

## CWSF 2019 - Fredericton, New Brunswick



### David Tobin

#### Can You Keep It Quiet?

**Challenge:** Discovery

**Category:** Junior

**Region:** Ottawa

**City:** Nepean, ON

**School:** Frank Ryan Catholic Sr. E.S.

**Abstract:** What are the qualities of building materials that are effective at reducing sound? My exploration had two parts. First, I focused on whether the density of materials affected sound reduction. Second, I looked at whether the thickness of materials had an affect on sound reduction. If these factors (density and thickness) make a difference, it could help create quieter rooms in houses and buildings.

#### Biography

My name is David Tobin and I'm a grade 7 student at Frank Ryan Intermediate Catholic School in Ottawa, Ontario. Science fairs are a new experience for me and have made for a very exciting year so far! Outside of school, I enjoy basketball and snowboarding, as well as cooking, engineering, and coding. I'm also a big fan of Rick Riordan's books, like the Percy Jackson series. What inspired my project? "Can you keep it quiet?" is a phrase said frequently in our house because my dad is a voice actor and has a studio. This led me to explore the sound reduction qualities of different building materials. My future plans for taking my project content further include improving my testing apparatus, adding more new materials to test, and exploring the effectiveness of various combinations of materials. My advice to anyone thinking about doing a science fair project is...Don't be afraid to try, or even to fail. That's how we learn! Also, follow your curiosity ? the little voice in your head will lead you to new discoveries.

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