

RAILWAY MANIA

The 1840s saw the biggest growth in the railways. Hundreds of new railway lines were planned and companies sought to make lots of money by opening their own railway lines. Many new laws and regulations were introduced during this time to make sure that the railways were safe to travel on.

IMPORTANT PEOPLE



Thomas Savery (1650 – 1715) invented and made one of the first ever steam engines in 1698



James Watt (1736 – 1819) was a Scottish engineer who worked to improve the earliest steam engines like that of Thomas Savery. Watt's designs and ideas were very successful.



George Stephenson (1781 – 1848) was a British civil engineer and mechanical engineer. Renowned as the "Father of Railways" he invented the first ever is the first steam locomotive to carry passengers on a public rail line.

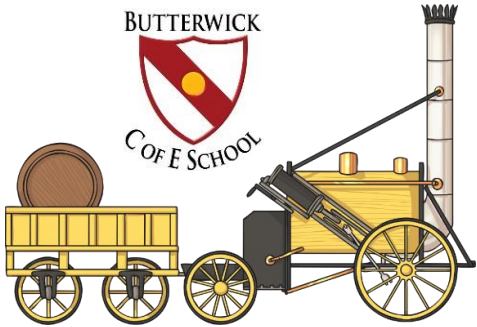
RAILWAYS

THE GROWTH OF THE RAILWAYS

At the start of World War 1 (1914 – 1918) the government took control of all the railways in Great Britain and this continued until 1921. From 1st January 1923, all the railway lines in Great Britain were grouped into four main companies.

- 1. Great Western Railway (GWR)
- 2. London, Midland and Scottish Railway (LMS)
- 3. London and North Eastern Railway (LNER)
- 4. Southern Railway (SR)

The first railroads in Britain were in the 18th century coal mines, where horses pulled mine carts from the pits to the factories along wooden tracks. Soon engineers were creating steam engine locomotives using new steam engine technologies which were quickly developing. The word locomotive means 'moving engine'. The 'train' is the line of carriages or carts pulled by the locomotive



NATIONALISATION OF THE RAILWAYS

In 1948, all the railways were nationalised. This means that the government controlled and managed them. The Big Four were then merged together to form British Railways (Later called just British Rail). Although many of the main railway lines remained, lots of smaller ones were closed down because they were not making enough money

FAMOUS STEAM TRAINS



The Flying Scotsman



The Rocket



The Mallard



The Evening Star

TYPES OF LOCOMOTIVE TECHNOLOGY

Steam Locomotives



Steam locomotives were the first type of locomotive to be used on Great Britain's railways. They work by burning coal or other materials and making steam in a boiler. The steam is then used to power the pistons which turn the wheels.

Diesel Locomotives



A diesel engine is an internal combustion engine. This means that it creates power by creating an explosion (blast of energy) inside the engine. The diesel is mixed with oxygen (air) and then compressed (squashed). This creates very high temperatures which cause an explosion of energy that is used to power the engine to move.

Electric Locomotives



Electric locomotives are powered using electricity from overhead lines. They are more friendly to the environment because they are not burning fuels which can put dangerous gases into the air, but they are very expensive to run. Some locomotives use a combination of electricity and diesel or electricity and petrol.

High Speed Trains



The first high speed train railway (the Shinkansen), was opened in Japan in 1964. The trains travelling these lines became known as bullet trains because of their shape and high speeds. However, high speed trains are not just fast trains. High speed trains have to have special tracks, use certain carriages and wagons and travel at high speeds. High speed trains were developed to get more passengers and goods to places quickly and to link major cities and countries. HSTs may be electric, diesel or diesel-electric.

Key Vocabulary

18 th Century	The 18 th century is the period of time between 1701 and 1800	Railway Line	A route between two points on a railway.
Chronological order	Means the order things happen – the timeline of events	Route	A route is a way from one place to another.
Steam Engines	A steam engine is a heat engine that makes use of the potential energy that exists as pressure in steam, converting it to mechanical work. Steam engines were used in pumps, locomotive rains and steam ships, and were essential to the Industrial Revolution.	Privatisation	If a company, industry, or service that is owned by the state is privatised, the government sells it and makes it a private company.
Locomotives	Locomotive engine - a wheeled vehicle consisting of a self-propelled engine that is used to draw trains along railway tracks.	Nationalism	Nationalism is the desire for political independence of people who feel they are historically or culturally a separate group within a country.

HISTORY TIMELINE

