

Habitat Garden Scavenger Hunt



Grade Levels

K-12

Overview

The following activity can be used as an introduction to the concept of observation. Observations skills are critical to the field of science among other things! Knowing how to pay attention to what's is going on around you is an important life skill. Taking the time to make observations is beneficial to health and wellness too.

It also introduces the concept of phenology through the observation of plants and animals in a habitat garden, occurring in their life cycles.

The activity increases science literacy by teaching about observation skills, encourages people to pay attention to their surroundings, to spend more time outdoors and observe things they may not yet have experienced.

Background

Phenology, or the study of the timing of life cycle events and their relationship to the environment, can be used to teach a number of scientific concepts in many grades from K through adult.

Real-world Connection

This activity teaches the basic scientific skill of observation. Observation lays the ground work for many aspects of scientific study, including biology, ecology, chemistry, physical science, etc. It is often included as a critical Standard of Learning in many state science curricula.

Citizen Science Connection

Nature's Notebook is not critical to completing the activity, rather can be used as an addendum to the activity.

Time Required/Location

30 mins

A habitat garden, or other garden/outdoor space.

Learning Objectives

Participants will be able to:

- Define phenology
- Understand the importance of paying attention to your surroundings
- Distinguish the different habitats in the garden, including elements of each (shelter, food, water, space).
- Make observations

Next Generation Science Standards

LS: Life Science			
Grades 6-8		Grades 9-12	
MS-LS1-4	Use empirical evidence and scientific reasoning to explain how behaviors and plant structures affect successful reproduction.	HS-LS2-6	Evaluate the claims, evidence, and reasoning that interactions in ecosystems are consistent in stable conditions, but changing conditions may result in a new ecosystem. ¹
		HS-LS2-7	Design, evaluate, refine a solution for reducing impacts of human activities on the environment and biodiversity. ¹
		HS-LS4-6	Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity. ¹
ESS: Earth and Space Systems			
MS-ESS2-6	Describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates. ²	HS-ESS2-4	Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate.
MS-ESS3-3	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. ¹		

¹ Can be elicited through the Explaining and Elaborating portion of the activity.

² Presence of species indicates relation to regional climates.

Conducting the Activity

Materials

- Resources needed
- Scavenger hunt sheet

Experience

ENGAGE

1. Discuss the skill, or art, of paying attention and using your senses. What do our senses do for us?
2. Discuss things that we might notice in each of the seasons here, using our senses. Is it wet, is it dry, what does it feel like? What do we hear?
3. Why do things occur in each of the seasons as they do? How do seasons affect habitats and their inhabitants?
4. Introduce the concept of phenology
 - All of the seasonal changes you talked about above are phenological events
 - Pheno-to show or appear
 - ology-to study
 - Phenology- the science of recurring plant and animal life cycle stages
 - What are some more examples you can think of? (migration, breeding, green-up, senescence)

