

**Standards-Based Lesson Planning  
Springfield Schools**

**Standard(s): Science and Technology/Engineering**

**Strand #2:** Life Science

**Learning Standard #2:** Identify the structures in plants that are responsible for food production, support, water transport, reproduction, growth, and protection.

**Learning Standard #3:** Recognize that plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death.

**Learning Standard #4:** Describe the major stages that characterize the life cycle of the frog and butterfly as they go through metamorphosis.

**Learning Standard #11:** Describe how energy derived from the sun is used by plants to produce sugars (photosynthesis) and is transferred within a food chain from producers (plants) to consumers to decomposers.

**Standard(s) English Language Arts**

**Strand :** Composition

**Learning Standard #19:** Writing – Students will write with a clear focus, coherent organization, and sufficient detail.

**Strand:** Language

**Learning Standard #2:** Questioning, listening, and contributing – Students will pose questions, listen to the ideas of others, and contribute their own information or ideas in group discussions or interviews in order to acquire new knowledge.

**Desired Results**

**Scope and Sequence**

**Topic: Habitats:** Exploring Habitats

**Suggested Time Frame:** Two day outdoor environmental education experience at ECOS (**Environmental Center for Our Schools**) in Forest Park, Springfield, MA

**Essential Questions**

- What organisms can be found living in a specific (pond, forest, or field) habitat?
- How do these organisms meet their needs of food, air, water, shelter and space?
- What are the different life cycles within a habitat?
- How is energy passed through a food chain?
- How are organisms interdependent of one another?

**Content and Skills  
(Progress Indicators)**

- Observe organisms in their natural habitat.
- Observe different habitats and discuss how organisms meet their basic needs.
- Observe the different life cycles of frogs and butterflies. Discuss what part of the cycle they are observing.
- Create a food web beginning with the sun as the source of energy. Create links that show the relationship of producers, to consumers, to decomposers.

## **Standards-Based Lesson Planning Springfield Schools**

### **Assessment Evidence**

- Participate in answering teacher prompted questions.
- Using journals, students will demonstrate their understanding of life cycles, food chains, and the diversity of organisms living in Forest Park.
- Creating a web of life, students will demonstrate their understanding of how organisms are interdependent on one another.

### **Learning Activities**

- Students will participate in exploring activities such as net fishing in the pond, a scavenger hunt in the forest, and insect and plant collecting in the field.
- Students will record observations in a nature journal.
- Students will orally share their observations and journal entries through a variety of activities.
- Students will create a web of life showing the interconnections of the organisms they observed in Forest Park.
- Students will sit silently in a habitat to listen and observe the natural surroundings.