



CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s) Brian M. Mares	Project Number J0519
Project Title Candy or Pencils?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My goal in this project was to determine the presence of lead in Mexican and American candies. My hypothesis for this project was that seven out of ten Mexican candies will have leads, and American candies will have two out of ten with lead present. I think that this will be the result for Mexican candies, because out of past research, I found that about 66% of the candies did not have lead. I think that the results for American candies will be because on one little article, it claimed that some American candies also have lead.</p> <p>Methods/Materials My materials in this project were: Petri dishes, filter paper, various Mexican and American candies, Bunsen burner, centrifuge, protective glasses, test tubes, centrifuge tubes, pipettes, magnifying glass, test tube rack, vinegar, test tube clamps, and a lead testing solution named Lead Check. The method i used in this project was that i first took the candy and if the candy did not fit in the test tube, then I crushed it to the proper size. Then, I added three pipettes full of vinegar, I put on safety goggles, and grasped the test tube with the clamp. I then melted it into a fine liquid. Next, I let the solution cool, before I extracted the solution, and put it inside a centrifuge tube. I centrifuged the samples for apporoximately five minutes. Next I extracted the distillate in the middle. I then placed three dots of the sample on a Petri dish to represent the three tests. I let the solution sit for about 24 hours, before I tested it with the Test ready solution.</p> <p>Results I found out that six out of the ten Mexican candies had lead, and three of the American candies had lead. In the Mexican candy tests two out of the six candies passed all of the tests, and the rest only showed two out of the three tests passed. In the American candies only one of the three candies passed all of the tests, one passed two of the three tests, and one passed only one test.</p> <p>Conclusions/Discussion In conclusion, Mexican candy showed six out of the ten candies with lead, and American candies showed three out of ten candies with lead. The Mexican candies that showed lead in all three tests were Cherry and Strawberry Arcor frutilla. The American candy that showed lead in all three tests was the Tootsie Pop. I found out that my hypothesis was wrong because Mexican candies did not have seven out of ten with lead, and American candies did not have two of out of ten with lead.</p>	
Summary Statement This project was about testing lead in various Mexican and American candies.	
Help Received Teacher helped me with testing.	