



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Brice W. Ezell	Project Number J1111
Project Title What Substance Melts Ice Most Efficiently?	
Abstract Objectives/Goals The objective of this experiment was to determine which substance is the most efficient in melting ice. Methods/Materials The materials used were: One cup of rock salt, one cup of salt, one cup of rubbing alcohol, one cup of cat litter, and 1/2 cup of calcium chloride. I also used eight by eight metal baking pans to freeze the water and substances. I put five pans in group A and four in group B. I took group A's pans, poured water into them and froze them in a freezer. I gathered group B's pans, poured 1/2 cup of the substances in the bottom, poured water over the substances and froze them in a freezer. After two days, I brought out all the pans to test. I took the five pans of group A and poured each substance onto the top of its individual pan. I observed the melting process at half hour intervals. Results The results are as follows: Rock Salt in Group B melted the most efficiently in five hours. Table Salt in Group B took seven hours. Rock Salt in Group A melted in eight hours. Alcohol in Group B melted in nine hours. Salt in Group A melted in ten hours. Alcohol in Group A melted approximately eleven hours. Cat litter in Group B and Calcium Chloride in Group a took twelve hours. Cat litter in Group A took fourteen hours. Conclusions/Discussion My conclusion is that rock salt in the most efficient in melting ice. I also found out that it is very efficient in lowering the freezing point of water because when I took the pans with rock salt out of the freezer, they had not fully melted. This experiment is very practical and can be used for everyday life.	
Summary Statement To Test What Substance Is Most Efficient For Melting Ice	
Help Received Mother helped with Abstract and Father helped with writing clear observations.	