



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

<b>Name(s)</b> <b>Anush Shaginian</b>	<b>Project Number</b> <b>J1921</b>
<b>Project Title</b> <b>Does the Distance between Ants and Food Affect the Percentage of Ants that Go to the Food?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> I wanted to find out whether ants would go to a certain food regardless of how far it is from them. I wanted to observe the characteristics of ants.</p> <p><b>Methods/Materials</b> I collected ants from our back yard in cups and placed 5 ants on a certain point marked by tape one meter away from 28.3 grams of sugar. I started the stop watch and recorded the percentage of the ants that went to the sugar in 10 minutes. I repeated this 3 more times. I repeated this entire procedure 3 more times except this time testing 5 meters, 10 meters, and 15 meters distance from the ants and sugar.</p> <p><b>Results</b> At 1 meter distance between the ants and sugar the average percentage of the ants that went to the sugar was 100%. At 5 meters distance between the ants and sugar the average percentage of the ants that went to the sugar was 95%. At 10 meters distance between the ants and sugar the average percentage of the ants that went to the sugar was 70%. At 15 meters distance between the ants and sugar the average percentage of the ants that went to the sugar was 25%.</p> <p><b>Conclusions/Discussion</b> In this experiment, as the distance between the ants and the sugar increased, the average percentage of ants that went to the sugar decreased. When the distance between the ants and the sugar was increased from 1 to 5 to 10 to 15, the average percentage of ants that went to the sugar decreased from 100% to 95% to 70% to 25%. These results contradict my hypothesis because I predicted that as the distance between the ants and the sugar increase, the percentage of ants that go to the sugar would stay the same. I think that my hypothesis was wrong because even though ants can smell sugar from over a mile away, not all of them would be willing to go all the way to that location. I believe that each ant behaves differently from other ants, like humans. I have seen people give out free food on some occasions. I have also witnessed quite a lot of people saying, "I'm too lazy to go all the way there," The same might be true for ants; some are willing to go while others are not.</p>	
<b>Summary Statement</b> This project tests the relationship between ants and a pile of sugar.	
<b>Help Received</b> Teacher proof read my report.	