Date: 8/14/16

Wednesday Challenge Form

Group Members: John, Alex, Alvin, Jaden

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 Dr. Neat. Refer to JPL bridge invention challenge. Duration is 2.5 weeks

Approach:

First, we thought it would be a good idea to split the 20 pieces of spaghetti in half and make two mini bridges. It turned out that the idea did not work out as well as we all thought. We ended up scrapping the idea and wasting a few days worth of time. Our second idea consisted of working as a team of four on one bridge, but we felt that we were not being as efficient as we could have been. Then, we decided to split the team into pairs. This gave us two mini teams each working on a bridge. Thankfully, this worked out. Once we both finished the bridges, we judged each one to see which bridge would most likely to the best. The team and I chose the bridge I built with Alex.

Solution: Our bridge only scored a 6.6 where the winner scored a 13.

Lessons Learned:

If I am to do this again, I will work more efficiently on the bridges so that I can have more trial runs.