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The Industrial Revolution Begins

As a Young Historian, I will be able to…

- Describe how changes in agriculture helped spark the Industrial Revolution.
- Analyze why the Industrial Revolution began in Britain.
- Explain the role of steam technology and textile manufacturing in the Industrial Revolution.
- Describe how the factory system and transportation revolution advanced industry.
- Trace how the Industrial Revolution spread.

New Ways of Working Change Life

The Industrial Revolution was an outgrowth of the Scientific Revolution.

It focused on the attention of the physical world & used the scientific method

The beginning of the revolution was Britain & it slowly spread to the rest of the world

At the start people lived & worked the land with handmade tools while living in simple cottages

Changes!

Rural life began to disappear as villages turned from towns to cities, allowing for production

Travelers were able to move quickly via trains or steamships

Anesthetic- drug that prevents pain during surgery, was developed

Antiseptics saved many lives & the speed of light was discovered

New Agricultural Revolution

The first agricultural Revolution was basic farming & the domestication of animals

The invention of the dike allowed earthen walls to keep water at bay and reclaim the sea

New methods such as crop rotation & the mixing of soils allowed a better yield

Enclosure- Process of taking over & combing lands to a private ownership or company

Agriculture

Consolidated fields needed less workers, but small farmers were forced off the land

Better farming yields led to more food and an explosion in population growth

Better hygiene allowed people to remain healthy & babies had a high chance of survival

Coal, Steam, & Energy

People used to rely on man-made energy to complete tasks

Now water power & coal allowed for better machinery especially the steam engine

Thomas Newcomen developed a steam engine to pump water out of mines

James Watt- improved this design that would later power locomotives & ships

Iron & Britain

Coal was eventually used to smelt iron, separating iron from its ore

This allowed for cheaper & better-quality iron

The industrial revolution was developed in Britain in the 1700s due to **four factors of Production

**Natural Resources, labor, capital, & entrepreneurship

Natural Resources & Labor/Capital

Britain had a LARGE amount of iron & coal for production

Due to it being an island nation, Britain was able to take advantage of trade & production

Capital- Money used to invest in enterprises. The wealth of Britain allowed for growth

Enterprise- Business organization in an area such as shipping, mining, railroads, or factories

Entrepreneurs & Climate

Entrepreneur- Someone who manages & assumes the financial risks of starting new businesses

Demand & capital allowed for new technology developments

Britain also had a stable government that allowed economic growth

The value of hard work and wealth inspired people to work towards new businesses

Textile Industry

Cotton cloth from India became popular & saw a rise in textiles

Putting-Out System- Raw cotton distributed to peasant families who spun it into thread & then cloth

New textile machines were developed & Eli Whitney invented the cotton gin to remove seeds from cotton

As machinery grew, the need for factories also grew to keep up with industry speed

Transportation Revolution

Turnpikes- Private roads built by entrepreneurs who charged travelers a fee to use

Canals were built between cities to shorten trips & allow for speedier delivery

The steam locomotive allowed travel virtually anywhere & allowed for heavy loads to be carried

Cheaper goods lead to more demand, which demanded more industry

Industrialization Spreads

Industry would surpass just Britain & go global as electrical processes created innovation

Experts from Britain moved to new nations with surpluses of materials which created industry fast.

Soon more social issues would arise such as safety codes, wages, race, & hours worked