CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY

Name(s)
Anthony D. Sorace

Project Number
J0126

Project Title
Drop Zone

Abstract

Objectives/Goals
My project was to determine if the shape of a parachute will have an effect on the amount of time it takes an attached object to fall to the ground.

Methods/Materials
Three parachute models were constructed from the same cotton fabric. Each parachute had the identical surface area but a different shape. There was a circle, square and an equilateral triangle parachute. To each parachute I attached the same plastic float (fishing bobber) with 6 nylon strings(fishing line). The lines were attached to the hook on the bobber. Each parachute was dropped from the same height 15 times and the time for each drop was recorded. As a control, I also dropped just the bobber with no parachute, and recorded the time for each of the 15 drops.

Results
The circle and square parachutes had virually the same rate of descent. The triangle parachute had a slightly faster rate of descent. The bobber (control) fell significantly faster than when attached to any one of the parachutes.

Conclusions/Discussion
The shape of a parachute will affect the rate of descent of an attached object.

Summary Statement
I designed an experiment to determine if the shape of a parachute will affect the rate of fall of an attached object.

Help Received
My dad helped me by timing the drops; my mother took the photographs and helped me organize the display