CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY

Name(s)
Rowyn D. Gilfillan

Project Number
31668

Project Title
Flying Flowers Flaming Hairspray

Abstract

Objectives/Goals
My goal is to find what projectile will be launched furthest on average from two different cannons of different barrel lengths. I think that the longer barrel length will launch the heaviest projectiles further on average than any other projectile from either barrel length.

Methods/Materials
By adding the same amount of fuel to two different cannons and igniting it I launch the projectile forward, then measure after the launch had been done, by doing this 12 times for each projectile from each cannon I have hopefully gathered enough data to prove my hypothesis correct or incorrect.

Results
I found that the longer barrel length launched the lightest and medium weight projectiles furthest on average whereas the shorter barrel length launched the heaviest weight furthest on average.

Conclusions/Discussion
I found that the shorter barrel length ended up launching the heaviest projectile the furthest on average, and that the longer barrel launched the two lighter projectile furthest on average.

Summary Statement
My project is about different cannon barrel lengths and how they launch different weighed projectiles of the same dimension.

Help Received
Mother helped with board set up, step father helped watch launches.