Saint John's Outdoor University Field Trip Overview

Insects

Objective: Students will observe insects while exploring in three different habitats (prairie, wetland, and forest). Student will determine how the habitats provide the insects' basic needs of space, water, food, shelter, and air. Using scientific tools to make observations, students will also closely examine insect body parts and will be able to answer the question 'How do you know it is or is not an insect?'.

Field Activities:
Prairie Insect Collection: Students will collect and examine insects common to the prairie. Students will use scientific tools to safely capture insects, closely study the body parts, and field guides to identify the types of insects caught.
Wetland Dipping: Students will get a closer look at the aquatic invertebrates living in the wetlands. Students will use equipment to examine the invertebrates, determine if they are insects or non-insects, and discuss how they know.
Forest Bug Dig: Students will examine the types of insects common to the forest. Students will explore forest habitat to discover and examine the insects living there and use a scavenger hunt to identify how insects are finding their basic needs.
Giant Bug: Students will review the parts of an insect by working together to build an oversized insect by putting together the body sections (head, thorax, abdomen), legs, wings, antennae, compound eyes, and mouth part.

Nature Explorer Connections: All students have the ability to be nature explorers. Nature explorers **respect** the natural world, **observe** using their senses, and **wonder** by asking questions about their observations.
Respect – Ways we will demonstrate respect:
- What lives in nature, stays in nature. We will not take anything home with us.
- All animals encountered, including insects, will be treated with respect and returned to their habitat at the end of our study.

Observe – Observational activities included during field trip:
- Students will create a list of animals we encounter, indicate if it is an insect, and how they know. The list will be brought back to the classroom.
- Observation games will be included throughout the field trip.

Wonder – Sample questions that may be discussed:
- What are insects' basic needs?
- If you find a critter, how do you know if it is an insect?
- How would you compare how insects find water in the prairie versus the forest?
- Are the same or different insects found in each habitat? Why?
- What would be the result if an insect cannot find a basic need in its habitat?
- How are an insect's basic needs connected to its habitat?
- Predict the outcome if you put wetland insects in the prairie.

Minnesota K-12 Academic Standards addressed and focused on during activities:

Strand	Code	Benchmark
SCIENCE		
4. Life Science	1.1.1.1.1	When asked "How do you know?," students support their answer with observations.
	1.4.2.1.2	Describe ways in which an animal's habitat provides for its basic needs.