

## Year 4 Knowledge Organiser: The Railways

### Key Facts

- Great Britain was the first nation to use steam locomotives and Britain's railway is the oldest in the world.
- A train is made up of carriages (also known as wagons or cars) pulled by an engine (or locomotive).
- A steam engine pulls a tender (a wagon containing fuel).
- Steam trains were first built in the early 1800s to carry goods and materials, but they soon were used to transport passengers too.
- In 1825, George Stephenson opened a railway in the north of England. He designed a steam train called Locomotion and used it to pull wagons full of coal.
- Diesel trains started to replace steam trains in the middle of the 20th century (1950/60's).
- The fastest trains in the world are powered by electricity. The electricity is transmitted to the train, either by overhead cables or through special rails running alongside the track.

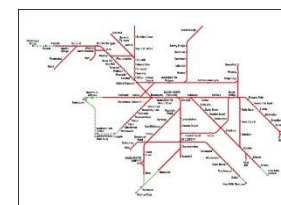


### Famous People

Thomas Savery (1650-1715)	<ul style="list-style-type: none"> <li>Invented and made one of the first ever steam engines in 1698. This engine was used to pump water out of the coal mines, but unfortunately it had a number of problems and did not work as well as everyone hoped. However, this early steam engine design helped other engineers and inventors to develop more successful engines in the future.</li> </ul>
James Watt (1736-1819)	<ul style="list-style-type: none"> <li>A Scottish engineer who worked to improve the earliest steam engines like that of Thomas Savery. Watt's designs and ideas were very successful. After Watt retired in 1800, many other engineers and inventors continued to work on and improve on this early steam engine design. The power of the steam engine was soon about to completely change travel and transport in the United Kingdom and around the world.</li> </ul>
George Stephenson (1781-1848)	<ul style="list-style-type: none"> <li>The most famous George Stephenson invention was his Rocket, which was a ground-breaking railway steam engine in terms of speed and design. George Stephenson won a prize of £500 for the Rocket's performance.</li> </ul>

### Key Vocabulary

Spelling	Definition
Carriage	one of the vehicles that is joined to make a train
Locomotion	an act or the power of moving from place to place
Parapet	a low wall or railing to protect the edge of a platform, roof, or bridge
Platform	an area next to a railway track from which passengers can get on and off trains
Porter	someone who helps people with their bags
Railway	the system of travelling by train
Station master	the person in charge of a railway station
Tunnel	a passage through a hill or underground
Train spotting	looking for different sorts of trains



### Railway Timeline

**1804** - World's first Steam locomotive built by Richard Trevithick.

**1814** - George Stephenson constructs his first locomotive, Blucher.

**1825** - Stephenson's Stockton and Darlington Railway opens.

**1829** - The Rocket sets a speed record of 47 km/h (29mph).

**1830** - The Liverpool and Manchester Railway opens.

**1890** - World's first electric underground railway opened in London.

**1938** - In England, the world speed record for steam traction is set by the Mallard.