

Unit 5 – Early Modern Europe

16 December

17/18 December

- Warm up
 - Take out the notes from yesterday and work with your neighbor about getting all the questions filled out
 - Discuss which part of the film was the most intriguing to you.

Logistics

- Smallest Unit of the Semester
 - Likely only going to be a few weeks
- Will have a test over this unit the week before finals
- This Week:
 - Brief intro into the Unit and what to expect
 - Famous Historical Figures Project

Notes: Early Modern Europe

- Massive changes at the end of the Middle Ages.
- This era saw:
 - First global trade network
 - Death of 30-60% of Europe
 - Drop in global temperatures
 - Birth of modern science and math
 - End of Catholic dominance in Europe
 - Absolute monarchies develop in Europe

Notes: Europe Timeline

- High Middle Ages 1000-1300 AD
 - Feudalism
 - Catholic Church
- Late Middle Ages 1300-1500 AD
 - Plague, war, famine, general awfulness
 - Challenges to old ideas
- Early Modern Period 1500-1800 AD
 - Kings take all power
 - Modern governments are born
 - Science, exploration, art, and philosophy thrive

Medieval Europe

- 1000-1300 is known as the High Middle Ages.
- This era was defined by:
 - **Feudalism:** a economic/political system based on land, rich landlords, and personal loyalty.
 - **Catholicism:** the church of the time had strong political power and exerted influence on all culture.



Notes: Medieval Europe

- From 1000-1300, Europe saw:
 - Dramatic population growth
 - Quickly expanding economies
 - Great advances in: structural engineering
 - Significant increase in literacy



Notes: Medieval Europe

- At the same time, most people lived in crushing poverty—with no access to education and almost no chance to improve life.
- Science was subordinate to religion and had barely advanced in 1000 years.
- Governments were small and decentralized



Medieval Europe

- Medieval Europe had a lot of flaws but was a successful society.
- Europe thrived in the High Middle Ages.
- But it also had a lot of problems and no real way to fix them.

Crises of the Late Middle Ages

- From 1300-1450, a series of calamities brought an end to the prosperity of the Middle Ages.
 - The Little Ice Age 1300-1850
 - The Great Famine 1315-1317
 - The Black Death 1347-1351
 - Peasant Revolts
 - Long, bloody wars



Project

- Requirements:
 - Image of person
 - Name, Birthday, area lived
 - Personal about the person (relationships, children, family, etc,)
 - Education
 - Brief overview of their life
 - Quote
 - Detail about most famous achievement and relevant information about it.

Project Cont.

- How can you do this?
 - Can be either done on compute or drawn poster
 - Profile on Twitter/Facebook/etc
- Logistics
 - Full sentences!
 - Must complete the questions I give on Friday
 - You can do it by yourself or with ONE other person

6 January

- Get out notebook and be ready for notes
- Think about the best thing that happened over break, you may share

Renaissance

- **Did not** end the middle ages. Renaissance occurs during the Late Middle Ages
- Very little change for everyday people
- Art takes huge leaps forward.
- A few people start to question the dominance of the church.

Renaissance Cities

- The Renaissance did not affect most Europeans.
- Only a handful of wealthy individuals in a few wealthy cities actually experienced the Renaissance.
- The other 99.9% continued to live as normal.



What is the Renaissance?

- ***Renaissance***: a period during which there was a flourishing of art in Europe, inspired by old Roman and Greek values.

Renaissance vs Medieval Art

- We will look at a few comparisons of art on the same topic.
- For each: take 2 minutes to record differences you notice. Record as many as you can.
- Think about style, colors, depth, perspective, background, realism, etc.

Notable Renaissance Elements

- ***Realism***: Renaissance artists focused on portraying things as they actually look.
- ***Naturalism***: Renaissance artists thought nature was worth portraying.
- ***Perspective***: Use of artificial lines used to make it appear as if flat paintings have depth.

Humanism

- Perhaps the most important legacy of the Renaissance.
- ***Humanism*** is the belief that humans are of value—as are their emotions and reasoning.
- Humanist artists focused on the human element of their work.

