

Year 3 - Railways - Autumn Term





Suggested book



| Key Vocabulary | |
|------------------------|------------------------------------------------------------------------------------------------------------------|
| locomotive | 'Moving engine'. A vehicle that moves using its own power. |
| nationalised | Under the government's control and management. |
| passenger | A person riding in a vehicle. |
| privatised | Run by individual, private companies. |
| railroad | A old term for railway. |
| Rainhill Trials | A competition designed to find the locomotive fit to run on the new Liverpool to Manchester line in 1829. |

| The First Trains |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> The first railroads in Britain were mine carts pulled along wooden tracks by horses. Thomas Savery invented and made one of the first steam engines in 1698. In 1807, the first passenger railway opened in South Wales. Horses pulled carriages along tracks. |

| British Rail | |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |

| 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. |

Types of Engines



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.

Many people throughout history have had strong feelings, both good and bad, towards **locomotives** and railway lines.

| 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. | |

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.



To know statements



I know how the first trains and railways were developed.

I know the dates of important events in the development of rail travel.

I know why some steam locomotives are historically significant,

I know how and why the railway network in Britain grew and changed over time.

I know how to use paintings to interpret information about steam locomotives.

I know about the positive and negative impact of the first railways on different aspects of society.

I know the technology of different locomotives and explain how and why they have changed over time.

What can you remember from previous work?

- What are longships?
- Who built and flew the first aeroplane?
- When were cars were first made in factories?

Anything else you have learnt?
What have you enjoyed?

