



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

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| Name(s) Shelli E. Melkonian | Project Number J0511 |
| Project Title Effect of Water and Temperature in Varying the Toxicity Level of Different Pollutants | |
| Abstract Objectives/Goals My objective is to determine if the pH level of a toxic solution is effected by certain water teemperatures. Methods/Materials The materials that were used in my experiment are : DAP glue, oil based paint, motor oil, paper plates, pH meter, water, salt, plastic cups and lids, jumbo craft sticks, water heater, aquarium. After the toxic solution was dry on the jumbo craft sticks, I tested it by putting them in plastic cups with water, and then I would put those cups in the degree I was testing, which were 48 degrees, 70 degrees, 70 degrees salt water, 76 degrees, and 82 degrees. After 4 days, I would measure the pH level of each toxic souldion. Results I found out that the higher the temperature is, the pH level will increase. But in 48 degrees, motor oil came out to a way different pH level than DAP glue and oil based paint. Yes, the temperautre does effect the pH level of a toxic solution. Conclusions/Discussion The hotter temperatures that had the toxic souldion had a higher pH level, which means that it is a base. The cooler temperatures with the toxic solution had a lower pH level, which means that it is an acid. This make me think that in the warmer water temperatures, the toxic solutions could have evaperated into the air and making it more of a base. I predict that these toxins in various temperatures could have an effect on their stability and sturdiness. | |
| Summary Statement My project is about measuring the pH levels of certain toxic solutions in variuos water temperatures. | |
| Help Received I did my project on my own | |