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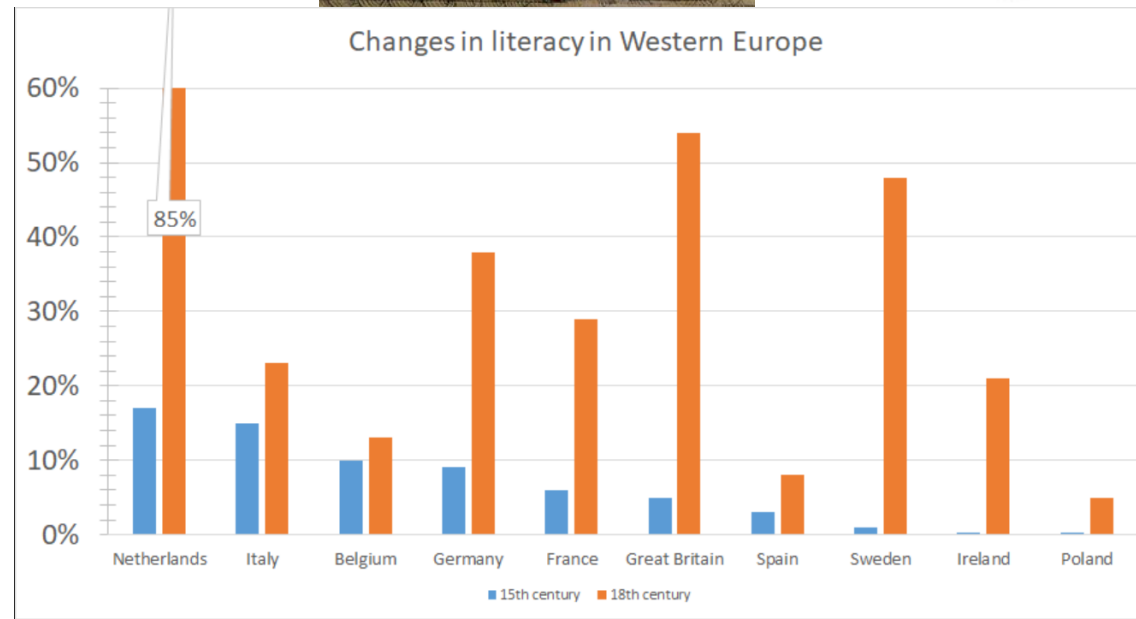
9 January

- LT: I can identify and explain the impacts of the Scientific Revolution
- - Compare and contrast pre-and post scientific revolution and analyze the impacts it had on the world

Notes:

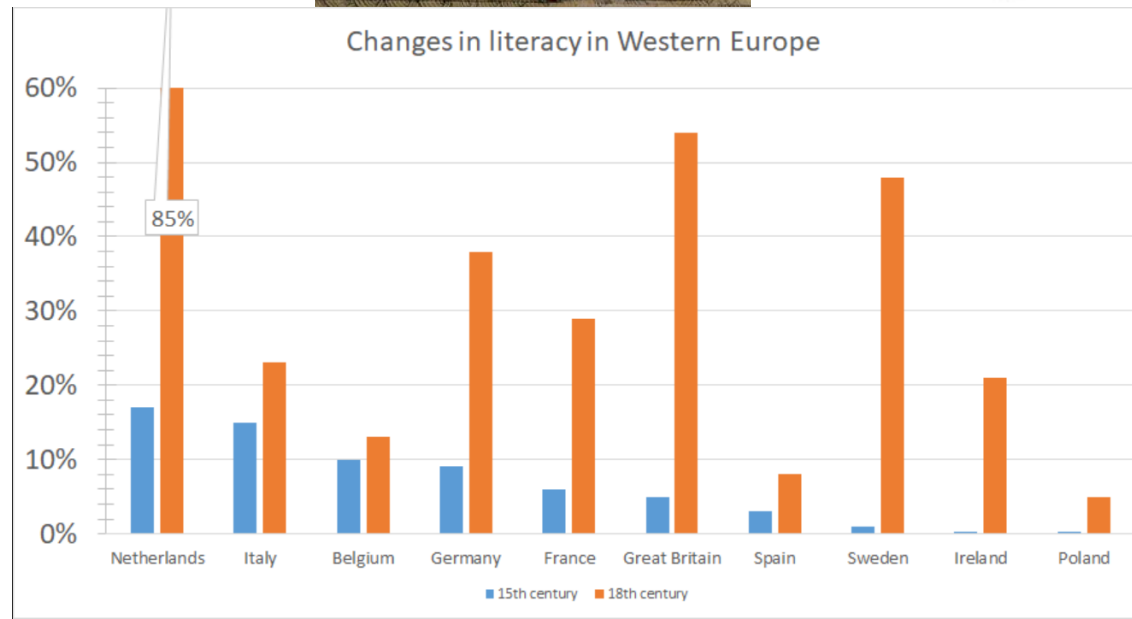
Scientific Revolution

- **Scientific Revolution:** the development of modern science and the corresponding increase in the rate of tech development.



