



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

<b>Name(s)</b> Caitlin A. Killmer	<b>Project Number</b> <b>S0309</b>
<b>Project Title</b> <b>Pushing the Limit: The Limit of Short-Term Memory in Adolescents</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of my project was to find out adolescent's ability to remember two-syllable nouns. <b>Methods/Materials</b> I made five lists of two syllable nouns. The first had three words, the second had five words, the third list had seven words, the fourth list had nine words, and the last list had eleven words. I gave these tests 88 times, in two different orders. In both trials, the subjects had fifteen seconds to look at the list, then flipped it over and immediately wrote down all the words they could remember. <b>Results</b> I found that the limits of short-term memory of two syllable nouns in adolescents is 5, plus or minus two. I found that 50 percent of people could remember 3 words, and 50 percent of people could remember between 4 and 5 words. In the seven, nine, and eleven word tests, fifty percent of people remembered between 4 and 7 words. <b>Conclusions/Discussion</b> I have concluded that adolescents can remember between 3 and 7 two-syllable nouns. My results contradict my hypothesis, which was based on the research of George Miller, who found that 7, plus or minus two, was the number of things a person could store and retrieve in their short-term memories. I think the difference in our results is because I tested only adolescents (people between the ages of 11 and 17,) and George Miller tested adults.	
<b>Summary Statement</b> I tested the short-term memory capacity of adolescents using two-syllable nouns.	
<b>Help Received</b> My math teacher, Clint Smith, helped me make graphs. My science teachers, Sunny LeMoine and Colin Matheson, helped edit the written components of my project.	