Reading: Henry Ford and the Assembly Line

The 1800s were a turbulent time for the people of the United States as the country rapidly industrialized and quickly went from an agrarian society of farmers to a mechanized powerhouse of factory workers. New machines were invented almost every day that made life easier and caused production to increase at an incredible rate. One of the most important ideas of the Industrial Revolution wasn't even a new invention it was a new way of organizing industrial machines called the **assembly line** and it was created by Henry Ford.

HENRY FORD	0
	3)

Henry Ford was a powerful industrialist who used his skills as an organizer to make his factories much more efficient than the competition.
Judging from this image, what did Ford's factories make for consumers?

1.	What was the Assembly Line and who invented it?

Henry Ford was born into a middle-class farming family in Michigan in 1863 but he was never very interested in farm work. In 1891 he left home and moved to the city of Detroit to work in the factories. Ford was displaying the same attitude as many young Americans that led to urbanization in the late 1800s. While in Detroit Ford met legendary inventor Thomas Edison who was impressed with Ford's mechanical skills organized investors to support Ford's designs for new cars. Ford was a meticulous (very careful) designer but the methods of car design and construction were limited at the time and the models that he built were too expensive for him to sell large numbers of.

The first cars that Ford designed and built had to be put together piece by piece which was a lengthy and expensive process. Would you want to drive a car that looked like this? Why or why not?	



2.	What was wrong with the cars that Ford built when he first started out?

Ford worked hard for eight long years to design a new, cheap, reliable car that could be produced quickly and repaired easily. On October 8th, 1908 Ford **introduced the Model T motorcar** which began selling rapidly. The Model T was inexpensive (only \$880), easy to drive, easy to repair and available in large numbers. By 1913 the Model T was so popular that the Ford Assembly Plant couldn't build enough of them fast enough to meet the demand from the American public. Ford went from a struggling inventor to a successful industrialist almost overnight.



The Model T was the first car to have the engine encased under a hood and
the drivers and passengers protected by a roof and windows. That doesn't
sound like a big deal today but it was revolutionary in 1913.

Judging from this image, what was the only color that the Model T was

available in?		

3.	What did Ford do on October 8 th , 1908 and how did it affect his company?

In order to keep up with demand Ford needed a way to produce more Model T cars quickly, efficiently and cheaply without hiring more workers. Ford had heard about the assembly line technique that other factories had designed to assemble complex machines one part at a time but even *that* wasn't fast enough for Ford. That is why in 1913 **Henry Ford invented and introduced the mechanical assembly line**. Instead of having workers move the cars to each spot on the assembly line to add new parts, Ford designed a moving belt that would lift and deliver the unfinished car to each station where the next part could be added. By having the car come to them to be assembled, Ford allowed each worker to focus solely (only) on their one job so they could do it quickly and correctly every time.

The moving assembly line allowed cars to be made much faster which made it possible to produce thousands of them per day.
What happens to the price of a consumer product that has a very high supply?



4.	What did Henry Ford do in 1913 to meet consumer demand for the Model T and how did it work?

The introduction of the Model T and the mechanical assembly line had two major effects on the Industrial Revolution. The first and most obvious was that **the price of cars plummeted** (declined sharply) very quickly. The mechanical assembly line allowed Ford to complete thousands more cars per day than he had with the standing assembly line and as the supply increased, Ford was able to sell each car for hundreds of dollars less than other car factories. Between 1913 and 1918 Ford maintained an almost stranglehold monopoly on the development and production of cars because no one wanted to buy from anyone else thanks to Ford's unbeatable prices. Ford even became the official truck supplier for the United States Army during the First World War which made him even richer.

Ford THE UNIVERSAL CAR
Buy It Because It's a Better Car
Get particulars from Ford Motor Co. of Canada, Ltd., Ford, Ost.

Once the Model T was in mass production, Ford took out advertisements in every major newspaper, magazine, pamphlet, and article in the country to tell as many Americans about his product as possible.
What did Ford say about his product and what do you think was the real reason that so many people bought it?

5.	What was the first and most obvious effect of the mechanical assembly line?

The second effect that Ford's actions had was the **incredibly widespread availability and use of the automobile** all throughout the entire country. Before the Model T was introduced most people got around by riding on trams and trains but Ford replaced almost all mass transportation with cars in a very short period of time. The car went from an expensive curiosity that only rich people could afford to an everyday tool that everyone in the country used to get from place to place. It was truly revolutionary.

Manhattan and Chicago went from being filled with trams and horse-drawn carriages to traffic jams of cars.
How do you think people responded when the car replaced the vehicles that they were used to for so long? Why?

After the introduction of the Model T the streets of cities like



6.	What was the second effect that Ford's actions had on the United States?