



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) David N. Schmidt	Project Number S0831
Project Title Examining Air Quality	
Abstract Objectives/Goals My objective was to learn all I could about air quality by comparing outdoor air conditions with indoor air conditions. Methods/Materials I gathered data with a Dylos Corporation DC1100 Air Quality Monitor. I ran it every two hours in five locations inside and outside of my house. I then took the data and inserted it into an Excel spreadsheet. Results I found that outdoor air quality is worse than indoor air quality. There are times when indoor air is worse than outdoor air, but only under conditions when the inside air is greatly stirred up. Outdoor air quality is constantly changing, while inside air quality is mostly unchanging. Conclusions/Discussion According to my data, the amount of PM 2.5 (Particulate Matter 2.5 microns in diameter) in the air is raised by large quantities of car exhaust, dust, movement in small, dusty areas, and various forms of weather. There are still many aspects that can be narrowed down to further find the specific causes for spikes and drops in the amount of PM 2.5.	
Summary Statement My project is about testing the specific aspect of air quality called Particulate Matter 2.5	
Help Received Mother helped put together board, Father helped gather data and sort data, and younger brother helped gather data.	