



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Emmanuel Ceja	Project Number J1203
Project Title Which Metal Conducts the Most Heat?	
Objectives/Goals I'm trying to figure out which metal has the ability to conduct the most amount of heat. By doing so i hope to help engineers around the world build better exteriors for space shuttles.	
Abstract	
Methods/Materials I used Lard, Aluminum metal rods, Brass metal rods, and Steel metal rods. I also used a gas stove, a graduated cylinder, and 12 test tubes. What i did first was i cut the metal rods. Then i melted the lard and poured it into the test tubes. I placed the test tubes inside the refrigerator. I left them in there for 600 seconds. I took them out and placed them next to where i was going to conduct my experiment. Then i placed a metal rod over the combustion flame of the gas stove. I left it in place for 120 seconds. I took the metal rod out and placed it in the test tube for 60 seconds. no more no less. Then i poured the melted lard into a graduated cylinder. I wrote the results down in my data book. I did the previous for every metal that i used.	
Results Aluminum metal rods were the best conductors of heat. They had a high of 16.9mL of lard melted. Brass were the worst conductors of heat. They had a high of 10.6 mL of lard melted. Steel metal rods were the second best conductors of heat. They had a high of 12 mL of lard melted.	
Conclusions/Discussion Aluminum metal rods were the best conductors of heat followed by steel and last but not least brass. All the metal rods conducted heat except the control group. They had no heat variable added to them which led to the poor conclusion that no heat was conducted.	
Summary Statement My project was done to figure out which metal can conduct the most heat.	
Help Received Teacher helped give ideas for project; Mother helped conduct the experiment.	