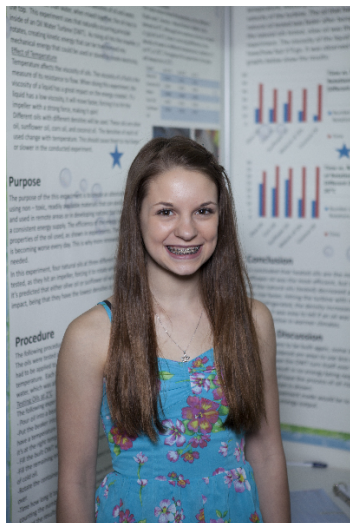


CWSF 2013 - Lethbridge, Alberta



Sierra Oakes

Opposites Make a Powerful Difference

Challenge: Energy

Category: Intermediate

Region: South Shore

City: Bridgewater, NS

School: Bridgewater Junior-Senior High School

Abstract: Opposites Make a Powerful Difference is creating energy using different natural oils and water. For an example, olive oil is less dense than water, therefore it rises. In this experiment, the oil rises, hitting a propeller, making it spin. This energy can be converted into electricity. Different oils are also tested to see which has the greatest effect/energy created.

Biography

My name is Sierra Oakes. I am a 14-year-old girl who enjoys cheerleading, gymnastics, volleyball, and Track and Field. My cheerleading team is like my family. Last year, we went to provincials, and this year we're even better! I've also earned many awards through gymnastics. My hobbies are drawing, reading (My favourite magazine is National Geographic), solving puzzles, baking, and running. I got the idea for my project one day this past winter. I was baking a cake, and the first two ingredients were olive oil and water. I knew that I had to pick a science fair topic soon, and wanted to do my project on some type of renewable energy. So, I thought, why not work against gravity, and use oil and water instead? I thought it was a cool idea, so I went to work and figured it out! If I were to change something about my project, I would try to experiment with different liquids and densities. Doing this, I could find out which two liquids create the most energy! The advice that I would give students thinking about doing a project is to let a topic come to you, and do only what interests you!

Awards

Value

| | |
|---|----------------|
| Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada | \$100 |
| Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University | \$1 000 |
| Total | \$1 100 |