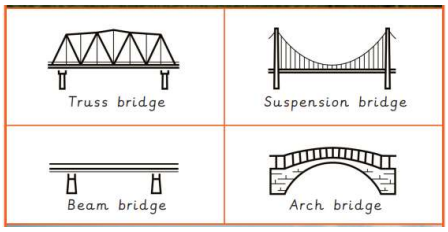
Wild Waters
Rivers – Bridges
Design Technology – Term 4

What should I already know?

- Notice features of purpose for a structure
- Consider points of reinforment in a structure



What am I going to learn? (Sticky knowledge)

1: Research different types of bridges - looking at arch, suspension, truss and beam bridges considering their strengths and weaknesses as well as looking at the purpose of bridges and everyday examples
2: Research making straw truss bridges to consider the process and points of joining, the importance of careful measuring
3. Plan design: Considering the purpose of bridges discussion about suitable materials and creating a criteria for making truss bridges from wood.
4. Make: Begin making bridges, using skills of measuring and assembling
5. Make: Continuing in making, considering points that may need reinforcing
6.Evaluate: Testing constructed bridges against criteria and to self evaluate process and skills used

Vocabulary

Reinforce	To make a structure or material stronger, especially by adding another material or element to it.
Arch bridge	A bridge which is built with a curved arch.
Beam bridge	A bridge which is built with horizontal beams and vertical pillars.
Tension	A stretching force caused by two parts of a structure being pulled apart.
Truss bridge	A bridge which is built from a series of triangular beams.
Shape	The form of an object.
Structure	Something which stands, usually on its own.
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.