

# CWSF 2017 - Regina, Saskatchewan



## Andrew Benn

### Magnetic Fields and Fluid Flow

**Challenge:** Discovery

**Category:** Junior

**Region:** Thames Valley

**City:** London, ON

**School:** Stoneybrook P.S.

**Abstract:** Fluids flow through tubes in many areas of life ? sewer systems, food production lines, and even blood vessels. This experiment was designed to see if the application of a magnetic field could affect the viscosity of a number of fluids flowing through tubes of small diameter. There was a small effect observed, at the 5% level for most of the fluids tested.

### Biography

I am in Gr.7 at Stoneybrook Public School in London, Ontario. I like science, biking with friends, playing soccer and reading. I enjoy playing trumpet in my school band, participating in STEAM club and being active in my church youth group. Ever since I can remember I've wanted to pursue a career in science, specifically related to magnetism or radiation, two things which fascinate me. This is what led me to develop this project. In the future I'd like to try this project on a larger scale by using stronger magnets and a longer tube of greater diameter. If I continue this research I could develop a more efficient sewer system for cities. This is my third year doing a science fair project. I've had a blast every year and have learned a lot. I'd recommend that other students choose a topic that interests them so that they will enjoy doing their project and sharing it with others.

### 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