CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY

Name(s)
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Project Number
J0101

Project Title
Aerodynamics of a Golf Ball

Abstract

Objectives/Goals
The purpose of my project was to see if the number of dimples on a golf ball changes its range.

Methods/Materials
Materials:
Golf Ball Launcher (home made)
Compressed Air Supply
Multiple Golf Balls (test subjects)
Measuring Equipment
Camera
Safe Controlled Area
Procedures:
1. Obtain different Titleist golf balls for testing
2. Make a golf all launcher to test the golf balls
3. Mark out every meter in an open area
4. Test each type of golf ball ten times
5. Record data while testing
6. Make a tables and graphs
7. Average the length for each ball
8. Share your results

Results
The results of my experiment showed that the golf ball with no dimples flew the farthest when launched at 7.6 bar and the ProV1 with 332 dimples flew the farthest when launched at 5.2 bar, proving my hypothesis partially wrong.

Conclusions/Discussion
During the testing of my project I was proved partially right. I believed that the ball with no dimples would fly the farthest when launched at my high pressure 7.6 bar (110 PSI), while the ball with 392 dimples would go the farthest when launched at the lower pressure of 5.2 bar (75 PSI). My hypothesis was proved right as the ball with 0 dimples went the farthest at 7.6 bar but, was also proved wrong as the ProV1 with 332 dimples went the farthest at 5.2 bar.

Summary Statement
My sience fair project was to test the effect of dimples on the range of a golf ball.

Help Received
I Used the machine shop and welder under the supervision of my father at his place of business.