



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Davis R. Reid	Project Number J1517
Project Title Which Fabric Best Retains Heat?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals To find the fabric that would retain body warmth best, over a period of time.</p> <p>Methods/Materials Four identical cardboard cups, each with a different fabric wrapped over the cup opening and secured with a rubber band, was filled with hot water at an approximate temperature of 160 degrees Fahrenheit. Each cup had a thermometer sticking out of it, and I recorded the temperature of each cup every 10 minutes. The control cup opening was left uncovered and it too had a thermometer.</p> <p>Results Wool and nylon had the highest temperatures throughout the tests while the control, cotton and silk had lower temperatures.</p> <p>Conclusions/Discussion It is best to wear either wool or nylon clothing during cold weather because they will retain a body's heat better than cotton or silk.</p>	
Summary Statement I conducted three independant tests, on four different types of common clothing fabric to determine which fabric would retain heat best over a 90 minute period of time.	
Help Received Mom helped purchase materials needed.	