



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

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Project Title The Ants Go Marching In	
Abstract Objectives/Goals To determine whether a diluted and thus lower concentrated solution of the ant deterrent, Raid, is as effective as a fully concentrated solution of Raid. Methods/Materials Six different concentrations of Raid (in increments of 20%) were tested with each concentration tested twice. Ten ants were collected and placed in each sealed container with the appropriate level of Raid concentration. As an incentive, one tablespoon of maple syrup was placed on the opposite end of the container as the ants. Ten minutes were allotted and the number of ants living, weakened, terminated, and those which successfully crossed the Raid concentration were recorded. Results The number of ants which crossed the deterrent peaked at the 80% concentration and 0% concentration of Raid. Further, the 60% concentration proved as effective as the full concentration of Raid in preventing ants from crossing. The number of ants weakened by the deterrent displayed its high point in the 60% concentration and its low point in the full concentration. Conclusions/Discussion The hypothesis was proven partially correct: a lower concentration of Raid is as effective in deterring ants as the fully concentrated solution. However, a 60% concentrated solution is equally effective rather than the hypothesized 80% concentration. The data suggests that a lower concentrated and thus consumer and penny-friendly Raid solution would be just as effective in deterring ants as the full concentration.	
Summary Statement Whether a lower concentration of Raid is as effective in deterring ants as the full concentration of Raid.	
Help Received	