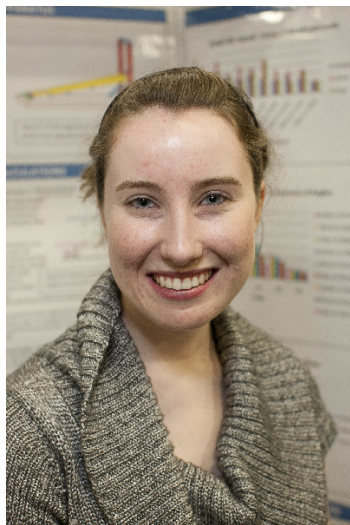


## CWSF 2011 - Toronto, Ontario



### Kathleen Walsh

#### Slippery Search for the Coefficient of Friction

**Challenge:** Discovery

**Category:** Senior

**Region:** Bluewater

**City:** Port Elgin, ON

**School:** St. Mary's High School

**Abstract:** The formula was derived for calculating the coefficient of static friction on an inclined plane. One thousand trials were conducted using an apparatus that was specifically designed and built for the purpose of data collection. The coefficients of static friction were calculated from the experimental data for 135 combinations of surfaces, lubricants, and angles of inclination. The coefficients ranged from 0.3426 to 1.274.

#### Biography

My name is Kathleen Walsh. I am a grade 11 student in rural Ontario. My favourite subjects are math and science, and I hope to continue studying sciences at university within the next few years. This year I was the treasurer of my school's student council, and I assisted with the grade 9 transition program. Outside of school I love to participate in sports, especially soccer, swimming, volleyball and cross country running, and I love to play the violin and piano. I also work part time as a lifeguard and swimming instructor at my local pool. This is my first year attending the Canada Wide Science Fair and I am very excited for the experience!