



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Lillian I. Lerner	Project Number J1116
Project Title Lead: Soiling the Fun	
Abstract Objectives/Goals For this year's science fair, I am investigating the dangerous levels of lead in soil in and around children's play areas. I chose this question because this topic greatly interests me, and many children get lead poisoning every year and I wonder if their playgrounds are a cause of it. My research shows that lead poisoning is most common in children because they explore the world by putting things in their mouths. More the 4% of the children in the US have lead poisoning right now. My hypothesis is, if playground soil is tested, then it will test positive for lead. Methods/Materials I began my experiment by picking five parks and collecting their soil samples. Then, I used the Carolina Biological Lead Test Kit to test my samples. The independent variable in my experiment is the lead in the soil I am testing. My dependent variable in my experiment is the danger caused by this. Results The major results I found in my study are that all five parks I tested exceed 400ppm, which is above/equal to the maximum government standard. These parks could be a danger to children because I tested that they have 400ppm of lead or more. So, I wrote a letter to the Ventura County Health Department letting them know of my findings. They responded by saying they will have professional testing done on my five locations. Conclusions/Discussion The major conclusions I have drawn are that all five parks I tested exceed that government maximum of lead in children's play areas. I proved my hypothesis because I predicted that playground soil would test positive for lead, and it did. One change I would make if I were to do this project again would be that I would send my lead samples to lab in addition to using the at-home lead testing kit that I used. My project is important to the real world because lead poisoning can cause death in children and this information could potentially save their lives.	
Summary Statement My project is about testing the soil at local playgrounds to see if they exceed the lead safety limit because high levels can cause lead poisoning in children.	
Help Received My mom helped time testing segments and drove me to locations.	