

CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s) **Project Number** Robin C. Cho 34535 **Project Title Voltage Vitality Abstract Objectives/Goals** The Objective of this project is too see if more voltage will increase battery My hypothesis is that the batteries with the larger voltage will last longer than a battery with the smalle voltage. Methods/Materials I used a type of battery called the Voltaic pile. I built two kinds of voltaic piles. 21.5 volt and an 3 volt. The battery is built of pennies after 1982, cardboard, electrical tape, and 16 AWG solid wire. I tested each battery for 4 days, and measured the current voltage and oltage lost. I took the averages and found the averages lost per day for two types of batteries: a 1.5 volt and 3. **Results** I found that The 1.5 battery lost was about 0.2946 and 3 volt lost about 0.4304 about 0.1 difference. So the two batteries loses about the same amount of voltage a day. **Conclusions/Discussion** In conclusion, my hypothesis was correct. The 3 volt lattery lasted longer than the 1.5 volt battery. I found that the 1.5 volt lost 0.2946 compared to the 3 volt battery, 0.4304, The reason why it lasted longer is because the two batteries had about the same amount of decrease in voltage a day. So the batteries with more voltage will last longer than batteries with less voltage but too much voltage could damage the appliance. Summary Statement a difference in voltage will affect the battery's life in a shelf. Help Received Mom helped get materials. Mrs. Jones supervised my project. Mrs. Owen helped me put the board together