

Solomon Family Insectarium

BACKGROUND FOR EDUCATORS

Overview of Student Worksheets

Guided by their worksheets, students begin by choosing one insect in the Insectarium to observe. They draw the insect and locate its mouthpart, legs, and other body parts that interest them. Students then explore the rest of the Insectarium to discover other insects, searching for more mouthparts and legs and considering how the form of those body parts are helpful to those insects in their habitats. Students are encouraged to count and record what they find, discuss with their classmates, and act out how they think the insects eat and move. These observations help students experience a **natural phenomenon**—that insects exist in a variety of shapes, sizes, and colors. This phenomenon can serve as an anchoring point in exploration and discussion as the students explore the **investigation question**: How do insects use their body parts to help them survive?

Extension Ideas

- **Class Data:** Students work together to compile the data they individually collected in the Insectarium to create a class tally or bar graph. Students then discuss what the data shows, e.g.: Were certain types of mouthparts observed more than others in the Insectarium? What about legs? How do you think those body parts are used by the insect? How does this body part or adaptation help the insect survive in its habitat?
- **Movement Activity:** Younger students use their bodies to act out how some of the insects they observed used their different body parts. Older students can work in small teams to come up with a skit where they act out different insects they saw in the Insectarium using the insects' adaptations; other teams can guess each insect, describe its adaptation, and how the adaptation helps the insect survive in its habitat.

Correlation to Standards

This activity supports the following Next Generation Science Standards:

Disciplinary Core Ideas	LS1.A: Structure and Function <ul style="list-style-type: none">• All organisms have external parts that they use to perform daily functions. (K-2)• Organisms have both internal and external macroscopic structures that allow for growth, survival, behavior, and reproduction. (3-5)
Crosscutting Concepts	Structure and Function <ul style="list-style-type: none">• The shape and stability of structures of natural and designed objects are related to their function(s). (K-2)• Substructures have shapes and parts that serve functions. (3-5)
Science and Engineering Practices	Obtaining, Evaluating, and Communicating Information <ul style="list-style-type: none">• Obtain scientific information to determine patterns in and/or evidence about the natural world. (K-2)• Obtain scientific ideas and describe how they are supported by evidence. (3-5)