



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Jamie T. Vigil	Project Number J1238
Project Title Color vs. Temperature	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My project is designed to show a probable cause of the heat trapped in houses #the color of the roof.</p> <p>Methods/Materials By using a 100 watt flood lamp to act as the sun, I will be able to test this in a controlled environment. I will place one fiberglass composite roof shingle sample on each of 5 single gang electrical boxes to act as my houses, which were placed in a circle around the lamp. The colors I tested were: Shasta White, Amber, Quarry Gray, Brownwood, and Chateau Green. I placed one thermometer in each of the boxes, and one thermometer directly below the lamp. I checked the temperatures in the boxes every 15 minutes for 1.5 hours.</p> <p>Results I found that the Quarry Gray shingle got the hottest because its color is very vibrant, intense, and saturated. This proves that the color of the roof is a cause of the heat in a house.</p> <p>Conclusions/Discussion My results stated that the dark color of a roof isn#t a factor which needs to be looked at when purchasing a roof. The more intense, vibrant, and saturated the roof shingle is, the hotter it will get inside. I was able to attain my objective through my experimenting. My original thoughts were that the darker the roof shingle color, the higher the temperature would be inside the house. My original thoughts were incorrect and my experimenting was successful.</p>	
Summary Statement My project is about a cause of the heat which gets trapped inside a house - the roof color.	
Help Received	