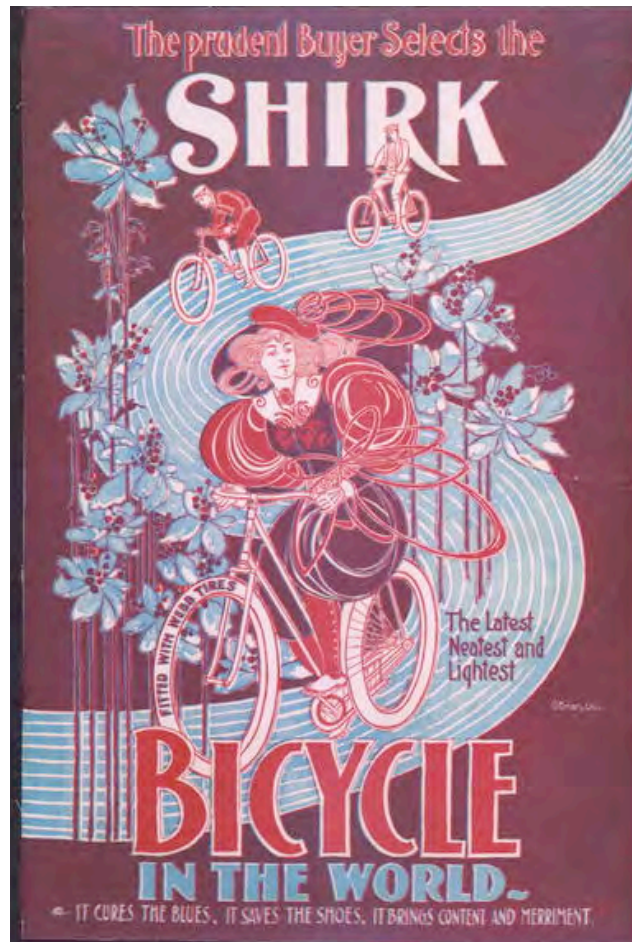


Inventions and mechanization changed people's lives during the late 1800s and early 1900s. Changes were felt in all industries, especially manufacturing, and agriculture. For individuals, there were more opportunities for work and leisure.

Advertisement for Shirk Bicycles, 1890s



Ottman, Chic. *The Prudent Buyer Selects the Shirk, the Latest, Neatest, and Lightest Bicycle in the World.* 1890s. Prints and Photographs Division, Library of Congress. Web.

In this activity, you will take on the role of someone whose life has changed due to inventions and mechanization. You will select one of the following people and write a journal entry describing some of the effects of inventions and mechanization on your life at work or outside of work:

- a man or woman working in a factory that has been affected by inventions or mechanization
- a man or woman farmer whose life has been affected by inventions or mechanization

I. Analyzing Changes Related to Inventions and Mechanization

1. Review the advertisement related to the bicycle. Take three minutes to complete a stop-and-jot activity, writing a few quick ideas about how this invention may have affected Americans during this time. Think about the following questions:
 - What is unusual about a woman riding a bicycle in the ad?
 - How did this invention offer new opportunities for workers?
 - What does this ad tell you about the lives of people who bought bicycles?

Divide into small groups and discuss your responses to each question with group members.

2. People across the country were affected in many different ways by inventions and mechanization. Study the selected research materials to learn more about how different groups were affected by the changes. As you watch and read, use the chart below the resources to collect ideas for your journal entry.

Research Materials:

“The Assembly Line” from *How We Invented the World: Cars*

This video segment provides background on how the assembly line changed manufacturing practices and workers' lives.

Young Women Working at Westinghouse Company, 1904



Works of the Westinghouse Electric & Manufacturing Company. American Memory. The Westinghouse World: The Companies, the People, and the Places. 1904. Library of Congress. Web.

Excerpt from *Life in Wilmerding, "The Air Brake City,"* 1904

"Wilmerding, the Ideal Town," would not be a misleading title for the little industrial center of 5,000 inhabitants fourteen miles from Pittsburg[h] on the Pennsylvania railroad.

No other town in Allegheny County can show such a beautiful park or such broad acres of closely cropped lawn. . . that helps so materially to give the town its ideal appearance. From the lawn rises the beautiful and artistic building occupied by the Wilmerding Y.M.C.A. and the general offices of the Westinghouse Air Brake companyThe effect is like that of a college town . . .

Nor is this picture altogether visionary, for there is actually a college flavor imparted to the life of the town . . . electricians, engineers, clerks, surveyors, heads of departments and mechanics are found in the ranks of this organization . . . Many of the members are college graduates, coming from such standard schools as the Massachusetts Institute of Technology, Cornell University, Yale, Harvard or University of Chicago. The features described, however, do not constitute the sole basis for the superiority of Wilmerding as an attractive residence quarter and as a town in general. The streets are excellently paved and kept as clean as can be and the business buildings erected of late bear the stamp of beauty as well as being perfectly adapted to their uses. The residence streets, particularly Marguerite Avenue, are beautiful with well kept shade trees and lawns and are lined with handsome, substantial houses. There are many artistic front yards in Wilmerding, thanks to the broad minded policy of the Westinghouse interests in offering annual prizes for the best examples of this kind. . . . The company beautifies it and does all the work of landscape gardening and keeping it in order, the borough paying the bills. . . .

Wilmerding is a strong hold of socialism, not militant socialism, such as is sometimes linked with anarchy and violence, but the peaceful, sane variety. . . . The party is second strongest in Wilmerding, being exceeded in this respect by the Republicans. . . . According to Adams there are now about one hundred Socialists.

