

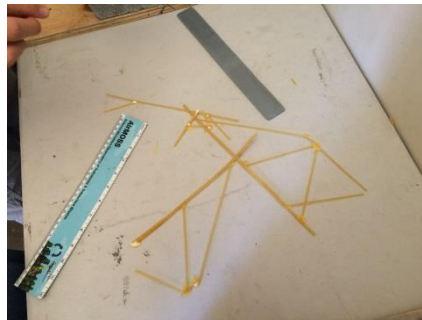
Wednesday Challenge Form

Group Members: Sophia Na, Derick, Sam, and Paul

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 100 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 had the weight of 25 grams and supported. The winner's group had supported 260 grams and had a weight of 20 grams.

Lessons Learned: If I were to do this again, I would try to give more strength to the base of the bridge by adding more spaghetti. It would be more supportive, putting more of a triangle design to the space between the bridge.