



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Alfredo Lorenzo, Jr.	Project Number J0512
Project Title Which Do Crystals Prefer? Hot or Cold?	
Abstract Objectives/Goals The purpose of my project is to discover in what temperature a crystal grows best. I wanted to learn how different temperatures affect crystalization. I believed that a crystal would grow best in the heat. Methods/Materials I began by gathering all my materials: three containers, one bag of crystal growing powder, water and goggles. I added a rock to the center of each container. I placed some of the powder in each container but saved some as "seeds". I boiled water and then poured some into each container and stirred until the powder completely dissolved. Then I added an equal amount of "seeds" on and around the rocks. Each container had its own thermometer and was placed in its designated area; near a chimney, in a refrigerator and on the kitchen counter. Results In three monts of observing the crystals, I noticed that the crystal in the heat had no moisture and had stopped growing. Little crystals on the edge of the container started chipping. In comparison the crystal in the cold grew more slowly but continued to grow unlike the crystal grown in the heat. Conclusions/Discussion This leads me to believe that the heat made the crystalization accelerate but consumed all the moisture so the crystal stopped growing. It kept on growing in the cold because the cold temperature preserved the moisture in the atmosphere surrounding the crystal container. My results show I was only partially correct.	
Summary Statement What are the affects of temperature on crystals?	
Help Received Mother helped paste papers, take pictures, and handle the boiling water.	