



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Andrea Darnbrough; Andres Garcia</b>	<b>Project Number</b> <b>J0707</b>
<b>Project Title</b> <b>Memory Recall: Finding the Best Way to Memorize Terms</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The objective is to determine if memorizing words in black text, in yellow text with a black outline, or as a naturally colored picture is more effective. We believe colored pictures will be the easiest to memorize and the black text will be the hardest to memorize.</p> <p><b>Methods/Materials</b> Ten words were selected, and three sets of index cards were made with these words in black text, yellow text outlined in black, and a naturally colored picture of the word. For each card type, we tested a group that consisted of two boys and two girls between the ages of ten and twelve that had an average of 93% or higher in their overall school grades. Each group was given 30 seconds to recall words or pictures from the ten index cards shown to them in the same sequence for three seconds each. We determined the average percentage of cards memorized for each card group and compared them.</p> <p><b>Results</b> Our data shows that the picture group had the highest percentage of memorized cards, with an average of 60.0% of cards correct. Following were the black text group, with an average of 55.0% of cards memorized, and the yellow text group, with the lowest percentage of 52.5% of cards memorized.</p> <p><b>Conclusions/Discussion</b> Our conclusion is that students recall memory at a higher level with naturally colored pictures over reading text.</p>	
<b>Summary Statement</b> Our project was to determine the most effective way for students to memorize terms.	
<b>Help Received</b> Our mothers helped us with scheduling appointments for the test takers, using Excel for our data analysis, editing our work, and purchasing materials for the study and the poster. Family members also helped us select the words for our project (see composition book).	