Dog Kennel Hill Primary School

Year 6 Industrial Revolution knowledge organiser

Industrial revolution	A time of great change in Britain between 1750 to 1900
Population	The number of people living in a particular place
Invention	Something new which is created, can be an object or an idea
Economy	The system of how money is used within a particular country
Agriculture	The process of producing food, and fibres by farming of certain plants or raising animals
Poverty	The lack of basic human needs such as clean water, nutrition, healthcare, education and shelter
Sanitation	Sanitation is the system that disposes of human waste
Industry	The process of making products by using machines and factories
Mass production	The production of many products in one go e.g. textiles

From 1750 Britain went through a process of change in a number of key areas:

- Agriculture – New tools, fertilizers and harvesting techniques were introduced, resulting in increased productivity and agricultural prosperity.
- Industry – factories sprung up all over the country creating more efficient ways to produce goods such as wool, cotton and coal. The increase in factories brought thousands of new jobs.
- Transport and communications - Thomas Telford built roads and canals in the 1700s and George Stephenson and Isambard Kingdom Brunel oversaw the 'Railway Mania' of the 1800s. There had previously been no very fast way of transporting goods and people around the country.
- Technology - There were also many scientific discoveries and technological inventions that changed society and industry. Changes to sanitation and medical treatment such as the work of John Snow and Edward Jenner improved people's quality of life.

Inventions of the Industrial Revolution

The Water Frame -1769

Richard Arkwright invented a machine, powered by water, to spin cotton into yarn, quickly and easily. His machines did not need skilled operators so Arkwright paid unskilled women and others to work on them. This invention allowed factories and mills to be built.

The Spinning Jenny - 1770

James Hargreaves, a British carpenter and weaver, invents the spinning jenny. The machine spins more than one ball of yarn or thread at a time, making it easier and faster to make cloth. This allows more workers to make cloth more cheaply and increases the amount of factories built.

The Steam Engine – 1717

Thomas Newcomen invents the first steam engine. It would later be improved by James Watt which meant steam engines could replace water and horse power in a wide variety of industries, which in turn allowed factories to be built anywhere.

The Locomotive - 1814

Richard Trevithick was a pioneer in early steam engine technology. He developed a new high-pressure steam engine which could be used to reliably move goods and passengers. This invention made transport much easier and quicker.

Factory working conditions

Long working hours: normal shifts were usually 12-14 hours a day, with extra time required during busy periods.
Low wages: a typical wage for male workers was about 15 shillings (75p) a week, but women and children were paid much less, with children three shillings (15p). For this reason, employers preferred to employ women and children.
Cruel discipline: there was frequent "strapping" (hitting with a leather strap). Other punishments included nailing children's ears to the table, and dowsing them in water butts to keep them awake.
Accidents: forcing children to crawl into dangerous, unguarded machinery led to many accidents and deaths.
Health: The air was full of dust, which led to chest and lung diseases and loud noise made by machines damaged workers' hearing.

Living conditions

Overcrowding: due to large numbers of people moving to the cities, there were not enough houses for all these people to live in.
Disease: typhus, typhoid, tuberculosis and cholera all existed in the cities of England. Overcrowding, low standard housing and poor quality water supplies all helped spread disease.
Waste disposal: gutters were filled with litter. Human waste was discharged directly into the sewers, which flowed straight into rivers.
Poor quality housing: houses were built very close together so there was little light or fresh air inside them. They did not have running water and people found it difficult to keep clean.
Lack of fresh water: people could get water from a variety of places, such as streams, wells and stand pipes, but this water was often polluted by human waste.

Important individuals of the Industrial Revolution

Robert Peel

Peel created and supported the Factories Act of 1844 which restricted the number of hours that children could work in factories as well as setting safety standards for machinery.

Isambard Kingdom Brunel

One of the most influential engineers of the Industrial Revolution. Brunel built railways and ships and opened up Britain to a new network of industry

John Snow

Snow was an English physician who discovered that the water in his local area was making everyone ill. His work led to the discovery of cholera and improved fresh water for thousands

Edward Jenner

Jenner discovered vaccination in 1796. he discovered that if you placed a small amount of disease in a human they were then able to fight it off in the future. This discovery saved millions of lives

Local Context

Explore how the industrial revolution impacted East Dulwich