There is universal complaint among the Wilmerding business men as to the industrial conditions prevailing there. Of the 4,000 men employed by the air brake company in normal seasons, only one-half find work at present, as the force has been cut down owing to reduced orders for air brakes from the railroads of the country. The town has this misfortune, that it depends almost exclusively on the big works, three-quarters of its breadwinners finding employment there, so that naturally when business is slack there is slack in the town, also. The laying off of men, together with the reduction in wages and the increased price of living, has produced this unsatisfactory state of affairs.

There are a number of . . . locations in Wilmerding to rent, whereas two years ago room could scarcely be had for love or money. Such periods, however, have occurred ever since the town was laid out, in 1889.

Works of the Westinghouse Electric & Manufacturing Company, 1904. American Memory. The Westinghouse World: The Companies, the People, and the Places. Library of Congress. Web.

Increase in Personal Income 1900–1920



*Dollar amounts are not adjusted for inflation.

Historical Statistics of the United States: Colonial Times to 1970, Part 1. U.S. Bureau of the Census. 1975. p. 224. Web.

James Ranch, Showing the Superintendent's Home and Horse-drawn Farm Machinery in Front of House, Kern County, California, c. 1890



Watkins, Carleton E., photographer. *James Ranch, Showing the Superintendent's Home and Horse-drawn Farm Machinery in Front of House, Kern County, California*. Between 1890 and 1900. Prints and Photographs Division, Library of Congress. Web.

Excerpt from "Prices in 1880 Compared with 1890. Prices of Farm Implements, Hardware, Clothing, etc., in the West in 1880 and 1890."

This article compares prices and income for farmers and others in 1880 and 1890.

It is beyond dispute that the development of the age has accomplished a large reduction in all manufactured articles. Now, unless there has been a corresponding reduction in the products of the farm and in the wages of the mechanic and the laborer, we have established our claim that never in the history of the human race would a day's labor buy so many comforts as to-day. . .

We submit to the candid farmer whether, with his bountiful yield of last year, and his implements, barb wire, and supplies of all kinds reduced as above, he is not in better relations with the world now than in April, 1880, with prices on produce as above and his supplies at the old figure.

And now what about the mechanic and laboring man? Is it not a fact, undisputed, that labor of every kind is as well paid now as in 1880? As a rule in the cities labor is constantly fighting for a betterment of its condition and constantly gaining either an increase in wages or shorter hours. American workingmen were never more alert to their interests than they are to-day, and their movement for less hours of labor and better pay never has commanded the interest and the sympathy that it commands to-day. They were never so intelligent as they are to-day, and that means both that they deserve more and that they know how to get more. The workingman is winning on both sides of the question, more hours to himself and better wages on one side and cheaper living on the other side. It is doubly false, then, to assert that the development of the age is not benefiting the workingman.

"Prices in 1880 Compared with 1890. Prices of Farm Implements, Hardware, Clothing, etc., in the West in 1880 and 1890." From the *Fort Dodge (Iowa) Messenger*, April 10, 1890. Philadelphia. Published by the American Iron and Steel Association. 1890. *An American Time Capsule: Three Centuries of Broadsides and Other Printed Ephemera*. Library of Congress. Web.

Improved Farm Machinery

Evolution of Sickle and Flail – 33 Horse Team Harvester, Cutting, Threshing, and Sacking Wheat, Walla Walla, Washington, 1902



Evolution of Sickle and Flail—33 Horse Team Harvester, Cutting, Threshing and Sacking Wheat—Walla Walla, Washington. Copyright 1902 by Underwood & Underwood.

Underwood and Underwood. *Evolution of Sickle and Flail - 33 Horse Team Harvester, Cutting, Threshing and Sacking Wheat, Walla Walla, Washington.* 1902. Prints and Photographs Division, Library of Congress. Web.

Video of Armour's Electric Trolley in Chicago Stockyards, 1897, by Thomas A. Edison



Edison, Thomas A. *Armour's Electric Trolley*. 1897. Library of Congress. Web.

Office with Women and Typewriters, c. 1910



Office with Women and Typewriters. Between 1910 and 1920. Prints and Photographs Division, Library of Congress. Web.

Bicycle Shop, Possibly Detroit, Michigan, c. 1910



Detroit Publishing Co., publisher. *Bicycle Shop, Possibly Detroit, Michigan*. 1900. Prints and Photographs Division, Library of Congress. Web.

Orville Wright and Edwin H. Sines, a Neighbor and Boyhood Friend, Filing Frames in the Back of the Wright Bicycle Shop, 1897



Wright, Wilbur, and Orville, Wright. *Orville Wright and Edwin H. Sines, Neighbor and Boyhood Friend, Filing Frames in the Back of the Wright Bicycle Shop. 1897.* Prints and Photographs Division, Library of Congress. Web.

What perspective are you taking and what is your character's background? Include a geographical location for your character.

What inventions or areas of mechanization have affected your perspective?

How have these changes affected your perspective? Include details on work, living conditions, health, and income.

From this perspective, do you see the effects of these changes as positive, negative, or a mixture of the two? Explain.

3. Share your journal entry with a partner. After sharing your work, complete a Quick Write activity in which you answer the following questions:
 - What were some major changes caused by inventions and mechanization in the early 1900s?
 - Do you think the effects of these changes were positive, negative, or a mixture of the two?