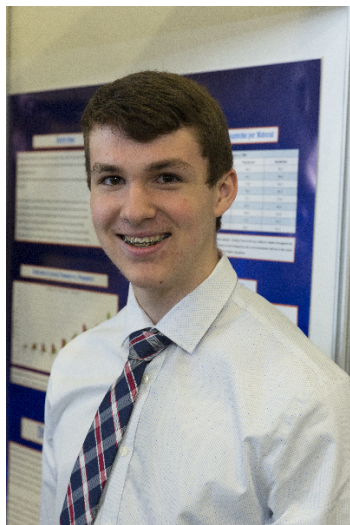


## CWSF 2018 - Ottawa, Ontario



### Zachary Fraser

#### Frequency in Sound Proofing

**Challenge:** Discovery

**Category:** Intermediate

**Region:** Cape Breton

**City:** Sydney, NS

**School:** Sydney Academy

**Abstract:** This experiment was intended to discover the effectiveness of a common soundproofing technique. It looked at its ability to reduce sound pressure at frequency ranges audible to the human ear, and tested multiple materials. Applications for this project are found when deciding what sounds should be reduced, with this method of soundproofing working best in conjunction with other techniques.

#### Biography

Hello, my name is Zach, and I am a grade 10 student attending Sydney Academy in Cape Breton, Nova Scotia. I am a big music fan, especially, to the disappointment of my friends, classical and jazz genres. I am a percussionist, and have played in a plethora of ensembles including the Maritime Youth Wind Ensemble, Nova Scotia Youth Wind Ensemble, Second Wind Concert Community Band, and even the Fortress of Louisbourg's Fife and Drum corps! Next year I plan to play with the Cape Breton Orchestra. As a musician, and particularly a drummer, it is not too difficult to guess the inspiration for my project regarding soundproofing this year! In the future I plan to attend university (fingers crossed for MIT) to study acoustical/sound engineering. Most participants will agree that finding a topic is the most challenging part of science fair. After that it is a fun test of your problem solving skills, and, unfortunately for me, time management skills. The best advice I can provide would be to stay organized, and choose a topic that will keep you interested. If it is not an important topic to you, what is the point of the project? See you around!

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