



# The Industrial Revolution



Term	Definition
Anaesthetics	Drugs or other substances used to prevent or reduce pain during medical procedures.
Bloody Code	The system of harsh criminal punishments in England during the 18th and early 19th centuries.
Canals	Safe, quick way of moving heavy loads; man-made rivers which could hold barges to move heavy loads
Cartwright's Power Loom	A weaving machine powered by steam or water, invented by Edmund Cartwright in 1785.
Cholera	Infected water supplies caused this disease which resulted in severe vomiting and diarrhoea
Co-operatives	A farm, business, or other organization which is owned and run jointly by its members, who share the profits or benefits
Crompton's Spinning Mule	A spinning machine that combined the best features of the spinning jenny and the water frame, invented by Samuel Crompton in 1779.
Enclosures	The process of fencing off common land and converting it into private property during the 18th and 19th centuries.
Factory System	Using large buildings to house machinery to create clothing/materials to be sold
Famine	A widespread scarcity of food, caused by several factors including war, inflation, crop failure, population imbalance, or government policies.
First nursing training school	The Florence Nightingale School of Nursing and Midwifery, which was established in London in 1860.
Florence Nightingale	A British nurse and social reformer who is considered the founder of modern nursing.
Four field system	Viscount Townshend developed this to rotate crops so nutrients could recover every year without fallow fields
Inoculation	The process of deliberately infecting an individual with a disease in order to build immunity against it.
London School of Medicine for Women	The first medical school in Britain to train women as physicians, established in 1874.
Luddites	Reformers who fought for better deals; executed by the government
Mechanical Reaper	A machine invented by Cyrus McCormick in 1831 that revolutionised the harvesting of grain crops.
Mortality	Most people did not live past the age of 40
Open-field system	Shared farmland where diseases spread quickly, and cattle wandered into crops
Poverty	Living with little to no money to feed or support
Railways	Trains replaced need for barges
Seed Drill	A machine invented by Jethro Tull in the 18th century that sowed seeds in straight rows.
Selective Breeding	The process of breeding plants and animals for specific traits or characteristics.
Separate System	A prison system in which inmates were kept in solitary confinement and strictly isolated from one another.
Silent System	A prison system in which inmates were required to remain completely silent and were punished for speaking.
Starvation	Suffering or death caused by lack of food
Steam Engine	A heat-powered machine that converts the energy from steam into mechanical work.
Stevenson's Rocket	First fast train
Tarmac	John Macadam and Thomas Telford designed the new roads which did not turn to mud in winter
The Agricultural Revolution	A period of agricultural innovation and development that occurred in Europe during the 18th and 19th centuries.
The Industrial Revolution	A period of economic and technological growth in the late 18th and early 19th centuries, marked by the introduction of new machinery and the transformation of manufacturing processes.
The Norfolk System	A system of crop rotation developed in Norfolk, England in the 18th century.
The Peelers	The first police officers in England, established in 1829 under Sir Robert Peel.
The Transport Revolution	A period of rapid development in transportation technology during the 19th century, including the introduction of railroads, steamships, and improved road systems.
Trade Union	An organized association of workers in a trade, group of trades, or profession, formed to protect and further their rights and interests.
Transportation	The practice of sending convicted criminals to penal colonies overseas, especially to Australia, as a form of punishment.
Tuberculosis	Disease of the lungs
Turnpike Trusts	Collected tolls to build and maintain roads
Typhoid	Caused by dirty living conditions and lack of clean drinking water
Typhus	An infectious disease carried by lice, mites and fleas

### 3.11 EXPLORE the contribution of technological developments and innovation to historical change

3.14 ILLUSTRATE patterns of change across different time periods in a chosen theme relating to life and society (such as, Crime and punishment; Food and drink; Work and leisure; Fashion and appearance or Health and medicine).

