

The Bridge Honor



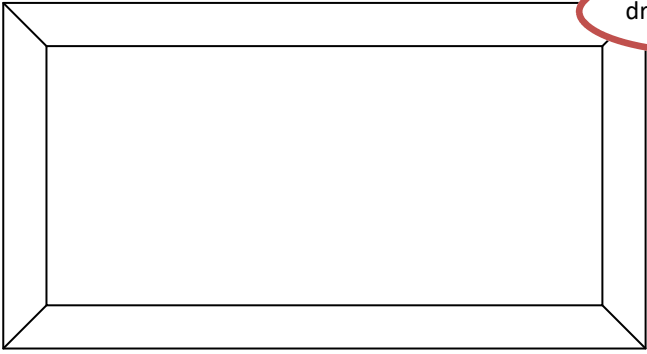
This journal belongs to _____

Club: _____

Date: _____

Cable-stayed Bridge

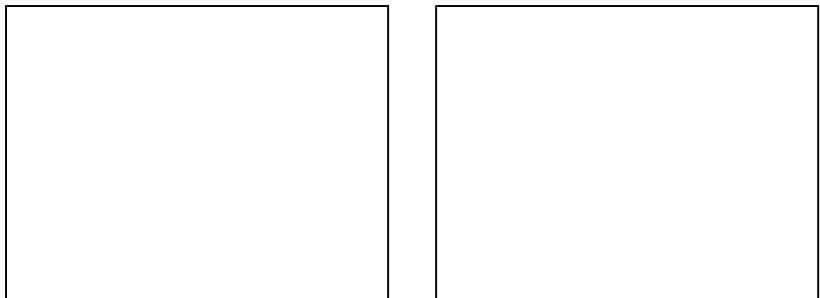
draw it here



Definition: A bridge that consists of one or more columns (normally referred to as towers or pylons), with cables supporting the bridge deck. Like suspension bridges, cable-stayed bridges are held up by cables. However, in a cable-stayed bridge, less cable is required and the towers holding the cables are proportionately shorter.

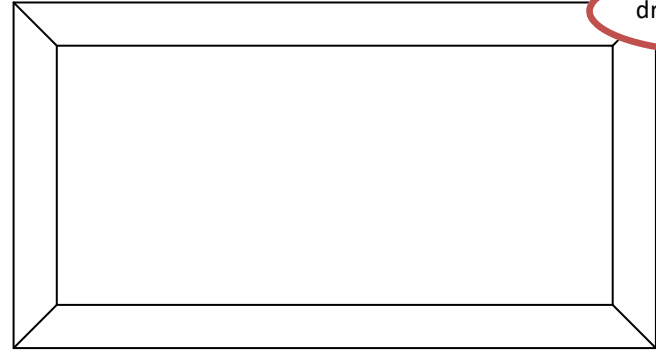
<u>Longest bridge:</u>	<u>Location:</u>	<u>Length:</u>
Russky Bridge	Vladivostok, Russia	3,622 ft
Port Mann Bridge	Vancouver, BC	6, 867 ft.

Examples of this bridge:



Truss Bridge

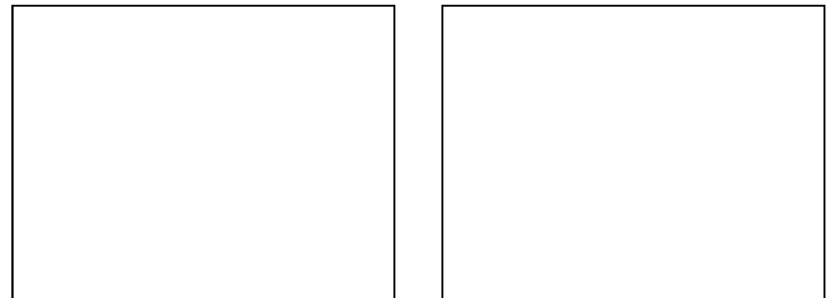
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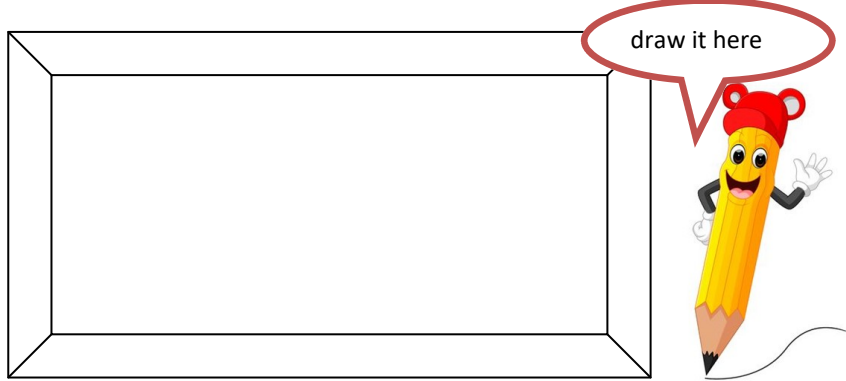
Definition: A bridge composed of connected elements (typically straight) which may be stressed from tension, compression, or sometimes both in response to dynamic loads. The ability to distribute the forces of compression, tension, shear and bending in various ways has led to a large variety of truss bridges.

