




Name _____ Date _____ Class _____

The Industrial Revolution

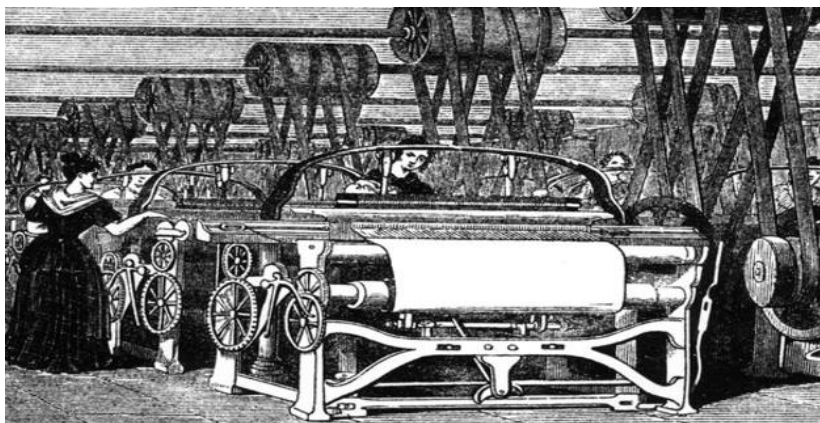
Part 1: Significant Terms: Instructions: Write at least one complete sentence describing the historical significance of each term in reference to the Industrial Revolution.

1. Jethro Tull:
2. John Kay:
3. Water Frame:
4. Andrew Carnegie:
5. Richard Trevithick:
6. <i>The Wealth of Nations</i> :
7. Communism:
8. John D. Rockefeller:

Part 2: Open Response: Instructions: Write at least one paragraph each to answer the questions below.

<p>1. Who was Florence Kelley? What impact did she have on the society of the USA? What social ills did she address?</p>	 <p>Florence Kelley</p>
	<p>2. How could one argue monopolies were good for society? How could one argue monopolies had a negative impact on society?</p>
<p>3. Compare and contrast the views of Adam Smith and Karl Marx. How are they similar? How are they different?</p>	

The Industrial Revolution



Prior to the industrial revolution, most people had handmade items. Yet, after the Revolution, machines made these items, such as the textile machines above that made materials for clothes.

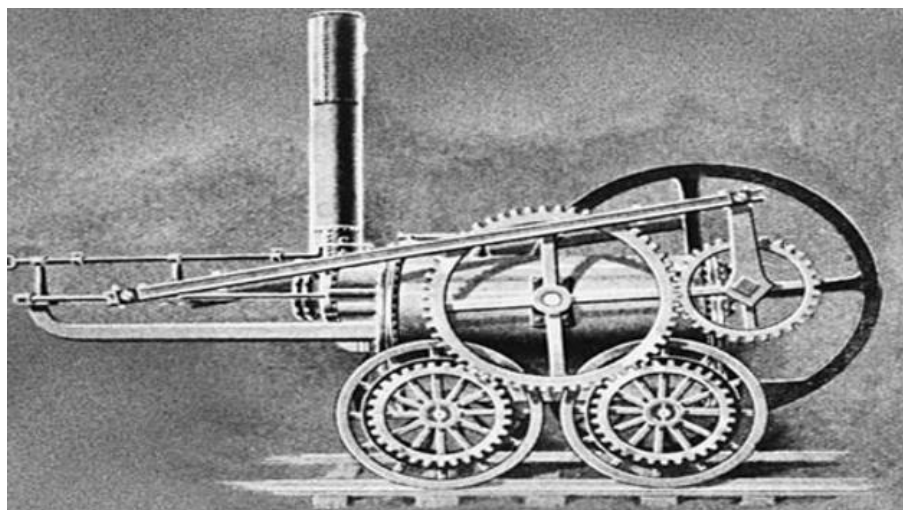
soil rest and halted it from becoming exhausted. These tactics also led to landowners pursuing inventions to produce efficient crop yields on their land. For instance, Jethro Tull (1674-1741) invented the horse-drawn seed drill. This invention made sure seed was not wasted and had a better chance to be planted and produce a crop.

