



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

<b>Name(s)</b> <b>Olivia L. Del Gavio-Kusich</b>	<b>Project Number</b> <b>J1705</b>
<b>Project Title</b> <b>Can Adults Pass a Standard 7th Grade Science Test?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The object of this project was to determine the level of adult understanding of basic science concepts.</p> <p><b>Methods/Materials</b> I went online and searched for a 7th grade standard science test. I found a sample from the Illinois Standard Achievement Test (ISAT). The next step was to shorten it from 40 questions to 22 plus 3 background questions, because I knew people would not want to take too much time to take the test and I didn't want anyone rushing through it (I thought that might change the results). I reviewed the Cartoon Guide to Statistics, and decided that 100 subjects should be a meaningful enough sample size to get an accurate representation of the general public. I made a first attempt at testing people, but it was a failure because I could only get 5 people to take the test after 3 hours. From this I could conclude that the test needed to be shortened to only 10 questions.</p> <p>I shortened the test, and was able to gather 100 completed tests. I sorted them by score, tallied them for the background questions, and noted each test taker's performance on the planet question and the Stooges question. These questions were added to see if people knew more about trivia than scientific facts. The Stooges question was: "Name the three Stooges" and the planets question was: "name the three planets closest to the sun. The data was input into Microsoft Excel. I tabulated the results. I assigned a pass/fail standard based upon what is done by most of my teachers, a straight percentage based upon the number of answers correct. For example, 70% and higher equals C- and higher. I considered C- and above to be passing, and below C- to be failing, because I cannot graduate from my class without at least a C- average.</p> <p><b>Results</b> The final results were as expected in my hypothesis, not very good. By looking at my results, I could see that the most educated people did the best. From this I can assume, because the test questions were based mostly on logic, and not a book learning, that the better the education a person has, the more likely they are to think logically.</p> <p><b>Conclusions/Discussion</b> My hypothesis, unfortunately, was correct. I found that only 62% of those tested could pass this test. However, because my data over-represented college graduates, in relation to the national average, I would expect that a larger sample from a wider area would result in a lower pass rate than what I observed.</p>	
<b>Summary Statement</b> Adults did poorly on a Standard 7th Grade Science Test.	
<b>Help Received</b> Thank you to my parents, all those who were tested, and the stores who let me give the test in front of their places of business.	