<u>Longest bridge:</u>	<u>Location:</u>	<u>Length:</u>
Ikitsuki Bridge	Nagasaki Prfecture, Japan	1,312 ft
Astoria Megler Bridge	Astoria, OR	1,232 ft.

Examples of this bridge:



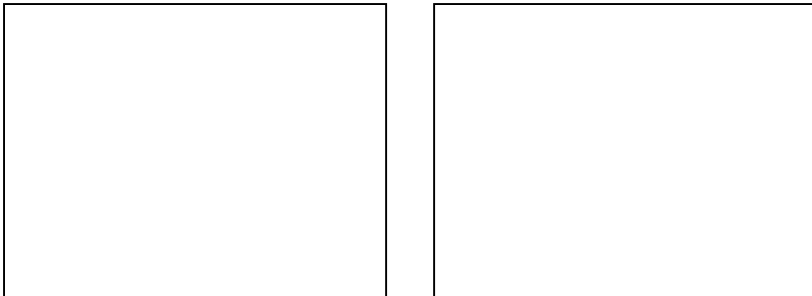
Suspension Bridge



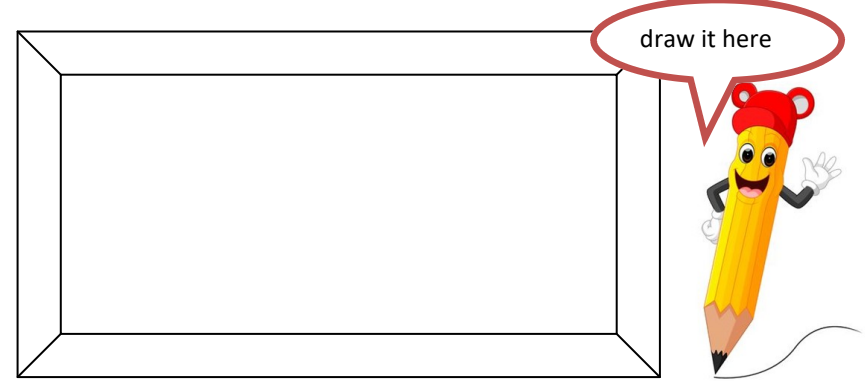
Definition: This type of bridge has cables suspended between towers, plus vertical suspender cables that carry the weight of the deck below, upon which traffic crosses.

<u>Longest bridge:</u>	<u>Location:</u>	<u>Length:</u>
Ambassador Bridge	Between Detroit and Windsor	7,500 ft
Akashi Kaikyo Bridge	Pearl Bridge in Kobe, Japan	6,543 ft.
Verrazano-Narrows	Upper New York Bay	4,260 ft center span

Examples of this bridge:



