



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Maxon G. Repass	Project Number 34479
Project Title How Does Viscosity Affect Shock Absorption?	
Objectives/Goals HOW VISCOSITY AFFECTS SHOCK ABSORPTION. Max Repass and D. Shah (teacher) Portola Magnet Center, 18720 Linnet Street, Tarzana, CA 91356. This study examined the question of how viscous liquids can absorb shock. Abstract Methods/Materials The study involved using water, syrup, corn syrup, canola oil, honey, and antibacterial hand soap to examine the velocity of a marble dropped into said liquid, then calculating viscosity. Each experiment was tested 3 times. The liquids were then transferred to small containers in which eggs were dropped into, going as high as needed to until the egg was broken. Results The results showed that both corn syrup and honey were good shock absorbers. Upon further observation the corn syrup was deemed greater, for honey would return an equal or greater force to the egg being dropped. Conclusions/Discussion Viscosity compared with shock absorption acts as a parabola with water starting at (0,0) going to its peak, (corn syrup) and falling with honey and materials of greater viscosity.	
Summary Statement This study examined the question of how viscous liquids can absorb shock.	
Help Received Father helped purchase materials	