



**THE CIVILIZED WORLD PRESENTS
POPSICLE-STICK BRIDGE COMPETITION
Wednesday, March 27th, 2019 from 12-3pm
<http://popstick.mohawkcollege.ca>**

Entrants are invited to compete in the design of a bridge made of Popsicle sticks. The competition is open to all full-time students of the Ontario College Educational System. Entrants must be carrying a full course load to be eligible for prizes and ranking. Anyone else can enter, but receives no rank or prizes (for example, students on a coop work term). Only one bridge is permitted per entrant. A contestant may only be entered once in the contest—either as a single member or part of a team.

The bridge will be an under-slung configuration - the deck of the bridge will be the uppermost part, and the supporting structure will be under the deck. The load will be applied at the centre of the top deck by a bar 12 mm wide traversing the bridge. A performance rating for each bridge will be determined by taking the load at failure and dividing it by the weight of the bridge. The bridge with the highest performance rating will be deemed the winner. Thus the overall efficiency of the structure will be the deciding factor. It is up to the designer to select the optimum balance between weight and strength. Should the bridge deflect enough to touch the bottom of the testing jig, failure is deemed to have occurred.

Specifications

- (1) The building material shall consist **ONLY** of the standard wooden Popsicle sticks and Lepages glue that are supplied by Mohawk College for the current contest. Do not use any materials from previous year's contests. The sticks shall receive no special treatments or coatings. They may be cut or formed into any required shape. (i.e. pieces may be used as pins in the joints). Contest organizers have the right to limit the number of Popsicle sticks issued, however a reasonable amount of waste is assumed.
- (2) The **Lepages Multi Purpose Glue** and the **Popsicle sticks** shall be supplied to each entrant upon receipt of the entry form and the \$10.00 entry fee. **Entry forms, glue, and sticks are to be picked up from room E009a or E010** (or will be forwarded by courier to other colleges). **THESE ARE THE ONLY MATERIALS THAT CAN BE USED TO CONSTRUCT THE BRIDGE. DO NOT USE ANY MATERIALS FROM PREVIOUS YEARS CONTESTS.**
- (3) The bridge must span the space between the ends of the testing jig, which shall be 500(±1) mm apart. Its overall length must not exceed 550(±1) mm, and its weight may not exceed 250 g. The width of the structure is not to exceed 110 mm. The structure may not project more than 20 mm above or 110 mm below the line of the supports. The load shall be applied to the top of the structure. **The top of the structure at the loading point must be no lower than the top of the supports. (See figure below)**
- (4) In order to handle the large number of entries, all entries will be subjected to pre-testing. Each bridge must survive a rating of 1000 lbs/lb. in order to advance to the final contest.
- (5) Entries must be handed in between **10:00 AM and NO LATER than 3:00 PM, Wednesday, March 20th, 2019** to **Room A032** for pre-judging & to check for conformation to the rules. **(Entrants from outside Mohawk College may be exempt from pre-judging, depending on the number of entries received)** In all cases, the decision of the judges is final. All bridges become the property of the contest.
- (6) The entrant must be the primary designer and builder of the bridge.

✉ A thank you letter to the sponsor must be emailed to Matthew Shelley (matt.shelley@mohawkcollege.ca) by Wednesday, April 3rd in order to claim your prize winnings.

