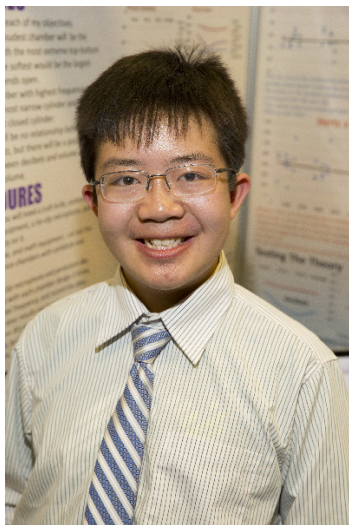


## CWSF 2014 - Windsor, Ontario



### David Wu

#### Can You Hear What I Hear? The Relationship Between Loudness, Frequency & Volume

**Challenge:** Discovery

**Category:** Junior

**Region:** Thames Valley

**City:** London, ON

**School:** Orchard Park P.S.

**Abstract:** My experiment is meant to find out how we can change alter the design of a resonance chamber to control its decibels (loudness) and Hertz (frequency). I tested different groups of them and compared them between their own shape, compared the designs when they had the same volume, and looked for possible relationships between decibels, Hertz, and the volume of the resonance chambers.

#### Biography

I am David Wu, a Grade 7 student going to Orchard Park P.S. in London, ON. I was born in Taiwan, on the other side of the world! When I was 1 year old, my family had moved to Canada. Since I was in kindergarten, I have always been an avid fan of all branches of science. I have read all non-fiction books in our area's libraries, and now mostly have to go to the adult sections for books that have topics I am interested in. A few examples of what I have looked into include zoology, basic quantum physics, and medicine. When I am older, I would be very willing to donate science books to libraries to give others like me the chance to learn more. This brings me to another one of the things I like-reading. I read almost any book I can get my hands on, but do prefer some specific genres, such as science, sci-fi, and mystery. I also greatly enjoy music, and am quite good with instruments, playing the piano, flute, and alto saxophone. I also play chess at a decently advanced level, and have won chess tournaments and gotten 2nd in regionals.

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