



The Industrial Revolution

Key Vocabulary	
Agriculture	The process of producing food, and fibres by forming of certain plants or raising animals.
Industrial Revolution	A time of great change in Britain between 1750 to 1900.
Industry	The process of making products by using machines and factories.
Invention	Something new which is created.
Mass production	The production of many products in one go e.g. textiles.
Population	The number of people living in a particular place.
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.

What was the Industrial Revolution and when did it happen?

- The industrial revolution was a time of great change in Britain when people started to make things by machine in factories. These changes occurred from 1750 to 1900.

A number of improvements took place in the following areas:

Energy
Coal was used for heat instead of water and peat as it omitted more heat and which allowed better quality steel and iron to be made.

Technology
The spinning jenny and power loom were invented allowed textiles to be mass produced. The steam engine and steam locomotive meant that materials and people could be transported easily and provided more energy for factories.

Work
People now worked in factories rather than home workshops.

Transport
Canals were introduced to move large volumes of goods and roads were improved using smoother and stronger road surfacing materials.

What were the key inventions during the industrial revolution?

The Spinning Jenny - 1770
Invented by James Hargreaves, a British carpenter and weaver, 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 Locomotive - 1814
In 1814, George Stephenson developed a new high-pressure steam engine. His first engine called the Blucher travelled at 4 miles per hour and was used to transport coal.

Miner's Safety Lamp – 1815
Sir Humphry Davy, a well-known scientist, designed a safe light for miners as candles were leading to explosions which killed many people. The lamp he made was surrounded by wire gauze. Which let the air in to keep the flame burning but prevented explosions.

Important individuals

Robert Peel (1788 – 1850)
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. He was also Prime Minister twice and founded the police service

George Stephenson (1781-1848)
Stephenson pioneered rail transport. He designed his first steam locomotive in 1814. It was used to move coal. In 1821 he built the first passenger railway – the Stockton and Darlington Railway

How did transport develop during the industrial revolution?

Horse drawn carts were no longer fast enough to transport people and goods. This meant that a number of changes were introduced to help.

Improvement of roads

- o Turnpike trusts (toll roads) were introduced to raise money to improve the roads

Introduction of canals

- o These allowed people to move a high volume of goods to and from places quickly and safely.

Introduction of Railways

- o Stevenson invented the steam train which was able to bring large volumes of good in quickly. This meant costs were reduced and bigger markets were created. People were also now able to travel around the country. Trains also improved communication and newspapers were able to be delivered much faster around the country.

What impact did the industrial revolution have on our local area and life today?

Local Area

1796- Batley was well known for producing cotton and its first water mills arrived.
1832 – Toll road built to link Gomersal and Dewsbury, this had a stop at Batley which allowed them to trade easily.
1848 – Batley train station was built.
1853 – A small confectionery shop was built, this later changed to Fox's Biscuits in 1927.
1861 – There were at least 30 shoddy (wool, rags and clothes) mills in Batley.

Timeline

1764	The spinning jenny is invented by James Hargreaves
1765	James Watt invents the steam engine.
1825	George Stephenson invented the first passenger steam locomotive.
1833	The Factory Act was passed making it compulsory for children working in factories to have 2 hours of education a day.

1839	Queen Victoria is crowned aged 18.
1844	Samuel Morse invents the telegram which allows messages to be sent quickly over a wire.
1876	Alexander Graham Bell patents the telephone which changes the way people communicate.
1878	Thomas Edison invents the lightbulb
1901	Queen Victoria dies