

Agenda – 3/11

- Turn in your revolutions notes if you didn't last week (for full credit)
 - Turn in your revolutions Venn diagram comparison if you did not on Friday
 - Today: the Industrial Revolution
-
- HW: keep reading, taking notes, and working on your research paper! **Half of Wednesday and all day Thursday will be work days.**
 - **DUE: RESEARCH PAPER, TURNITIN.COM, FRIDAY, 8:20AM. Bring a hardcopy to class.**

THE URBAN GAME

A LESSON ON THE
INDUSTRIAL REVOLUTION

DIRECTIONS

- Concentrate on listening to the story.
- Work as a group with each instruction to complete the task in the minutes given.
- **You will be evaluated on your poster** and a short reflection at the end.
 - Appearance matters. You and your partner should try to have the same colored pen.
 - Make sure you include everything I ask you to include!

It is 1700 in England.

- Draw a river across your paper connecting east to west. The river should be about an inch wide. Draw:
- a wooden bridge across the river
- 2 roads originating from each direction
- 10 single-family homes
- a church
- a cemetery
- a pasture area
- a store
- a pub
- and a lot of trees



By 1745, you begin to see some small changes.

- Add **2 more single-family homes**
- Add a **blacksmith's shop**
- A new piece of technology comes to your town! Add a water-powered gristmill for grinding grain
- Add a **canal**
 - You realize that your life would be better and you could profit more if you constructed a canal that helped you transport your grain
- Build yourself **one nice home** anywhere on the map



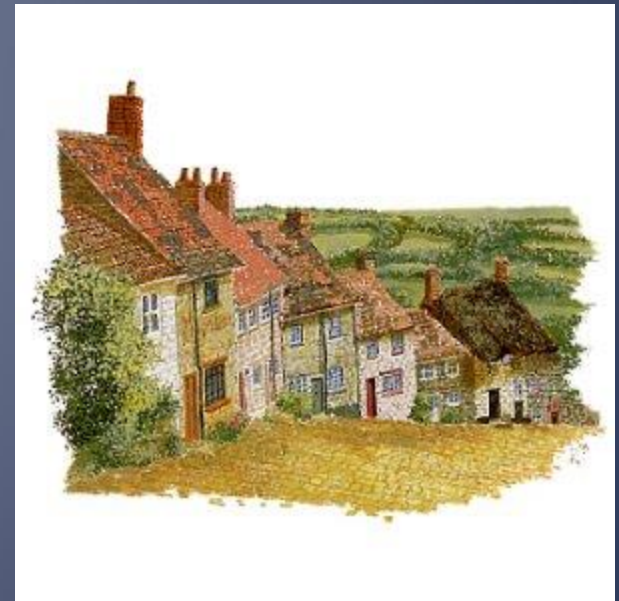
You discover coal in your town! I wonder if this will become important...

- Get a neighbor to make a dot somewhere on the outer corners of your paper.
 - This is your **coalmine!**



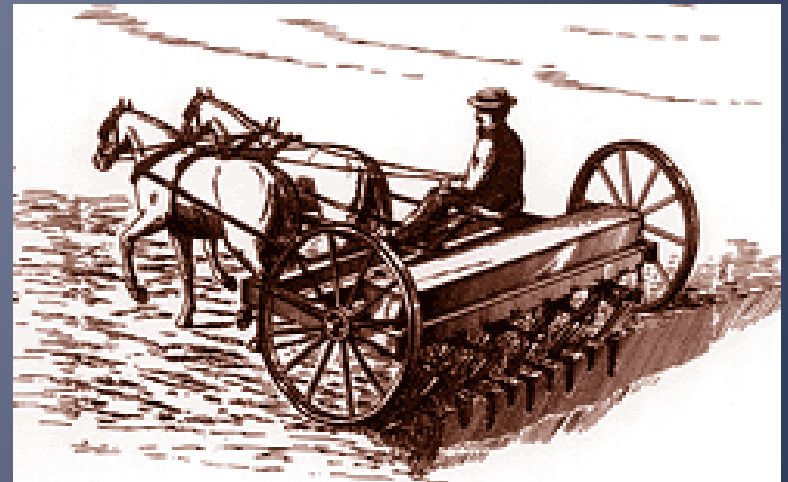
By 1750, the population begins to grow a bit.

- People are discovering ways to make life better! This includes better diets and sanitation practices
- **Add 7 houses** to your scene



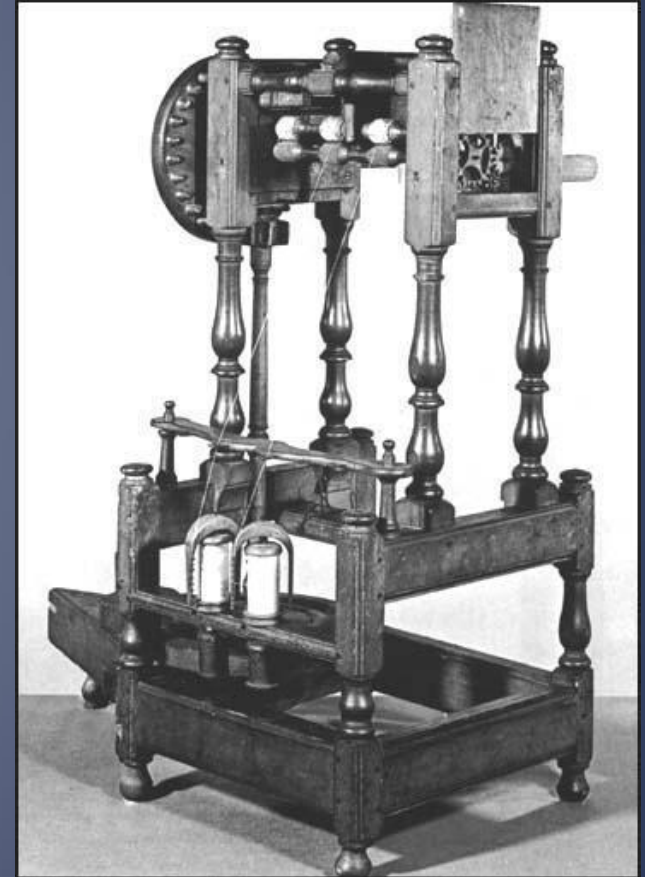
By 1760, needs are different.

