



**CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY**

Name(s) Mona L. Patterson	Project Number J1125
Project Title How Can Phytoremediation Be Used to Reduce Lead Levels in Soil?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this experiment is to determine if phytoremediation can reduce lead levels in soil.</p> <p>Methods/Materials My materials include soil samples, brassica plants, test tubes, gloves, and soil test kits. I measured the lead levels in a 3x5 soil plot, planted brassica plants, and retested soil at 8 and 18 week intervals.</p> <p>Results Data from the first trail indicates lead levels dropped from 4 to 10 points in each of the sampled holes. Data from the second trail also shows additional lead level reduction ranging from 5 to 24 points.</p> <p>Conclusions/Discussion My results demonstrate that Phytoremediation can be an effective method for reducing lead levels in soil. It is clear that lead level reduction increases in relation to time. Therefore, more time is required in order to make significant decreases in lead levels.</p>	
Summary Statement My experiment shows that phytoremediation can reduce lead levels in soil.	
Help Received I designed, planted, collected, and tested the soil samples for lead ranges. The samples were sent to a lab for exact lead measurements.	