

Design Technology -Bridges - Year 4 Spring Term

Prior Learning

Properties of materials

Vocabulary

Design brief - it outlines the most important factors to consider when starting a project.

Investigate- complete research, look at existing examples

Join- where two materials are attached

Jinx Corner - triangle added to corners to increase strength

Fit for Purpose - do the job it was meant to do

Evaluation - to judge how successful the final product is.

Design- shape and construction details

Construction- making of structure

Jobs in Engineering

Engineering is the use of scientific principles to design and build machines, structures, and other items, including bridges, tunnels, roads, vehicles, and buildings. The discipline of engineering encompasses a broad range of more specialized fields of engineering, each with a more specific emphasis on particular areas of applied mathematics, applied science, and types of application.

Methods and Processes

Design

What style do you want to achieve?

Measure

Accurate measuring is essential.

Cut

Safety first, follow instructions. Work slowly and in a controlled manner.

Join

Take care to join accurately and safely if using hot glue.

Tools

Pull saw



Mitre Block



Cutting Mat



Junior Hack saw



Design Process



Materials and Consumables

jinx corners

1cm square wood

dowel

hot glue

Can I answer?

- Which materials could you use to join wood together and why?
- Why do we investigate before we make our own?
- How and why are jinx corners used?
- What is the purpose of a design brief? How does it help us?