- Your town's farmland is fertile. With improvements in farming technology, like new fertilizers and livestock breeding techniques, people start to move to your town.
- **Add 5 more houses.**



In 1773, the town changes drastically. No turning back.

- Richard Arkwright invents a new machine that can spin and weave cloth hundreds of times faster than what could be done by hand. It's water-powered.
- Add **1 factory**. The textile factory must be located on the river bank.
- Add **5 houses** for workers.



The factory is changing our town. By 1774, we are growing. This is progress!

- The enclosure acts have forced people away from their rural farms and into a larger town. Your town is becoming a city!
- Add **5 houses, 1 church, 1 pub, and 1 store**. You may draw additional roads and 1 bridge.



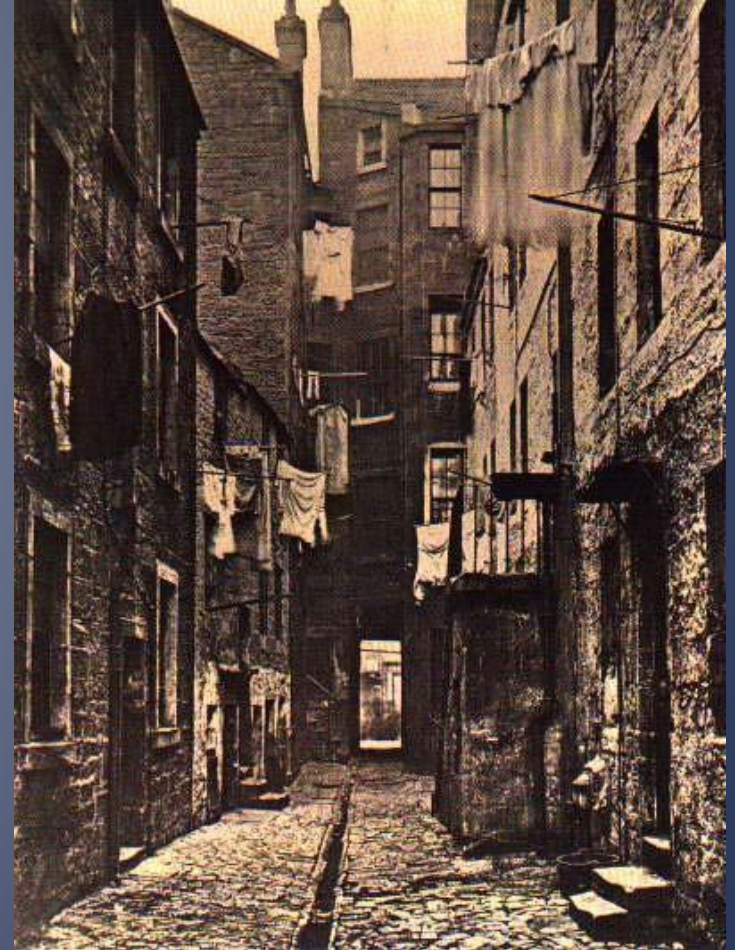
It's 1779. Progress is good, right?

- The profits from that textile factory are enormous.
- New factories are built in order to keep making money.
- **Add 5 new factories.**
- **Add 5 houses for workers.**



By 1780, with all of the new factories, the demand for labor has grown our population.

- Even though wages are low, they are attractive to otherwise starving families. Housing is in great demand, and people come up with a new type of housing called a tenement, where dozens of families live together in close quarters.
- **Add 5 tenements.**



By 1781, the new population requires more...

- Most workers work six days a week, and rest on Sundays.
- Add 1 store, 1 pub, and 1 church.
- While much of the population works in the factories for low wages, there is a small middle class and an elite upper class of owners. They need the schooling for their boys.
- Add 1 school for boys.

By 1782, many of the workers in the factories need something to help them forget the hard work they do in the factories.

- Add 2 more pubs.

By the next year, 1783, other wealthy investors come to town.

- While life is unpleasant for the workers, life is luxurious for the factory owners. Huge houses are built and filled with expensive art.
- Add **2 large, special, luxury homes.**



By 1785, the new owners begin bringing more progress for our town.

- James Watt invents the steam engine. This allows factories to be built away from the river.
- Add **10 more factories**, this time with smoke.
- Add **1 huge house** for another wealthy investor.



As the century turns in 1800, we are definitely seeing the costs of progress. We need to find more energy and update our town to support the factories.

- Henry Cort invents a process that makes it possible for coal to be used as the primary fuel in the new iron industry. Luckily, coal is abundant in England!
- Add **2 new coal mines** and a **new iron bridge** to replace the old wooden bridge.

