



**CALIFORNIA STATE SCIENCE FAIR  
2009 PROJECT SUMMARY**

<b>Name(s)</b> <b>Allison W. Cheung</b>	<b>Project Number</b> <b>J0606</b>
<b>Project Title</b> <b>Smell Your Way to Good Memory Power</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My experiment's purpose is to see how smells can affect a person's short-term memory. Going into further depth, I will investigate which of the following smells (Vanilla, Rosemary, Peppermint, Eucalyptus, or Lemon) improves short-term memory the most.</p> <p><b>Methods/Materials</b> Paper and pencil for the memory quiz; Vanilla scented oils; Rosemary scented oils; Peppermint scented oils; Eucalyptus scented oils; Lemon; 2 groups of 6 people each.</p> <ol style="list-style-type: none"><li>1) Form 6 memory quizzes with 6 trials each.</li><li>2) For the control group, give each person in your group the memory quiz.</li><li>3) The next day, have each volunteer take five deep breaths of a scent. Then have his or her take the new quiz with the scent.</li><li>4) Do the same for each scent.</li><li>5) Compare results.</li></ol> <p><b>Results</b> After performing my experiments, I found out that smells actually do affect memory, but in different ways. Rosemary improved memory the most. Eucalyptus made the volunteer perform even worse than without smells. However, I noticed that each of the volunteers did badly while smelling their favorite smell. Nobody liked rosemary, therefore, they did the best on that smell.</p> <p><b>Conclusions/Discussion</b> The results of my experiment will prove if smells benefit short-term memory or not. If smells do benefit short-term memory, students can smell scents while studying to maximize study time efficiency. Those who have troubles with remembering can use scents to aid them. Rosemary will be beneficial to people like these. They can use this scent to boost their short-term memory ability.</p>	
<b>Summary Statement</b> My project tests to see if smells can affect a person's short-term memory.	
<b>Help Received</b>	