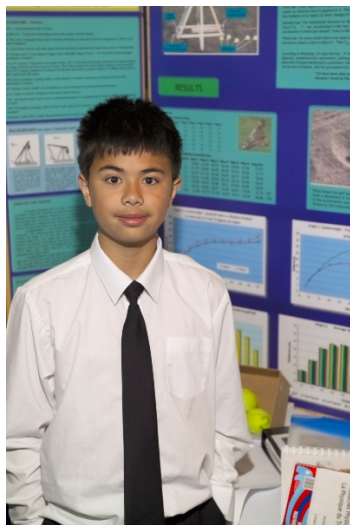


CWSF 2005 - Vancouver, British Columbia



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