

# CWSF 2016 - Montreal, Quebec



## Teagan Ribbink

### Pump Up The Velocity

**Challenge:** Discovery

**Category:** Junior

**Region:** Central Okanagan

**City:** Kelowna Bc, BC

**School:** Okanagan Mission Secondary

**Abstract:** For my project I studied the effects of projectile mass, barrel length, and pressure on the final velocity of a projectile. My results were compared to theoretical results based on Newton's second law of motion, using a mathematical model designed by Dr. Mathew Turner.

#### Biography

My name is Teagan Ribbink and I am a grade 7 student at Okanagan Mission Secondary in Kelowna, BC. My favourite subjects in school are Math and Science. Outside of school my passion is sports. I play hockey and basketball in the winter, while in the spring I participate in baseball and soccer. I love the outdoors and spend most of my summers camping. My project grew from wanting to study the effects of mass on final altitude reached by model rockets. When this idea proved to be impractical, I decided to build a pneumatic cannon to simulate a rocket launch. Not only did I study the effect of mass on the exit velocity, but also the effect of pressure and barrel length. My 14 year old brother Jordan who is my role model also was my "mentor". It were the backyard experiments (aka. blowing up things) that Jordan and I did that got me interested in science in the first place. Competing in the science fair has been an amazing experience and I thank my teacher Mrs. Taylor for organizing my class science fair where it all started.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000