

MYSTERIOUS ENCOUNTERS—EARTH

PROGRAM OVERVIEW



A detective, dressed in a full-length, tan raincoat with sunglasses and a brimmed hat, sneaks into a grade five classroom. The children yelp when they recognize who it must be and then fall silent. They have been hoping for a visit ever since they received the invitation letter and then the secret audio tape...."Code Green here, agent for the Ecoleese detachment at Fleming Park. We are a small group of people who help others to learn to take care of the earth. We've taken over the Adventure Earth Centre and are searching for the missing parts of the formula for the needs of all life. I am extremely pleased that you all are going to tackle this dangerous and exciting mission with us. You better be prepared though because of The Chief... in fact if she knew I was here now (the agent clutches his throat)... First, you must each bring a proper agent ID, like this one here...

This is the agent's initial visit to a grade four-five class that is participating in *Mysterious Encounters—Earth*, a carefully crafted and sequential earth education program based on a detective storyline developed and run by the *Acadia University Community Development Program*. It is organized around an intensive and exciting one-day environmental experience on the Woodland Trails at Acadia. This experience then provides the springboard and program framework to facilitate the teachers to integrate environmental learning into the regular classroom curriculum throughout the rest of the year. Trained university students in Environmental Education lead the elementary students through the outdoor experience in small groups. *Mysterious Encounters—Earth* aims are...

Students will...

- have greater appreciation of the forest.
- be able to explain the concept of energy flow at a basic level, including photosynthesis, food chains, and energy storage.
- have increased awareness of how their daily behaviour impacts the environment.
- take steps to change a personal habit to reduce their environmental impact.
- have had fun.

Leaders will...

- have increased appreciation of the forest
- be able to explain the concept of energy flow at a basic level, including photosynthesis, food chains, and energy storage.
- improve their skills in teaching and leading children.
- appreciate the responsibilities, requirements and rewards of being a teacher and a leader.

Teachers will...

- use the program framework to integrating environmental learning into existing curriculum topics.

Theme and Structure

Mysterious Encounters challenges students to search for the three missing parts of the secret formula for all life. What three things are needed to assure the earth has healthy food, fresh air, and clean water? The class accepts the challenge and becomes part of a complex mystery plot that is full of unexpected complications and tantalizing clues. They are arrested and interrogated upon their arrival at the Irving Centre and can only be released once they have discovered the

three unknown parts of the formula. They are given "detective notebooks" which provide clues and space to record evidence.

They begin by honing their detective exploration skills in small groups using all of their senses through activities facilitated by their high school leader: i.e., with tiny reflective mirrors they enter the "underworld" and discover fragile planets of moss and lichen; blindfolded they get to know a tree friend through their sense of touch. They are rewarded with the first meaning in the formula—each person must learn to *touch* the earth.

The detectives move on to four activities through which they experience and come to understand the concept of energy flow: i.e., they sneak into a giant leaf and make a unit of sugar according to detailed instructions piped in over a loudspeaker from Chlorophyll Control; they put on a full miner's outfit with head lamps and descend into a coal mine (a pitch dark, dirt basement) where they work through the process of how plants turned to coal over millions of years. Each activity gives them one letter toward the word "know," to *know* the workings of the earth is the second meaning of the formula.

At the end of the day, each group *happens* to come upon a colourful locked box sitting in the forest. It is attractively labeled "*The Secret Ingredient*". To open the box, they must come up with their own earth step in their detective notebook. An earth step is one thing they can do to reduce their impact on the earth. They work together to put on a fun skit that demonstrates good and bad environmental habits. They then must put together pieces of a puzzle given to them during the skit that includes pictures of kids doing positive environmental behaviours. They realize that the puzzle is in the shape of a heart to represent the care they need to show through defining and doing their earth steps. Once they come up with their steps, they open the box. A note inside explains that the secret ingredient is *care*, the third meaning in the formula.

By the end of the day, the students discover that they must *Touch* the earth, *Know* the workings of the earth, and *Care* for the earth in order for all life to have healthy food, fresh air, and clean water. The students return to school and develop each of these ingredients within themselves through continued learning activities in their detective notebooks. The formula structure becomes a framework that the teachers use to integrate environmental learning into the curriculum. Once the class is ready to share their accomplishments, the agent returns to the classroom to inspect the results and give each one a printed poster that depicts their detective experiences.

In addition, each kid received a special business card when they opened the Secret Ingredient Box at the end of the trip day. It says "*Could you be an Ecoleese Detective at home?*" The card includes a password to an unknown website. The Chief vaguely refers to the card and a new mission just before they leave. The students can then follow-up using the Mysterious Encounters website where they log on and receive instructions on how to be undercover detectives at home,— turning off lights when no one is looking, convincing folks to walk instead of take the car short distances. Once they have completed each assignment, they return to the website to report in and then get their next mission. This web process helps them take the program home.

Leadership

Dr. Alan Warner and Cate Heimpel will be providing the training and supervision of the program on behalf of Acadia University Community Development Program. Alan Warner has a Ph.D. in Community Psychology and a B.Ed. and is a professor in Community Development and Environmental and Sustainability Studies. He has been developing and leading environmental education programs for adults and children for more than twenty-five years. Cate Heimpel is a third year student at Acadia in Community Development and Environmental and Sustainability Studies. She has worked over the past four summers leading and coordinating youth recreation and environmental education programming.