



**CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY**

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| Name(s) Darrick L. Gowens | Project Number J1110 |
| Project Title Comparing the Water Repellent Properties of Different Glass Treatment Substances | |
| Abstract Objectives/Goals The objective of my project is to determine the repellent properties of water and water solutions and the products that repels them. Methods/Materials I am using different types of water solutions, plain water, salt water, and acid rain. In the control group I will use a plain piece of glass cleaned with ammonia and alcohol. I will place one drop of water onto the glass. I will raise the glass 1° until the water starts to move. I will measure the angle degree when the water droplet reaches 5cm. I will do this with each water solutions. I will repeat the test thirty times. I will calculate and average the degree of angle of the glass for each test and test variable. Results Rain X has the highest repellent property, when compared to plain glass and other substances. Conclusions/Discussion My conclusion on using different types of water solutions and repellent products can have an effect on the repellent properties. I found that certain kinds of waxes can have different repellent properties in their ingredients. I also found that some liquid detergents can act as a degreaser and aid to the repellent property. | |
| Summary Statement My science project is to determine the repellent properties of water and water solutions and the products that repels them. | |
| Help Received My mom help me hold the protractor in place and watched to make sure I only move the angle of the glass one degree at a time. She help me look for errors in my writing and typing and helped me put my board together. | |