

# How important was the Industrial Revolution?

## Key Questions

What was the Industrial Revolution?  
What were the key inventions?

What impact did industrialisation have? Was it all a positive impact?  
Who was Robert Owen?

Prior Learning What do I already know? What can I already do?	New Sticky Knowledge What will I learn?	New Skills What new skills will I develop? What will I learn to do?
18th Century Britain: <ul style="list-style-type: none"> <li>The Act of Union</li> <li>James I</li> </ul> British Empire	<ul style="list-style-type: none"> <li>The changes that happened during the Industrial Revolution</li> <li>Transport developments during this time</li> <li>George Stephenson's Rocket</li> <li>Mechanisation of industry and the impact that this had</li> <li>Social changes including poor working conditions; including long hours, low and dangerous conditions.</li> <li>Children working in factories</li> <li>Why cholera epidemics were very common</li> <li>Who Robert Owen was and the changes he made</li> </ul>	<ul style="list-style-type: none"> <li>Describe the impact of an event</li> <li>Analyse art as a historical source and use these determine thoughts and opinions about an event</li> <li>Research information about a significant individual</li> </ul>

## History

### Key Vocabulary

industrialisation  
steam  
transport  
mechanism  
colliery  
mill  
union  
workforce  
cholera  
epidemic  
industry  
social

**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.

### Factory conditions

- Long working hours:** normal shifts were usually 12-14 hours a day, with extra time required during busy periods. Workers were often required to clean their machines during their mealtimes.
- Low wages:** a typical wage for male workers was about 15 shillings (75p) a week, but women and children were paid much less, with women earning seven shillings (35p) and children three shillings (15p). For this reason, employers preferred to employ women and children. Many men were sacked when they reached adulthood; then they had to be supported by their wives and children.

- Fierce systems of fines:** these were imposed for talking or whistling, leaving the room without permission, or having a little dirt on a machine. It was claimed that employers altered the time on the clocks to make their workers late so that they could fine them. Some employers demanded that their overseers raise a minimum amount each week from fines.

### Living conditions

- Pollution:** coal was used to heat houses, cook food and heat water to produce steam to power machines in factories. The burning of coal created smoke, which led to terrible pollution in the cities.
- Overcrowding:** due to large numbers of people moving to the cities, there were not enough houses for all these people to live in. Low wages and high rents caused families to live in as small a space as possible. Sometimes whole families lived in one room.
- Disease:** typhus, typhoid, tuberculosis and cholera all existed in the cities of England. Cholera reached England for the first time in 1830, and there were further major epidemics in 1832 and 1848. Overcrowding, housing of a low standard and poor quality water supplies all helped spread disease.

## 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.

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### 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.