

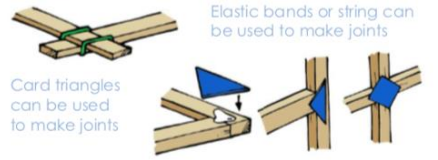
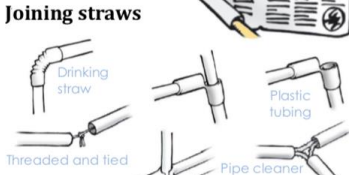
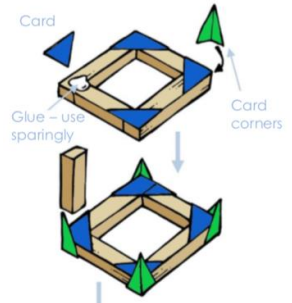
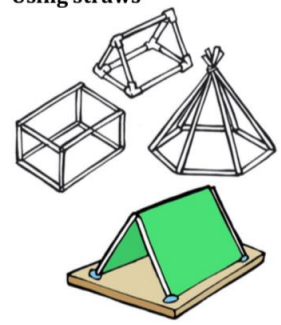
## Frame Structures

### Techniques for building frame structures

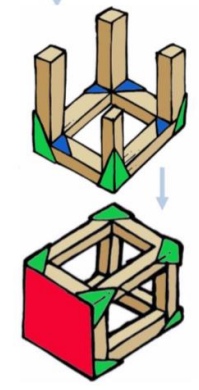
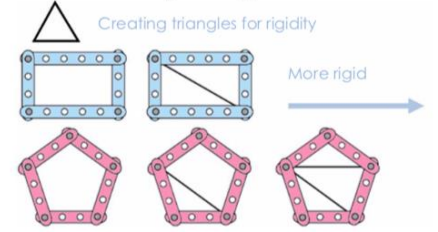
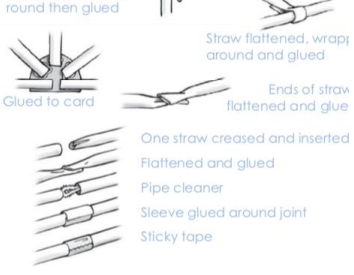
### Joining thin sectioned pieces of wood

### Using straws

### Using square section wood

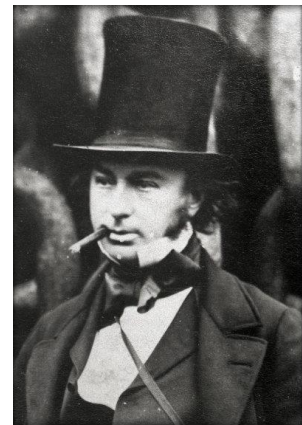
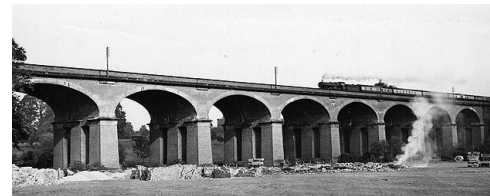


### Understanding triangulation



## Engineer Study

### Isambard Kingdom Brunel



- ✓ Isambard Kingdom Brunel was born on 9th April 1806
- ✓ Isambard Kingdom Brunel was a Victorian engineer who was one of the main architects of Britain's industrial revolution. He was famous for his pioneering work on Britain's railways and ships.
- ✓ He built railways and designed bridges, tunnels, viaducts and passenger ships.

## Vocabulary

**Modelling** – the process of making a 3-D representation of a structure or product.

**Compression** – the application of pressure to squeeze an object.

**Strut** – a part of a structure under compression.

**Tension** – a force pulling on a material or structure.

**Tie** – a part of a structure under tension.

**Diagonal** – a straight line that goes from one corner to another inside a shape.

**Horizontal** – a line that is parallel to the ground.

**Vertical** – a line that is at right angles to the ground.

**Triangulation** – the use of triangular shapes to strengthen a structure.

**Frame structure** – a structure made from thin components e.g. tent frame.

