



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Adira L. Dooley	Project Number S1905
Project Title Sta-Netic	
Abstract Objectives/Goals My project was to compare the differences between the static and kinetic friction that act upon different objects when they slide down a sheet of glass. I believed that the watch would have the greatest difference because it is very textured and is made of rubber. Methods/Materials Materials: Cell phone, Watch, Pillow, Notebook, Shoe, Protractor, Sheet of glass, Triple beam balance In my experiment, I increased the angle of the sheet of glass while the object was on it. Then, once the object began moving, I recorded the angle and calculated the static friction. To calculate the kinetic friction, I observed the angle at which the object moved continuously down the sheet of glass. Results I observed that the watch had the greatest difference, with 0.521, the notebook had the next, with 0.235, the pillow was next, with 0.185, then the cell phone, with 0.171, and the shoe had the least difference, with 0.009. Conclusions/Discussion I concluded that my hypothesis was correct, the watch had the greatest difference between the two frictions. But, my results differed from what would have been expected. In all cases, the kinetic friction was greater than the static, and all of my background research said that the static friction is always greater than kinetic. I plan to do further research and try to fix whatever error I may have made.	
Summary Statement My purpose was to compare differences between static and kinetic friction acting on different objects.	
Help Received Physics teacher helped come up with procedure; Environmental science teacher helped revise procedure; Father helped record data and format board.	