

Pioneers: Fact Sheet

Top Facts

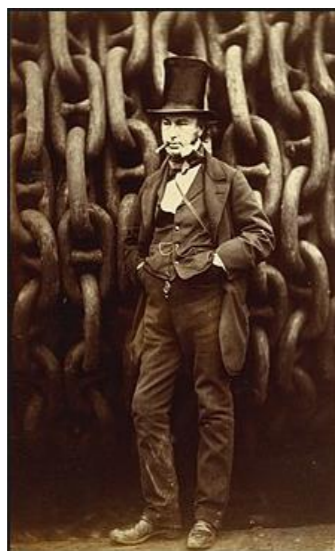
1. Isambard Kingdom Brunel was born on 9 April, 1806 in Portsmouth.
2. Brunel's parents sent him to the finest schools in England and France to learn the skills he needed to be an engineer.
3. Brunel worked on the Thames tunnel with his dad, who was also an engineer. He almost drowned when the roof collapsed and flooded in 1827!
4. When Brunel was getting better from this, he entered and won a competition to design a bridge over the Avon river gorge in Clifton, Bristol - this later became the **Clifton Suspension Bridge**.
5. Brunel married Mary Horsley in 1836. They had three children, and one of them became an engineer too.
6. Brunel was known for wearing a tall black top hat - very stylish in Victorian times!
7. **Brunel was the chief engineer of the Great Western railway**, and he designed the railway line between London and Bristol. He also designed the Temple Meads station in Bristol, and Paddington station in London.
8. Brunel also designed fast **ships** - the SS Great Western, the SS Great Britain and the SS Great Eastern.
9. Brunel died on 5 September 1859. He is buried at Kensal Green cemetery in London.
10. Brunel's legacy has lasted long after 1859. His creations are still used today!

Did you know?

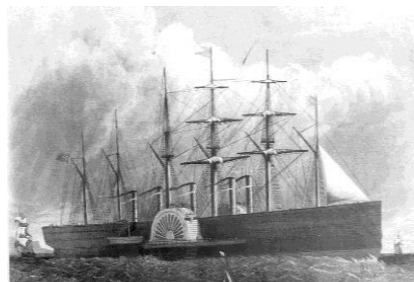
- Brunel's first name - Isambard - was his dad's middle name. His middle name - Kingdom - was his mum's maiden name.
- Brunel designed lots of different things - train, ships, bridges, tunnels, docks, and even a hospital!
- Brunel liked to get really involved in the things he was designing, but this sometimes meant that he'd get badly hurt. He almost drowned when the roof of the Thames tunnel collapsed, and he fell down a burning ladder when the SS Great Western caught fire.
- Brunel didn't just design railways in Britain - he also worked in Italy, India and Australia!



Statue of **Brunel** at Paddington Station in London.



A famous photo of Brunel in front of one of his **ships**.



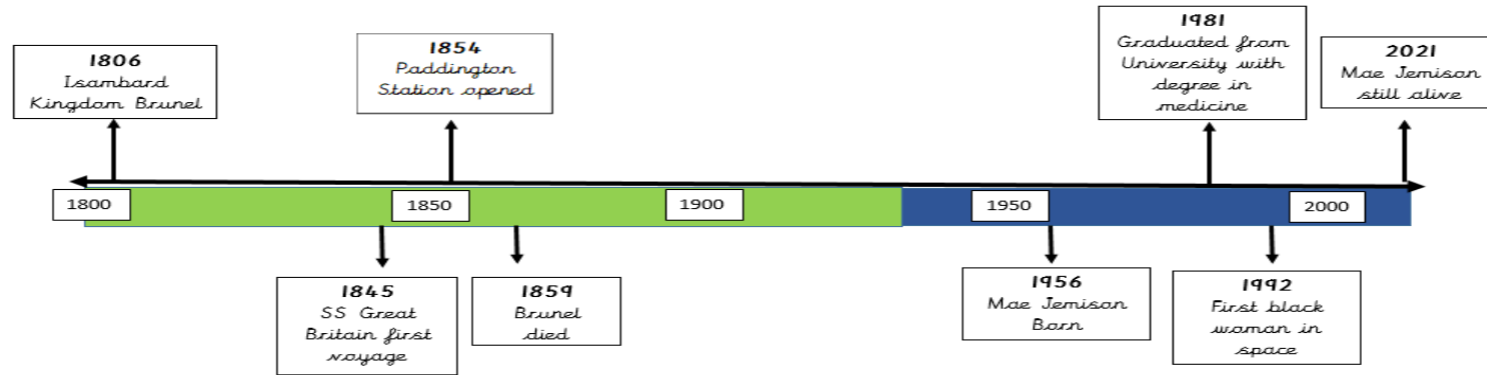
SS Great Eastern



The Great Western train company.

Brunel engineered railway routes which meant people could travel by train to places for the first time and in much quicker times.

Brunel **changed transportation in Britain**. He designed the railway line between Bristol and London, and built a ship that only took 15 days to get from Liverpool to New York City. People could travel farther, faster. Brunel died when he was just 53 years old, but his contributions to the world of engineering and transportation live on.



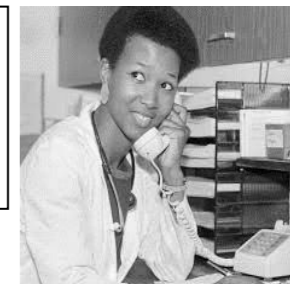
Clifton Suspension Bridge



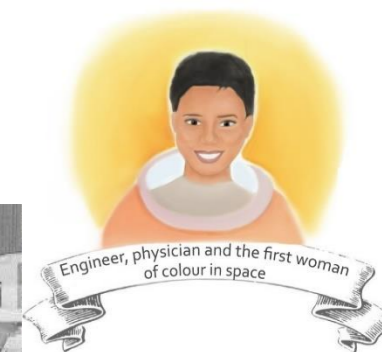
Isambard Kingdom Brunel was a **famous engineer in Victorian times**. He built bridges, ships and even railway stations - you can still see some of those today!

Mae Jemison applied to the **National Aeronautics and Space Administration (NASA)** to become an astronaut. She was one of only 15 out of 2,000 applicants accepted by NASA.

She worked as a **doctor** first in Los Angeles, California, and then with the Peace Corps in West Africa



Mae Jemison has a degree in **chemical engineering** and has a **medical degree**.



Mae Jemison was the **first woman of colour in space**.

She was a part of the crew of the **space shuttle Endeavour**, which orbited Earth for more than a week in 1992.



THE DOROTHY JEMISON FOUNDATION FOR EXCELLENCE

Mae set up the **Dorothy Jemison Foundation** to support children receive high quality learning opportunities no matter their background. It is named after her mother who was a teacher for 25 years.

Mae leads the **100 year Starship Foundation** which aims to make the capability of human travel beyond our solar system a reality within the next 100 years.



NATIONAL WOMEN'S HALL OF FAME

In addition to her many awards, **Jemison** has been inducted into the National **Women's Hall of Fame** and the International **Space Hall of Fame**.



MAE JEMISON, M.D.
Principal, 100 Year Starship
Principal for the 100YSS foundation



LET'S MAKE HUMAN INTERSTELLAR TRAVEL CAPABILITIES A REALITY WITHIN THE NEXT 100 YEARS.