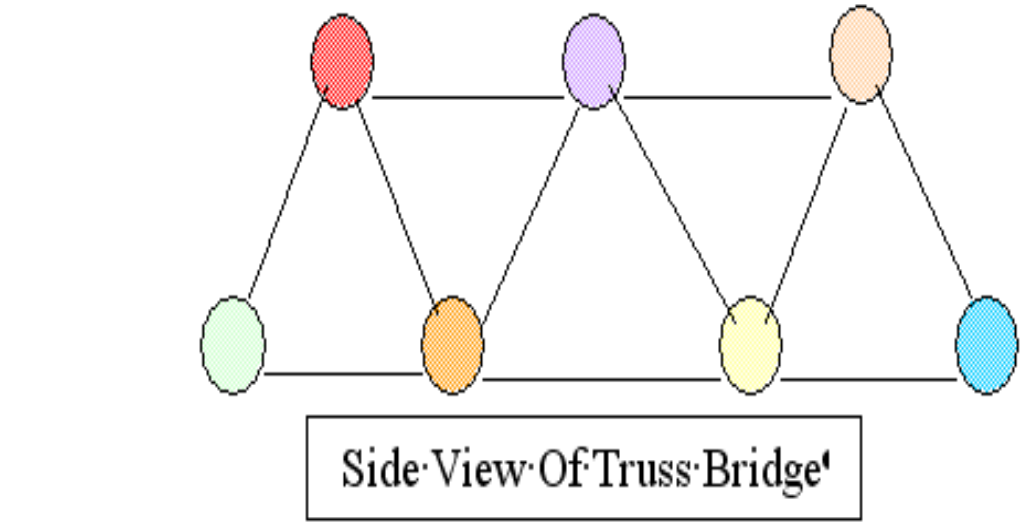
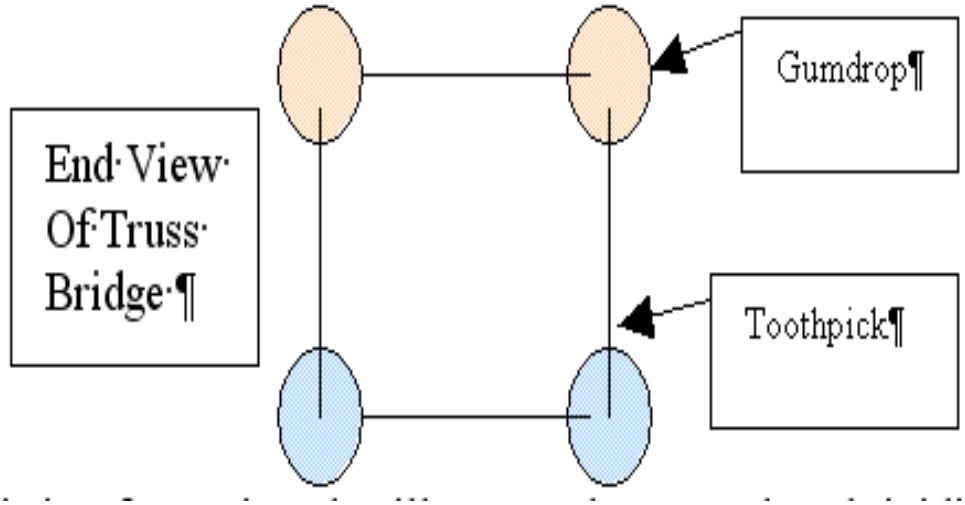
Gumdrop Truss Bridge

Karen, Webelos Leader (and an engineer),
Pack 23, Suffern, NY

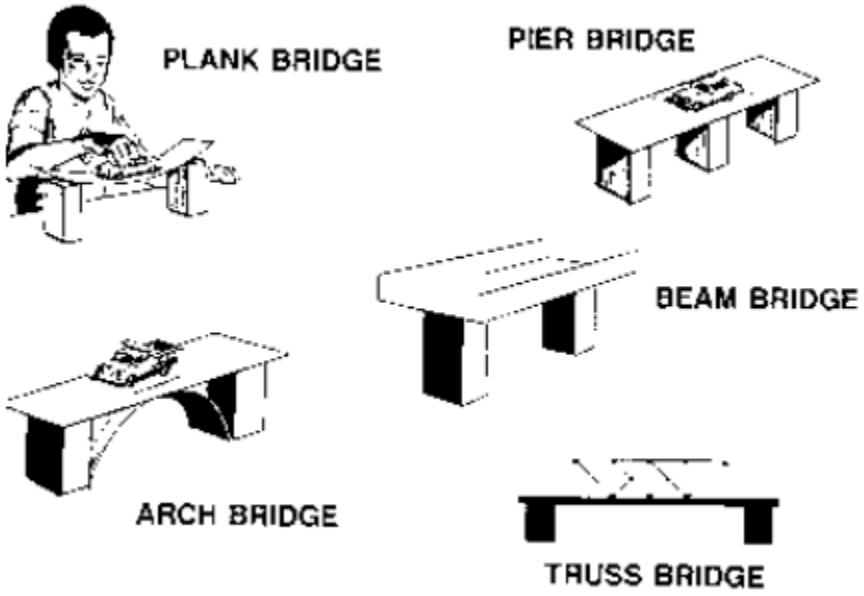




This is a fun project that illustrates the strength and rigidity of a truss bridge. You will need a box of round toothpicks and a couple of bags of inexpensive gumdrops (or spice drops). Scouts can work as pairs or individuals on this project. Each scout should start by assembling a single triangular panel using 3 gumdrops and 3 toothpicks. (It is important to notice the strength of the triangular shape.) From there they can extend the side panel of the truss by adding more toothpicks and gumdrops.

Once the single truss is about 4 panels long, the scouts can begin the second side truss. The two sides are then connected together by adding toothpicks between matching gumdrop node points. This short bridge span, which is about 8 inches long,

will be very stiff and strong. Spanning the bridge between two stacks of books, or the like can test the strength. A cup full of pennies can be used to load the truss. After testing the strength, the scouts can extend the bridge length by adding more pieces. A second level of truss may be added for really long spans (2 ft or more). The scouts will enjoy testing out various different bridge configurations.



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