CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)
Andrew S. Tubbs

Project Number
J0525

Project Title
How Do Your Crystals Grow?

Abstract

Objectives/Goals
My project was to see whether crystal growth is affected when sugar or salt solutions are added.

Methods/Materials
What I did was boil 3 solutions in 3 small jars. The first solution contained the base mineral (monoammonium phosphate). I put some of it in a jar and labeled it "control." The second jar contained a satuated solution of sugar and some of the mineral solution. It was labeled "sugar." The last jar contained a saturated solution of salt and some of the mineral solution. It was labeled "salt." In my second experiment I did the same thing except the mineral solution had a food dye that was red. In both experiments, the crystals were allowed to grow for one week.

Results
The control group grew crystals normally and as expected. The sugar group grew altered crystals of the base mineral. The salt group inhibitted crystal growth.

Conclusions/Discussion
Crystal growth is affected by the additions of sugar or salt.

Summary Statement
My project was to see whether crystal growth is affected when sugar or salt solutions are added.

Help Received
My dad supervised , but did not do the experiments for me.