



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Steven L. Delcarson	Project Number J2208
Project Title The Best Insulation	
Abstract Objectives/Goals Would you like to know what the best insulation is for building a house that conserves energy? Well that is what I have been testing for the past months to figure out. I believe that this project can help and prove to builders the best insulation for houses. Methods/Materials To begin my experiment I had to buy all the materials that were needed for the project. I bought most items such as wood, insulation, and dry wall at Home Depot and Lowes. Then I went to a hardware store and bought the right types of nail. To start the boxes we made three boxes out of wood with thin rectangular frames inside. I then put fiberglass and foamed plastic in two different boxes and left the other empty. I finally put dry wall walls inside of the creating a small house with insulation at the top also. After a few days of hard work I was ready to test. Results After I finally finished testing I got my answer. The winner of the best insulation/energy saver was the fiberglass with a drop of 8.8 degrees Celsius, followed by the foamed plastic with a drop of 10.2 degrees Celsius. The worst insulation was the spray foam which dropped 10.6 degrees because of an error of the generator possibly making the freezer cold. In last was the empty control with a 15.7 degrees drop. Conclusions/Discussion This experiment's results have shown me and will show others what truly is the best insulation. Builders can now create more energy saving houses when they identify that fiberglass is the best. To finish off my experiment I will write my written report and my create my poster to state the best insulation. So, I realize that I was wrong in my hypothesis but, have learned one of the key points to house building and saving energy to keep warm. Fiberglass insulation!	
Summary Statement I built three boxes with different insulations and tested each of them in the freezer for an hour to see the greatest and lowest temperature decrease.	
Help Received Teacher Ms. Reichelt was my mentor throughout the project, my dad helped me with creating the boxes and touch-ups on the board, and my uncle helped me decide my project.	