



**CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY**

Name(s) Alana S. Maiello	Project Number S0215
Project Title I Hit a Good Putt. Why Didn't It Go In? Did the Hole Move?	
Objectives/Goals I have always wondered while playing golf if the construction of a golf ball and the material it is made out of has an impact of whether the ball goes in the hole or not. Can the structure of a ball have a great effect on the result? The purpose of my experiment was to find out how much the construction and cover material of a golf ball affects the distance of a consistent putt.	
Abstract	
Methods/Materials Obtain all the golf balls that will be tested and used during the experiment. Find the construction and cover material of each. Give each ball a number. Obtain all materials needed to perform the putting of the balls. Construct "Puttsy," the structure that will putt the ball consistently each time. Go to the 1st green of Las Posas Country Club, a green of medium speed, and pick a level area with a level. Set up Puttsy and adjust all of its settings so that it is ready to putt each ball. Putt each ball three(3) times with the indicator-gauge on Puttsy measuring 3 feet for the three feet testing and 5 feet for the five feet testing. Record the distances of each ball.	
Results During the 3 feet test, the balls consistently rolled past 3 feet. The highest average for the covers was balata and the lowest was the urethane covered balls. The highest out of the construction types was the 2-piece balls and the lowest was the 3-piece balls. During the 5 feet test the balls consistently rolled past 5 feet. The urethane covered balls once again had the lowest average and the trithane balls had the highest.	
Conclusions/Discussion My hypothesis proved to be correct. Different types of cover material and constructions showed to differ in the average distances, sometimes averaging almost a foot more than another cover material or construction! The 2-piece balls had the highest averages for the construction types in both tests and the urethane covered balls had the lowest averages for the covers in both tests. This shows consistency in my results, despite the distance tested. Although no ball rolled exactly 3 or 5 feet in both test, the balls seemed to roll further past 5 feet than they did 3 feet, because of the extra speed relayed onto the ball when hit after being taken back. A notable observation is that each ball rolled a little differently when putt. When a ball was hit 3 times, it rarely landed in the same spot.	
Summary Statement My project tests whether golf ball construction types and cover materials have an effect on the distance they roll in a consistent putt.	
Help Received Dad helped carry materials and drove me to golf course, Randy Poorboy helped construct Puttsy	