## The Industrial Revolution & Russia

 The Industrial Revolution was born in the United Kingdom – the very heart of the British Empire (the top political and commercial institution in the world) – and spread rapidly throughout the world (especially the United States).



- Remember that most Canadian cities in Upper Canada (and west) were born during the Industrial Revolution this includes Waterdown (settled in 1805, established in 1830).
- The most important changes brought with the Industrial Revolution were:
  - The invention of machines to do the work of hands and hand tools.
  - The use of steam, and later kinds of power, in place of muscles of human beings and animals (example: Mills powered by water in places like Waterdown's Smokey Hollow).
  - The adoption of the factory system.
- The "beginning" of the Industrial Revolution is said to be the invention of John Kay's "Flying Shuttle" (an innovation in spinning yarn out of wool) in 1733.
  - The increase in demand due to the flying shuttle exceeded the capacity of the spinning industry of the day, and prompted development of powered spinning machines which could produce strong, fine thread in quantities needed. These innovations transformed the textile industry in Great Britain.
- By 1750 large quantities of gods were being exchanged among the European nations, and there was an increased demand for more goods than were being produced.
- At the same time, land enclosures across Great Britain were forcing landless people off of their estates and into cities –creating a pool of available workers.
  - This created the conditions for massive social and political change. Farm labourers and artisans were transformed by industrial centres into workers.
  - Cities grew rabidly, as the percentage of the rural population declined.

Fun fact: Sanitation was so bad at the beginning of the Industrial Revolution that European cities only started growing from their own birthrates (and not people moving to them) in the 1900s!

• The change from domestic work to the factory system meant a loss of independence to the worker.



Benefits of working as a home/farm/artisanal worker:

What happens when you enter the factory system:



Time?

Children?

- The Industrial Revolution created a new "class" called the middle class (factory owners, merchants and professionals such as doctors and lawyers). In England, this middle class demanded to be heard in government, challenging its traditional control by the British landed aristocracy.
- The labourers soon began to see the hopelessness of their situations, uniting together into "unions" against the factory owners to demand better wages, working conditions and reasonable hours. These same workers began reading the writings of Karl Marx and Friedrich Engels.

The Industrial Revolution and the Russian Empire<sup>1</sup>:

- Russian Industrialization took place during the Reign of Czar Alexander II (1855-1881) and differed from Western European Industrialization. In the West, the motivation for development was largely entrepreneurial, while in Russia the political and military classes were its driving forces. The chief architect of the Russian Industrial Revolution was Count Sergi Witte, minister of finance from 1892-1903.
  - Railway development was a huge part of Russian Industrialization, including the construction of the Trans-Siberian Railway (which opened up the east for large-scale settlement).
  - For a decade the "Witte System" played a crucial role in the industrialization of Russia, but peasant rebellions and strikes by industrial workers indicated that large segments of the population were unwilling to tolerate the low standard of living the Witte's policies entailed.
  - Recently freed serfs did not appreciate factory work, which forced them to follow new routines and adapt to rhythms of industrial machinery.
  - Industrial wealth began to create an urban working class, which endured conditions similar to those experienced by workers in other societies during the early stages of industrialization. Example: Employers kept wages at the barest minimum. The government tried to help in 1897 by lowering the maximum amount hours worked in a day to 11.5, but it did little.
  - Trade Unions and strikes were outlawed by the government (they still continued to occur).
  - Economic exploitation and the lack of political freedoms made workers increasingly receptive to revolutionary propaganda, and underground movements soon developed among them.

<sup>&</sup>lt;sup>1</sup> Taken from Jerry H. Berry and Herb F. Ziegler, *Traditions and Encounters: A Global Perspective on the Past*, (Toronto: McGraw-Hill, 2006), 889-890.

 Groups such as the St. Petersburg League of Struggle for the Emancipation of the Working Class (1895) were formed across the empire whose members were reading works by the likes of Karl Marx and Friedrich Engels, including the *Communist Manifesto* (1848).



St. Petersburg League of Struggle for the Emancipation of the Working Class