Design and Technology
Year 5- Autumn 2

Bridges

Key Vocabulary

Diagram, computer-aided design, structure, cams, suspension, rigid, tension, truss, span, beam

Learning enquiry question: How can we make a strong and stable bridge?

Prior Learning:

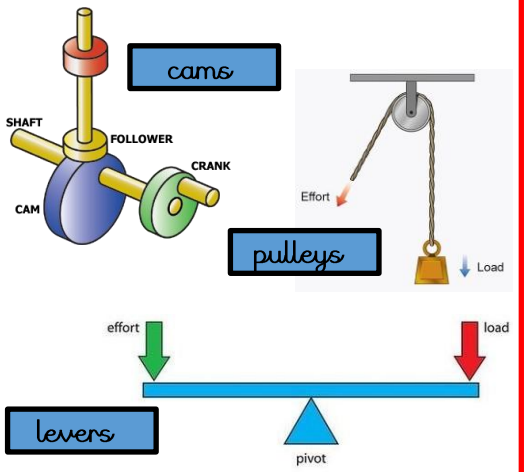
- Knowledge of strong and stable structures
- Knowledge of levers, wheels & axels
- Knowledge of tools & materials to cut and join

Curriculum Link:

Geography- Rivers

By the end of this unit, I will be able to:	SA	TA
Understand the different types of bridges.		
Understand how to strengthen and stabilise a structure.		
Understand how to use mechanical systems (cams, pulleys, levers)		
Know how to use a range of tools foor cutting and joining materials.		
Evaluate their bridges according to the design criteria.		

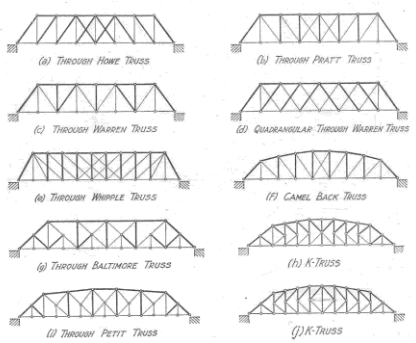
Mechanical Systems



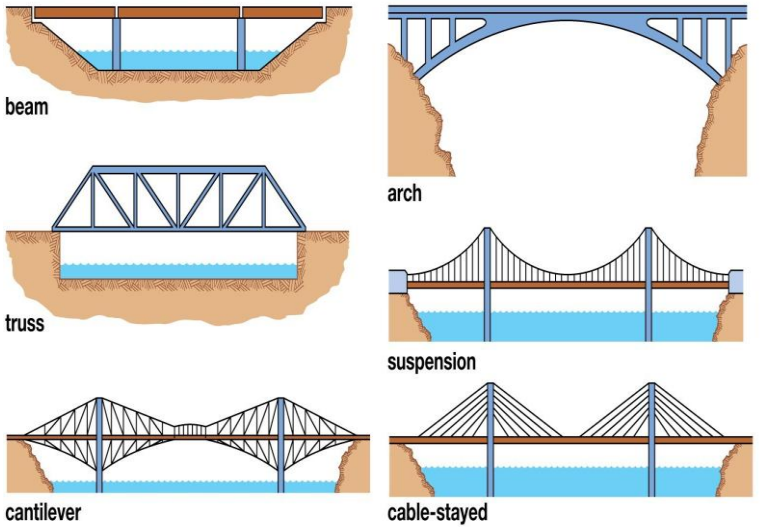
Strong and Stable Materials & Techniques

Materials are at their strongest when they are positioned in a certain way i.e. crosses, triangles.

Strong materials: Lolly sticks, cardboard, wood, hard plastic



Types of bridges



Cutting Tools:

Scissors

Junior saw

Craft knife

Joining Tools:

Glue gun

Tape (clear, duct, masking)

PVA glue

Pritt sticks