



**CALIFORNIA STATE SCIENCE FAIR  
2005 PROJECT SUMMARY**

<b>Name(s)</b> Annelise J. Battles	<b>Project Number</b> <b>J0303</b>
<b>Project Title</b> <b>Do You Recall? Using the Senses to Make Sense of a Dog's Short Term Memory</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My objective was to learn which of a dog's sense of sight, smell, or hearing has the greatest affect on their short term memory (5 minutes or less).</p> <p><b>Methods/Materials</b> Using four dogs of approximately the same age, I tested each of their senses of sight, smell, and hearing by having them smell, see, or hear an object under one of the three buckets on the ground. I would then take them out of the room for intervals increasing by ten seconds. I would then let them off the lead and back into the room, where they would go to the bucket they remembered the object/toy/treat being under. If they were correct, I would move the object to a different bucket, and they would be taken out of the room for a longer period of time. If they could no longer remember twice in a row, I recorded the last interval of time they could remember for as their final time.</p> <p><b>Results</b> My hypothesis was correct - the dogs could remember using their sense of smell for the longest period of time. The average times for the four dogs were: smell: 77.5 seconds, sight: 70 seconds, hearing: 42.5 seconds.</p> <p><b>Conclusions/Discussion</b> In conclusion, a dog's sense of smell has the greatest affect on their short term memory.</p>	
<b>Summary Statement</b> My project is about determining which sense ( smell, sight, or hearing) has the greatest affect on a dog's short term memory (5 minutes or less).	
<b>Help Received</b> Parents assisted in testing of the dogs (two people were needed) and in laying out board.	