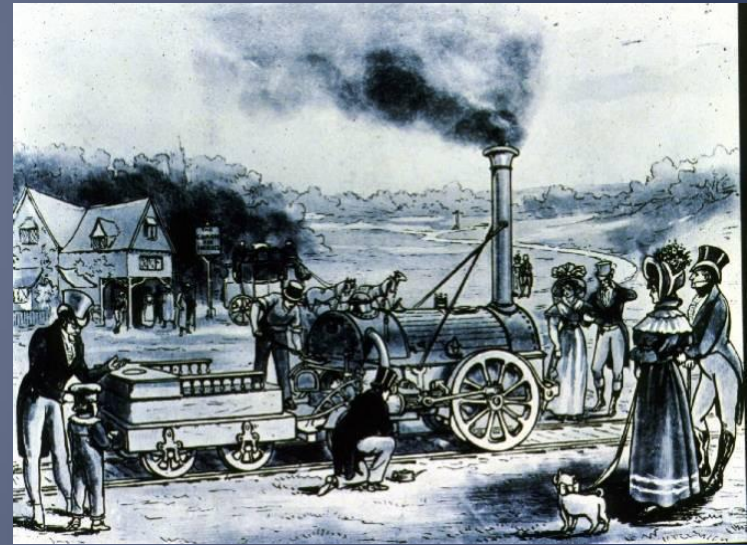
This progress is really taking its toll... By 1815, the town is no longer as excited about the factories coming to town.

- Working conditions are especially disastrous. Black lung, explosions, and accidents are commonplace. Children are malnourished and their growth becomes stunted.
- Add **1 cemetery**.



Maybe a new development will make it all worth it. By 1820, a new form of transportation is coming to town.

- The existing dirt roads and canals cannot accommodate all of the heavy industrial traffic. Plus, you need to more easily ship your goods across the country.
- Add **1 railroad line** connecting your factory district to the outer coal mining regions.



Unfortunately, only the wealthy will benefit from the new transportation. The rest just work and sleep. Some get frustrated by the situation. By 1827, our little town has definitely changed.

- Add 1 jail and 2 pubs.

Still, progress doesn't stop.
By 1837, we have to find
ways to keep the town up at
night to get the work done.

- Draw **street lights** (fueled by gas, a by-product of the coal industry), lining your business and community streets.



The work is never ending. By 1838, with the changes in the factories for more production, it is getting more dangerous to go to work.

- Many of the injured and killed are the children working in the factories.
- Add **2 hospitals and 1 cemetery.**



For the factory owners, life is good. They are making money and need more ways to transport their goods. By 1840, another addition comes to town.

- Add one more railroad line.

By 1842, our little town is growing into a full city.

- The middle and upper classes of our town are demanding social opportunities. They - not just the factory owners, but now the merchants and shop owners - are able to spend money on new cultural advancements.
- Add **1 museum, 1 university, 2 theaters, 2 more private schools.**

The population to work in the factories is ever growing. By 1850, there is great demand for more housing and for businesses to support the population changes. Of course, new investors will come as well.

- Add 20 houses, 5 tenements, 2 stores, 1 church, 5 factories, 1 pub, and 1 other huge, nice house.

For the working class, by 1850, life only gets worse. There are no regulations on the factories. The pollution is fogging our city. Workers are being killed or injured every day. The women and children are no longer innocent and protected. Times have definitely changed...

- Add 3 more cemeteries, 1 jail, 3 more hospitals - all to accommodate the poor victims of urban life.





Reflection Questions (back side)

- What **social, economic,** and **environmental** changes occurred as England industrialized?
- Denver is experiencing rapid urbanization. What are some similarities that you experienced in the game that you see presently in Denver? What is different?

THE INDUSTRIAL REVOLUTION

Causes, effects, and long-term impacts

What was the Industrial Revolution?

- New manufacturing process that used **machines** (rather than humans)
- Revolutionized mass production
 - Started with textiles
- Increased production, lowered costs of goods, led to new technologies
- Warm up: answer the following question in the top box of your notes sheet
- ***To what extent was Industrial Revolution positive for the world?***

New Changes

- Recap: what was the economy based on before the Industrial Rev?
- How would the Industrial Rev change that?

