

Unit 4 - Scientific, Philosophical, and Political Developments c.1648 - c.1815
Guided Notes ANSWERS

The Scientific Revolution

Questions	Notes	Extra
<p>How did the advances in astronomy during the Scientific Revolution affect the way society viewed the world, and the role of the Church?</p>	<p>Until the Scientific Revolution Aristotle's and Ptolemy's geocentric models of the solar system was the accepted model, and promoted by the Church.</p> <p>Copernicus, Kepler and Galileo challenged the traditional view of the solar system with the heliocentric model - this hurt the reputation of the church and greatly contributed to the Protestant Reformation.</p> <p>The traditional view put humans and earth at the center of everything, the heliocentric model challenged that view - increasing skepticism in society.</p>	<p>Tycho Brahe Isaac Newton</p>
<p>How did the advances in anatomy and medicine during the Scientific Revolution influence society and its view of the Church?</p>	<p>Until the Scientific Revolution, the Greek physician, Galen's model of the human body, centering around the humoral theory was the accepted model of medicine.</p> <p>Paracelsus, and William Harvy were able to advance this view, by understanding the chemical makeup of the body as well as mapping out the circulatory system and the functioning of the heart. Their discoveries challenged the accepted views of the Catholic Church and in many</p>	<p>Renaissance Artists, like Michelangelo and da Vinci had an incredible grasp of the human form which inspired further study of human anatomy.</p> <p>Andreas Vesalius - first to dissect human bodies - despite the fact that the Church was adamantly against this. His drawings became the first to really challenge Galen and previous physicians who based their knowledge of human anatomy on the dissections of animals, most commonly</p>

	ways these new discoveries contributed to the success of the Protestant Reformation.	pigs.
Compare and contrast Bacon's Scientific Method with Descartes', what impact did these have on society at the time?	Bacon's Inductive Reasoning uses specific experiences or observations and comes up with a general belief based on it, whereas Descartes' Deductive Reasoning, starts with the hypothesis or general belief, and tries to prove it. Both were based on the understanding that the world is not random, but rather there are natural laws that explain everything that happens. These ideas challenged the Church and its belief that God controlled everything, and phenomena such as natural disasters and plagues were punishments from God. The scientific challenges to the Church contributed to the success of the Protestant Reformation and questioning of the authority of the Church.	Newton's - 3 Laws of Motion - similarly Newton's laws were a means of showing that the world is not random and that these natural occurrences could be explained through Science. Kepler's - 3 Laws of Planetary Motion.

The Enlightenment

Question	Notes	Extra
Identify and explain how and why the philosophes of the Enlightenment Challenged the authority of the Church.	Deism, Skepticism and Atheism - all of which countered the belief in organized religion, regardless of Protestant or Catholic. These ideas along with the idea of religious freedom as promoted by the likes of Voltaire and Diderot were especially damaging to the power of the Church and the power of the governments as many of the Governments after the Protestant Reformation had merged	Henry VIII - Established a Theocracy over England Louis XIV - Gallicanism - combined Religious and Political Authority of France. He also revoked the Edict of Nantes removing any semblance of religious freedom that may have existed in France.

	<p>their political and religious authorities. So not only were these men challenging the church's authority they were undermining the authority of the governments. This would ultimately contribute to revolutions such as the French Revolution.</p>	
<p>Explain what the Enlightened philosophes were responding to with their new theories on Government and Society?</p>	<p>The philosophes were criticizing the Absolute Monarchs of the 17th century - most specifically Louis XIV's rule over France.</p> <p>Locke's theories kick started the Enlightenment - and growing up in England during the Civil War and Glorious Revolution his writing reflected the ideas of natural rights and the need for a government to protect those rights. His writing inspired the French thinkers such as Voltaire and Rousseau who were living in France under an absolute monarchy.</p> <p>Not surprising that the majority of the thinkers of the Enlightenment originated from France. Ideas such as Rousseau's belief in the Social Contract and General Will were in direct contrast to the power of an absolute monarchy.</p> <p>Adam Smith's criticism of Mercantilism was also a hit at the governments who promoted this type of economy, such as France and Great Britain. His ideas of a Free Market Economy were in direct contrast to the mercantilist policies of the</p>	<p>Montesquieu - 3 Branches of Government with Checks and Balances - this was designed to prevent Absolutism</p> <p>Immanuel Kant - defined the Enlightenment in his work <i>A Critique of Pure Reason</i></p> <p>Olympe de Gouge - <i>Declaration on the Rights of Women</i> - like Wollstonecraft she challenged society's traditional roles of women.</p> <p>Jeremy Bentham - Utilitarianism</p>

