



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Dylan Beatty; Jack Holman; Garrett Morgan	Project Number S0203
Project Title Spudgun Ballistics	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The main objective for our project was to learn about the physics of a potato cannon focusing on angle, barrel length, and the type of hairspray you use.</p> <p>Methods/Materials We took a potato cannon to a large field and repeatedly shot it recording how far it went on a data table. Materials: abs pipe, (to build gun) joint glue, latern striker, stand for gun, angle measure, large field, potatoes and hairspray.</p> <p>Results We found that at a 15 degree angle with White Rain Hairspray and a 6 foot barrel it went the farthest.</p> <p>Conclusions/Discussion We might of had different results if we had found a way to measure from where the potato landed instead of adding the bouce. Besides this we believe that the results we got were accurate. We believe that White Rain worked the best because it had the most dimethyl ether. We also think that the 6 foot barrel worked best because it had the perfect amount of time to exspand.</p>	
Summary Statement Our project was about find the perfect combination of hairspray, barrel length ,and angle to launch as far as we can.	
Help Received partners father helped build gun/stand science teacher helped us learn physics.	