



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Todd K. Sakamoto	Project Number 22372
Project Title Determining Which Soils Best Stabilize Buildings During an Earthquake	
Abstract Objectives/Goals My objective was to see what potting soil mixture would have the greatest amount of fish weights standing up after five seconds, ten seconds, and fifteen seconds. My hypothesis was that the potting soil with landscape stone would work best for all of the intervals. Methods/Materials I used four intervals to see what would work the best. They were potting soil plus pumice, potting soil plus walk-on mulch, potting soil plus landscape stone, and potting soil by itself. Then I simulated an earthquake by using a massager to shake a storage box. I used fish weights in place of buildings. Results Potting by itself would be best for five seconds and ten seconds. The walk-on mulch plus potting soil was the worst for the five and ten second intervals. The landscape stone worked best for the fifteen second interval. Conclusions/Discussion The results did not support my hypothesis for the five and ten second intervals. It did support my hypothesis for the fifteen second interval. My project was a better understanding of what we could use as base soils to stop the damage of earthquakes.	
Summary Statement In my project I wanted to see what soil mixture would hold the most buildings.	
Help Received Mother helped put boards together	