#### Summary

The Industrial Revolution was a period of significant change in the 18th and 19th centuries. From technological advances to societal changes, crime and punishment to medical innovations, the Industrial Revolution paved the way for the modern world. It began in Great Britain and quickly spread to other parts of the world, including the United States and Western Europe. There were four key areas of change during the Industrial Revolution:

**Technological Changes:** It was characterized by the invention and widespread use of new machines and processes that transformed the way goods were produced and distributed. Key technological developments during this time included the steam engine, mechanized textile production, and the development of new transportation and communication systems.

**Societal Changes:** It led to the growth of cities and the emergence of new social classes, including a wealthy industrial elite and a working class that often lived in poverty. It also created new forms of work and labour, as people moved from rural areas to work in factories.

**Crime and Punishment:** As cities grew and new forms of technology emerged, new forms of crime also emerged. To address this, new forms of punishment were developed, including transportation to colonies and the establishment of penitentiaries.

**Medical Changes:** As cities grew, the spread of disease became a major concern. Public health measures were introduced, such as the construction of sewer systems and the development of vaccination programs. Medical innovations included the use of anaesthesia during surgery and the discovery of the germ theory of disease.

#### Technological Developments

One of the most significant technological changes of the Industrial Revolution was the development of the steam engine, which was invented by James Watt in 1765. The steam engine was used to power many of the machines used in factories, which greatly increased the efficiency of production. Other important inventions included the spinning jenny, the power loom, and the cotton gin, which all greatly increased the efficiency of textile production.

The development of new transportation and communication systems also played a significant role in the Industrial Revolution. The construction of canals and railroads made it easier to transport goods, while the telegraph allowed for faster communication over long distances.

Overall, the technological changes of the Industrial Revolution had a profound impact on society, economics, and culture. They paved the way for modern industrialization and played a significant role in the development of the modern world.

#### Societal Developments

It led to the growth of cities and the emergence of new social classes, including a wealthy industrial elite and a working class that often lived in poverty. The shift from a predominantly agricultural society to an industrial one created new forms of work and labour, as people moved from rural areas to work in factories and mills.

The growth of cities and factories also led to new forms of housing and living arrangements. The working-class lived in crowded and unsanitary conditions, often in tenement buildings or company towns. As a result, new forms of social organization and activism emerged, including the formation of labour unions and the push for improved working conditions.

The Industrial Revolution also had an impact on family life. As men and women increasingly worked outside of the home, traditional gender roles began to change. Women and children were often employed in factories, and child labour became a significant social issue.

The emergence of new technologies and transportation systems also had a significant impact on culture and leisure time. The availability of newspapers, novels, and other forms of entertainment expanded, and new leisure activities such as team sports and music halls emerged.

#### Health and Medical Changes

As cities grew and people began living in close quarters, the spread of disease became a major concern. This led to the development of new public health measures, such as the construction of sewer systems and the implementation of vaccination programs.

The discovery of the germ theory of disease by Louis Pasteur in the mid-19th century revolutionized medicine and led to the development of new treatments and preventive measures. The use of anaesthesia during surgery also became widespread during the Industrial Revolution, making surgery safer and less painful.

In addition to these advancements, the Industrial Revolution also led to the development of new medical technologies and practices. For example, the stethoscope was invented in 1816, and the use of X-rays for medical diagnosis was first demonstrated in 1895.

However, despite these advancements, living conditions during the Industrial Revolution remained poor for many people, particularly the working-class. Poor sanitation, inadequate housing, and long working hours contributed to high rates of disease and poor health.

#### Changes in Crime and Punishment

As cities grew and populations expanded, crime rates increased, and new forms of criminal activity emerged. To address these challenges, new policing systems were established, such as the Metropolitan Police in London in 1829. The prison system was also reformed, with the establishment of penitentiaries designed to reform offenders rather than simply punish them.

The Industrial Revolution also saw the introduction of new forms of punishment, such as transportation, which involved sending criminals to penal colonies in Australia and other colonies. The use of the death penalty for a wide range of offenses also continued, although there were some efforts to limit its use.

However, despite these efforts, the new policing and prison systems were often criticized for being too harsh, with prison conditions being particularly brutal for those who were incarcerated. The use of corporal punishment, such as whipping and flogging, was also common in prisons and in some cases even in schools.

