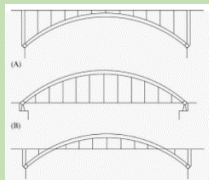


## Your child will learn to:

- Explore how to reinforce a beam (structure) to improve its strength
- Create a range of beam and arch bridge designs
- Identify stronger and weaker structures
- Build a spaghetti truss bridge
- Understand how triangles can be used to reinforce bridges
- Measure and mark out accurately
- Select appropriate tools and equipment for particular tasks
- Identify points of weakness through testing

## Significant people/links

William Morris, Edward Burne Jones, John Everett Millais,  
<https://www.duckworthbooks.co.uk/black-victorians-hidden-in-history/> - link to images of 'Black' Victorians, Brunel



## Trips/experiences

### Tower Bridge



## Vocabulary

<b>Beam bridge</b>	consists of a horizontal beam that is supported at each end by piers.
<b>Arch bridge</b>	An arch bridge is a bridge with abutments at each end shaped as a curved arch
<b>Truss bridge</b>	A truss bridge is a bridge whose load-bearing superstructure is composed of a truss, a structure of connected elements, usually forming triangular units.
<b>Strength</b>	the quality or state of being physically strong.
<b>Technique</b>	a way of carrying out a particular task, especially the execution or performance of an artistic work or a scientific procedure.
<b>Lamination</b>	overlay (a flat surface, especially paper) with a layer of plastic or some other protective material.
<b>stiffness</b>	inability to move easily and without pain.
<b>Rigid</b>	unable to bend or be forced out of shape; not flexible.
<b>Factors</b>	circumstance, fact, or influence that contributes to a result.