

# CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

Caleb M. Iness

**Project Number** 

J1813

### **Project Title**

# **A Cure for Concrete**

#### **Abstract**

## **Objectives/Goals**

The object of my project is to determine which of the different methods of curing concrete gives you the strongest concrete.

### Methods/Materials

I made twelve bars of concrete. I cured three samples in plastic, three in burlap, three in sand, and three samples in nothing. I let them cure for twenty-eight days with one misting of water every day. Then I tested their strength by testing how much weight they held until they broke.

#### Results

The mean of the weight held by the plastic samples was 1077 N (242 pounds). The mean of the weight held by the burlap samples was 1250 N (281 pounds). The mean of the weight held by the sand samples was 1219 N (272 pounds). The mean of the weight held by the samples with nothing was 1014 N (228 pounds).

### **Conclusions/Discussion**

My conclusion is that burlap is the best way to cure concrete out of the methods tested. I conclude the burlap won because it allowed the concrete to breathe while it also retained the moisture.

### **Summary Statement**

What is the best way to cure concrete?

### Help Received

My dad provided me with research, helped me cut forms. Mom helped me glue my paper on my board, and mix and break the concrete. My sister and my dad also helped break the concrete.