



**CALIFORNIA STATE SCIENCE FAIR  
2011 PROJECT SUMMARY**

<b>Name(s)</b> Cobalt J. McAvinue	<b>Project Number</b>  31892
<b>Project Title</b> Eta Equals F Over A Divided by Delta Vx Over Delta z (aka Viscosity)	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> 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.</p> <p><b>Methods/Materials</b> 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.</p> <p><b>Results</b> I found that the flow time of the fluids decreased from cold to hot proving my hypothesis correct.</p> <p><b>Conclusions/Discussion</b> 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.</p>	
<b>Summary Statement</b> This project studies the affects of temperature on a fluids viscosity.	
<b>Help Received</b> My mon helped to heat the fluids.	