



California Science Center  
**CALIFORNIA STATE SCIENCE FAIR**  
**2001 PROJECT SUMMARY**

**Your Name** (List all student names if multiple authors.)

**Cindy J. Vavra**

**Science Fair Use Only**

**J1035**

**Project Title** (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9)

**Is Your House Made of the Strongest Bricks?**

**Division**

**J Junior (6-8) J Senior (9-12)**

**Preferred Category** (See page 5 for descriptions.)

**10 - Materials Science**

**Abstract** (Include Objective, Methods, Results, Conclusion. See samples on page 14.)

Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.

**Objective:** My project was testing the strength of different materials used for brick making. My hypothesis is that the cement bricks will be the strongest.

**Methods:** I made three bricks of each material I tested. Those materials are: Hydrocal, Plaster of Paris, and Cement. Each brick had a hook in it. I suspended weight in increasing amounts off the hook until the brick broke. All the bricks were the same size, and each brick was tested on the same setup, so there wasn't any differences besides the different materials.

**Results:** The Hydrocal bricks came in first, by holding the most weight. The Cement bricks came in second, and the Plaster of Paris bricks came in third by holding the least weight.

**Conclusions:** As shown in the results, the Hydrocal bricks proved to be the strongest material I tested.

**Summary Statement** (In one sentence, state what your project is about.)

My project is about the strength of different materials used for making bricks.

**Help Received in Doing Project** (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4.

My father helped me perform the experiments.