



**CALIFORNIA STATE SCIENCE FAIR  
2006 PROJECT SUMMARY**

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<b>Project Title</b> <b>Determining the Toxicity Level of Perfumes and Colognes</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My goal for this science competition is to just have a great time. If I don't win I will still be proud of myself knowing that I did my best. <b>Methods/Materials</b> Materials: 1. perfumes (Calvin Klein, Fantasy, Curious); 2. colognes (Axe, Tag, Polo Sport); 3. 105 live crickets; 4. 35 cups; 5. 35 cottonballs; 6. stopwatch; 7. saran wrap; 8.35 rubber bands. Procedure: 1. spray cottonball with either perfume or cologne; 2. place sprayed cottonball into cup; 3. place 3 live crickets into cup with cottonball; 4. put plastic wrap over cup; 5. put rubber band around saran wrap to keep in place; 6. time how long it takes for the crickets to die; 7. repeat each step and additional 4 times totaling 5 trials. <b>Results</b> In my investigation of finding the toxicity level of perfumes and cologne, perfumes were the most toxic. The total average of all perfumes is 94.6 seconds. The most toxic perfume was Calvin Klein with an average death rate of 84.2 seconds. The least toxic was Fantasy with an average death rate of 106 seconds. The perfume that was neither most or least toxic was Curious with an average death rate of 93.8 seconds As for colognes, it did not result of being the most toxic overall. The total death rate of all perfumes was 105 seconds. The most toxic cologne was Axe with an average death rate of 74.4 seconds. The least toxic was Tag with an average death rate of 123.4 seconds. The cologne that was neither most or least toxic was Polo Sport with an average death rate of 117.4 seconds. <b>Conclusions/Discussion</b> After completing my project on finding the toxicity level of perfumes and colognes, I learned that they are toxic. Since perfumes and colognes are used on a daily basis, I would suggest to people to watch what and where they are spraying their fragrances. They should be aware of that because it may be sprayed near children and/or babies and also near people who have allergies. Doctors have also stated that people can die because of this.	
<b>Summary Statement</b> The purpose of my project is to find the toxicity level of perfumes and colognes and how they can affect your health.	
<b>Help Received</b> Dad helped with purchasing materials and science board; Sister helped with transportation to CSSF; Science teacher helped with writing; Computer teacher helped with making graphs.	