Pond Study Activities

By Participants of Into the Woods Cohort 2, October 2014

Observations and Inferences

Water Wonders (GLOBE pond macro-invertebrate study)

Observe seasonal changes to the pond & pond life.

All Year Long (Journaling & Sharing Seasonal Observations)

Observe different habitats within the pond.

Collect pond invertebrates at different times of year.

Observe pond macro-invertebrates using microscopes.

Observe pond micro-organisms using microscopes.

Study pond life anatomy.

Observe pond life food chain and predator-prey interactions.

Collect, compare and contrast soils in and around the pond.

Biology Research

Study pond ecosystem health and analyze factors that influence ecosystem health.

Study pond organism life cycles.

Study pond organism mating habits.

Compare and contrast organisms with internal skeletons to those with external skeletons.

Study pond food chain relationships.

Study relationships predator-prey relationships.

Examine the effects of weather on pond life.

Examine the effects of seasonal changes in water level on pond life. Study the effects of climate change on pond life.

Waters

pH protocol (GLOBE)

Hydrology and water cycle studies.

Water quality study.

Soils

Collect and study soils in and around the pond. Compare and contrast wet soils with dry soils.

Identification

Pond Macroinvertebrates (GLOBE protocol)

Using identification keys.

Social Studies

Study the interactions between ponds and humans. History of the pond and surroundings.

Math Studies

Use pond subjects for math word problems.

Use pond subjects to study probability.

Use pond subjects to study graph-making.

Use pond subjects to practice measurement. For example, measure the heights of plants or the mass of toads.

<u>Art</u>

Make collages, clay models and dioramas of ponds and pond life.
Sketching.

Photography

Literacy and Language Arts

Create poetry.
Keeping data.
Representing information.

Vocabulary.

Speaking and listening.

Buddy teaching: students teach other students what they are learning.

Higher Order Thinking Skills

Observation, Inference, Cause & Effect, Comparison, Analysis, Inquiry Experimental Design, Prediction