

# CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

Chris D. Botts

**Project Number** 

**J0205** 

## **Project Title**

# A Comparison of Bridge Type and Bridge Strength

## **Abstract**

# **Objectives/Goals**

This project was done to test the strength of various types of bridges including the arch, cantilever, and suspension bridge.

#### **Methods/Materials**

To conduct the experiment I built three bridge types. The bridges were constructed out of Popsicle sticks and Styrofoam. I tested the strength of each bridge by placing rectangular cinder blocks on each bridge until it broke.

## **Results**

In the end, the arch bridge held the most weight. I think this is because the arch bridge has more support on the base.

#### **Conclusions/Discussion**

Each bridge has a specific role to play based upon its location, but there are some areas where different bridge types could improve safety. Since the Arch Bridge can not span long distances without the arch losing its strength arch bridges should be placed in more small areas.

# **Summary Statement**

My project was about testing the strength of major bridge types and the experience of engineering

## Help Received

My mother helped cut and paist and father helped carry bricks