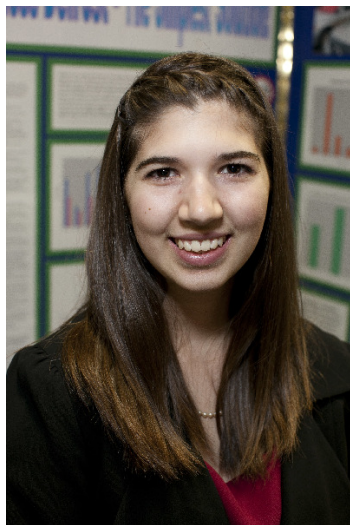


# CWSF 2011 - Toronto, Ontario



## Arctica Cunningham

### Exhaustless Defrost - The Simplest Solution!

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Pacific Northwest

**City:** Telkwa, BC

**School:** Smithers Secondary

**Abstract:** To protect the environment, and simultaneously help people save money and time, my goal was to replace the common practice of idling a vehicle to defrost the windshield, unnecessarily burning non-renewable fuel and creating harmful carbon emissions. After examining the formation of frost, and developing and testing a number of different innovations, I discovered the best solution is a lot simpler than one would expect.

#### Biography

I am a grade ten student, from northern BC, involved in Leadership, Youth for a Better World, CARE Committee, Jazz Choir, and playing clarinet in Senior Concert Band. This year our band had the privilege of travelling to Cuba on a performance tour. I believe it is very important to give back to your community; therefore, I volunteer at a soup kitchen, candy stripe at a senior's home, help with church activities, and I am the student representative for my town's Improvement Committee. Last summer, I was the lucky recipient of a Youth Science Canada scholarship for a phenomenal trip to the Arctic with Students on Ice. I will be attending the Shad Valley program at University of New Brunswick, this July. I plan to pursue a career in Environmental Science, and I always choose science fair projects that attempt to solve environmental problems. This year, at the Pacific Northwest Regional Science Fair, I won: Best Intermediate Project, and the B.C.I.C. and Calderwood Special Effort awards. I attended CWSF in 2009 and 2010 and was honoured to win Bronze and Silver medals. I have always had an incredible time at CWSF, and I am so glad to be attending again.

#### Awards

#### Value

Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	\$300
The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
<b>Total</b>	<b>\$1 300</b>