



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Colin B. Ries	Project Number J0827
Project Title Does Color Matter for Solar Power?	
Abstract Objectives/Goals My problem statement is, #How do different colors of light affect the electrical output of a photovoltaic cell?#. My hypothesis was if green light would shine on a photovoltaic cell then it will produce the most electrical current. Methods/Materials An acrylic prism was used to produce a spectrum of colors. A photovoltaic cell connected to a multimeter measured the voltage produced of each color of the spectrum. Results I found the most electrical current produced was under yellow light of the spectrum, with 8.9% more voltage than outside the spectrum and red was similar. Green and blue produced less and indigo the least amount. Conclusions/Discussion My hypothesis was incorrect. Red and yellow produced more electrical current than green. Even though these color#s energy levels were lower than the other color#s, they produced the greater electrical output.	
Summary Statement Different colored light effects the output of a photovoltaic cell.	
Help Received My Dad helped type the report and helped make the graphs. My Mom assisted putting together the board.	