

## Key Vocabulary

<b>structure</b>	The arrangement of the parts of something complex.
<b>bridge</b>	A bridge is a structure built to span a physical obstacle such as over water.
<b>base</b>	Structures are more stable when they have a wider base. A base is the lowest part of something, the part on which it rests.
<b>freestanding</b>	Not attached to or supported by another structure.
<b>weight</b>	Weight is the how heavy something is. Bridges need to be able to hold weight.
<b>strong</b>	The strength of a bridge is important as they need to withstand weight and use to be purposeful.
<b>rigid</b>	Rigid means unable to bend or be forced out of shape.
<b>stable</b>	Not likely to give way or overturn.
<b>folding</b>	Folding of materials can be used to strengthen and stiffen structures.
<b>layering</b>	To add more layers means that the structure will be strengthened.

## Structures:

### Designing and Making a Bridge



Mersey Gateway Bridge- 2017



Tower Bridge, London

- There are different types of bridge structures: arch bridge, cable-stayed bridge, beam bridge, cantilever bridge and suspension bridge, etc.
- Bridges are a type of structure that are built for a purpose.
- They are freestanding structures that can stand without being attached to something else, so they need to be able to support their own weight and the weight of other things, like people.
- Free standing structures need to be strong, rigid, and stable. Structures with a wider base give more stability.
- Structures can be made stronger and more rigid by joining materials together or folding them and layering.

