



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Aashna M. Parekh	Project Number J1221
Project Title Run Kids! The Airborne Particles Are Coming!	
Abstract Objectives/Goals My objective is to ascertain if the distance of the freeway affects air quality in the form of airborne particle pollution on a school campus and to determine how the intensity of blue color in the sky, measured in degrees, is related to airborne particle pollution. How does the distance of the freeway affect air quality on a school campus? Methods/Materials fifteen funnels, fifteen glass slides, popsicle sticks, a source of petroleum jelly such as vaseline, a cyanometer with an included value chart (value chart is optional), a microscope, and duct tape or regular tape, skewers, trays, and beakers if necessary Results In the aspect of taking the average number of airborne particles on the three slides, Preparatory Academy has the most airborne particles in the form of airborne particle pollution. In addition, Preparatory Academy's cyanometer measuring is low compared to other campuses, taking into consideration that as time passes, the sky gradually becomes darker. However, Mable Campus has the most airborne particles considering the field of view results. Conclusions/Discussion My conclusion is that Preparatory Academy has the worst air quality based on the number of airborne particles and the cyanometer measuring, because vehicle emissions on a nearby freeway result in a low quality air on a campus. The cyanometer measuring was low, because the lighter the sky, the more airborne particles there are. Considering the number of airborne particles from the field of view can be deceiving; therefore, it is probable that Mable Campus does not have the worst quality air.	
Summary Statement My project involves finding out how the distance of the freeway affects air quality on a school campus and how the the intensity of blue color in the sky, measured in degrees, is related to airborne particle pollution.	
Help Received My mother assisted in the experimentation by driving me to the five Fairmont Private Schools . My science teacher helped me by conducting the experiment at two of the Fairmont Private Schools . The science teachers from other campuses helped me in setup.	