



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Tovah H. Popilsky</b>	<b>Project Number</b> <b>J1317</b>
<b>Project Title</b> <b>What's Hot and What's Not</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The goal of my project was to learn what everyday material is the best thermal insulator. My hypothesis was that the hay would insulate the best because hay has good climate control. <b>Methods/Materials</b> First, I built six uniform boxes out of pine wood and placed a polycarbonate insert inside of each box. Then, I filled each box, between the inner wall of the wooden box and the insert, with its designated insulator. Then each box was heated up to 100 degrees fahrenheit with a hairdryer and a stopwatch was started. Once the thermometer read 70 degrees fahrenheit, the time was recorded then converted to seconds. This was performed for five trials. <b>Results</b> The results proved that the Aluminum Cans insulated the best. The insulators ranked in this order: Aluminum Cans, Hay, Fiberglas, No Insulation, Shredded Paper, then Wood Chips. <b>Conclusions/Discussion</b> By conducting my experiment, I learned that Aluminum Cans was the best thermal insulator from the materials I tested. I also learned that my hypothesis that Hay would insulate the best, was invalid. There were many ways I could have improved my project in a few ways. First, I could of tested eco-friendly insulators. I also could have figured out the average cost of each material.	
<b>Summary Statement</b> In my project, different materials were tested to determine which one was the best thermal insulator.	
<b>Help Received</b> Mother helped construct boxes.	