	<p>British Government over the American Colonies as well as the French belief in a trade imbalance. His theories would also contribute to the undermining of the governments that would ultimately lead to Revolutions.</p> <p>Although the rights of women did not take root at this time, the works of women like Mary Wollstonecraft set the stage for feminism as they challenged the traditional role of women in society.</p>	
<p>What did these new ideas lead to? And why?</p>	<p>All of these challenges to the existing religious, political and social orders, ultimately would lead to revolutions, such as the American, French and Haitian. Their ideas were spread due to an increase in literacy rates as a result of the printing press, and the use of salons where these thinkers would gather together to share their ideas. In addition the Diderot's Encyclopedie also helped to spread the ideas of the thinkers throughout Europe. Inspiring not only Revolutions, but also the monarchies of Eastern Europe which used these ideas to avoid revolution.</p>	<p>The Royal Societies in London which hosted various lectures and talks promoting the ideas of these thinkers.</p> <p>The Academies - throughout the major cities of Europe, London, Paris, Berlin etc... These also hosted lectures and talks promoting the ideas of the Enlightenment.</p>

Enlightened Absolutism

Question	Notes	Extra
<p>Explain how the policies of the Enlightened Despots were in reaction to both Absolutism and the Enlightenment?</p>	<p>Enlightened Despots were in Eastern Europe and therefore they had the advantage of hindsight. They saw how the Enlightenment led to</p>	<p>Maria Therese of Austria - who used the Enlightenment ideas to gain favor over the Magyar nobility and thus keep them under her control.</p>

	<p>revolutions in the American Colonies, France and Haiti and their goal was to use the Enlightenment to maintain power and avoid their own revolutions. They gave enough rights so that people would be happy, but not enough that it would cost them their own power.</p> <p>Example: Frederick the Great - befriended Voltaire, and allowed things like freedom of speech, religion and the press. These policies would appease the lower classes while undermining the nobility's power and thus allowing him to maintain power.</p>	
<p>How were the Enlightened Despots short sighted in their implementation of Enlightened philosophies?</p>	<p>The Enlightened Despots only saw as far as their own reign and would benefit them, and did not really think about the long term impact of what they were doing. It was like opening a can of worms. By allowing some reforms they were giving the people a taste of freedom, something that they would want more of over time.</p> <p>Example: Catherine the Great - she implemented reforms but was halted by the Pugachev Rebellion and had to pull back on her reforms in order to maintain power.</p>	<p>Joseph II - arguably the most Enlightened of all the Eastern European monarchs, had all of his reforms reversed when he died and his brother Leopold I took over. Leopold knew that these reforms would ultimately cost the monarchy power and control.</p>
<p>How did the Enlightenment influence the religious policies of the European rulers?</p>	<p>There was more of a move in many of these states to follow Locke's belief in Separation of Church and State, as well as Voltaire's views on religious freedom.</p> <p>Examples: The Declaration of Rights of Man and Citizen</p>	<p>Frederick the Great - Prussia has always had a semblance of religious freedom, in fact it was important to Prussia because religious freedom allowed for the unification of various princedoms.</p> <p>Maria Theresa - allowed the</p>

