

CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s)

Talen Barton; Rowyn Gilfillan

Project Number

S0305

Project Title

Propelled Potatoes

Abstract

Objectives/Goals

The objective of this project was to find which combination of propellant and barrel length will yield the longest launches.

Methods/Materials

The materials I used to make the cannons was ABS pipes with varying diameter. The propellants were Axe, Suave hairspray, and Engine starter fluid.

Results

We found that the hairspray gave the longest launches, the Axe gave the second longest launches, and that the engine starter fluid had the shortest, and fewest launches.

Conclusions/Discussion

We found that contrary to what we had expected, the engine starter fluid was the least explosive, not the most, and that the hairspray ended up as the most explosive. The barrel length difference didn't really seem to change much of the data, if there had been a larger difference in barrel length we probably would have seen a difference in launch distance.

Summary Statement

This project is about cannons, and how varying propellants and barrel lengths affect their power and the distance they shoot.

Help Received

Family helped with safety, and providing materials.