CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY

Name(s)
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Project Number
J0720

Project Title
Solar Panel Power Booster

Abstract

Objectives/Goals
To show that reflectors can boost the electrical output of solar panels.

Methods/Materials
I used insulated wire to construct an electrical circuit. The circuit included a solar panel, an ammeter, and an automotive headlamp. I monitored the electrical output of the solar panel while varying the number of reflectors to see if adding more relectors would increase the electrical output of the solar panel. I repeated the experiment 6 days in a row at the same time of day.

Results
As reflectors were placed around the solar panel, electrical output increased.

Conclusions/Discussion
My results supported my hypothesis that using reflectors to concentrate the sun's rays onto a solar panel would increase the electrical output of the solar panel. Using reflectors with solar panels can increase their effectiveness and lower the cost of this type of energy.

Summary Statement
This project shows that reflectors can increase the energy output of solar panels.

Help Received
My dad helped with providing materials and setting up the electrical circuit for this experiment.