

Teacher Activity Guide and Lesson Plan

Spaces & Species Virtual Field Trip Activity 1: "Notes on Habitat"

Overview

Audience:

This activity is designed for students grades 3-5, but it can be modified for students K-2 with adult support and supervision. In this activity, students will plan and carry out a Field Trip at home. This packet accompanies the video "Midpen Virtual Field Trips: Notes on Habitat".

Lesson Goal:

To better understand the living things that share our surroundings and to practice observation skills to answer questions.

Lesson Objective:

Students will be able to make observations and ask questions based on exposure to natural phenomena (videos and Field Trip at Home). Students will be able to define a habitat, and to identify essential components of a habitat.

Student Notebook:

https://www.openspace.org/sites/default/files/Student_Nature_Notebook_VFT-Habitat.pdf

To learn more about Midpen's in-person field trips, please visit: https://www.openspace.org/what-to-do/education/field-trips

Activities and Objectives Included in this 5-E Lesson Plan:

- 1. Engage!
 - a. Students will familiarize themselves with their own habitat and reflect upon what they need to survive. (Part 1: Your Habitat)

2. Explore!

- a. Students will learn about making observations of living things and evidence of living things. Students will learn how to record their observations using nature notes. (Part 2: Preparing)
- b. Students will identify local routes where they can observe living things. Students will plan a walk along one of those routes with an adult. Students will make and record observations of living things and evidence of living things. (Part 3: Field Trip at Home)

3. Explain!

a. Students will synthesize their observations. (Part 4: What did you find?)

4. Elaborate!

a. Students will connect the prevalence of living things to the features of habitat available to them. Students will reflect upon humans' impact upon habitats. (Part 5: Connecting animals to habitat)

5. Evaluate!

 a. Students will reflect upon their experiences throughout the Field Trip at Home. (Part 6: Reflection)

Video Links

"Notes on Habitat" from Midpen (11 minutes): Midpen Virtual Field Trip: Notes on Habitat



"Nature Journaling...getting started!" from Lawrence Hall of Science (6 minutes). <u>Nature</u> Journaling...Get started! - Outdoor Activities Ages 8+



Outdoor Activities: Get Started with Nature Journaling!

Standards Correlations

California Next Generation Science Standards

(NGSS 3-Dimensional Lesson Design)

NGSS **Performance Expectation**. Students who demonstrate understanding can:

3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

https://www.nextgenscience.org/

Describe the Science & Engineering Practice(s) addressed in the lesson	Describe the Disciplinary Core Idea(s) addressed in the lesson	Describe the Crosscutting Concept(s) addressed in the lesson
Asking Questions and Defining Problems: Scientific investigations begin with a question. Scientists use different ways to study the world.	LS1.C Organization for matter and energy flow. Food provides animals with the materials and energy they need for body repair, growth, warmth, and motion. Plants acquire material for growth chiefly from air, water, and process matter and obtain energy from sunlight, which is used to maintain conditions necessary for survival.	Patterns: observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.

Common Core ELA Standards

http://www.corestandards.org/wp-content/uploads/ELA_Standards1.pdf

- Writing 8: Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories
- Speaking and Listening 1: Engage effectively in a range of collaborative discussions (one-onone, in groups, and teacher-led) with diverse partners on grade level topics and texts, building on others' ideas and expressing their own clearly.
- Speaking and Listening 4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace
- Language Standards Vocabulary Acquisition 6: Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases

California Environmental Principles & Concepts <u>https://www.californiaeei.org/epc/</u>

Principle 1 - People Depend on Natural Systems

The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services.

Concept A. The goods produced by natural systems are essential to human life and to the functioning of our economies and cultures

Ideas for Further Expansion

Some of the big questions that we ask when we go outside in nature are:

- 1. How can we find out what animals live here?
- 2. What about this place makes it such a great home for wildlife? Tip: Think about what an animal needs from its habitat. What kinds of food, water, shelter, and space is available for animals in area where you went on your Field Trip at Home?
- 3. Explain why you think it's important to protect open spaces.

Suggested EEI Curriculum Activities

The California Education and the Environment Initiative (EEI) Curriculum provides free, field-tested and standards-aligned curriculum for the classroom. The following lessons are suggestions to consider teaching after the Midpen Field Trip at Home activity.

Request your free copies of the activities at: https://www.californiaeei.org/curriculum/

- 2nd Grade: From Field to Table (History-Social Science Standard: 2.4.1)
- 3rd Grade: Living Things in Changing Environments (NGSS: 3-LS4, 4-ESS3)
- 4th Grade: The Flow of Energy Through Ecosystems (NGSS: 4-LS1, 5-LS2, 5-ESS3)
- 4th Grade: Reflections of Where We Live (History-Social Science Standards: 4.1.3 and 4.1.5)
- 5th Grade: Earth's Water (NGSS: 5-ESS2, 5-ESS3, 3-5-ETS1)
- 5th Grade: Our Water; Sources and Uses (NGSS: 5-ESS3, MS-ESS2).

Vocabulary	Definition	
habitat	not only an animal's home; it also includes all the places an animal goes. Provides food, water, shelter, and space.	
observation	something that is noticed using senses (sight, smell, hearing, taste, or touch), or counted	
evidence	clue that can be observed	
survive	to continue to live or exist, to avoid death	
behavior	the way in which something acts	
record	to write down or capture for later reference	