

## CWSF 2015 - Fredericton, New Brunswick



### Benjamin d'Entremont

#### The Best Parabolic Reflector

**Challenge:** Energy

**Category:** Junior

**Region:** Fundy

**City:** Quispamsis, NB

**School:** Quispamsis Middle School

**Abstract:** Four different foam and aluminum paraboloid reflectors were built, each with a different depth and focal point, but the same diameter. A thermometer was placed at the focal point of each reflector, and the temperature from a heat lamp, placed at a constant distance was measured. The experiment showed that the reflector with the shortest focal point gathered the most heat.

#### Biography

I am a high honours grade 7 French immersion student at Quispamsis Middle School. My favourite subjects are math and science. Outside of school, I am active in hockey, ski club, guitar, and competitive singing. I have performed many times on stage, having won many awards at the New Brunswick Competitive Festival of Music, and most recently I have done some acting. This includes a star role in "The Boy Who Was Bullied" (CBC-TV) and a TV/Theatre pre-roll commercial for the New Brunswick Innovation Fund. I was inspired to do this project because I wanted to see if I can get clean energy from the sun. For a future project, I would like to expand my science experiment with a heat source that is further away, to better simulate the energy that comes from the sun and to see if I can capture the sun's energy and convert it into a heat source. My advice to other students doing a science project would be to choose a topic that you are interested in. You might be surprised what you discover.

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