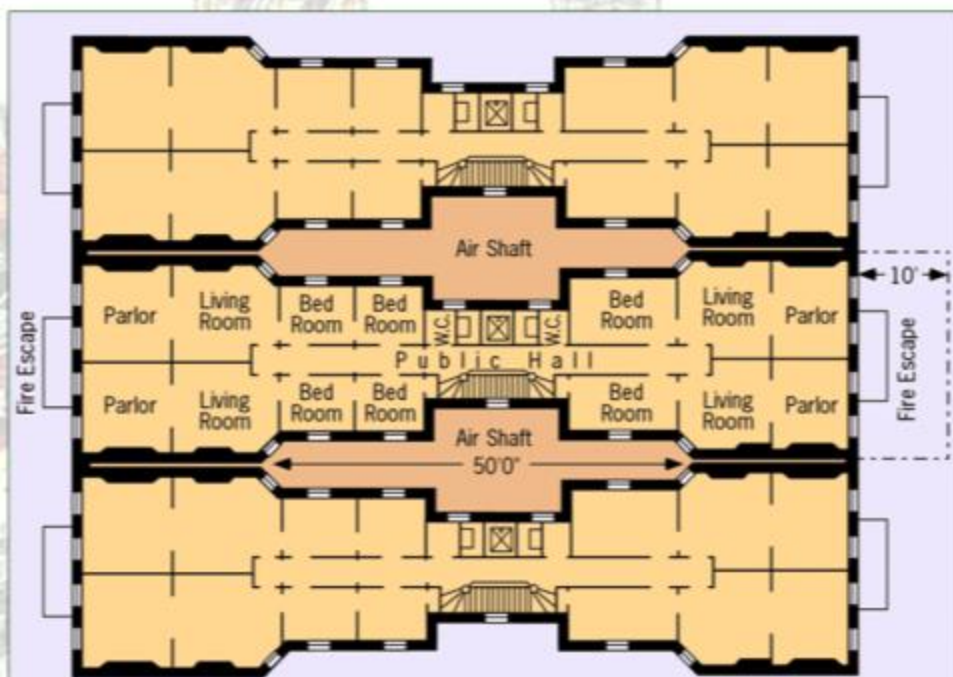


SHORT-TERM EFFECTS

Things got really bad really quickly

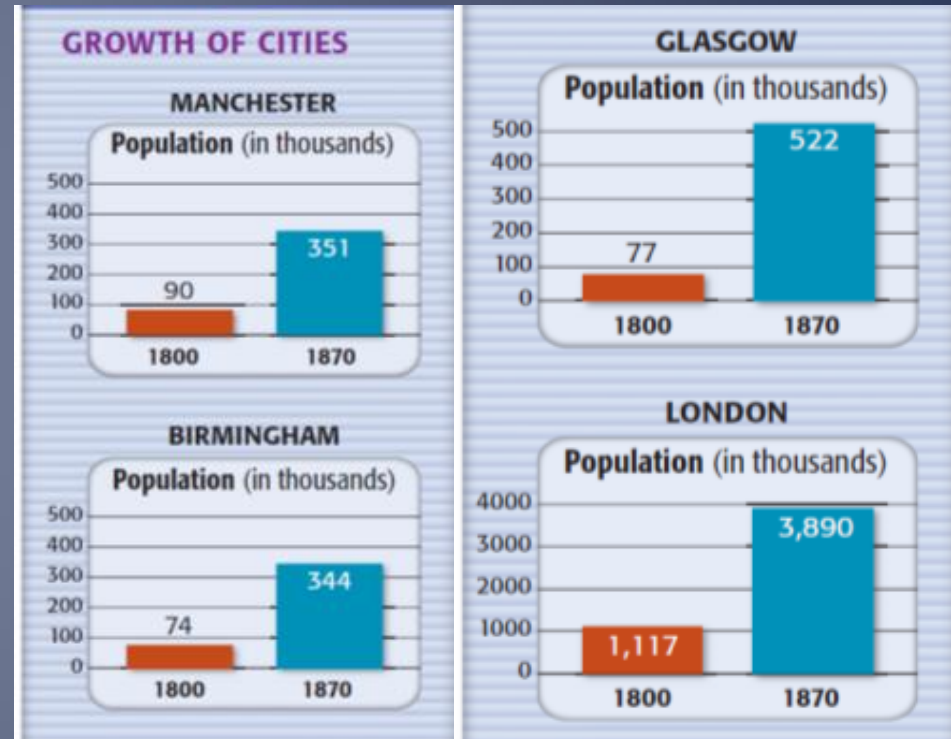


"Dumbbell" Tenement

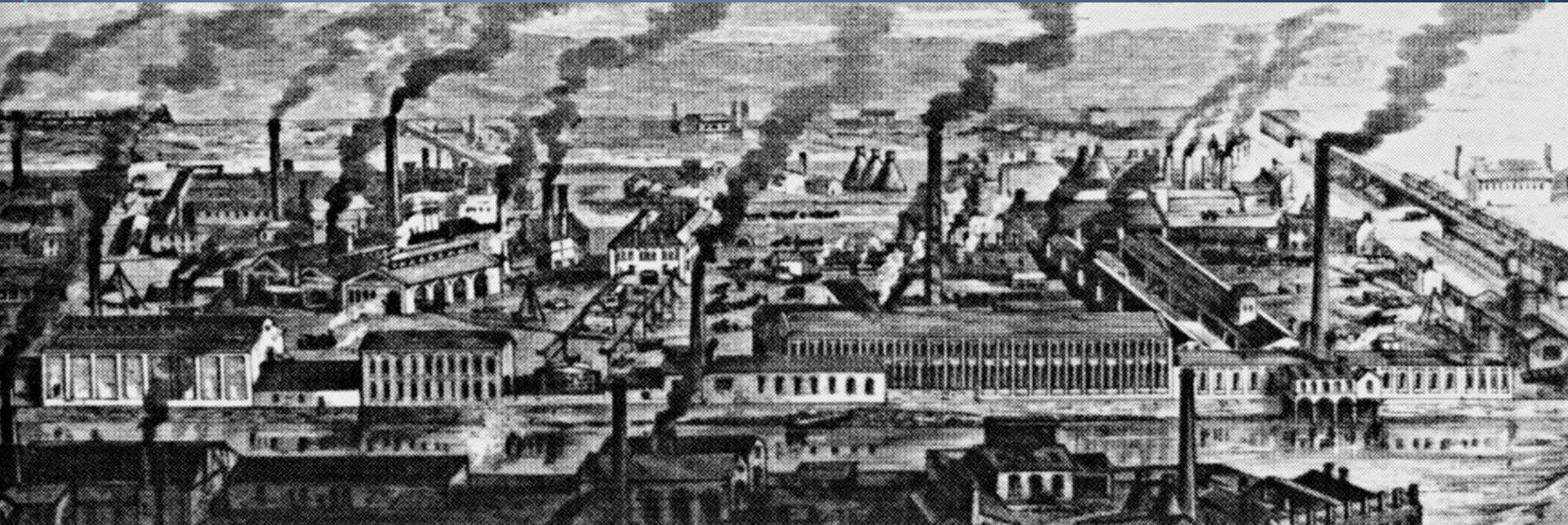


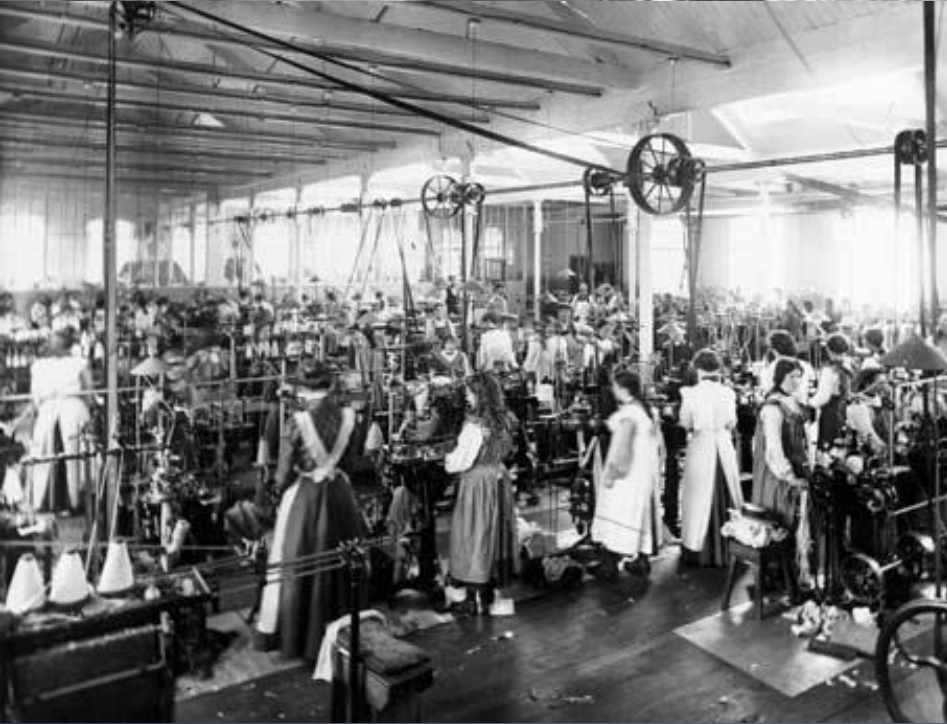
Urbanization

- Movement to cities for jobs → **overcrowding**
- **Tenement** homes
- Slums
 - No sanitation, limited running water, electricity, disease rampant
- Short life expectancies



Urbanization





Working Conditions

- Factory system
 - Less skilled
 - Conditions were dirty, dangerous, and unhealthy
 - → pollution
 - Long hours (12-16 hrs)
 - Not paid well (women and children less than men for same work)



The Day of a Child Laborer, William Cooper

William Cooper began working in a textile factory at the age of ten. He had a sister who worked upstairs in the same factory. In 1832, Cooper was called to testify before a parliamentary committee about the conditions among child laborers in the textile industry. The following sketch of his day is based upon his testimony.



5 A.M. The workday began. Cooper and his sister rose as early as 4:00 or 4:30 in order to get to the factory by 5:00. Children usually ate their breakfast on the run.



12 NOON The children were given a 40-minute break for lunch. This was the only break they received all day.



3 P.M. The children often became drowsy during the afternoon or evening hours. In order to keep them awake, adult overseers sometimes whipped the children.



