

## CWSF 2011 - Toronto, Ontario



### Lloyd James

#### **Cells and Stock Markets: Defining, Quantifying and Applying Complexity**

**Challenge:** Discovery

**Category:** Intermediate

**Region:** South Fraser

**City:** Surrey, BC

**School:** Semiahmoo Secondary

**Abstract:** The goal of this project was to create a method of defining and quantifying complexity that could be applied to evaluating and predicting everyday systems. Mathematical simulations, such as "Conway's Game of Life," and simulations of the values and profits of businesses were used to gather and analyze data on complexity.

#### **Biography**

My name is Lloyd James, and I am a student at Semiahmoo Secondary, in Surrey, B.C. I was born in Wales, and I have lived in Canada for almost 8 years. This is my first time competing in a science fair at a national level, and I hope I will be back again next year. I have always been fascinated by physics, in particular the weird and wild quantum world. In my spare time, I enjoy surfing Wikipedia, playing computer games, and collecting rocks and minerals. In my school's science club, I like to help with putting on science events for children from nearby elementary schools. One day, I hope to be a theoretical physicist, working at CERN, or a like facility, to push the boundaries of modern physics.