Britain was an ideal setting for the start of industrialization. It was an island nation, which helped the British to avoid the physical devastation spawning from various European conflicts and remain stable inside its borders. The island of Britain had abundant natural resources, such as coal, iron, rivers, wood, and the like. Also, as landowners continued with enclosure, many citizens abandoned farming and flocked to cities looking for work. Equipped with labor, resources, and stability, Britain started building factories.

John Kay (1704-1779) invented the Flying Shuttle, a device that made spooling thread and yarn mechanized. A similar, but much faster invention, the Spinning Jenny, was created by James Hargreaves (1720-1778) afterward. Looking for an alternative to manmade power, Richard Arkwright (1732-1792) invented the Water Frame to harness the power of rivers to spin thread. Now, factories could use the power of rivers for their machines. Samuel Crompton (1753-1827) combined the technologies of the Spinning Jenny and the Water Frame to create the Spinning Mule, a weaver that used rivers for power, but his machines were much larger than the Water Frames of Arkwright. Britain used cotton for its various textile factories. Much of this cotton came from the Americas. By the late 1800s, America was now its own nation, no longer 13 Colonies. Despite their independence, the USA traded greatly with Britain and used cotton in their Northern Factories as well. Tragically, African slaves were used in the South to harvest this cotton. Eli Whitney (1765-1825), an American inventor, developed the Cotton Gin. Prior to this, slaves had to handpick seeds from cotton. Now, the machine did it. Ironically, this drastically increased slavery in the USA. Cotton production radically increased. Slaves were still used to harvest and gather cotton used in factories.

Thomas Newcomen (1664-1729) invented the first steam engine. The invention pumped water out of coal mines. Robert Fulton (1765-1815) created a new way to use the steam engine. Fulton used it to power boats. Richard Trevithick (1771-1833) used the steam engine to push locomotives. Trevithick proved his invention worked in a demonstration in 1804. This led to the invention of trains. Many entrepreneurs, business leaders who pursued commerce endeavors for profit, invested in the new railroads and train companies. Iron mines increased, since iron was used for tracks. Coal mines also grew, since the locomotives needed coal for fuel.

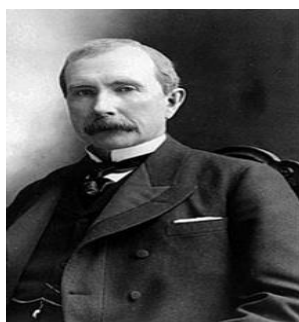
The new railroad industry began transporting goods and people at speeds never witnessed before in history. This encouraged a huge migration of people living in rural areas to move into cities seeking jobs in the new factories, a process called urbanization. City life brought pros and cons. In terms of pros, cities helped increased mass produced goods, allowed people to earn more money, and increased technology. In terms of cons, child labor was used in factories, people worked grueling hours, and many factories were unsafe to work in.



In 1804, Richard Trevithick proved steam powered trains were possible with a demonstration of his locomotive.

The growth in cities increased more rapidly than the government's ability to manage the needs of citizens. Policing, fire protection, living space, and other aspects of governance faced many perils in the attempt to accommodate the needs of citizens. Sanitation was another problem. Without proper sewers and the like, diseases spread quickly in cities. Tension began to develop between wealthy factory owners and their workers. Many workers were discontent with their economic plight. The factory owners were rich, while most factory workers earned meager salaries and worked around six days a week 12 hours a day.

