



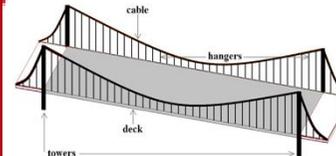
bridge



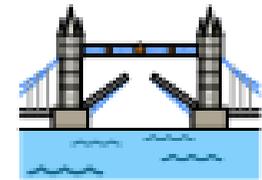
beam bridge



cantilever  
bridge



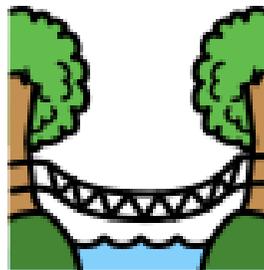
suspension  
bridge



Tower Bridge



support



# Design and Technology: Bridge Making



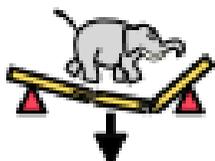
Severn Bridge



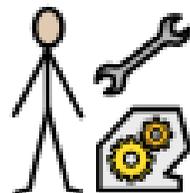
reinforce



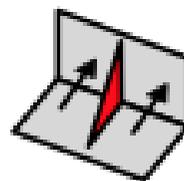
arch bridge



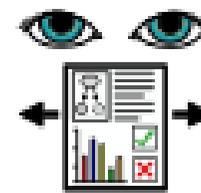
weak



engineer



support

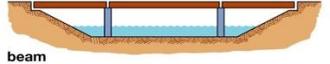
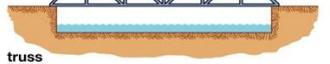
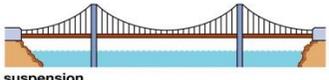
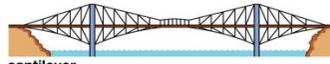
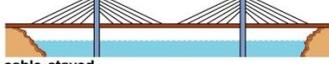


evaluate



modify

# Y5 Design and Technology: Bridge Making - Topic Vocabulary Mat

Subject Specific Vocabulary		Relevant Pictures	Websites	
<b>bridge</b>	A structure carrying a road, path, railway, etc. across a river, road, or other obstacle.		<a href="#">What are bridges made from? - KS2 Science - BBC Bitesize</a> <a href="#">D&amp;T KS2 Structure: Bridges - Kapow Primary</a>	
<b>suspension bridge</b>	A bridge that uses ropes, chains or cables to hold the bridge in place.		<p style="text-align: center;"><b>Other Information</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>beam</p> </div> <div style="text-align: center;">  <p>arch</p> </div> </div> <div style="text-align: center;">  <p>truss</p> </div> <div style="text-align: center;">  <p>suspension</p> </div> <div style="text-align: center;">  <p>cantilever</p> </div> <div style="text-align: center;">  <p>cable-stayed</p> </div> <p style="text-align: right; font-size: small;">© Encyclopædia Britannica, Inc.</p>	<ul style="list-style-type: none"> <li>The oldest bridge is in Turkey over the river Meles, build in 850BC.</li> </ul>
<b>cable-stayed bridge</b>	A bridge in which the weight of the deck is supported by a number of cables running directly to one or more towers.			
<b>arch bridge</b>	A bridge that uses a curved shape to spread the weight from the bridge over the curve, rather than the weight bearing straight down			
<b>cantilever bridge</b>	A bridge which has 'arms' that meet in the middle, allowing it to be crossed.	<b>What I've learnt already</b>		<b>Key Knowledge</b>
<b>beam bridge</b>	The simplest type of bridge that you may come across. A plank of wood placed between two supports is an example.	<p>Y3:</p> <ul style="list-style-type: none"> <li>The shape of a structure can influence its strength (Anderson shelter – arch, Morrison shelter - four 'legs' as support and lid)</li> <li>A structure can be strengthened by internal (inside) support and exterior (outside) reinforcement.</li> </ul>	<ul style="list-style-type: none"> <li>There are many different types of bridge: beam, arch, cable-stayed, suspension, cantilever</li> </ul>	
<b>construct</b>	To build or make something that uses different materials.	<p>Y1:</p> <ul style="list-style-type: none"> <li>I know how to join components together effectively.</li> <li>I know that a range of tools can be used for different purposes: cutting, sticking, curling, bending, joining etc.</li> </ul>	<ul style="list-style-type: none"> <li>There are many well known and successful bridges (eg the DSevern Bridge) and associated designers an engineers: e.g. Tower Bridge; Designed by John Wolfe Barry and engineered by Sir Horace Jones</li> </ul>	
<b>engineer</b>	A person who designs, builds, or maintains engines, machines, or structures.		<ul style="list-style-type: none"> <li>Different materials can be used: steel, brick, wood, iron, rivets</li> </ul>	
<b>steel</b>	A hard and tough metal made by treating iron with great heat and mixing carbon with it.		<ul style="list-style-type: none"> <li>It is important to work safely when constructing bridges.</li> </ul>	
<b>rivet</b>	A short metal pin or bolt for holding together two plates of metal. 		<ul style="list-style-type: none"> <li>A structure can be strengthened using different materials.</li> </ul>	
<b>reinforce</b>	To strengthen or support (an object or substance), especially with additional material.		<ul style="list-style-type: none"> <li>The design of specific bridges makes them particularly successful considering their purpose and location</li> </ul>	
<b>support</b>	To bear all or part of the weight of; hold up		<ul style="list-style-type: none"> <li>There are lots of different design considerations needed to construct a bridge</li> </ul>	