

Subject: D&T - Bridges

Key Vocabulary

Beam bridge

Arch bridge

Truss bridge

Stiffness

Stability

Reinforce

Corrugation

Lamination

Stiff

Rigid

Wood file/rasp

Softwood

Hardwood

Joints

Sandpaper/glass paper

Bench hook/vice

Tenon saw/coping saw

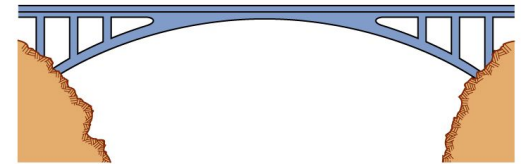
Overview

This topic develops children's understanding of secure structures and introduces them to measuring, sawing and joining wood accurately. After learning about different types of bridges and also exploring how the strength of structures can be affected by the shapes used, children create their own wooden bridge and test its durability.

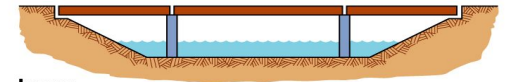
Key Points of Learning (RAG at end of each session)

- To explore how to reinforce a beam (structure) to improve its strength
- To identify arch, beam and truss bridges and to use triangles to build a spaghetti truss bridge, understanding how triangles reinforce bridges.
- To complete a wooden truss bridge and identify points of weakness, reinforcing them as necessary following testing
- To evaluate a truss bridge against a specification

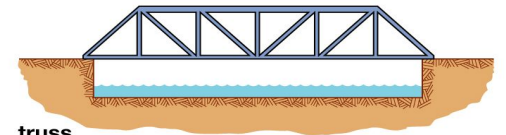
Questions I want to Investigate now ...



arch



beam



truss

Useful Websites

<https://easyscienceforkids.com/all-about-bridges/>