UNIT 4: SCIENTIFIC, PHILOSOPHICAL, AND POLITICAL DEVELOPMENTS

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| MAINIDEA | KEY CONCEPTS | NOTES AND VOCABULARY |
| Contextualizing the Scientific Revolution and the Enlightenment | The rediscovery of works from ancient Greece and Rome and observation of the natural world changed many Europeans’ view of the world* *New ideas in science based on observation, experimentation, and mathematics challenged classical views of the cosmos, nature, and the human body, although existing traditions of knowledge and the universe continued*
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| The spread of Scientific Revolution concepts and practices and the Enlightenment’s application of these concepts and practicesto political, social, and ethical issues led to an increased but not unchallenged emphasis on reason in European culture.* *Enlightenment thought, which focused on concepts such as empiricism, skepticism, human reason, rationalism, and classical sources of knowledge, challenged the prevailing patterns of thought with respect to social order, institutions of government, and the role of faith.*
* *New public venues and print media popularized Enlightenment ideas.*
* *New political and economic theories challenged absolutism and mercantilism.*
* *During the Enlightenment, the rational analysis of religious practices led to natural religion and the demand for religious toleration.*
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| The experiences of everyday life were shapedby demographic, environmental, medical, andtechnological changes.* By the 18th century, family and private life reflected new demographic patterns and the effects of the commercial revolution.
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| The Scientific Revolution | New ideas and methods in astronomy led individuals, including Copernicus, Galileo, and Newton, to question the authority of the ancients and traditional knowledge, and to develop a heliocentric view of the cosmos. |  |
| Anatomical and medical discoveries by physicians, including William Harvey, presented the body as an integrated system, challenging the traditional humoral theory of the body and of disease espoused by Galen |
| The Scientific Revolution  | Francis Bacon and René Descartes defined inductive and deductive reasoning and promoted experimentation and the use of mathematics, which would ultimately shape the scientific method. |  |
| Alchemy and astrology continued to appeal to elites and some natural philosophers, in part because they shared with the new science the notion of a predictable and knowable universe. At the same time, many people continued to believe that the cosmos was governed by spiritual forces. |
| The Enlightenment | Intellectuals, including Voltaire and Diderot, began to apply the principles of the Scientific Revolution to society and human institutions. |  |
| Locke and Rousseau developed new political models based on the concept of natural rights and the social contract. |
| Despite the principles of equality espoused by the Enlightenment and the French Revolution, intellectuals such as Rousseau offered controversial arguments for the exclusion of women from political life. |
| A variety of institutions, including salons, explored and disseminated Enlightenment culture. |
| Political theories, including John Locke’s, conceived of society as composed of individuals driven by self-interest and argued that the state originated in the consent of the governed (i.e., a social contract) rather than in divine right or tradition. |
| Mercantilist theory and practice were challenged by new economic ideas, including Adam Smith’s, which espoused free trade and a free market. |
| Enlightenment thought, which focused on concepts such as empiricism, skepticism, human reason, rationalism, and classical sources of knowledge, challenged the prevailing patterns of thought with respect to social order, institutions of government, and the role of faith. |
| The Enlightenment | Intellectuals, including Voltaire and Diderot, developed new philosophies of deism, skepticism, and atheism. |  |
| Religion was viewed increasingly as a matter of private rather than public concern |
| Review | Explain the context in which the Scientific Revolution and Enlightenment developed in Europe.Explain how understanding of the natural world developed and changed during the Scientific Revolution and EnlightenmentExplain the causes and consequences of Enlightenment thought on European society from 1648 to 1815.Explain the influence of Enlightenment thought on European intellectual development from 1648 to 1815. |
| 18th-Century Society and Demographics | In the 17th century, small landholdings, low-productivity agricultural practices, poor transportation, and adverse weather limited and disrupted the food supply, causing periodic famines. By the 18th century, the balance between population and the food supply stabilized, resulting in steady population growth. |  |
| By the middle of the 18th century, higher agricultural productivity and improved transportation increased the food supply, allowing populations to grow and reducing the number of demographic crises (a process known as the Agricultural Revolution). |
| In the 18th century, plague disappeared as a major epidemic disease, and inoculation reduced smallpox mortality. |
| 18th-Century Society and Demographics | Although the rate of illegitimate births increased in the 18th century, population growth was limited by the European marriage pattern, and in some areas by various birth control methods. |  |
| As infant and child mortality decreased, and commercial wealth increased, families dedicated more space and resources to children and child-rearing, as well as private life and comfort. |
| Cities offered economic opportunities, which attracted increasing migration from rural areas, transforming urban life and creating challenges for the new urbanites and their families.* *The Agricultural Revolution produced more food using fewer workers; as a result, people migrated from rural areas to the cities in search of work.*
* *The growth of cities eroded traditional communal values, and city governments strained to provide protection and a healthy environment.*
* *The concentration of the poor in cities led to a greater awareness of poverty, crime, and prostitution as social problems, and prompted increased efforts to police marginal groups*
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| 18th-Century Culture and Arts | Despite censorship, increasingly numerous and varied printed materials served a growing literate public and led to the development of public opinion. |  |
| Natural sciences, literature, and popular culture increasingly exposed Europeans to representations of peoples outside Europe and, on occasion, challenges to accepted social norms |
| The arts moved from the celebration of religious themes and royal power to an emphasis on private life and the public good.* *Until about 1750, Baroque art and music promoted religious feeling and was employed by monarchs to illustrate state power.*
* *18th-century art and literature increasingly reflected the outlook and values of commercial and bourgeois society. Neoclassicism expressed new Enlightenment ideals of citizenship and political participation.*
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| The consumer revolution of the 18th century was shaped by a new concern for privacy, encouraged the purchase of new goods for homes, and created new venues for leisure activities. |
| Review | Explain the factors contributing to and the consequences of demographic changes from 1648 to 1815. Explain how European cultural and intellectual life was maintained and changed throughout the period from 1648 to 1815. |
| Enlightened and Other Approaches to Power  | In the 18th century, a number of states in eastern and central Europe experimented with enlightened absolutism. |  |
| By 1800, most governments in western and central Europe had extended toleration to Christian minorities and, in some states, civil equality to Jews. |
| As a result of the Holy Roman Empire’s limitation of sovereignty in the Peace of Westphalia, Prussia rose to power, and the Habsburgs, centered in Austria, shifted their empire eastward. |
| Review | Explain how different forms of political power were influenced by Enlightenment thought from 1648 to 1815.Explain how and why political and religious developments challenged or reinforced the idea of a unified Europe from 1648 to 1815. |