



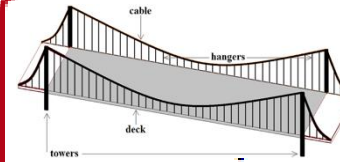
bridge



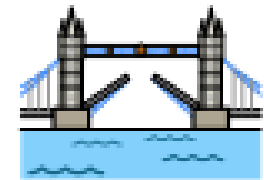
beam bridge



cantilever
bridge



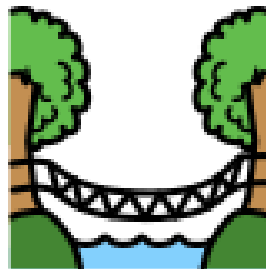
suspension
bridge



Tower Bridge



support



Design and Technology: Bridge Making



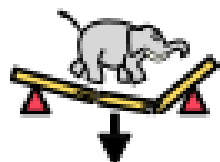
Severn Bridge



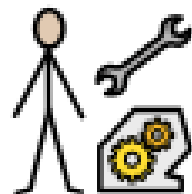
reinforce



arch bridge



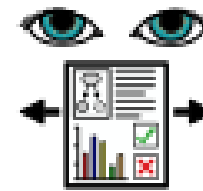
weak



engineer



support





evaluate



modify

Y5 Design and Technology: Bridge Making - Topic Vocabulary Mat

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