



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Benjamin Sheehan	Project Number J2127
Project Title What Golf Ball Would You Choose?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of this experiment was to determine the performance of different golf balls on a putting green. Does it matter what ball is used, if it's dirty, how many dimples it has, or if the aim marker on the ball is facing towards the target? I predict that all seven balls that I test would have similar results for distance.</p> <p>Methods/Materials I chose seven different golf balls. I simulated long putts and short putts using a consistent force by using different size ramps. Two pipes placed on the ramps created a straight pathway for the ball to roll down. A tape measure was used to measure the distance. Each ball was rolled down three times and the distance measured. The same procedure was used with the aim marker aligned and off target, and with dirty balls.</p> <p>Results My results indicate that different golf balls traveled different distances on a putting green when given similar force of putts. This difference shows up mostly in long putts than short putts. This is most likely due to two factors, weight of the ball and the number of dimples on the ball. Dirty balls, which are heavier, rolled an average 12% farther than clean balls. The number of dimples on the ball reduced how far a ball rolled, most likely due to increased friction with the grass on the putting green. The alignment of the aim marker had little effect on how straight the ball rolled.</p> <p>Conclusions/Discussion This experiment disproved my hypothesis; different golf balls do perform differently when putting. Knowing what these differences are and how they affect the performance of your ball on the green will make you a better golfer.</p>	
Summary Statement I developed my project to verify my hypothesis that different golf balls perform the same on the putting green; but to my surprise, this was not true.	
Help Received Used putting green at a local golf course	