Industrial Revolution Study Guide

KEY ACADEMIC VOCABULARY SUPPORTING CONCEPTUAL DEVELOPMENT

* Innovation – the introduction of something new (e.g., idea, method or device)
* Transportation – means of conveyance or travel from one place to another
* Communication – an act or instance of transmitting a verbal or written message
* Region – a geographic area distinguished by similar features
* Industrialization – the overall change in circumstances accompanying a society’s movement of population and resources from farm production to manufacturing production and associated services
* Urbanization – the process by which towns and cities are formed and become larger as more people begin living and working in central areas

8.1A

identify the major eras and events in U.S. history through 1877, including ~~colonization, revolution, drafting of the Declaration of Independence, creation and ratification of the Constitution, religious revivals such as the Second Great Awakening, early republic, the Age of Jackson, westward expansion,~~ reform movements, sectionalism~~, Civil War, and Reconstruction,~~ and describe their causes and effects

Readiness Standard

* Industrialization
	+ Factory System
	+ Population shift to cities
	+ Inventions
	+ Expansion of Slavery
	+ Slave Rebellions
	+ Reform Movements
	+ Immigration

8.5D

explain the ~~causes, important events, and~~ effects of the War of 1812

Supporting Standard

* Effects
	+ The United States gained a measure of international respect for managing to withstand the British attack
	+ Improved the professionalism of the U.S. Army
	+ On manufacturing capabilities of the United States: the British blockade of the American coast created a shortage of cotton cloth (previously American cotton was shipped to Britain where it was turned into cloth, then sent back to America) in the United States, leading to the creation of a cotton-manufacturing industry, numerous manufacturing establishments were founded (particularly in the Northern region)- left the United States industrially independent of Europe

8.11B describe the positive and negative consequences of human modification of the physical environment of the United States

Supporting Standard

|  |  |  |
| --- | --- | --- |
| **Modification** | **Positive** | **Negative** |
| Railroads | Increased communication and trade between the East and the West | Air pollution, destruction of natural environment |
| Urbanization | More jobs were available in cities | pollution |

8.12A identify economic differences among different regions of the United States

Supporting Standard

* Industrialization
	+ North – manufacturing and industry
	+ South – agriculture (supplied North with raw materials)

8.12B explain reasons for the development of the plantation system, the transatlantic slave trade, and the spread of slavery

Readiness Standard

* Industrialization
	+ The invention of the cotton gin made the cotton-cleaning process more efficient and quicker thus the need arose for a larger work force (drastic rise in the number of slaves in the South)

8.12C explain the reasons for the increase in factories and urbanization

Supporting Standard

* Increase In Factories – Industrial Revolution
	+ Result of major changes in agriculture, manufacturing, mining, transportation and technology
	+ Steam-power capabilities increased production
	+ WAR OF 1812 – Manufacturing Capability increased (the British blockade of the American coast created a shortage of cotton cloth (previously American cotton was shipped to Britain where it was turned into cloth, then sent back to America) in the United States, leading to the creation of a cotton-manufacturing industry, numerous manufacturing establishments were founded (particularly in the Northern region)- left the United States industrially independent of Europe)
* Increase In Urbanization
	+ Industrialization had produced substantial growth in cities, and 35 percent of Americans lived in urban areas, mostly in the northern half of the United States
	+ The increased number of jobs, along with technological innovations in transportation and housing construction, encouraged migration to cities.

8.12D analyze the causes and effects of economic differences among different regions of the United States at selected times in U.S. history.

Readiness Standard

* Industrialization
	+ North
		- Cause – industrialization led to new jobs in cities
		- Effect – urbanization and growth of cities
	+ South
		- Cause – warm climate and fertile soil
		- Effect – plantation system; slave system sustained cash crop economy

8.13A analyze the War of 1812 as a cause of economic changes in the nation

Supporting Standard

* As a result of the interruption of trade during the War of 1812, Americans had to rely on U.S. manufactured goods in place of those they had previously imported. U.S. manufacturing grew.

8.13B identify the economic factors that brought about rapid industrialization and urbanization.

Readiness Standard

* Plentiful natural resources
* Improved transportation
* Growing population
* New inventions
* Investment capital

8.14A explain why a free enterprise system of economics developed in the new nation, including minimal government intrusion, taxation, and property rights

Supporting Standard

* Free enterprise was preferable to the former mercantilist system the colonies were under
* Americans’ focus on their rights included the right to choose trade partners, prices and products

8.14B describe the characteristics and the benefits of the U.S. free enterprise system during the 18th and 19th centuries.

