



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

<b>Name(s)</b> <b>Karis R. Tang-Quan</b>	<b>Project Number</b> <b>J0333</b>
<b>Project Title</b> <b>Name That Color</b>	
<b>Objectives/Goals</b> Discover the interference color identification has on word. How does the brain react when processing contradicting information? Which task takes priority?	
<b>Abstract</b>	
<b>Methods/Materials</b> stopwatch 50 "interference" flashcards with name of a color written in contradicting color, like "red" written in blue 25 "regular" cards with color spots 25 "regular" cards with names of colors written in black 60 subjects, 30 girls and 30 boys, ages eight to seventeen. "Regular" cards provided control measurement of normal reading and color identification speeds 4 timed tests (1) identifying color of the word (2) reading the word written in color (3) identifying color spots (4) reading the word written in black I varied the order of tests so that no learning effect was introduced by a particular order.	
<b>Results</b> Identifying the color of the word was harder than reading the name of the interference word. All the times were slower, no matter the age or gender. As age increased, time decreased. Girls identified colors and read words faster than boys. With the regular cards, people read the word slightly faster than identifying colors. Reading the word in black was slightly faster than reading the word in color interference cards. Identifying color spots was faster than identifying the color of the word in the interference cards.	
<b>Conclusions/Discussion</b> Identifying the color of the word was challenging. Times were slower because it was harder for people to block out the word on the card. The older the subjects, the lower their times. Girls were faster than boys. However, this might have been due to an age difference because average age of the girls was greater than that of the boys. People can probably read faster than they can identify colors because they read every day. Subjects had the slowest times for identifying the color of the word in the interference cards. Most people identify color of spots easily. But when the color of a word is contradicted by the name of the color word being read, people tend to read the word on the card, and their time is slowed down.	
<b>Summary Statement</b> When the brain is processing contradicting information of word color and word name, interference takes place and color identification slows down.	
<b>Help Received</b> Metropolitan Water District provided the poster board, log book, and binder.	