



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Calvin D. Nishimoto	Project Number J2315
Project Title Investigating the Effects of Automotive Fluids on the Regeneration of Planarians	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My project is to determine if water containing trace amounts of automotive fluids has an effect on planarians regeneration.</p> <p>Methods/Materials I conducted my experiment by first adding used and unused motor oil, used and unused coolant, and used and unused transmission fluid to spring water. I then filtered the water before placing two planarian tails in ten cups of each test variable. I then observed and recorded how many planarians regenerated.</p> <p>Results After completing my investigation, the used motor oil and unused coolant most negatively effected the planarian's regeneration rate.</p> <p>Conclusions/Discussion My conclusion is that when you dump hazardous wastes in to our ground water, even though it gets filtered, it can still be harmful to our environment. In addition, used motor oil and unused coolant were the worst fluid contaminants.</p>	
Summary Statement In my project, I determined that filtered automotive fluids had a negative effect on planarians regeneration.	
Help Received Stereoscope from science teacher; Dad got me automotive fluids and supervised my experiment	