

## CWSF 2012 - Charlottetown, Prince Edward Island



### Cole Millar

#### The Wave Nature of Light

**Challenge:** Discovery

**Category:** Senior

**Region:** Renfrew County

**City:** Cobden, ON

**School:** Opeongo H.S.

**Abstract:** I recreated Thomas Young's famous double slit experiment and determined how effective it is at calculating the wavelength of incident light from a laser. I also investigated the effect that the spacing of the slits has on the interference pattern created.

#### Biography

I am a grade 12 student who enjoys playing in the school bands and competing on the Reach For The Top team. I'm planning on pursuing a career in either science or engineering. I got the inspiration for my project by reading about the famous Double Slit Experiment conducted by Thomas Young in my Physics class. This is an experiment where light is passed through two slits spaced extremely close together and an interference pattern is generated from the light waves interfering. Further investigations with this same experiment could include using polarized light, and using light of various wavelengths. My advice to a student who is thinking about doing a project is just to go for it. It's a lot of fun and a very rewarding experience.

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