



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Michael C. Schmit	Project Number J0725
Project Title Launching Ball Bearings	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My project was to determine whether magnets could increase the momentum of rolling ball bearings in order to launch one uphill and several inches through the air. I believe that having magnets at the beginning and end of the track will maximize the launch distance.</p> <p>Methods/Materials I used 20 magnets, 10 approximately 1/2" in diameter and 1/8" thick, and 10 more approximately 3/4" diameter and 1/8" thick. 16 steel ball bearings were also needed to complete my project. For the track, I used a piece of aluminum angle that is 3/4" on each side and 27-1/2" long. The magnets were mounted to the angle with masking tape. The aluminum angle is mounted on a wood stand that I painted with acrylic paint.</p> <p>Results The evidence proves that if the majority of the magnets are set at the beginning and end of the track, the ball will launch to it's maximum distance.</p> <p>Conclusions/Discussion Magnets have a major effect on increasing the momentum of rolling ball bearings.</p>	
Summary Statement My project shows how magnetic forces can interfere with objects in order to create a change.	
Help Received My father helped me cut the wooden stand on his saw.	