **1600s - Scientific Method used rather than reliance on the Bible, Aristotle, and Ptolemy.**
- **It all started with the heliocentric or sun-centered model of the universe.**
 - **1543 - proposed by Polish scholar Nicolaus Copernicus**

late 1500's - observational evidence provided by Danish

- **astronomer Tycho Brahe - his assistant German astronomer and mathematician Johannes Kepler calculated orbits and determined they were not circular, but an ellipse 1633 - Italian Galileo Galilei brought on trial before the Inquisition after he validated Copernicus' theory after his invention of the telescope proved the earth was not the center of the universe. He was forced under threat of death to recant his heresy and proclaim that the earth stood motionless at the center of the universe. He is reported to have muttered as he left the court, "Nevertheless, it does move."**

- **Gravity - Cambridge University student, Isaac Newton, was sitting in a garden when he observed an**

apple fall from a tree. He theorized that the same force that brought the apple to the ground kept the planets in their orbit around the sun.

- . Advances in chemistry and medicine followed.**

Scientific Method

- 1. state problem**
- 2. gather info**
- 3. form hypothesis**
- 4. experiment**
- 5. record and analyze data**
- 6. state conclusion**
- 7. repeat steps**

Questions

- . How did the Renaissance differ from the Middle Ages?**

- . Why did the northern Renaissance take place 100 years after the Italian Renaissance?**
- . What were the effects of the printing revolution?**
- . Why did the Renaissance begin after economic growth had taken place?**
- . How did the new scientific method differ from the traditional approach used before the 1600s?**
- . Modern scientists refer to the discoveries of Copernicus as the Copernican Revolution. Why do they use that term?**

