

## CWSF 2010 - Peterborough, Ontario



### Josh Semeniuk

#### Green Energy by Electrolysis

**Division:** Physical & Mathematical Sciences

**Category:** Junior

**Region:** North Channel

**City:** Espanola, ON

**School:** A.B. Ellis P.S.

**Abstract:** This experiment determined which electrolyte produced more hydrogen and oxygen gas, and impact temperature and water purity has on gas generation. Solutions of vinegar and baking soda, at different temperatures, using both de-ionized and tap water were put into an electrolyser with a gas bubbler that measured the amount of gasses produced. De-ionized water produced more gasses than tap water. Warmer water produced more gasses.

#### Biography

My name is Joshua Semeniuk. I am 13 years old and I live in Espanola, a small town located about 45 minutes drive west of Sudbury in Northern Ontario. I have a variety of interests such as : house league hockey, Alpine skiing, and RC cars. My favourite sport is downhill skiing. I play saxophone in the school band. I have been a paper boy for our local newspaper for five years. I am responsible for babysitting my younger brother and sister after school and during the summer. Thank you for the opportunity to attend the Canada-Wide Science Fair. I know this experience will help me with my plans for an engineering career.

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