



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Jonathan T. Chaney	Project Number J2207
Project Title Compact Fluorescent Lights vs. Incandescent Lights	
Abstract Objectives/Goals My goal was to determine if compact fluorescent light bulbs were more efficient than their equivalent incandescent light bulbs. I did this by measuring the light output, the power used, and the operating temperature of each type of light bulb. Methods/Materials I compared 5 compact fluorescent light bulbs to 5 incandescent light bulbs by using a voltmeter and photocell to measure light output, a wattmeter to measure the power used, and an electronic thermometer to measure the temperature of each bulb. In order to keep my tests consistent, I built a light proof box to hold the test instruments while doing the experiment. Results I determined that compact fluorescent light bulbs used about 75 percent less power, put out almost the same amount of light, and generated 30 degrees Fahrenheit less heat than the incandescent light bulbs. Conclusions/Discussion I concluded that compact fluorescent light bulbs are more efficient than incandescent light bulbs.	
Summary Statement I wanted to determine if the compact fluorescent light bulb commercials were correct about them being more efficient than incandescent light bulbs.	
Help Received Dad helped me build the light proof box. Mom helped edit the report.	