



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

Name(s) Kevin C. Case	Project Number J0904
Project Title Determining the Effects of Air Pollutants on the Water Cycle, and Subsequent Seed Germination	
Abstract Objectives/Goals The objective of my project is to find out if airborne pollutants effect our water cycle. I'll then test these affected water samples on seed germination. Methods/Materials I'll be obtaining four different airborne pollutants; wood burning smoke, car exhaust (carbon monoxide), paint fumes, and glue fumes. I'll capture these pollutants in a 20 gallon aquarium. I'll collect the pollutants on a sterilized piece of paper. I'll then burn the paper, and collect the remaining ashes. I'll then percolate 100 mL of purified water through the ashes in a coffee filter. I'll test the change in the water's pH, and use the water to check it's effect on seed germination. Results Each of the pollutants adversely affected the water's pH. The glue fumes had the greatest effect on the pH, and seed germination. The car exhaust had the least effect on both the pH, and seed germination. Conclusions/Discussion Glue fumes should be altered so that they don't adversely effect our water supply, which in turn adversely effects us. Each of the airborne pollutants should be monitored by some type of agency to determine their total effect on us, and our environment.	
Summary Statement Finding out if airborne pollutants hurt the water cycle, and us.	
Help Received Dad helped me with my experimental procedures	