Supporting Standard

Characteristics

* Four questions governing economic activity
	+ What to produce?
	+ How to produce it?
	+ How many to produce?
	+ For whom to produce?
* Four components of free enterprise and economic freedom
	+ Private property
	+ Voluntary exchange
	+ Profit motive
	+ Supply and demand
* Laissez-faire – the belief that the government should not interfere in the economy other than to protect private property rights and to maintain peace
* Entrepreneurship – people who risk their capital in organizing and running a business
* The U.S. Constitution guaranteed economic rights of freedom to own, compete, and select an occupation

Benefits

* Specialization
* Foreign investment saw opportunity for profit and growth
* U.S. Constitution could protect the rights of workers and owners
* A diverse economy that met the needs of the United States when it was needed
* Less dependent on foreign markets
* Industrial Revolutions in the 19th Century

8.27A explain the effects of technological and scientific innovations such as the steamboat, the cotton gin, and interchangeable parts

Readiness Standard

* Steamboat – Increased factory production and led to the growth of cities like New Orleans and St. Louis because it could move goods and people faster up and down rivers.
* The cotton gin – Made the cotton-cleaning process more efficient. It enabled cotton farmers to move farther west to grow cotton, grow more cotton, drive Native Americans off their land, and create a larger work force (drastic rise in the number of slaves in the South).
* Interchangeable parts – parts for devices were made to be nearly identical so that they could fit into any device of the same type, this allows easy assembly of new devices and efficient repair of existing devices, (e.g., guns – before the 18th century they were made by gunsmiths and each gun was unique, if a single component needed a replacement the entire weapon had to be sent back to the gunsmith for custom repairs, interchangeable parts drastically increased productivity and efficiency of production and repair)
* Bessemer steel process – the first inexpensive industrial process for the mass-production of steel. It decreased the cost which allowed increase in steel production and work force.
* Mechanical Reaper – increased farm productivity

8.27B analyze the impact of transportation and communication systems on the growth, development, and urbanization of the United States

Readiness Standard

* Transportation allows people and goods to move to urban areas in large numbers where there are markets, business opportunities, and jobs.
	+ Transportation
		- Steamboats – prior to the invention of the steamboat, river travel depended on river currents, wind and manpower; steam-powered boats changed river travel and transportation of goods because of the increased efficiency of travel/transport of goods.
		- Canals – man-made waterways used for travel and/or shipping (The Erie Canal (1825) proved to be the key that unlocked an enormous series of social and economic changes in the young nation. The Canal spurred the first great westward movement of American settlers, gave access to the rich land and resources west of the Appalachians and helped make New York the preeminent commercial city in the United States).
		- Railroads – the invention of the steam engine led to modern railroads and trains; railroad construction boomed in the mid-19th century; by the 1890s, the United States was becoming an urban nation, and railroads supplied cities and towns with food, fuel, building materials, and access to markets; the Transcontinental Railroad (completed in 1869) created a nation-wide transportation network that united the Nation; railroads allowed for the transportation of larger quantities of goods over longer distances.
* Communication
	+ Telegraph – transmitted electric signals over wires from location to a location that translated it into a message; many telegraph lines followed railroads; enhanced communication abilities, particularly after 1860 (during the increased settlement of the west)

8.27C analyze how technological innovations changed the way goods were manufactured and marketed, nationally and internationally

Supporting Standard

* Ways goods were manufactured – faster, in large number, and standardized
* Marketed – transportation and communication improved, which allowed goods to move faster and over farther distances

8.27D explain how technological innovations brought about economic growth such as how the factory system contributed to rapid industrialization and the Transcontinental Railroad led to the opening of the west.

Supporting Standard

* Factory system
	+ Products could be produced faster and cheaper
	+ Hire low-waged workers
* Transcontinental Railroad
	+ Connected the Eastern coast with the Western Coast (California); previously investors saw the West as worthless sage brush, insurmountable mountains and a few scattered settlers, now it was open to economic expansion and settlement; immigrants used the railroad to migrate west and to form new immigrant settlements in western states and territories

8.28A compare the effects of scientific discoveries and technological innovations that have influenced daily life in different periods in U.S. history

Supporting Standard

* Encouraged the hiring of low-skilled workers and expanded slavery

8.28B identify examples of how industrialization changed life in the United States.

Supporting Standard

* Faster process and allows slavery to expand
	+ Cyrus McCormack's reaper (1834) – cut ripe grain faster
	+ Cotton Gin – cotton cleaning process more efficient