

Solomon Family Insectarium

BACKGROUND FOR EDUCATORS

Overview of Student Worksheets

Using worksheets as a guide, students visit two species of social ants—honeypot ants and leafcutter ants—that live in two different kinds of environments. Based on their observations, students make connections between adaptations and environmental conditions. They then learn more about another social insect, the honeybee.

These observations help students experience a **natural phenomenon**—that ants, even within the same colony, can have different physical traits. This phenomenon should serve as an anchoring point in student exploration and discussion as they seek answers to the **investigation question**: How do the different roles of social ants support the survival of the species and the individual?

Post-Visit Activity

Back in the classroom, students share the information they gathered at the Museum and do additional research about the different roles within a social-insect colony, such as the honeypot ants, leafcutter ants, or another social-insect species. Students make a claim about how the different roles of social insects support the survival of the species and the individual.

Correlation to Standards

This activity supports the following Next Generation Science Standards:

Performance Expectations	HS-LS2-8: Ecosystems: Interactions, Energy, and Dynamics Evaluate evidence for the role of group behavior on individual and species' chances to survive and reproduce.
Disciplinary Core Ideas	Social Interactions and Group Behavior Group behavior has evolved because membership can increase the chances of survival for individuals and their genetic relatives.
Crosscutting Concepts	Structure and Function The way in which an object or living thing is shaped and its substructure determine many of its properties and functions.
Science & Engineering Practices	Engaging in Argument from Evidence Evaluate the claims, evidence, and/or reasoning behind currently accepted explanations or solutions to determine the merits of arguments.