CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY

Name(s)

Lucas G. Wong

Project Number

S0328

Project Title

The Effect of Bridge Design on the Amount of Weight that can be Sustained

Abstract

Objectives/Goals

The objective is to see which design out of the 3 truss designs of 30-60-90 triangles, right isoceles triangles or eqilateral triangles sustain a larger weight load.

Methods/Materials

The objective is to see which design out of the 3 truss designs of 30-60-90 triangles, right isoceles triangles or eqilateral triangles sustain a larger weight load.

Results

Out of the three designs, the equilateral truss bridge ended up sustaining the most weight, holding an average of 114.08 pounds. The second best design was the 30-60-90 truss bridge which sustained an average of 74.94 pounds. Lastly the right isoceles truss bridge sustained the least weight, holding an average of 46.81 pounds.

Conclusions/Discussion

In conclusion my hypothesis was supported. My initial logic of "equally" distributing the weight with equal angle measures proved to have a role in this experiment.

Summary Statement

My project is about the effect of different bridge designs on the amount of weight that can be sustained

Help Received

None