



**CALIFORNIA STATE SCIENCE FAIR  
2014 PROJECT SUMMARY**

<b>Name(s)</b> <b>Robin C. Cho</b>	<b>Project Number</b> <b>J0606</b>
<b>Project Title</b> <b>Voltage Vitality</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The Objective of this project is too see if more voltage will increase battery shelf life. My hypothesis is that the batteries with the larger voltage will last longer than a battery with the smaller voltage. <b>Methods/Materials</b> I used a type of battery called the Voltaic pile. I built two kinds of voltaic piles: a 1.5 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 voltage lost. I took the averages and found the averages lost per day for two types of batteries: a 1.5 volt and an 3. <b>Results</b> 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. <b>Conclusions/Discussion</b> In conclusion, my hypothesis was correct. The 3 volt battery 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.	
<b>Summary Statement</b> The Project is to see if a difference in voltage will affect the battery's life in a shelf.	
<b>Help Received</b> Mom helped get materials. Mrs. Jones supervised my project. Mrs. Owen helped me put the board together	