

Jones Magnet Middle School USII.4

Industry and Urban Growth: A New Industrial Revolution

Why it Matters~	When did the United States experience its second, and most important industrial revolution? during the late 1800s Industrialization ~ a period of technological growth that
	impacts on all people within a society.
Why Industry Boomed~	As American expanded westward, huge deposits of <u>iron, coal, tin</u> and other materials were available to factories.
	Lumber was taken in large quantities from the Pacific Northwest. The government gave large subsidies to railroads and businesses.
	The government kept up hightarriffs to protect US businesses.
	Tarriffs made imported goods more expensive and US goods cheaper.
Steel and Oil~	In 1850, Henry Bessemer develops
	a way to produce inexpensive, high quality steel
	This became known as the Bessemer Process>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
	Steel replaces iron as the best building material.
	Pittsburgh becomes the steel making capital of the US because of
	nearby <u>iron/coal</u> mines and a great <u>railroad</u> system.
	Meanwhile, in the 1850s, Edwin discovers oil in Titusville, PA
	Oil becomes the most important liquid to industrialization, also known as Black Gold .
	Back then, gasoline was thrown out because no one had a use for itLOL.



Trains carried finished factory goods and settlers

to the West.

Trains carried

raw materials, crops, beef

Some railroads used unfair methods to destroy other smaller railroads.

This created some of the first monopolies .

Inventors and

After the Civil War, American ingenuity seemed to be reborn.

Inventions~

A huge number of patents were issued.

Define Patent~legal protection for a person's invention. Now, no one can copy your inventions without permission

American became known as the land of invention

Edison's Invention In 1876, Thomas Edison created a research lab in

Factory~

Menlo Park, NJ

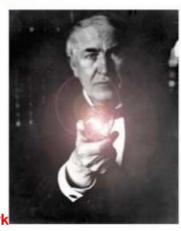
Edison's inventions include lightbulb, record player and motion picture camera

Edison's inventions were useless without

electricity

So, Edison created the first power plant in New York City.

Some of the benefits of lighting and electricity include: factories operate longer, safer machines, more time off from work



Communications

During the 1800s, the telegraph was the primary form of communication.

Revolution~

The telegraph used a system of dots and dashes known as the

Morse Code transmitted down telegraph wires.



Alexander Graham Bell patented the first Telephone

His first "call" was to his assistant, Mr. Watson

Bell's telephone became one of the most important inventions of the last centrury.

<<<<Bell and his phone

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Devices for	In 1868, Christopher Sholes invents the typewriter .
Home and Office~	George Eastman invents a cheap, lightweight camera which allows everyone to record their lives on photos.
Transportation	European engineers were the first to develop the gas powered
Revolution~	automobile . This was invented by Karl Friedrich Benz, a
	German.
Henry Ford~	However, an American made cars affordable to everyone. He was Henry
	Ford's secret was mass poduction
	Ford perfected the assembly line in which Model T
	the automobile being built came to the worker on moving belt. Worker specialization
	allowed each Ford worker to become very fast and good at his job.
	Ford cars were also built with <u>interchangable parts</u> which lowerd costs.
	Ford also doubled employee wages. Now his own workers could buy aFord car Now, that's smart.
	Because of the automobile, <u>roads</u> allowed people to travel and <u>live</u> outside the cities in <u>suburbs</u> .
Wright Bros~	In 1903, Wilbur and Orville Wright make the first gas-powered airplane into the air over Kitty Hawk, North Carolina.
	Strangly, the first flight did not attract much attention from the world. No one could imagine what an aircraft might be used forLOL.
	The first military use of the aircraft was during World War One .
-1	By the 1920s and mail delivery.