



Arch bridge



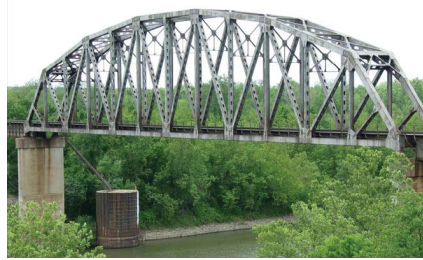
Beam bridge



UKS2 - Bridges



Suspension bridge



Truss bridge

What I need to know:

- Bridges make it easier for humans and transport to get over a gap or river.
- All bridges can hold a certain amount of weight.
- Some structures are stronger or weaker than others
- There are different ways to reinforce structures.
- An arch bridge has an arch under the support of the beam.
- A beam bridge has two supports and a beam across the supports.
- Suspension bridges can cross a wide body of water. They use thick cables that are suspended above a deck and held down tightly, anything going over the bridge pulls down and creates tension.
- Truss bridges have a long string of triangles.
- Triangles can be used to reinforce bridges, as they are really strong shapes.
- If you put force on the point of a triangle it keeps its shape. The force pushes down the two sides and the bottom gets stretched out to both sides.
- I can measure and mark wood accurately and select appropriate equipment for particular tasks.
- I can saw safely to create the parts needed to create a bridge.
- I can evaluate my bridge and identify points of weakness in my bridge structure and know to reinforce them as necessary.

Key Vocabulary

Arch bridge	A bridge which is built with a curved arch.
Beam bridge	A bridge which is built with horizontal beams and vertical pillars.
Suspension bridge	A bridge which is supported by vertical cables and suspended by cables which run between pillars that are connected onto either end of the bridge.
Truss bridge	A bridge which is built from a series of triangle beams.
Tension	A stretching force caused by two parts of a structure being pulled apart.
Compression	A squashing force caused when parts of a structure are pushed together.
Reinforce	To make a structure or material stronger, especially by adding another material or element to it.