

Popsicle stick bridges

In the same groups as before make a bridge out of popsicle sticks and glue that spans an 18 inch gap and holds weight using only popsicle sticks and glue.

Requirements:

- Bridge must be longer than 18 inches and shorter than 22 inches.
- Bridge will be set across a gap between two tables.
- Bridge must be between 2 and 4 inches wide.
- Bridge must be between 2 and 4 inches tall. Upper height must be a structural part of bridge (not just spikes pointing up.)
- Bridge must be able to hold the weight hanger, a board with a rope hanging down that holds a hanging scale; ideally the hanger can be inserted from below and then laid flat; come look at the hanger to see how it works.
- Bridge is made of only popsicle sticks and glue. You may cut or break the sticks.
- Bridge will consist of 50 sticks or less.
- Glue is only used to hold pieces together, never as a freestanding structural element
- It is likely that the heaviest bridge will be eliminated from competition, so go light on the glue while doing your best to preserve structural integrity.

The task:

In your notebook title a new section or page "Popsicle stick bridges" with the date. Each person has this in their notebook. Discuss as a group what kind of bridge you want to make, then everyone sketches a rough sketch in their own notebook. When you are all ready, bring your notebooks up to Mr. Hays to get checked off and to get your sticks then start to build.

All gluing and construction should occur on a board (not a table). You need to be done building this bridge today. Next class we will apply weights and see which bridge is strongest.

If your bridge fails to meet the requirements you will not receive full credit. If you have questions, speak up. Good luck, let's see what we can do!