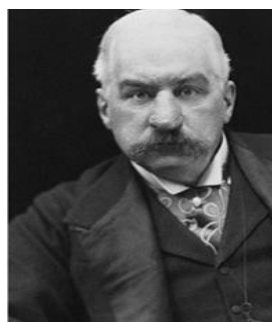
As industrialization moved forward, corporations formed. In corporations, there are many owners. Each owner has a share of the company, called stock. By pooling their money together, the stockholders could make larger investments. By the late 1800s, incredibly wealthy individuals rose up and developed corporations. For instance, in the USA, John D. Rockefeller (1839-1937) developed the Standard Oil Corporation. Likewise, Andrew Carnegie (1835-1919) developed the Carnegie Steel Corporation and JP Morgan (1837-1913) ran the General Electric Corporation. Rockefeller, Carnegie, and Morgan each developed monopolies in the industries they invested in. This meant they dominated the market of their product to such a degree that they had eliminated almost all competition. Many argued monopolies should be allowed, since these companies earned



John D.
Rockefeller



Andrew Carnegie



J.P. Morgan

In the late 1800s, in the USA, monopoly leaders created colossal industries in oil, steel, electricity, and in other industries.

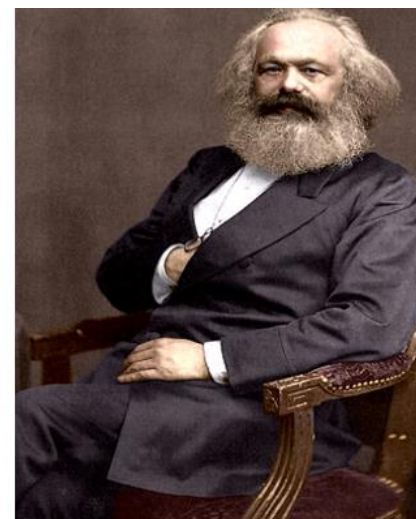
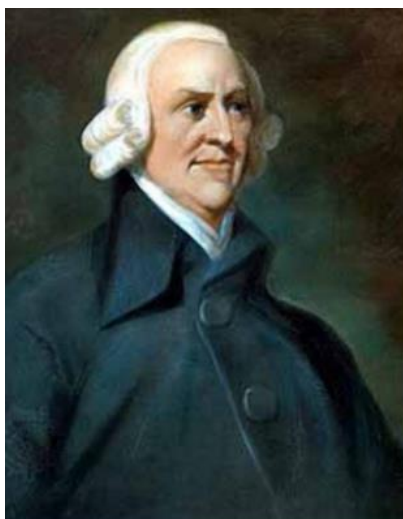
their top spot position. Others declared monopolies hurt most people, since, without competition, these businesses could charge outrageous, high prices for their products.

In the 1800s, philosophers and others began to consider the impact of industrialization and provide support and criticism for the system. In *The Wealth of Nations*, a Scottish philosopher, Adam Smith (1723-1790), defended capitalism, the system where privately owned businesses seek a profit for goods and

services. Smith asserted competition was good for society because it forced companies to improve products over time to gain business and increase technological advancement. Smith argued the government should have little to no intervention toward factories and that this would create a system that improved the economy

overtime. He also wanted little to no taxes on businesses. This hands off approach was called a “laissez faire” policy. His ideas helped develop and then grow the Industrial Revolution.

Not everyone shared Smith’s optimism toward capitalism and industrialization. Karl Marx (1818-1883) argued capitalism and industrialization created an atmosphere where a small minority were very wealthy, factory owners, and most barely made a living, factory workers. Marx argued this was because ownership was privatized. He claimed the private owners mistreated their workers. He outlined his vision in his work *The Communist Manifesto*. Marx argued the government should take over property rights and distribute resources to all people equally, regardless of the difficulty of their job, to eradicate poverty. Marx’s theory was called Communism. Those who supported private property rights and Britain’s representative government argued that, when citizens choose leaders and own property, it gives them power in society. Communism, which is a form of government and a form of economics, called for a strong central government that claimed to allocate resources equally, thus claiming to end the problem of poverty, a major aspect present in the capitalistic, industrial society of Britain. Capitalists argued Communism would not work. With the incentive to work gone, people would not pursue complex jobs and lose rights. Communism was just a theory until 1917, when Russia became the first government to try the system.



