



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

Name(s) Elizabeth S. Church	Project Number J1307
Project Title Growth of Water Bottle Bacteria	
Objectives/Goals The goal of my project is to find out which environment (in a car, on a kitchen counter, on an outside surface, or in the refrigerator) makes a Crystal Geyser Natural alpine spring water bottle grow the most bacteria after being drunk out of.	
Abstract Methods/Materials In my project, the main materials I used were: Crystal Geyser water bottles, sterile cotton swabs, petri dishes, agar, magnifying glass, a lamp, and a human mouth. To do my project I drank from each water bottle, then took a sample from the inside rim of the bottle. Then I had the bottles sit in their environment. After 2 days, and again after 5 days, I sampled the rim and the water itself. Then I measured the amount of bacteria that grew in each petri dish.	
Results Of all the samples I took, after five days, the results were that the outside environment had the most bacteria. The car environment had the next most, then the kitchen counter, and last the refrigerator.	
Conclusions/Discussion In conclusion, my hypothesis was partially correct. I was wrong when I predicted the most bacteria would grow in the bottle in the car. Instead the most bacteria grew in the outside environment. However, I was correct about which environment would grow the least bacteria..... the refrigerator.	
Summary Statement My project is about the growth of bacteria in a water bottle that has been drunken from, and left sitting in a certain environment.	
Help Received My mother helped type my report while I told her what to write. She also bought my supplies. My whole family encouraged me.	