

# CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

Rowyn D. Gilfillan

**Project Number** 

**S0307** 

**Project Title** 

# Flying Flowers Flaming Hairspray

## **Objectives/Goals**

### **Abstract**

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.