CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY

Name(s)

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Project Number

29053

Project Title

Going the Distance: Launch Angles and Projectile Trajectory

Abstract

Objectives/Goals

Our project was to determine which launch angle results in the greatest distance for a projectile. We believed that the 45 degree launch angle would make the projectile go the greatest distance.

Methods/Materials

We constructed a projectile launcher and its projectile. We placed the projectile in the launcher and set it at one of the test angles: 0 degrees, 20 degrees, 45 degrees, and 60 degrees. We launched the projectile from the launcher. When the projectile stopped, we measured how far it went from its exit from the launcher to where it stopped moving. Then we recorded the distance it traveled. Each test variable angle was tested 15 times.

Results

The 45 degree angle made the projectile go the farthest.

Conclusions/Discussion

Our conclusion is that the 45 degree angle measurement caused the projectile to travel the greatest distance.

Summary Statement

Determining which launch angle results in the greatest distance for a projectile.

Help Received

Teammates father helped build the launcher; science teacher helped with project display; employees at Orchard Supply Hardware helped choose project parts.