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Bridge Engineering

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| **Across****2.** A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bridge uses shapes such as triangles and trapezoids to give it strength.**9.** Force caused by the act of being squeezed together.**11.** A structural support; to strengthen and stiffen a structure to resist loads.**12.** A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bridge has a curved bottom and is usually supported at the ends. Covers small distances usually over a small stream or uneven surface.**13.** The outermost end supports on a bridge, which carry the load from the deck**14.** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bridges, also known as stringer bridges, are the simplest structural forms for bridge spans supported by an abutment or pier at each end.**15.** A strain produced when material is twisted**18.** The steps that engineers use to design something to solve a problem**19.** A \_\_\_\_\_\_\_\_\_\_\_\_\_ bridge uses cables to distribute the tension load to usually a central or pair of vertical beams. | **Down****1.** A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bridge is meant to cover great distances. Usually very expensive to make but are very appealing. (Example: golden gate bridge)**3.** An engineer who plans, designs, and supervises the construction of facilities essential to modern life. (examples: bridges, buildings, roads, etc..)**4.** A mixture of water, sand, small stones, and a gray powder called cement.**5.** A force caused by the state of being stretched.**6.** The vertical structure in a suspension bridge or cable staryed bridge from which cables are hung**7.** The distance a bridge extends between two supports.**8.** Supported roadway on a bridge.**10.** A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bridge is a bridge built using structures that project horizontally into space, supported on only one end.**16.** A structure built over an obstacle, such as a river or a road.**17.** The weight of the bridge that must be supported by the structure of the bridge. |