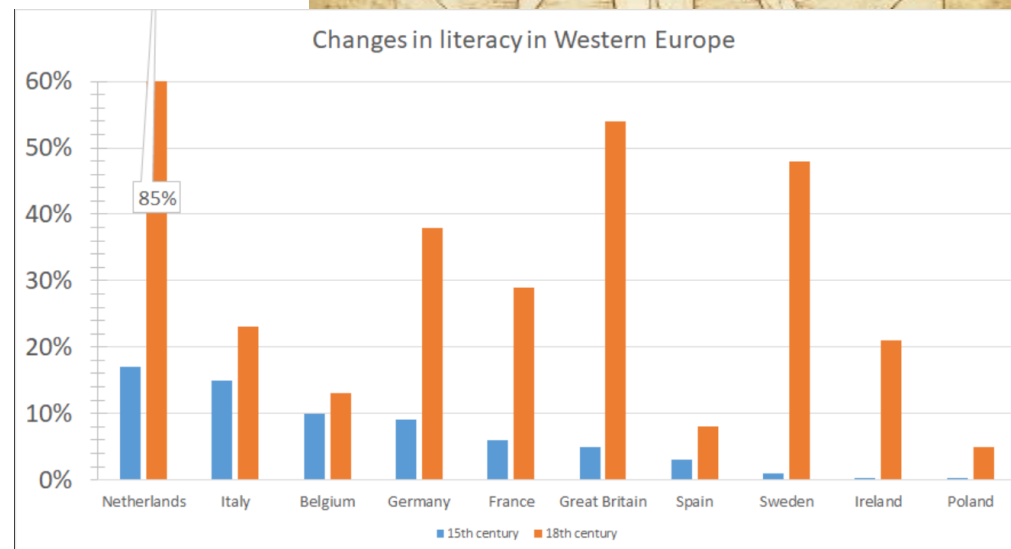
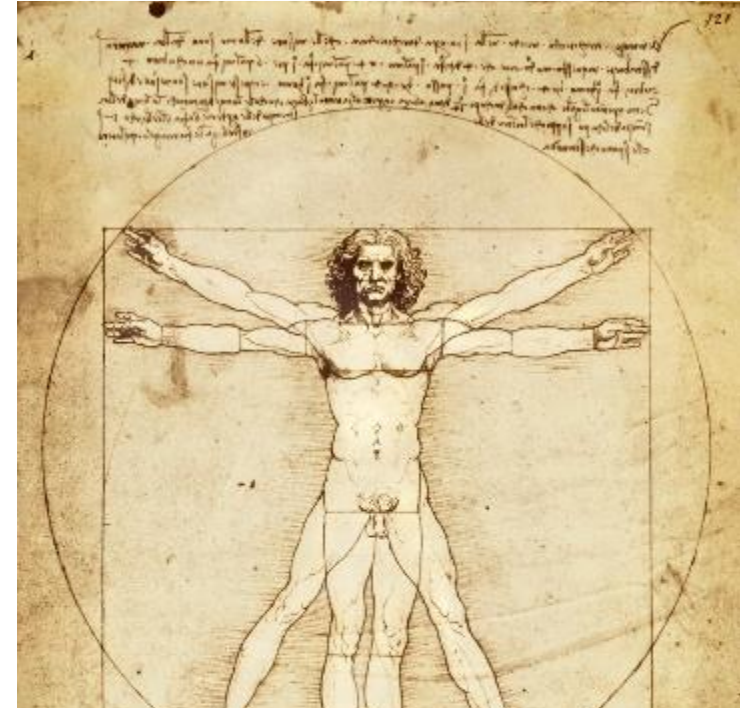
Notes: background

- Facilitated by the Printing Press.
- Invented By Johannes Gutenberg in 1440.
- Books were handwritten before 1440. Now they could be printed in large numbers.
- Made books dramatically cheaper, allowing people more control of their educations.



