

A Nation Grows and Prospers Class Notes

Mr. Zindman's Class

Please study your slides and class notes!

- 🌐 The **Industrial Revolution** changed the way products were made in this country. Machines replaced hand tools and new sources of power (steam and electricity) replaced human power.
 - New Technology
 - **Spinning Jenny**: machine that allowed a worker to spin several threads at once rather than just one thread at a time (James Hargreaves).
 - **Cotton Gin**: machine that sped up the process of cleaning cotton fibers (Eli Whitney).
 - **Water Frame**: machine that could hold 100 spindles of thread and required water power to turn its wheels (Richard Arkwright).
 - **Samuel Slater and Moses Brown**: Created first American spinning mill using Arkwright's water frame
 - Birth of the Factory
 - Many new machines needed water power to run and needed to be housed in large buildings. The factory was born! Workers in factories had to work 12 hours a day and were paid daily or weekly wages.
 - **Capitalist**: people with money to invest in business to make a profit.
 - **Factory system**: brought workers and machines together to produce goods in one place.

- 🌐 **The War of 1812** boosted American industries. Being cut off from foreign goods required Americans to produce more goods for themselves.
- 🌐 **Francis Cabot Lowell** came up with the idea of creating a community around a factory. The towns had banks, schools, stores, a library and a church with the factory as the center of the community.
 - In Lowell, Massachusetts, young women ("Lowell Girls") worked at the factory and lived at boarding houses. **Women and children were hired because factory owners could pay them half of what they would pay men.**
 - Child labor wasn't seen as cruel then. It was seen as a necessity for families to survive.
 - Working hours were twelve-hour days, six days a week. As industry grew, conditions worsened, and wages fell.
- 🌐 **Eli Whitney** and Interchangeable Parts: Whitney sped up the making of guns by having machines manufacture each part; the idea spread quickly and helped small workshops grow into factories.
 - **Interchangeable parts**: identical parts of a tool or instrument that are made by machine.

- 🌐 Routes to the West
 - Great Wagon Road across Pennsylvania
 - Wilderness Road through the Cumberland Gap into Kentucky
 - Ohio River into Indiana, Kentucky and Illinois

🌐 New States in the West!

Kentucky	1792	Tennessee	1796
Ohio	1803	Louisiana	1812
Indiana	1816	Mississippi	1817
Illinois	1818	Alabama	1819

🌐 Better Roads!

- **Lancaster Turnpike:** Road built in the 1790's that linked Philadelphia to Lancaster, PA; It was important because it was set on a bed of gravel and water was able to drain off quickly.
 - To pay for the roads, companies collected tolls. At points on the road a pike (pole) blocked the road. When you paid, the pike was lifted. Alas! The **turnpike** is born!
- **National Road:** Road to run from Cumberland, MD to Wheeling, WV; it was later extended across Ohio, Indiana and Illinois.

🌐 John Fitch and Robert Fulton invented the **steam engine**.

- Fitch opened a ferry service, but nobody used it and he went out of business. ☹️
- Fulton launched the **Clermont** on the Hudson River. It carried passengers from Albany to New York. Fulton's success increased the popularity of steamboats and **revolutionized travel in the West**.

🌐 Steamboats couldn't ship western goods directly to the east, so Americans began building canals. A **canal** is a channel dug by people, then filled with water to allow boats to cross a stretch of land.

- **The Erie Canal:** Linked the Great Lakes with the Mohawk and Hudson Rivers.
 - New York Governor **De Witt Clinton** convinced state lawmakers to allocate money for the canal.
 - This canal would allow western farmers to ship goods into the port of New York!
 - It took eight years to complete!
 - Benefits:
 - Reduced travel time.
 - Lowered the cost of shipping goods.
 - Helped make NYC a center of commerce.

Causes

- ✓ British ideas of a spinning mill and power loom reach the United States.
- ✓ Eli Whitney invents the cotton gin.
- ✓ War of 1812 prompts Americans to make their own goods.
- ✓ Eli Whitney introduces the idea of interchangeable parts.

The Industrial Revolution

Effects

- ✓ Factory system spreads.
- ✓ Young women and children from nearby farms work in mills.
- ✓ Growing cities face problems of fire, sewage, garbage and disease.