CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY

Name(s)
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Project Number
J1820

Project Title
Does Length Affect the Amount of Weight a Bridge Can Support?

Abstract

Objectives/Goals
I studied the correlation between length and weight support on a simple beam bridge. I thought that the longer the beam, the less weight it would support.

Methods/Materials
To do this I built a bridge out of wood and changed the length of the beam,(which was a pair of wooden skewers.)

Results
At the end, my hypothesis was supported. There was direct correlation between the length of the bridge and the weight pressed upon it. The longer the span of the beam, the more compression and tension would happen upon the beam.

Conclusions/Discussion
If there is too much weight on a beam of a certain length then it will break or snap. Bridges are an important part of transportation. If they aren't constructed properly then they might collapse and harm people.

Summary Statement
My project was to discover if there was any correlation between length and strength of a bridge span.

Help Received
My dad helped me build the bridge.