CALIFORNIA SCIENCE & ENGINEERING FAIR
2019 PROJECT SUMMARY

Name(s)

Jacob Cho

Project Number

J0105

Project Title

Golf Ball Aerodynamics

Abstract

Objectives

The objective was to find if the difference in dimple pattern of a golf ball affects the spin rate, distance, and ball speed of the golf ball.

Methods

Three different golf balls, launch monitor, and golf club. Launch monitor recorded data from ball that was hit by club.

Results

When doing my experiment, I found that the ball with the most dimples had the most spin rate. The ball with the least spin rate had the least dimples.

Conclusions

In conclusion, my hypothesis was partially correct. It was incorrect because I found no correlation between the dimple pattern of a golf ball and the distance of the golf ball. I also did not find any correlation between the dimple pat- tern and ball speed of the golfball. However, There was a significant correlation be- tween the number of dimples on a golf ball, and the spin rate of the golf ball. Through my testing, I did find that the ball with the most dimples had the most spin rate. Additionally, the ball with the least spin rate had the least spin rate. There was a significant difference of spin rate be- tween the three balls ranging from 4000 to 1000 rotations per minute.

Summary Statement

In my project I did a study on the dimples on a golf ball and how it affects the spin rate of the ball.

Help Received

I designed my experiment by myself, but used a machine made by flightscope.