6 P.M. There was no break allowed for an evening meal. Children again ate on the run.



9 P.M. William Cooper's day ended after an exhausting 16-hour shift at work.



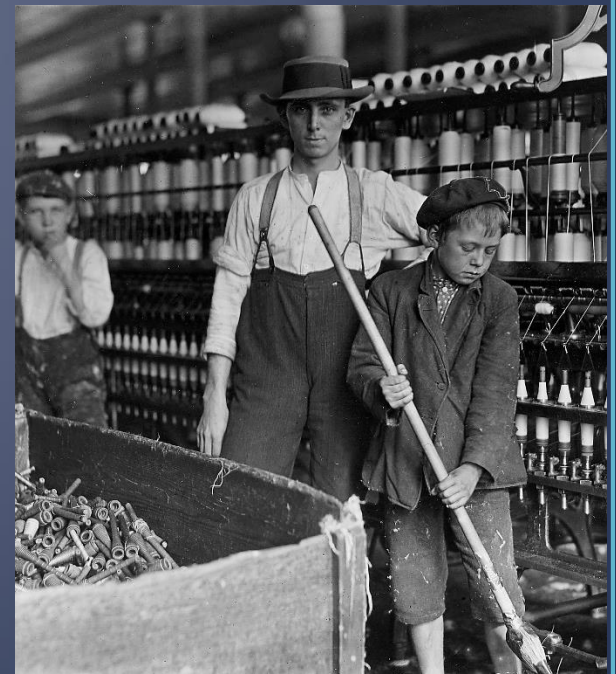
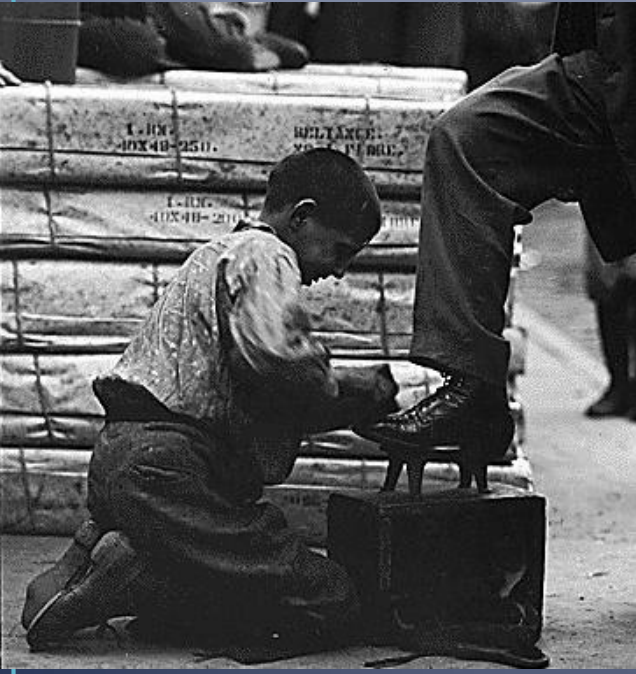
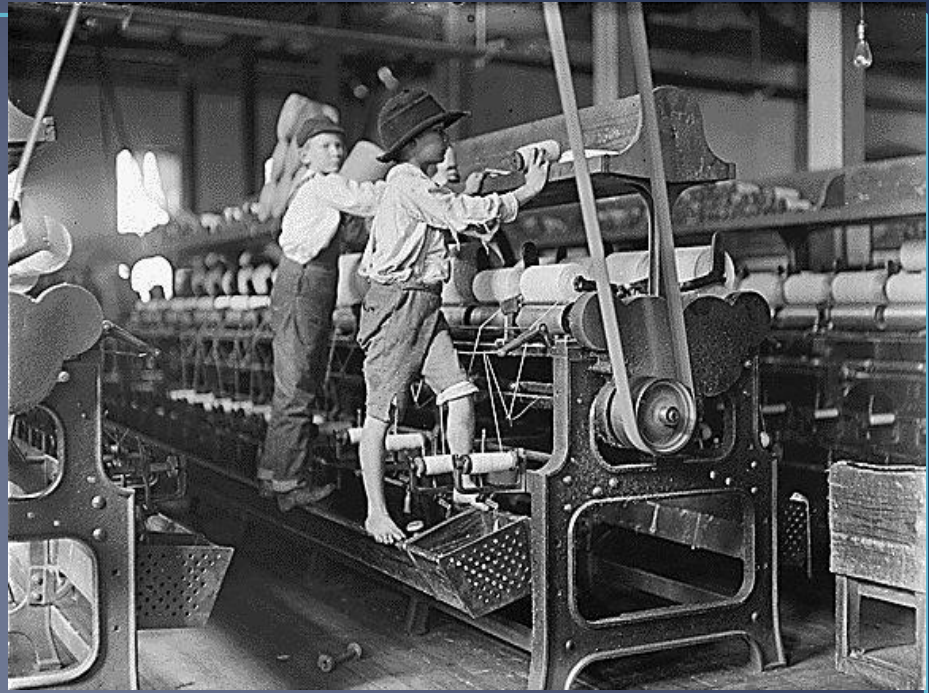
11 P.M. Cooper's sister worked another two hours even though she had to be back at work at 5:00 the next morning.



Child Labor

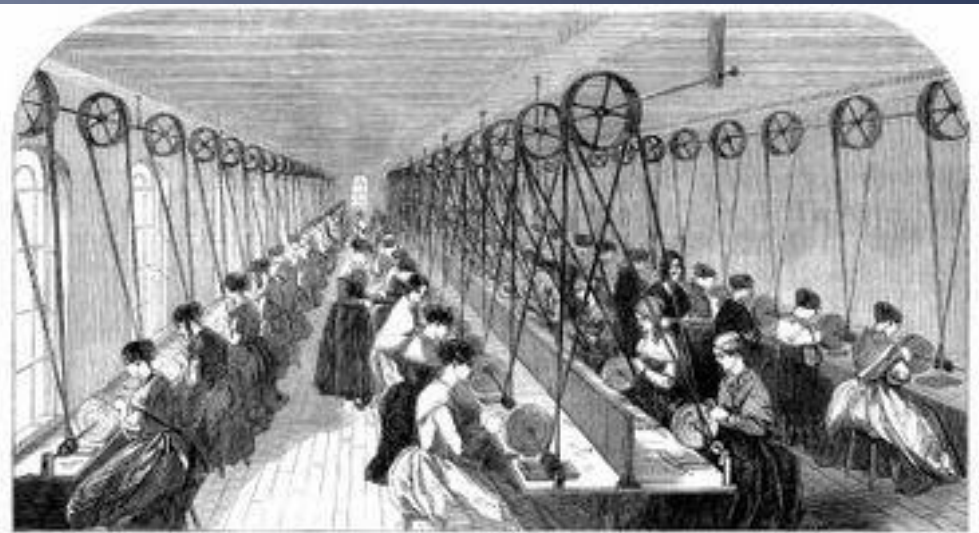
- Earned 10% of an adult male's wage
- Those late for work were severely punished
- They were hit with straps to work faster
- Some children were dipped head first into a water cistern if they became drowsy
- Talking to other children was forbidden
- Accidents were commonplace
 - A visitor to Manchester commented that he had seen so many people in the streets without arms and legs that it was like "living in the midst of the army just returned from a campaign."