Notes: background

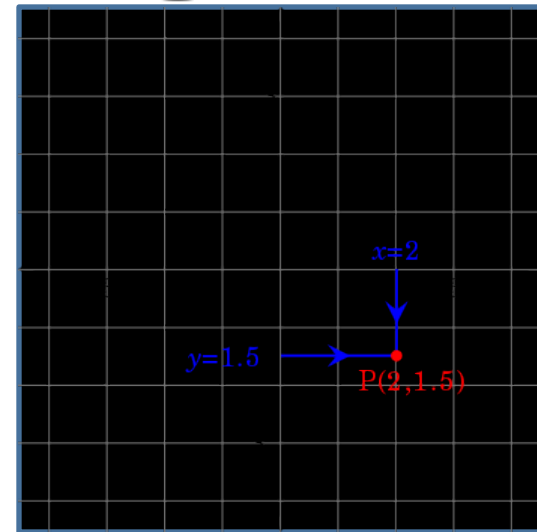
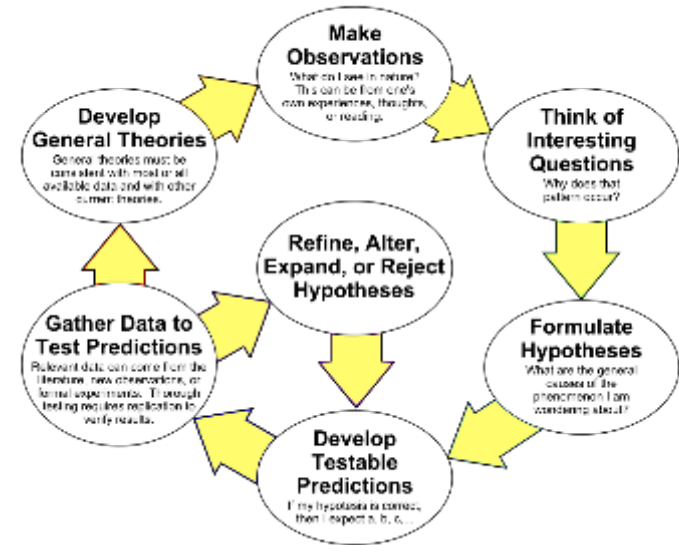
- Humanism also had a huge impact.
- Encourages people to use their reason to make sense of the world.
- Catholicism still skeptical of humanism and catholic countries start to lag behind.



Notes: Scientific Revolution

- Changes during Sci Rev:
 - Scientific Method is born—creating modern science.
 - Calculus and analytic geometry are created.
 - Rate of technological development greatly increases.
 - Majority view of the physical world changes

The Scientific Method as an Ongoing Process



Make a Table:

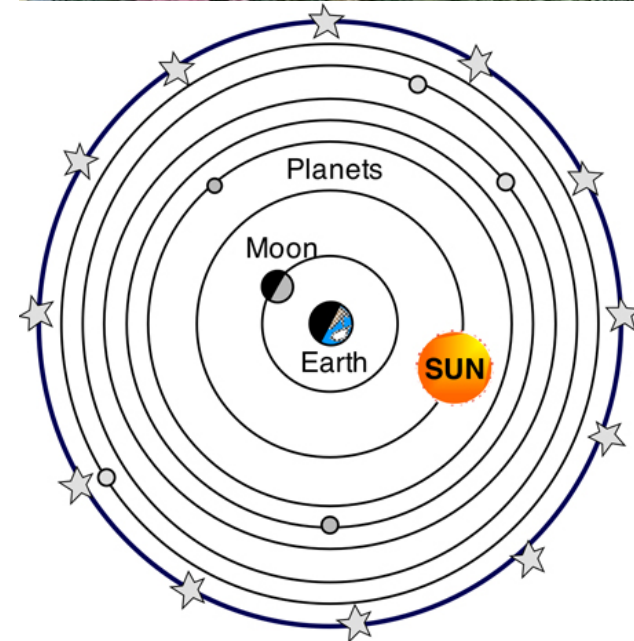
Medieval World View

Modern Science World View

Medieval World View	Modern Science World View

Notes: Medieval World View

- Bible and teachings of the Saints used to explain the universe.
- Human reasoning viewed as flawed—can be tricked by devil.
- Earth viewed as the center of the universe.
- Many natural phenomenon explain by supernatural beings.



Notes: Modern Science World View

- Math alone can explain the actions of all things in the universe.
- Human reasoning and observation must be the basis of understanding.
- Earth viewed as a single object in a larger universe that does not revolve around it.



