

IRONSTONE BRIDGE PROJECT



Bridges are amazing structures – think where we would be without them! There are thousands of different types of bridges all over the world from a simple plank over a stream to our historic Transporter Bridge over the River Tees.



We are issuing you with a **CHALLENGE** to build your own bridge at home. It could be inside or outside if you have a garden or yard and it can be made from anything you have lying around. BUT – please ask an adult first; don't go using your family's last packet of spaghetti!

Watch this video our project engineer, Paula, has made which tells you all about the challenge.

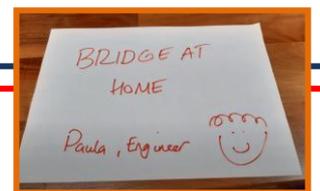
https://www.youtube.com/watch?v=QK6n_EUJWZk&feature=youtu.be

Paula McMahon
Structures Engineer
Sir Robert McAlpine



So the challenge is to build a bridge – here are a few ideas but I bet you can come up with much better ones.

-  **Build a bridge across a sink or bath for your toy vehicles to cross – make sure they don't fall in!**
-  **Find a way to get across a garden path without touching it – make sure you leave space underneath though!**
-  **Find a way to get your lego people from one chair to another without falling to the floor.**



REMEMBER THOUGH!

- ✓ Stay safe – don't climb onto a homemade bridge unless an adult says it is safe.
- ✓ Ask first before using anything from home to build your bridge.
- ✓ Only use tools if an adult says it is ok and is supervising you.

Don't forget - take a picture of your bridge and post it to your school's website or twitter. We would love to see any drawings, designs or independent work on bridges.



TYPES OF BRIDGES

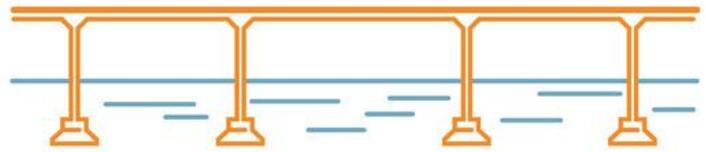
truss bridge



arch bridge



beam bridge



tied arch bridge



suspension bridge



cantilever bridge



cable-stayed bridge



BRIDGE VOCABULARY

Span



Deck



Load



Anchor



Pier (support)

