The coming of steam

What is a railway?
A railway is a track with rails that vehicles move along. 500 years ago carts full of coal were being pushed or pulled along wooden tracks by people or horses.

The tracks made it easier to move the loaded carts but, the coal was very heavy. The amount of coal that could be carried in any wagon was limited to how much a man, or a horse, could pull or push along the track.


Why was steam so important?
Clever people began to realise that steam could be used to make things move.

New inventions and the discovery of steam as a source of power meant that people’s lives changed forever.

The heat that was produced by heating coal heated water to make steam which powered the machines. This meant that the power of steam made it easier and quicker to produce more and more goods. As a result, lots of new factories were built.


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Sadly the locomotive only made three journeys because the weight of the locomotive kept on breaking the cast iron rails it ran on.

The owner of the ironworks (who had been paying Trevithick money in the hope that he’d invent something useful) was very disappointed. He came to the conclusion that Trevithick’s invention wasn’t likely to reduce his transport costs and so the project was abandoned.

In 1808, Richard Trevithick built a new steam railway locomotive called ‘Catch Me Who Can’ and decided to show it off to the public in London.

In 200 years ago carts were being pulled along much improved wooden rails by horses.

The carts ran on rails as the way to a river or canal where the coal was loaded on to barges and taken wherever it was needed.

The wooden rails regularly wore out or broke under the weight of the coal, and the horses were slow and unable to pull very heavy loads.

Coal was very important in those days. It was used to heat people’s homes but it was also needed in the factories to power machines.

More and more coal was needed so miners had to dig deeper and deeper into the earth to find it. It was dirty and dangerous work. Many workers including men, women and children were killed in the mines because of flooding, explosions and lack of oxygen.

The ‘Catch Me Who Can’ ran on a circular track at up to 12 miles an hour. People were invited to pay one shilling to go on the ‘steam circus’ and ride in an open carriage pulled by the locomotive.

Trevithick intended to show that travelling by railway was much faster than travelling by horse.

Once again, the cast-iron rails were broken and broke. The train came off the rails and the public were not impressed. It was a great disappointment for Richard Trevithick and again he abandoned his project.

During Queen Victoria’s long reign, roads had improved thanks to John McAdam’s new hard surface.

More and more coal was opened so that barges could carry goods to more and more parts of the country.

The next step was to replace the horses that hauled the coal wagons with something that would go faster and something that would be able to move much heavier and larger loads.

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The public might not have been very impressed by Richard Trevithick's Steam Railway, but the story of steam locomotives didn't end there. They would go on to change everyone's idea of travelling but not before the public had been persuaded that rail travel was a good thing.

**Extended chronological study**

Pupils should be taught a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066. For example:

- The changing power of monarchs using case studies such as John, Anne and Victoria
- Changes in an aspect of social history, such as crime and punishment from the Anglo-Saxon period to the present or leisure and entertainment in the 20th century
- The legacy of Greek or Roman culture (art, architecture or literature) in later periods in British history, including the present day
- A significant turning point in British history, for example, the first railway or the Battle of Britain

To understand the important developments in transport (particularly rail transport) that took place throughout the Victorian era and the impact of these developments.