

Date: 8/10/16

## Wednesday Challenge Form

**Group Members:** William, Garrin, Keila, and Maddy

**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 with 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 Dr. Neat. Refer to the JPL Invention Challenge Bridge Challenge for reference. Duration was 2.5 weeks.

**Approach:**

**Solution:** Bridge Weight: 30 Weight Carried: 377 Final Score: 12.566666666667

**Lessons Learned:** If I were to do this again, I would make the bridge lighter. Our bridge was slightly too heavy. We carried 377 g rams, but the bridge weighed 30 grams. The people who beat us carried less weight, but their bridge weighed 10 grams less than ours. So if our was lighter, we would've won.