CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)

Chad A. Kerr

Project Number

22821

Project Title

Only the Strong Survive

Abstract

Objectives/Goals

The objective of this experiment was to find which sand grade(desert sand, beach sand, and industrial) will make the strongest compression strength in a brick.

Methods/Materials

1 Cup of desert, beach and industrial sand 6 cups of clay
straw 45, 25, 2.5, and 1 pound weights
2 ½ milk cartons cup measures

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Designs in the experiment were simply the measures of a brick. My experiment utilizes bricks made from the sand grades and tested them by putting weights on until they broke.

Results

The objective materialized with industrial sand proven to be the strongest, with a compression strength of about 40 pounds per square inch . Beach sand had a 31 compression strength pounds per square inch and desert sand had approximately 18 pounds per square inch.

Conclusions/Discussion

The proposed hypothesis in this experiment was proven wrong. Desert sand initially stated as the strongest one was the weakest. The findings in this experiment could be beneficial to contractors and scientists from them to explore this topic and make stronger building materials that could probably withstand a disaster that occurred to our Twin Towers during September 11.It could also be beneficial to historians to know what happened to buildings like Twin Towers the pyramids that collapsed.

Summary Statement

My project was about bricks with different sand grades and their compression strength.

Help Received

The military junk yard for supplying the weights and the use of experimenting there. My Mom for helping me with my grammar and spelling. My Dad for helping me with putting the weights on the bricks.

Preliminary