Adam Smith, to the left, saw Capitalism as a positive structure that would advance society. Karl Marx, to the right, critiqued Capitalism and wanted to see a Communist Revolution restructure the allocation of resources in society.

During the late 1800s, many fought to help women gain fair treatment in factories and remove child labor.

Florence Kelley (1859-1932) was a leader in movements like this and tirelessly struggled to defend women and children.



While Karl Marx’s vision of the common people rising up and ushering in Communism never happened in Britain, common workers did pursue other measures. While factory owners had strength in their money, factory workers had strength in numbers. Often, they would go on strike, which is where they refused to work and occupied factory property, to demand higher wages or better conditions as a group. These groups were called unions. This created a balance of power where, collectively, workers could make demands as a team. Many unions denied they were Communist. Rather, they asserted they wanted fair pay and conditions,




not that they were trying to overthrow Capitalism. More extreme participants in these movements did claim to be Communists. In the 1800s and 1900s, many argued women and children were mistreated in factories. Women often earned less salary and others argued it was immoral to force children to work in dangerous factories, when they should have been growing up and being educated. Many rose up to create change in these areas. The British Parliament passed the Factory Act of 1833. This made it illegal to hire children under nine and limited the hours children over nine could work. In the USA, Florence Kelley (1859-1932) fought to ban child labor and create safeguards for women in Illinois. This helped spur on such advocacy across the USA. Movements like these created social awareness and led many nations to ban child labor and pursue reforms to protect women and ensure they made adequate wages.

Answers:**The Industrial Revolution**

Part 1: Significant Terms: Instructions: Write at least one complete sentence describing the historical significance of each term in reference to the Industrial Revolution.

1. Jethro Tull: He invented the horse-drawn seed drill.
2. John Kay: He invented the Flying Shuttle, a device that made spooling thread and yarn mechanized.
3. Water Frame: This device could harness the power of rivers to spin thread.
4. Andrew Carnegie: He developed a monopoly in the steel industry.
5. Richard Trevithick: He used the steam engine to push locomotives.
6. <i>The Wealth of Nations</i> : Adam Smith wrote this book about his view on Capitalism.
7. Communism: Karl Marx wrote this book to offer an economic system contrasted to Capitalism, Communism.
8. John D. Rockefeller: He developed a monopoly in the oil industry.

Part 2: Open Response: Instructions: Write at least one paragraph each to answer the questions below.

<p>1. Who was Florence Kelley? What impact did she have on the society of the USA? What social ills did she address?</p> <p><i>In the USA, Florence Kelley fought to ban child labor and create safeguards for women in Illinois. This helped spur on such advocacy across the USA. Movements like these created social awareness and led many nations to ban child labor and pursue reforms to protect women and ensure they made adequate wages. She worked tirelessly in these efforts to protect those who were mistreated in the industrial society.</i></p>	 <p>Florence Kelley</p>
 <p>2. How could one argue monopolies were good for society? How could one argue monopolies had a negative impact on society?</p> <p><i>One could argue monopolies are good because, if you made it to the top, you deserved to stay there. You worked hard to take over a market and being a monopoly is the reward. This could spur on capitalistic endeavors in society as people seek to control a market. Yet, others could argue this would be bad for others. Competition would be eliminated and this could damage innovation. If competition was lost, consumers would also pay high prices.</i></p>	
<p>3. Compare and contrast the views of Adam Smith and Karl Marx. How are they similar? How are they different?</p> <p><i>Adam Smith and Karl Marx were similar in that they both studied economics. They both recognized the capitalistic structure emerging through trade and factory use. Yet, Smith had a positive view of capitalism. He felt it would improve society. Marx argued capitalism only benefited those at the top of the structure while most suffered. He wanted to see a break from capitalism in which the products and services were shared by all in society equally, a system called Communism.</i></p>	

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