



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

Your Name (List all student names if multiple authors.) Anna M. Yu	Science Fair Use Only <h1 style="margin: 0;">S0114</h1>
Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) The Effects of Different Types of Insulation on the Loss of Heat	Division _ Junior (6-8) <u>X</u> Senior (9-12)
Preferred Category (See page 5 for descriptions.) 14 - Physics & Astronomy	
Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.	
<ol style="list-style-type: none"> 1. Problem Statement: Is plastic, batting, or aluminum foil most effective in preventing against heat loss? 2. Hypothesis: I believe that the setup using aluminum foil as insulation against radiation will prove to be the most effective in keeping water at a hot temperature, because of its reflection of heat. 3. Materials <ol style="list-style-type: none"> A. Four glass jars of equal size (1lb) B. Four thermometers C. One roll of aluminum foil D. One square foot piece of wool and fiberglass batting E. One roll of plastic wrap 4. Procedure: <ol style="list-style-type: none"> A. Cover three jars with appropriate insulation material (Jars must have 16 inch circumference) B. Fixate thermometers in each of the four lids C. Fill jars with boiling water D. Take temperature immediately, and continue to take temperatures at five-minute intervals for a period of one hour. E. Variables are the jars covered in insulation F. Control is the jar without insulation 5. Results: My results showed that Jar C, (insulated with wool and fiberglass batts) proved to be the most effective in this investigation. Jar B, (insulated with plastic wrap) was a little less effective than the wool and fiberglass batts. 6. Conclusion: My conclusion is that wool and fiberglass batts are the most effective in providing insulation against heat loss. My conclusion is contradictory to my hypothesis. 	
Reference List	
Summary Statement (In one sentence, state what your project is about.) My project is testing whether aluminum foil, plastic, or rock-wool and fiberglass batts are most effective in preventing against heat loss	
Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4.	