

Date: 8/10/16

Wednesday Challenge Form

Group Members: Jacob, Evan, Christian, Jess

Problem Statement: Design a bridge made of spaghetti and wood glue.

Goal is to make the highest efficiency bridge. Efficiency is defined as the ratio of the supported bridge weight to the mass of the bridge. The supported weight will be provided by water. The span distance will be 24". Each group will be provided 120 pieces of spaghetti, however only 20 can be used in the final design. In addition, the bridge must accommodate the weight attachment hardware provided by me. Refer to the JPL Invention Challenge Bridge Challenge for reference. Duration was 2.5 weeks.

Approach:

Solution: Our bridge was a prism shape filled with smaller triangles. It was a little longer than the two foot gap so it could rest comfortably on the cinderblocks. It weighed 35 grams and held 43 grams which gave us a score of 1.228571429. The winning bridge had a score of 13.

Lessons Learned: