

YEAR 4 THE HISTORY OF THE RAILWAYS

Key Vocabulary

locomotive	'moving engine'. A vehicle that moves using its own power
nationalised	Under the government's control and management
privatised	Run by individual, private companies
railroad	An old term for a railway
Sustainable	doing something that will cause little or no damage to the environment and will be able to continue for a long period of time

What were the earliest Railways like?

The first railroads in Britain were mine carts pulled along wooden tracks by horses.

The first passenger-carrying railway line was the Stockton to Darlington line built by George Stephenson in 1825.

Locomotion No.1 was the first locomotive to run on this line.



How and why did steam locomotives change over time?

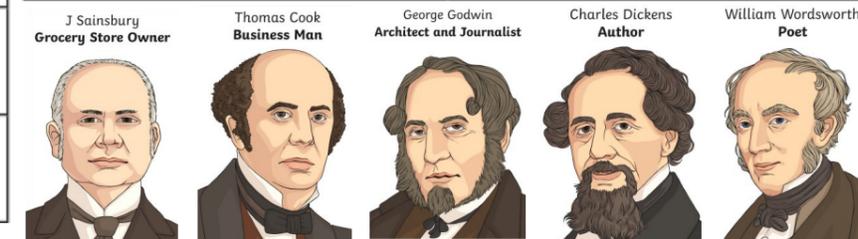
Rocket	Flying Scotsman	Mallard	Evening Star
George Stephenson 1829	Sir Nigel Gresley 1923	Sir Nigel Gresley 1938	RA Riddles 1960
Record speeds of 29mph (miles per hour).	First steam locomotive to travel non-stop from London to Edinburgh.	Broke the world record in 1938 for the fastest ever steam locomotive - 126mph.	The last steam locomotive for British Railway.
Won the Rainhill Trials.	The first steam locomotive to reach a top speed of 100mph.	Travelled nearly 1.5 million miles in its 25-year career.	Could transport passengers at over 90mph.

How did the railway network in Britain grow and spread over time?

1914	The government took control of all British railways and continued to manage them until 1921.
1923	All railways were grouped into four main companies: <ul style="list-style-type: none"> • Great Western Railway • London, Midland & Scottish Railway • London & North Eastern Railway • Southern Railway
1948	All railways were nationalised and the Big Four companies were merged to form British Rail.
1994-1997	British Rail was privatised over three years and has been run by separate companies ever since.

What impact did the first railways have on existing industries, the environment and people in society?

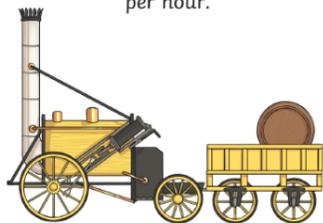
Positives	Negatives
Allows people to visit different places in the country.	Spoils the beautiful countryside.
Features, such as railway stations and bridges, enhance the scenery.	Concerns over the safety of people travelling on trains.
Allows goods to be transported quicker to stores for the customer.	



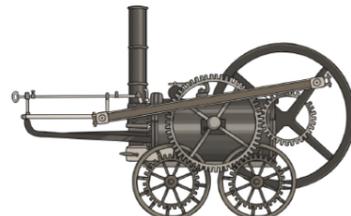
How and why have locomotives changed overtime?

	Steam - Works by burning coal and making steam in a boiler which is used to power the pistons to turn the wheels.
	Diesel - Diesel is mixed with oxygen and squashed which creates a very high temperature. This causes an explosion which is used to power the engine.
	Electric - Overhead lines power the trains with electricity.
	High-Speed Trains - These trains have special tracks, carriages and wagons. They can travel between 125mph and 177mph.

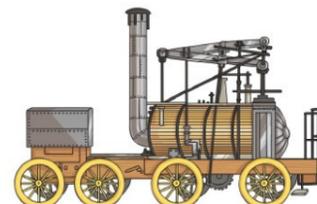
Stephenson's Rocket was the winner of the Rainhill Trials. It could travel up to 28 miles per hour.



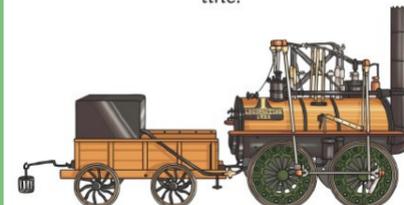
Richard Trevithick's un-named steam locomotive carried 10 tons of iron over a distance of 16km at the Pen-y-Darren Ironworks in Wales.



William Hedley's Puffing Billy was used to pull coal wagons. It was a very reliable engine and was in use for over 50 years.



George Stephenson's Locomotion No.1 was the first locomotive to run on a passenger carrying line.



Matthew Murray's Salamanca was the first steam locomotive to make money for its owners.

