



CWSF 2005 - Vancouver, British Columbia



Nicholas Randall

Trebuchet Physics

Division: Physical & Mathematical Sciences

Category: Junior

Region: Central Okanagan
City: Summerland, BC
School: Ecole Entre Lacs

Abstract: This project determined the optimum ratio of counterweight to projectile

weight for a projectile to travel the maximum distance using a model trebuchet. Two release pin angles and two different projectiles were

investigated with 900 firings. At a 0 degree pin angle, the optimum ratio was

125:1 for a tennis ball and 175:1 for a golf ball.

| Awards | Value |
|--|---------|
| Petro-Canada Peer Innovation Award - Junior - Western Canada | \$200 |
| Sponsor: Petro-Canada | |
| The University of Western Ontario Scholarship | \$1 500 |
| Silver Medallist - \$1500 Entrance Scholarship | |
| Sponsor: University of Western Ontario | |
| Silver Medal - Physical & Mathematical Sciences - Junior | \$700 |
| Sponsor: Encana Corporation | |
| Total | \$2 400 |



