



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Elizabeth (Bethie) M. Conlan	Project Number S0206
Project Title Acceleration Factors	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals To see if acceleration remains constant between three different balls, with different masses and different diameters and different materials.</p> <p>Methods/Materials To test my hypothesis I tested three balls on a 4.5 meter wooden plank. I measured the acceleration at three different increments on the board to see if the acceleration between the balls remained constant. I tested each ball at each increment on the board ten times. I raised the ramp from a 10 degree angle to a 30 degree angle and repeated the test.</p> <p>Results The acceleration remained constant for each ball type for each angle. The only differences in the acceleration was due to human error in recording the time.</p> <p>Conclusions/Discussion The acceleration graphs showed the acceleration remained constant for each ball type and angle of the ramp. Expansions on this project could include further studies on moments of inertia or test how different friction factors would effect the experiment.</p>	
Summary Statement To see if acceleration remains constant between three different balls, with different masses and different diameters and different materials.	
Help Received Father helped construct ramp using power tools.	