



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

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| Name(s) Cobalt J. McAvinue | Project Number J1815 |
| Project Title Eta Equals F Over A Divided by Delta Vx Over Delta z (aka Viscosity) | |
| Abstract Objectives/Goals I chose to do a project on viscosity. My question was #Does temperature affect the viscosity of a liquid?# My hypothesis was that a hot fluid would be less viscous than a cold fluid. Methods/Materials For the experiment, I used water, shampoo, honey and olive oil at 3 different temperatures: 60 degrees, 80 degrees, 110 degrees. I poured each of the liquids at varying temperatures down a slope and timed the liquids movement from line 1 to line 2 on this slope. Results I found that the flow time of the fluids decreased from cold to hot proving my hypothesis correct. Conclusions/Discussion My Conclusion is that the temperature of a fluid is a factor in determining the fluids viscosity. The higher the temperature of a fluid the less viscous it is. | |
| Summary Statement This project studies the affects of temperature on a fluids viscosity. | |
| Help Received My mon helped to heat the fluids. | |