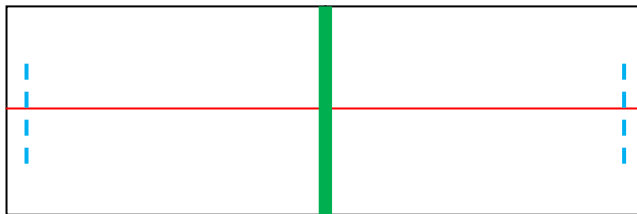


Tips for Building Your Popsicle Stick Bridge

1. Wash your hands. Before handling the popsicle sticks wash your hands thoroughly with soap and water. This removes any dirt or oil that can transfer from your hands to the popsicle sticks and stop the glue from sticking.
2. Sort your sticks to find the best 100 sticks. Look for sticks that have uniform wood grain and are free from defects (for example: knots, cracks).
3. Make a drawing of your bridge before you start building your bridge. This will help you make sure that the bridge is long enough to fit in the testing machine.

To make a drawing of your bridge take a sheet of paper at least 22 inches long by 8 inches wide. Or take two 8 ½ x 11 inch sheets of paper and tape the short sides together (the thick line in the middle represents the tape). Draw two vertical lines on the paper 20 inches apart (500 mm) (the two dashed lines on either end) – this is the span of the bridge. The overall length of the bridge should be at least 2 inches (50 mm) longer than the span – one inch (25 mm) on each end.

You can draw a horizontal line to split the paper into an upper half and a lower half – this line can be used to represent the bridge deck (depending upon your design) and will help with your layout.



4. Use clothes pins or small clamps to hold sticks and glue together until the glue has time to set (typically 30 minutes).
5. As an alternative to small clamps or clothes pins lay wax paper below and on top of the sticks and place a few heavy books on top. The wax paper will stop glue from getting on the books and the table top.
6. Build your bridge as a set of components and allow the glue to set on each component before connecting them together.
7. Make sure your bridge is complete at least a few days before the competition. This gives time for the glue to cure completely.