



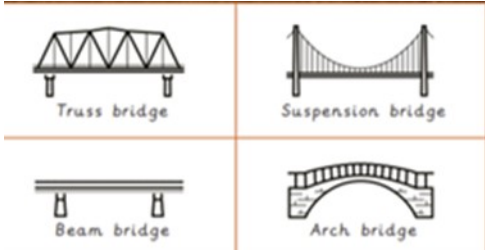
Build a Viking Bridge (Structures)

We are learning to design and build a Viking bridge

Frame structures are ridged support structures that use beams and piers to hold large forces of gravity and weight.



What have we already learnt?
 In Years 3 and 4 children learnt about different ways to make strong and stable structures. They explored different joining and finishing methods and ways to make structures stronger by using specific shapes.



There are 4 different types of bridges: arch, beam, truss and suspension.

Triangles are a strong shape used in structures
 Supporting shapes can increase the strength of a structure allowing it to hold more weight

Vocabulary	Definition
truss	A bridge composed of a series of wooden or metal triangles, known as trusses
arch	a bridge shaped as an upward curved arch
suspension	A bridge that hangs from strong wires called cables
beam	a bridge supported by an abutment or pier at each end
flange	a part or edge that sticks out from an object in order to keep the object in position, strengthen it, or attach it to another object
L brace	Cross bracing between joists or rafters
triangulation	the engineering practice of forming rigid triangles together with adequate fasteners at the joints

Structures need materials which are accurately cut and joined to create a strong, stable structure.

