



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Erica Fernandez	Project Number S1506
Project Title What Is the Better Insulation Material?	
Abstract Objectives/Goals The objective of my project was to find out which of a variety of materials, which are commonly used in home construction acts as best insulator against heat. My hypothesis was "if the material has a higher R value (resistance to heat flow, then it will act as better insulators." Methods/Materials I tested convection and conduction of several insulators ten samples of each one for only ten minutes. I used the following materials, heat source, insulators, lamp, 2 wood bases (open spaces), thermometers, 100Wt bulb, hold stand, goggles, gloves, R values, chronometer and ruler. Results According to my results they differed from previous researchers in the way that the bubble pack was the best insulator in their results, but in mine it was fiberglass. Conclusions/Discussion My conclusions showed that the materials tested generally followed R values. Since the the R value of fiberglass was the highest, the results showed it was the best insulator. I proved my hypothesis to had a highly significant difference of the materials by using a statistical analysis.	
Summary Statement To find an insulator that acts against heat and that it follows its R value.	
Help Received Mr. Callway and my family help me accomplish this task by supporting with their help and materials.	