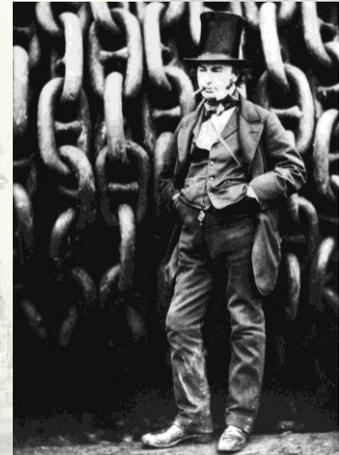


STEAM
Museum
Burst!

Isambard Kingdom Brunel

- Isambard Kingdom Brunel was a civil engineer in the 19th century
- He designed many bridges, tunnels and buildings
- In 1833 he became Chief Engineer of the Great Western Railway and began work on the line from London to Bristol.
- In 1841 work began on the building of the Swindon Works; STEAM is now housed in part of the original works
- Some of Brunel's most notable achievements include: Clifton Suspension Bridge, Box Tunnel and Paddington Station.



Let's Explore

Building Bridges

Bridges have been used for centuries to enable people to cross otherwise impassable obstacles, such as streams, rivers or valleys. Engineers, like Brunel, must consider how far the bridge needs to reach or span and what will cross the bridge, for example pedestrians, trains or other traffic. A bridge also needs to support the materials it is made from as well as the load that will cross it. When designing a bridge engineers also need to think about what will pass under the bridge.

There are many different types of bridges, including beam bridges, arch bridge and suspension bridges.

You might like to research and investigate some different types and find out about some famous and beautiful bridges.

Try it at Home



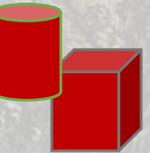
Become an engineer!

Build a bridge to take the weight of a LEGO figure or another of your toys, a small car perhaps.

Use things that you can find in your home or garden; books, cans or toilet rolls for the piers to hold your bridge up. Sometimes having a limited amount of resources can help you be more inventive: use just rolled up newspaper and sticky tape, an empty cereal box or even dried spaghetti and marshmallows for your structure!

If your bridge is wide it might need extra supports in the middle.

Share your creations with us online (Facebook and Instagram @steammuseum or Twitter @STEAM_Museum)



Brunel also designed tunnels, so perhaps you could do that too!

Thought Stop



Can you find some images of Brunel's bridges? Which one do you like best? Why?

Find out about some of the other things Brunel designed. Were you surprised there were so many different types of things?

Next steps

Can you draw a design for a bridge from your house to.... wherever you would like it to go!

Perhaps write a story about an adventure you have as you cross your bridge

Can you find out some place names in the UK that include bridge in their name. How about Bridgnorth and Kingsbridge to get you started.

READ: Traditional stories including building and bridges

The 3 Little Pigs. What would you build your house out of and why?

3 Billy Goats Gruff. What could you do to stop a greedy troll hiding under your bridge?

WATCH: Bridge to Terabithia