Women in the Workforce

- Factory jobs to support their family
- Paid half or a third of an adult male's salary





*Ann Fairhurst, Ince Hall Pits
1868*



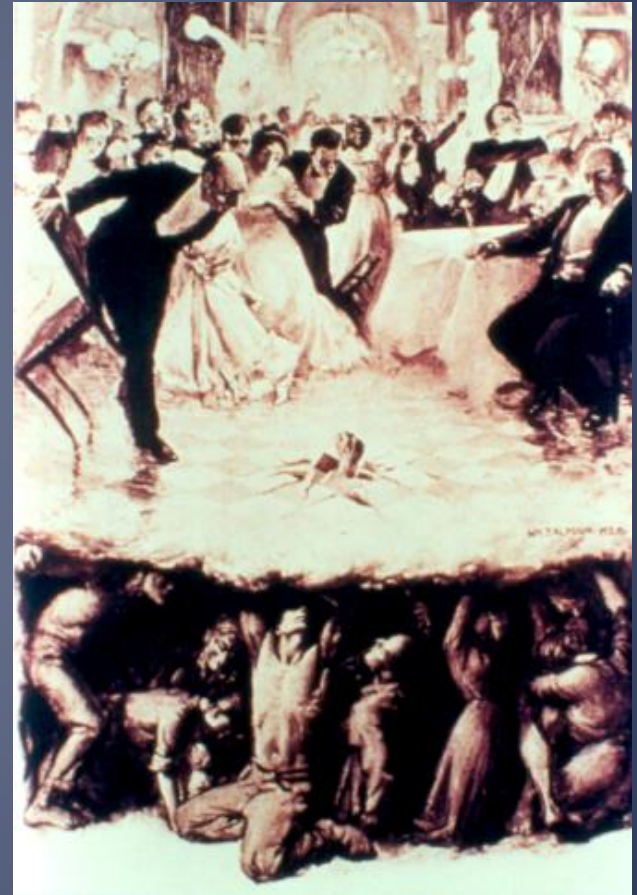
*Wench from Ince Hall Pits, age 30
1863*



*Pit brow girls standing by a coal truck
Shevington, 1867*

Social Hierarchy Shift

- Ownership of land no longer most important factor
 - Industrial capitalists (factory owners)
 - Engineers, managers, shopkeepers
 - Urban poor (factory workers)



Imperialism

- Countries needed more raw materials to fuel the growing Industrial Revolution and demand by the people
- Where will they go?
- How will they treat their new colonies?

QUICK DISCUSSION

- How did people respond to the negative effects of the Industrial Revolution?
 - Consider: Women, children, low wages, factory conditions, living conditions

How did people respond?

- Workers formed unions



- Britain passed child labor and women labor laws
- Reformers regulated living and working conditions

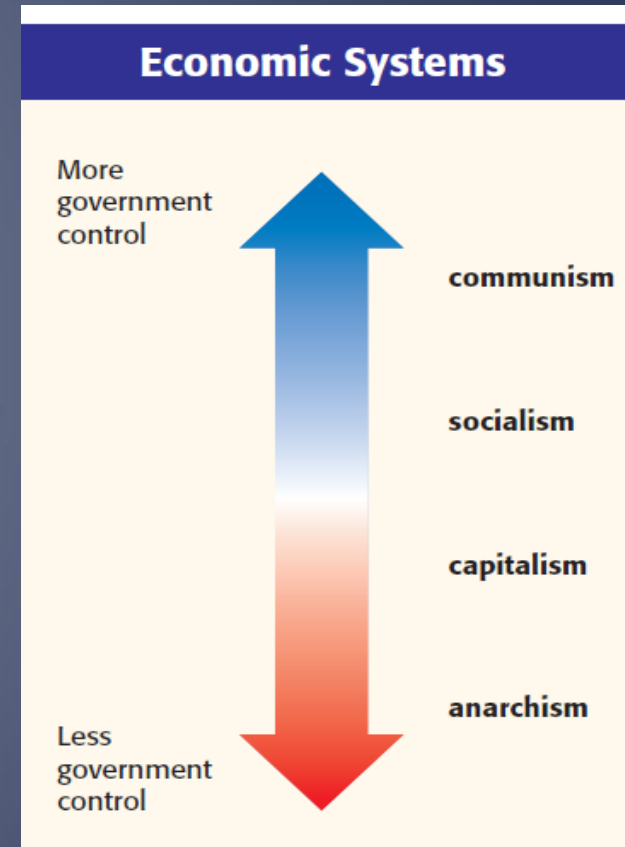


As early as 1802 and 1819 Factory Acts were passed to regulate the working hours of workhouse children in factories and cotton mills to 12 hours per day.

In 1831, a Royal Commission recommended in 1833 that children aged 11–18 should work a maximum of 12 hours per day, children aged 9–11 a maximum of eight hours, and children under the age of nine were no longer permitted to work. This act however only applied to the textile industry.

How did people respond?

- Growing gap between rich and poor was addressed →
 - The rise of **socialism** and **communism**
 - Government controls and plans the economy
 - versus Adam Smith's **capitalism**



Capitalism

- Individuals and businesses own property and the means of production.
- Progress results when individuals follow their own self-interest.
- Businesses follow their own self-interest by competing for the consumer's money. Each business tries to produce goods or services that are better and less expensive than those of competitors.
- Consumers compete to buy the best goods at the lowest prices. This competition shapes the market by affecting what businesses are able to sell.
- Government should not interfere in the economy because competition creates efficiency in business.

Socialism

- The community or the state should own property and the means of production.
- Progress results when a community of producers cooperate for the good of all.
- Socialists believe that capitalist employers take advantage of workers. The community or state must act to protect workers.
- Capitalism creates unequal distribution of wealth and material goods. A better system is to distribute goods according to each person's need.
- An unequal distribution of wealth and material goods is unfair. A better system is to distribute goods according to each person's need.

