

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s) **Project Number** Nicole L. Larsen **J0119 Project Title Aerodynamics of Projectiles Through a Liquid Medium** Abstract **Objectives/Goals** The purpose of this project was to see which shape (circle, triangle, or square) would travel the farthest distance when propelled through water. **Methods/Materials** The procedure included making a 121.92 centimeter long box lined with plastic to hold the water. Two holes were drilled on one side of the box and one on the other to attach two hooks and plastic tubing. The plastic tubing was fastened to an air compressor that launched the projectile through the water. The three shapes of the projectiles were a circle, labeled S1, a triangle, labeled S2, and a square, labeled S3. Each projectile was propelled through water using the air compressor six times and measurements of the distance were taken after each test. Results The average measurement for the circular projectile, S1, was 95.9 centimeters. The average measurement for the triangular projectile, S2, was 79.8 centimeters. The average measurement for the square projectile, S3. was 80.6 centimeters. **Conclusions/Discussion** It was concluded that the circular projectile traveled the farthest, which supports the hypothesis. **Summary Statement** This project is testing whether the shape of an object will affect how far it traveled in water.

Help Received

Mom helped proofread report; Dad helped perform procedure; Uncle helped with research; Teacher gave ideas to improve project.