Physics & Pre-AP Physics Formula Chart

(Equations surrounded by a box denote they are used by Pre-AP Physics only)

$v_a = \frac{d_t}{\Delta t}$	$a = \frac{V_f - V_o}{\Delta t}$	$w = mg$
$v_f = v_o + at$	$T = 1/f$	$J = Ft$
$d = v_o t + \frac{1}{2} at^2$	$f = 1/T$	$\Delta mv = Ft$
$t = \sqrt{2d/a}$	$KE = \frac{1}{2} mv^2$	$p = mv$
$v_f^2 = v_o^2 + 2ad$	$F = ma$	$W = Fd$

Notes: Some Key Figures

- Nicolaus Copernicus (d. 1543): creates model of universe with sun at the center.
- Francis Bacon (d. 1626): creates the original inspiration for the scientific method, called the Baconian Method.
- Galileo Galilei (d. 1642): lived under arrest for championing Copernicus' model. Makes major contributions to physics, math, and astronomy.

Notes: Some Key Figures Continued

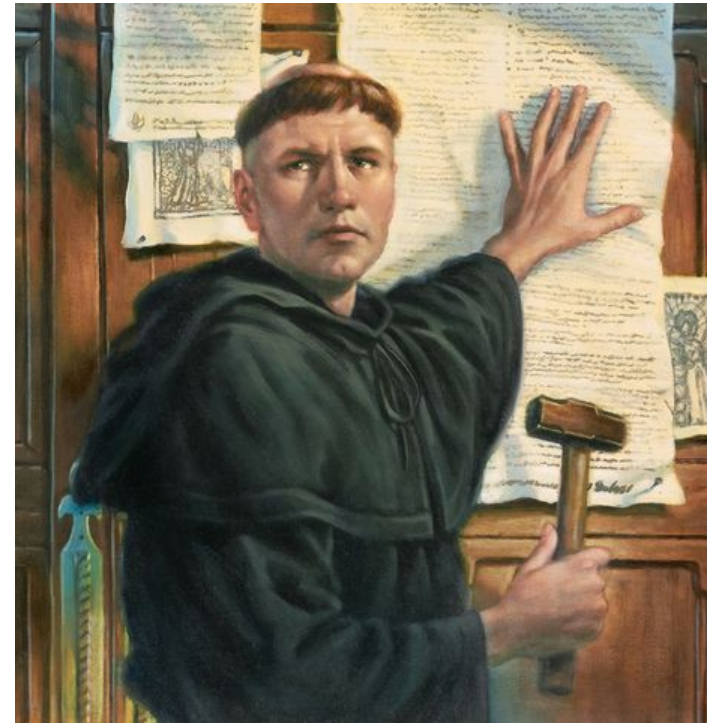
- Rene Descartes (d. 1650): creates analytical geometry and inspires people to only believe what they can prove.
- Gottfried Leibniz (d. 1716): creates calculus.
- Isaac Newton (d. 1727): also creates calculus. Discovers the laws of motion and gravity. Founds the modern scientific method.

Notes: Changes to Europe

- Views of the world change
- Speed of technological progress accelerates
- Growing importance placed on education
- Medicine/surgery become considerably better

Notes: Protestant Reformation

- **Protestant Reformation:** new forms of Christianity are created that reject the pope and the authority of priests.
- These new Christians are called **protestants**



Notes: Before Printing Press

- Bible is only read in Latin—a language only priests still speak.
- Books are expensive
- Catholic church maintains that only a priest is sufficiently educated to translate the bible correctly.



Notes: Printing Press

- The printing press makes books much cheaper.
- The Bible is soon also translated into the common languages.
- Now anyone can read the bible without having to rely on a priest.
- Many start to question the church's translation of the bible.



Notes: Church Corruption

- The church of the time has a very tarnished reputation.
- Many view the church as corrupt for 2 reasons:
 - The selling of indulgences
 - The actions of popes
- **Pope:** the highest ranking priest of the catholic church.

Church Corruption

- The church started selling something called indulgences.
- **Indulgences:** if you sinned, you could buy an indulgence, which would forgive you of some sins and speed your entry to heaven.
- This created the view that you could buy your way into heaven.



Notes: Church Corruption

- Priests are supposed to be spiritual.
- They are not supposed to be “worldly”
 - Don’t marry
 - Don’t have children
 - Live in poverty

Notes: Church Corruption

- The Popes of the 15th and 16th centuries:
 - Lived like Kings
 - Had many illegitimate children
 - Owned land the size of a country
 - Made political deals
 - Fought wars
 - Appointed family members to church offices
 - Were often from the two wealthiest Italian families (Medici and Borgia)

