



**CALIFORNIA STATE SCIENCE FAIR  
2010 PROJECT SUMMARY**

<b>Name(s)</b> <b>Shaelyn P. Topolovec</b>	<b>Project Number</b> <b>J1525</b>
<b>Project Title</b> <b>Keepin' Cool</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective of this project is to determine what outside paint colors are best to keep a house cooler (or warmer depending on the climate) so that money and energy could be saved.</p> <p><b>Methods/Materials</b> Seven siding pieces were cut 1'x 1' and were painted with different colors of paint. The wood siding was then attached to a scaled down wall built with R-13 fiberglass batt, wood, and drywall to simulate an exterior house wall. One at a time, each siding piece was attached to the small wall and then inserted into the center of an insulated box. A light bulb was used as a heat source on one side of the wall. Thermometers were used to measure the temperature in the 1 cubic foot of air space on each side of the small wall. The temperatures for each color were recorded every 5 minutes for 2 hours.</p> <p><b>Results</b> Lighter siding colors always resulted in cooler interior temperatures. Darker siding colors resulted in hotter interior temperatures.</p> <p><b>Conclusions/Discussion</b> A house in a warmer climate would save money and energy painted a lighter color. A house in a cold climate would do better painted a darker color.</p>	
<b>Summary Statement</b> The purpose of this science project is to determine if the color of paint on the outside of a house can affect the temperature inside a house.	
<b>Help Received</b> Mother helped type and assemble board. Father helped build. Grandfather supplied materials. Sister advised on computer research. Teacher acted as project advisor.	