26. YCG DETECTIVE AGENCY

Overview: This activity is designed to get visitors to ponder some pretty deep questions.

Objective: To stimulate thought about how and why things are the way they are.

Time needed: 30 minutes to 3 hours

Group Size: 1-3

Age appropriateness: 4th Grade and up

Site: anywhere

Background: There are many cause and effect relationships in the environment.

Materials:

Provided at the Garden

Clipboard

Provided by the classroom teacher

A detective sheet and a hint sheet for each "detective".

Preparation: Make copies of the detective and hint sheets.

Pre Activity: Cause and effect studies may be useful. Holmes stories by Arthur Canon Doyle could help set the mood. Students should look for cause and effect relationships around the school.

Procedure:

- 1. Distribute detective handouts followed by hint sheets as needed.
- 2. Conduct oral discussions or have students write a narrative after their experience.

Modifications:

Extensions: "Lab experiments" involving footprints, wind erosion, plants, rocks, etc. will enhance the students observations of cause and effect. Students could keep an observation of change journal.

Reference List:

Time of Year: any

**This activity was created by Bruce Campbell

YCG Detective Agency

by Bruce Campbell

An exercise in higher order thinking.

Things happen. Things change. This Garden was different before you showed up. When you first entered the Garden you changed some things. You deposited some footprints that were not there before. You may have dropped some condensation from your water bottle. If you dropped a candy wrapper or spit out some gum, turn around right now and pick it up! You have even brought new sounds and smells to the Garden. The Garden is always changing and evidence of that change is everywhere - if you know how to look for it.

A detective tries to figure out what happened, when it happened, and who or what was responsible for the change. Look around the Garden.

What changes have happened in the last hour? How can you tell?

What changes have happened since yesterday? How can you tell?

What changes have occurred in the last week? How can you tell?

Name some changes that have happened in the last year. How can you tell?

Some changes take time. How is the Garden different today than it was twenty years ago? How can you tell?

What changes have occurred in the last one hundred years? How can you tell?

Name some changes that have happened in the last one thousand years. How can you tell?

Some changes take a lot of time. How is the Garden area different today than it was ten thousand years ago? How can you tell?

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HINT SHEET - For detectives that need a clue.

If someone spills their drinking water, how long before it dries? Does it leave a mark?

What kind of ground leaves the best footprints? Prove it.

How long will footprints last in the Garden? How can you tell?

Does melting ice leave the same mark as does water?

Have any vehicles driven through the Garden? Was it a one time trip or is there frequent traffic? What is your evidence?

Has anything fallen off plants?

Can you find evidence of wind creating changes in the Garden?

Does it ever rain in the Garden? What effect does the rain have?

What animals live here and what kind of changes has their presence caused?

What evidence of human presence can you find? Were people here 5 years ago? 50 years ago? 100? 1000?

Was the Garden area ever entirely underwater?

Was it ever buried by dirt and rocks?

Are any of the rocks in the Garden from somewhere else? How did they get here?

Have any rocks been moved? How were they moved?

What is not indigenous to the Garden? How did it get here?

Were any of the plants placed here by people?

What is the oldest plant? the youngest?

What plants started growing at the same time? What was the Garden like before that?

How have people changed the Garden?

How has weather changed the Garden?

How have plants and animals changed the Garden?