

TURTON SCHOOL HISTORY DEPARTMENT – KNOWLEDGE ORGANISER – INDUSTRIAL REVOLUTION

Key events	Key industries	Political Changes
<p>In 1837, Britain was still a rural nation with 80% of the population living in the countryside. Most people were farmers or spun wool and cotton to weave into cloth. Soon new machines were invented that could do these jobs in a fraction of the time. This left many people out of work, so they flocked to the towns in search of jobs in new industries. By the middle of the nineteenth century over 50% of the population lived in towns and cities. New developments in medicine saw the total population grow from 7 million in 1750 to 35 million in 1900</p> <p>The Industrial Revolution rapidly gained pace during Victoria's reign because of the power of steam. Victorian engineers developed bigger, faster and more powerful machines that could run whole factories. This led to a massive increase in the number of factories (particularly in textile factories or mills).</p> <p>By 1870, over 100,000 steam engines were at work throughout Britain. The industry depended on steam and steam depended on coal. The number of coalfields doubled between 1851 and 1881.</p> <p>Most cities and towns were not prepared for the great increase of people looking for accommodation to live near their work place.</p> <p>There was a shortage of houses, so many people had to share a room in other people's houses. Rooms were rented to whole families or perhaps several families. Often ten or twelve people shared one room. If there was no rooms to rent, people stayed in lodging houses.</p> <p>Many factory owners built houses for their workers near their factories. The houses were built close together really quickly and cheaply.</p> <p>These houses often had two rooms downstairs and two rooms upstairs. They were not really big enough for the large families people tended to have during the Victorian time.</p> <p>The houses also did not have running water and toilets. Up to 100 houses had to share an outdoor pump to get their water and share an outside toilet. To make things worse, the water from the pump was often polluted.</p>	<p>The Industrial Revolution involved innovation, capital investment and increased output:</p> <p>Textiles</p> <p>James Hargreaves' Spinning Jenny (1764) and later Richard Arkwright's Water Frame (1769) and Samuel Crompton's Mule (1779) were spinning machines. Edmund Cartwright's Power Loom (1785) was a weaving machine. Many of these inventions were powered by James Watt's steam engines (1765).</p> <p>Large factories, eg Arkwright's Mill at Cromford, full of machines. <i>Output</i> increased 15-fold in the century 1815–1914.</p> <p>Iron and steel</p> <p>Abraham Darby smelted iron using <i>coke</i> (1709), Henry Cort's puddling process made wrought iron (1784), and Henry Bessemer's Bessemer converter (1856) and the Gilchrist-Thomas process (1879) made steel.</p> <p>Huge ironworks eg Richard Crawshay's Cyfartha works in South Wales, and John Roebuck's Carron Works in Scotland. Production of 'pig' iron increased 30-fold in the century 1815–1914.</p> <p>Coal</p> <p>Better coal mining techniques allowed deeper mines eg 'roof and pillar' working to support the roof, upcast and downcast shafts to provide ventilation, and the Davy Lamp (1815) to help prevent gas explosions.</p> <p>In 1914, the coal industry employed a million men in 3,000 collieries. Production of coal increased 20-fold in the century 1815–1914.</p> <p>Steam power</p> <p>In around 1712 Thomas Newcomen built the first commercially successful steam engine to pump water out of mines.</p> <p>James Watt made steam engines much more efficient in the 1760s and 1770s giving huge savings on fuel. His other improvements meant steam engines could replace water and horse power in a wide variety of industries, which in turn allowed factories to be built anywhere.</p>	<p>The concentration of people in towns allowed for new ideas to spread easily. One idea that gathered pace in this period was that ordinary people deserved a fair say in our nations democracy.</p> <p>In 1800 only the wealthy could vote in elections whilst the boundaries between counties and boroughs hadn't changed in centuries taking no account of the shifts in population.</p> <p>Protestors gathered in Manchester to listen to Henry Hunt talk about new political ideas. However, the mayor panicked and thought a revolution was starting. He ordered the military to arrest Henry Hunt, resulting in the Peterloo Massacre.</p> <p>This divided opinion for and against reform. People who wanted reform became known as Chartists as they signed a charter or petition asking for democratic reforms. 3 million people signed. However the petition was ignored when it was presented to Parliament.</p> <p>The Chartists tried to change society through direct action such as welfare schemes or armed riots. However they were effectively suppressed by the police.</p> <p>Political change did begin with the 1832 Great Reform Act, but it wasn't until 1918 that all men over 21 got the right to vote and 1928 for women to get the vote on equal terms to men.</p>