BUGS

Program Description:

Students discuss the needs of living things, focusing on air, food, and water. They are introduced to the group of arthropods known as insects and are asked "What makes an insect an insect?" Students learn that all insects have certain characteristics, such as three body sections, an exoskeleton, and six legs. They consider where insect body parts are and how they are used to acquire air, food, and water and provide protection. Students each build a wooden insect that includes key insect body parts. They choose a particular insect to make (example models include bees, mosquitoes, and butterflies) and add color and detail to complete their project.

Learning Objectives:

1. Students will understand that all insects share certain characteristics, including 3 body segments, 6 legs, and antennae.
2. Students will explain how specific body parts are used to meet insects' survival needs; associating the proboscis with eating, eyes and antennae with sensing and finding food, legs and wings with moving, and spiracles with breathing.
3. Students will learn to build a general model of an insect, then adapt it, making choices to represent a particular bug.

Alignment with Connecticut Core Science Curriculum

K.2 *Many different kinds of living things inhabit the Earth.*
- Living things have certain characteristics that distinguish them from nonliving things, including growth, movement, reproduction, and response to stimuli.

1.1 *Living things have different structures and behaviors that allow them to meet their basic needs.*
- Animals need air, water, and food to survive.

Insect Study:

Our usual program focuses on these five insects; if you are interested in other insects, please let us know.
- Bees
- Monarch butterflies
- Mosquitoes
- Assassin bugs
- Ants

Key Vocabulary: *insect, head, thorax, abdomen, antennae, compound eyes, spiracles*

Preparation for Visit:

Students need not come to the program with a knowledge of insects; however, it is helpful if they have already begun their study of living things. Questions to discuss or consider before your visit include:
- How can you tell whether something is alive or not? What characteristics do living things share?
- What do living things need in order to survive? How do different animals or plants get these things?

Eli Whitney Museum
915 Whitney Avenue
Hamden, CT 06517
VOX: *203.777.1833*
FAX: *203.777.1229*
www.eliwhitney.org