



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Ashley A. Thompson	Project Number J1139
Project Title The Effect of a Chemical on a Pipe Clog	
Abstract Objectives/Goals The objective is to learn which chemical will work best at eating away at lard in clogged household drains. Methods/Materials The procedures included the testing of four drain chemicals in order to determine which chemical best broke down one cup of lard in a ten minute time period. The lard was compacted in four individual pipes to represent a blocked household drain. Water was then poured into each of the pipes through a funnel. Once the blockage was confirmed, the four chemicals were poured separately into each of the pipes to determine which would clear the blockage first. The results were measured in millimeters. Results Each of the chemical's result numbers, from start to finish, ranged from one to nineteen millimeters. Only one chemical, Pro Liquid Drain Opener, broke through the blockage before the ten minute time period. Zep Drain Opener came in second followed by Drano Max. Liquid Plumber proved to be the least effective. Conclusions/Discussion These results indicate that they support my hypothesis, if Pro Liquid Drain Opener broke through first, then it would be the most effective chemical. The testing proved that Pro Liquid Drain Opener containing sulfuric acid cleared a clogged drain the fastest. These results tell us which chemical will work the best at clearing a clogged drain and why.	
Summary Statement My project tests four different drain chemicals to see which is the most effective in clearing a pipe clog in ten minutes.	
Help Received Teacher helped with results; Mother helped improve writing; Father helped build/construct this project and monitored me during the testing; Santee Public Library reference workers assisted in locating books/information.	