

The Expedition to the Pond

Objectives

1. Students will observe four samples/specimens from the pond area: a leaf, something near the water, a non-living thing, and something interesting.
2. Students will record their observations in their journals. (See last pages for sample.)
3. Students must use scientific inquiry skills, sketches and diagrams, and written expression.

Supplies:

Student-made journals, pencils, color pencils, map of school grounds, baggies, hand lenses, rulers, tape measures, thermometers, and scales

Procedures

One week before:

1. Have students study a real life expedition, e.g., Lewis and Clark, the Space Shuttle, etc.
2. Study sample maps of the school for our upcoming student expedition.
3. Have students plan what to wear, what to bring, and what to do.
4. Recruit parent assistants.
5. Students make journals.

One day before:

1. Assign students to teams of four.
2. Gather the scientific instruments for the expedition.
3. Go over rules for safety, behavior, and proper treatment of the environment.
4. Have students check the weather forecast and decide on proper clothing.

Day of Expedition:

1. Use the map of the schoolyard.
2. Review the purpose of the expedition and team tasks.
3. Collect specimens; weigh, measure, observe, sketch, and record data.
4. Record any additional data in journals.

Post expedition:

1. Refine information in journals; attach specimens to pages.
2. Display field journals and specimens.
3. Present the expedition results to other students.

Evaluation:

Teacher evaluates student journals using rubrics table. (See next page.)

Science Journal Rubrics

<i>Criteria</i>	4 Expert	3 Proficient	2 Competent	1 Basic
I. Use of scientific inquiry skills <i>--records data</i> <i>--asks "why" questions</i> <i>--makes observations</i> <i>--sees relationships</i>	Data is accurate and labeled with correct measurements. Questions are relevant and thought-provoking.	80% of data is accurate and complete. Questions are relevant to study.	70% of data is accurate and complete. Some relevant questions	Less than 70% of data is accurate and complete. Some relevant questions
II. Uses of sketches and diagrams	Specimen is shown accurately; color, size, and extra detail evident.	Specimen is shown accurately; color, size, some detail evident.	Some accuracy is shown in size, color; little use of detail	Accuracy lacking in regard to color, detail, size. Some sketches missing.
III. Use of written expression	Vivid, detailed, and descriptive language is used to describe specimen/ environment	Some descriptive language is used.	Little descriptive language is used.	No descriptive language is used.

“Creating Schoolyard Science Expeditions”
 Karen Crisafulli, Kathy Williams, summer, 1997

JOURNAL PAGE

1. DATE: _____ TIME: _____ SITE: _____

2. SAMPLE/SPECIMEN: _____
LOCATION FOUND: _____

3. SKETCH/DIAGRAM:

4. OBSERVATION (DESCRIPTION AND NOTES):

Initials _____

Page _____

ADDITIONAL NOTES, OBSERVATIONS, SKETCHES, ETC.

Initials_____

Page _____