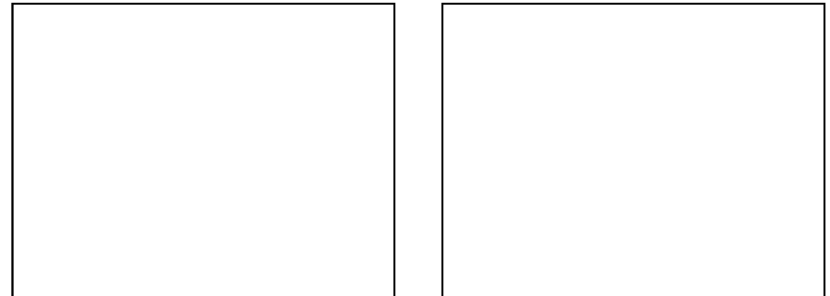
Cantilever Bridge



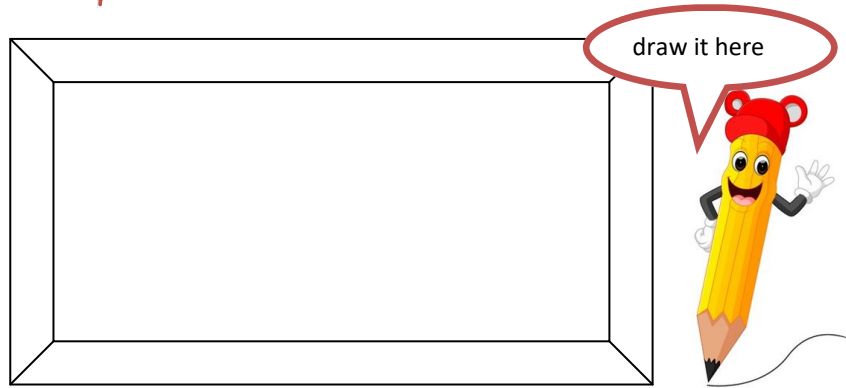
Definition: A bridge built using cantilevers, structures that project horizontally into space, supported on only one end.

<u>Longest bridge:</u>	<u>Location:</u>	<u>Length:</u>
Quebec Bridge	Quebec, Canada	1,801 ft.
Commodore Barry	Over the Delaware in Pennsylvania	1,644 ft

Examples of this bridge:



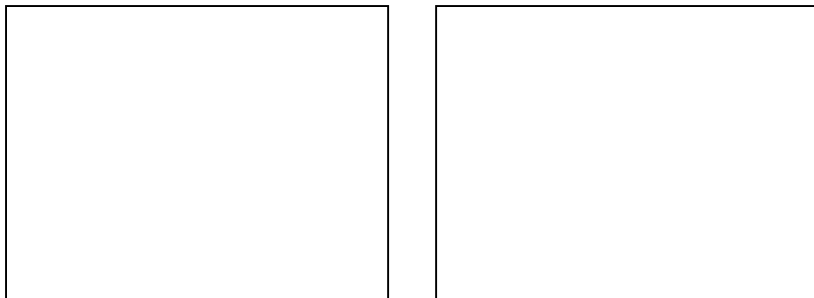
Arch Bridge



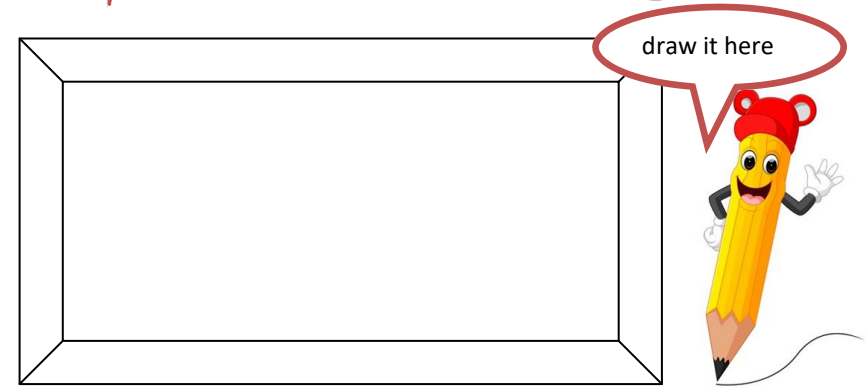
Definition: Arch-shaped bridges that have abutments at each end. Arch bridges work by transferring the weight of the bridge and its loads partially into a horizontal thrust restrained by the abutments at either side.

<u>Longest bridge:</u>	<u>Location:</u>	<u>Length:</u>
Masonry arch bridge	Pont de la Liberation Rance	315 ft.
Chongqing-Chaotinmen	Over Yangtze River in China	1,811 ft.

Examples of this bridge:



Beam Bridge



Definition: The beam bridge is the simplest kind of bridge today. Like most bridges that are characterized by how they are supported, beam bridges consist of one horizontal beam with 2 supports, usually on either end.

<u>Longest bridge:</u>	<u>Location:</u>	<u>Length:</u>
Lake Pontchartrain Causeway	Louisiana	24 miles

Examples of this bridge:

