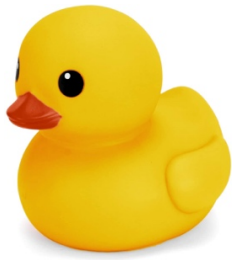
Rubber Duckie Shelter Challenge (Statics)
AENG 101 Introduction to Engineering
Dr. John Wright

Directions: In small teams, the groups are to design and construct a shelter constructed of popsicle sticks that will hold as much compressive force as possible to keep Duckie safe and warm! Your team may not use no more than 1000 popsicle sticks (provided by the instructor) to construct the shelter. The rubber duckie's dimensions are 8"L x 5.5"W x 6.5"H. The popsicle sticks measure 4.25"L x .375"W.



The maximum dimension of the shelter is 12" x 12" x 12". Solid walls are not required, but a solid roof is required. Duckie hates getting wet when it rains! **The structure must cover him completely**. The only additional material that may be used is glue (tape is not allowed).

All structures will be tested using the AEST Department's Compression Tester. Performance will be evaluated as follows based on how much weight the structure can hold:

Fail to Qualify	0pts
8th place	65pts*
7th place	70pts
6th place	75pts
5th place	80pts
4th place	85pts
3rd place	90pts
2nd place	95pts
1st place	100pts

**Must meet full design criteria stated above to score >0pts.*

Note: All structures will be tested for maximum compressive strength.