	<p>which helped to spark the French Revolution called for religious freedom in France. Catherine the Great in Russia was also open to the idea of religious freedom and allowed for Judaism within Russia.</p>	<p>Magyars to maintain their religion so as to keep her control over them.</p>
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18th Century Society and Demographics

Question	Notes	Extra
<p>How did the Scientific and Agricultural Revolutions impact the population of Europe?</p>	<p>Increases in Population: Medical advances, such as the Smallpox Vaccine, led to lower mortality rates and a rise in the population. In addition the increased production of food as a result of the Agricultural Revolution's selective breeding policies, and more efficient farming techniques, contributed as well to the growing population</p>	
<p>How did the increase in the population and the Enlightenment influence education in Europe?</p>	<p>With an increase in the population and an increase in children there was a stronger emphasis on education. This was in part inspired by Rousseau who believed that education was important but he believed it was achieved through life experiences and encouraged a more active parental role. When Napoleon was in charge of France he implemented <i>lycees</i>, or public schools which used a standard national curriculum.</p> <p>Increase in the literacy rate as a result of the reading revolution - a direct byproduct of the works of the</p>	<p>Catherine the Great - established schools for girls in Russia</p>

	Enlightened philosophes.	
Explain how the Agricultural Revolution naturally led to Urbanization?	As the small farmers were forced off their land due to Enclosure acts and as the population grew due to the increased supply of food due to processes like selective breeding, people began to look for work elsewhere. They left their homes in the countryside to seek employment and found that the cities, which were all located on waterways, and therefore could use water power to run factories, factories that needed this onslaught of new labor.	

18th Century Culture and Arts

Question	Notes	Extra
Explain why the Western monarchs of the 17th century were so eager to censor the works of the philosophers?	<p>Many of the philosophers were questioning the ideas of organized religion and the authority of the church. Since these monarchs, specifically Louis XIV of France, were not only the heads of state but also the heads of the Catholic Church, these attacks were not just attacks on the Church but were attacks on the government, since they were essentially the same thing.</p> <p>Example - Diderot's encyclopedia which promoted Deism as well as religious freedom was sanctioned by the King of France, and actually banned.</p>	<p>Voltaire - Deism, Religious Freedom</p> <p>Catherine the Great brought Diderot's encyclopedia to Russia and housed it there in order to protect it while it was banned in France. Diderot even visited Catherine in Russia during that time.</p>
Explain how the Baroque style was used as a means of expressing power and	Baroque art, music and architecture was extremely opulent, detailed and over the	Versailles - built in the Baroque style it exudes opulence, wealth and power.

<p>strength over the people in Europe?</p>	<p>top. The style exuded wealth and power, and the Catholic Church used it to remind the people of its power. The church built incredibly ornate and over the top chapels using the works of artists like Lorenzo Bernini. Even the music that was used by the church at the time exuded power and opulence, such as the work of Bach.</p>	<p>It was a constant reminder, especially to the nobility forced to live there, that Louis XIV was in total control.</p> <p>It's important to note too, that this is post Reformation and that the Catholic Church was looking for anyway at the time, to show that it still had power, money and control. The Baroque style was a way for the Church to accomplish this.</p>
<p>How did the emergence of the middle classes in Europe change the focus of the art at the time?</p>	<p>The middle class emerged in Europe as a consumer class, and as such artists, writers and composers began to cater to these new patrons. Neoclassicism was the result of this shit, as it was the opposite of Baroque, and instead of showing opulence and power, it reflected simplicity and symmetry. Writers such as Daniel Dafoe and Jane Austen wrote novels that appealed to the rising middle classes.</p> <p>This increase in disposable income was also a cause of the Consumer Revolution and the creation of new businesses focused on leisure activities, such as coffee houses.</p>	<p>Composers as well started to make music aimed at the middle classes, for example Haydn who was one of the first to create music for the masses.</p> <p>This additional income and time also helped to spread the Enlightenment ideas, making this the breeding ground of the French Revolution.</p>