

Year 4 Reading Comprehension

George Stephenson's Radical Railways



Today, there are almost 10 000 miles of railway in the United Kingdom, serving around 2500 stations. Trains carry passengers quickly from place to place and carry freight such as building materials, coal and oil, as well as other goods. But what was the world's first railway? Read on to find out.

1568	Miners used carts pulled by animals on wooden rails in Cumbria, England.
1604	A 2-mile long wooden track that was used to transport coal in horse-drawn wagons was built in Shrewsbury, England.
1793	Iron rails began to be used on the popular wagonways and railways.
1807	The first passengers began to travel by horse-drawn carriage on the railway.
1812	The first steam locomotive, the Salamanca, was designed.
1821	George Stephenson was hired as the engineer for the Stockton and Darlington Railway.
1825	Stephenson opened the world's first locomotive railway.

George Stephenson's Radical Railways

George Stephenson was born in Wylam, a small village in the north of England, in 1781. He was interested in engines and steam-powered machinery. His first invention was a safety lamp. It helped to stop explosions in the mines, which were often caused by the flames of the miners' lamps. After this, he began to design locomotives to help people move coal.

In 1821, Stephenson was offered a job building a new railway line. It would be 25 miles long and would connect the coal mines in Bishop Auckland and Stockton. To start with, the plan was to build a track for horse-drawn carriages. Stephenson disagreed. He thought that his locomotives would work better.

After four years of work, Stephenson's project was completed. He drove his steam-powered locomotive named Locomotion No. 1 on its first journey on the 27th of September 1825. It carried wagons of coal and flour at a speed of up to 12 miles per hour on its first journey. A passenger carriage called Experiment carried upper class guests on the first ever passenger journey on a steam locomotive. Stephenson's project was a huge success and he went on to work on more railway projects around the UK.

Did you know?

The specific sized rails that Stephenson used on the Stockton and Darlington Railway almost 200 years ago are still being used today, all around the world.

Glossary

freight: Goods transported in large amounts

iron: A hard, grey metal which is very common

locomotive: A vehicle with an engine to power it

miners: People who work in mines digging for minerals such as coal

passengers: People who are travelling in a vehicle but are not driving it

George Stephenson's
Radical Railways

Questions

1

Which of these is another word for **passengers**? Tick one.

travellers

drivers

hikers

2

How many miles of railway are there in the United Kingdom today? Circle the correct answer

2500

10 000

12 500

3

Why do you think wooden railways were replaced with iron ones?

4

Order the stages of fossilisation by numbering these statements from 1 to 5. The first one has been done for you.

	Stephenson got a job as an engineer for the Stockton and Darlington Railway.
	Stephenson drove the Locomotion No. 1.
1	Stephenson was born in Wylam.
	Stephenson began to design locomotives.
	Stephenson invented a safety lamp.

George Stephenson's
Radical Railways

5

Draw lines to match these events with the year they took place.

Miners used carts on wooden rails.	1604
The first passenger journey on a steam locomotive took place.	1793
Iron was used to build railways.	1825
Horse-drawn carriages travelled on wooden rails.	1568

6

Look at the paragraph beginning with **George Stephenson was born in Wylam...**

What kind of person do you think George Stephenson was and why?

7

How do you know that Stephenson's project was a success?

8

Explain what Stephenson's project was in as few words as you can.

George Stephenson's
Radical Railways

Answers

1

Which of these is another word for **passengers**? Tick one.

travellers ✓

drivers

hikers

2

How many miles of railway are there in the United Kingdom today? Circle the correct answer

2500

10 000

12 500

3

Why do you think wooden railways were replaced with iron ones?

Child's own logical answer, for example:

Iron was stronger and it lasted longer than wood.

4

Order the stages of fossilisation by numbering these statements from 1 to 5. The first one has been done for you.

4	Stephenson got a job as an engineer for the Stockton and Darlington Railway.
5	Stephenson drove the Locomotion No. 1.
1	Stephenson was born in Wylam.
3	Stephenson began to design locomotives.
2	Stephenson invented a safety lamp.

George Stephenson's
Radical Railways

5

Draw lines to match these events with the year they took place.

Miners used carts on wooden rails.

The first passenger journey on a steam locomotive took place.

Iron was used to build railways.

Horse-drawn carriages travelled on wooden rails.

1604

1793

1825

1568

6

Look at the paragraph beginning with **George Stephenson was born in Wylam...**

What kind of person do you think George Stephenson was and why?

Child's own answer, for example:

- **George Stephenson was kind because he wanted to invent things to help people.**
- **George Stephenson was creative because he invented a way to make a safety lamp.**

7

How do you know that Stephenson's project was a success?

Child's own answer, for example:

- **Stephenson got more jobs on railway projects afterwards.**
- **Stephenson's rail size is still used today.**

8

Explain what Stephenson's project was in as few words as you can.

Stephenson's project was to build a 25-mile long railway between two coal mines. His locomotive carried freight and passengers.

We hope you find the information on our website and resources useful. As far as possible, the contents of this resource are reflective of current professional research. However, please be aware that every child is different and information can quickly become out of date. The information given here is intended for general guidance purposes only and may not apply to your specific situation.



visit [twinkl.com](https://www.twinkl.com)