Inner Me: "Don't start getting all political; you know how easily you get carried away."

five minutes later





LONG-TERM EFFECTS

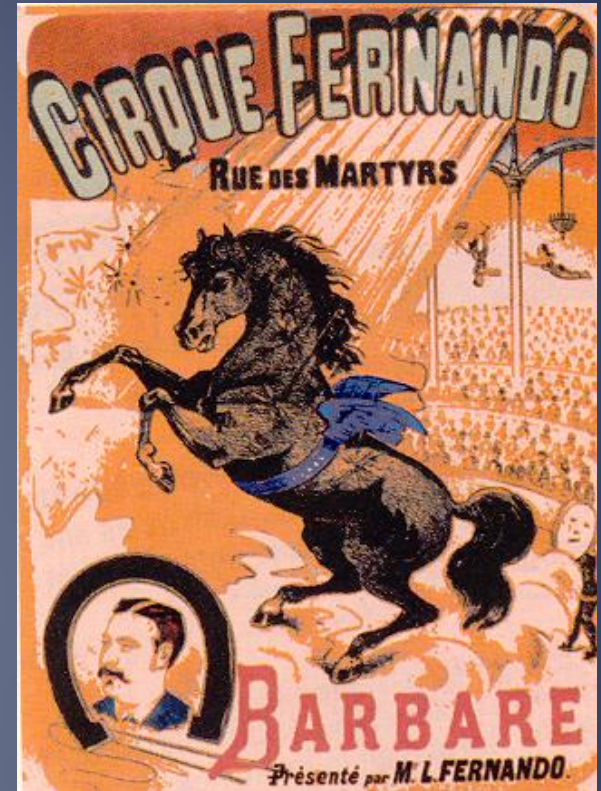
ENOUGH DEPRESSING STUFF; LET'S DISCUSS HAPPY IMPACTS

Goods become more accessible and cheaper

- Faster way to produce → more goods → cheaper prices
 - Using machines → the end of slavery
- Widespread use of railroads, and later telegraph and telephone → quick communication
 - Advances in one area of the world could easily make their way to another area

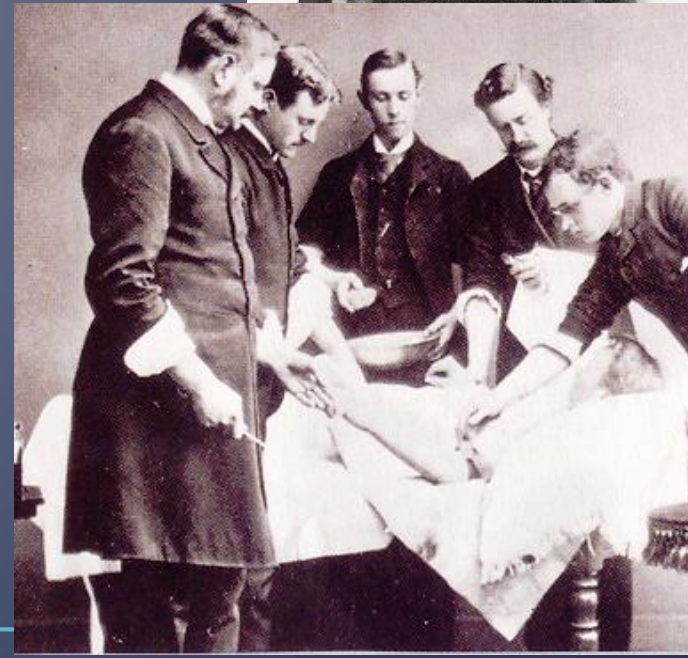
Leisure

- By the 1900s, more money + more free time = more fun!
- Parks
- Circuses
- Sports—football
- Bicycles
- Libraries
- Operas, theaters & museums

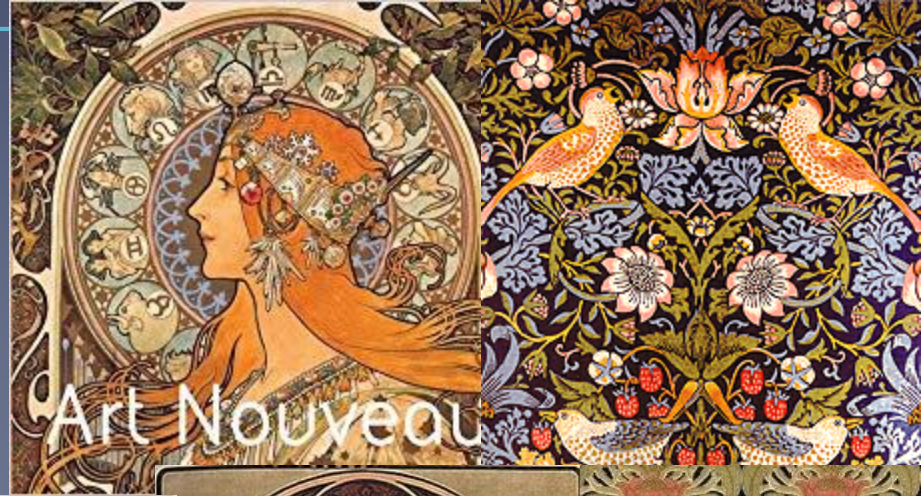


Health and Welfare

- Medical instruments could be quickly produced → better healthcare
- Smallpox vaccine
- Penicillin
- Antiseptics
- Salvation Army



Artistic responses: romanticism and art nouveau



Art Nouveau



Closure

- ***To what extent was the Industrial Revolution a positive development for the world?***
 - Were the short-term problems negated by the long-term impacts?
 - Would communism have been as wide-spread?