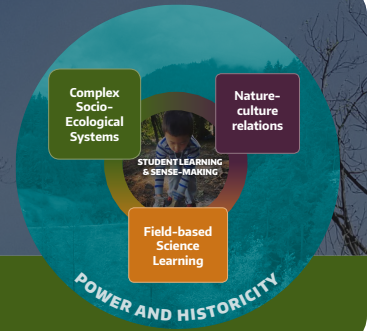




# Family Science Learning Engagement



## LE 1.C Taking a Socio-Ecological Histories of Places Walk

### Activity Purpose

Pick a place outside in your neighborhood. Observe that place (what do you see, hear, and smell, for example). Think about different time scales to deepen your observations. For example, what are you noticing that might be related to geologic time? What are you noticing that might be related to plant, animal and soil time? Then consider how human decision making has contributed to changes in the place.

### Activity Overview

This is a two-part activity.

- **Part 1:** Go for a walk in your neighborhood. Make observations, and ask questions about what you wonder about as you observe (there is no “right” answer). You can use the two-page activity sheet provided or a blank piece of paper to write and draw observations, questions, and ideas.
- **Part 2:** Think about your observations from different time scales (see page 2 of the activity sheet). What did you observe related to some or all of these time scales? What questions do you have? How has human-decision making impacted this place from each time scale? Again, there are no “right” answers.



What can you do to support learning?

- » The goal of this activity is to practice making observations in specific places, and to use different time scales to deepen your observations.
- » Ask questions throughout this activity to encourage family members to make and share their observations. For example, ask what they see, hear, and smell. If they have been to this place before, ask them to share what they notice that is the same and what they notice that is different (and why they think that is). What questions do they have about what they are noticing? Which time scales do they want to learn more about given what they are observing in the place?
- » Consider how the places have changed over time and why. How have the decisions people made contributed to this change? Which people made choices? Why did they make those choices?

## Connecting with other families

- » Ask other family members and friends to participate in this activity. You can share your observations and questions from your walks. You can also share what you noticed and wondered about relative to the different time scales.

### Disciplinary Core Ideas & Important Phenomena

There are many time scales that make a place what is today, and what it could be in the future. Histories span across land, plants, animals, and communities over time. Thinking across many time scales is necessary to understand the complexity of socio-ecological systems more deeply.

### Science Practices Emphasized

- Asking Questions
- Planning and Carrying Out Investigations
- Obtaining, Evaluating, and Communicating Information

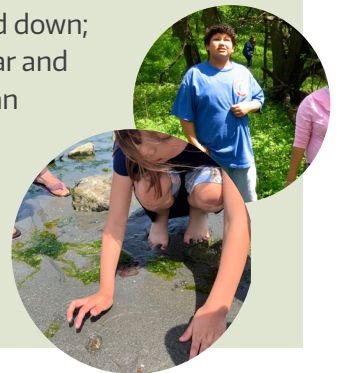
## Key Ideas & Practices

### Making Observations

Practice recording observations to help you remember what you observed. Use pictures, symbols, or words to record observations. Young family members may describe their observations or drawings so that an adult can write them down. Remember to only feel, smell, and taste if it is safe to use those senses.

### Thinking across scales:

A key way to understand socio-ecological systems is to think across multiple scales. These include time scales, and spatial scales (horizontal and vertical scales like looking side to side, or up and down; above and below ground; near and far). Thinking across scales can help people more closely observe phenomena, and it can help them think about change.



## CONNECT TO OTHER ACTIVITIES

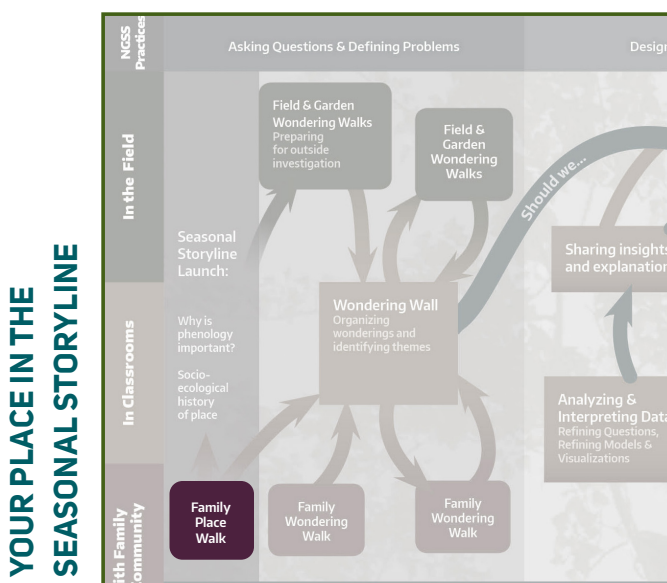
- 1.A: Sharing Places – Neighborhood Walk
- 1.B: Family Learning Across Places

### Extension Activities:

- You can learn more about various time scales by using books, videos, the Internet, and by asking other people. Once you learn more about these time scales, what new questions do you have about the observations you made and the place you explored? Another extension idea is to take another walk to a different place and make observations there using the different time scales as lenses.

## LEARNING IN PLACES FRAMEWORKS TO CONSIDER

- Socio-ecological Histories of Places
- Observation and Data Collection





## Taking a Socio-ecological Histories of Places Walk

### Part 1: Taking a walk, making observations, and asking questions

First, decide where you and your family want to take a walk.

Where did you go for a walk and why? \_\_\_\_\_

\_\_\_\_\_

Now make observations of what you see and notice in the place you picked.

<i>What are you curious to learn more about in this place?</i>	<i>Write questions and wonderings here.</i>

**Part 2: Using different time scales to explore the place that your family explored and observed**

There are many time scales that make a place what is today, and what it could be in the future. These time scales (a place's histories) span across land, plants, animals, and communities over time. If you did activity LE 1.B, you completed the following chart about a place that is important to you and your family. **In this activity (LE 1.C), use this chart to think about the place you observed on your walk. Think about that place from the perspective of these different time scales.** Fill out as much of the chart as you want. There are no right or wrong answers!

Time Scales	What did we observe in our place related to each of these time scales?	What questions or wonderings do we have about our place related to these time scales?	What decisions have people made that shaped this time? Which people? Why did they make those decisions?
<b>Geologic Time:</b> Land and ocean processes, mountain formation, glaciation, etc.			
<b>Plant, Animal, and Soil Time:</b> Plants, animals, and soils of the area, species extinctions or adaptations			
<b>Indigenous Peoples' Time:</b> Recognizing First Peoples and their histories and current relationships to this place			
<b>Nation State Time:</b> How the development of nations over time has shaped and impacted this place			
<b>Global Time:</b> How this place is connected to, impacts, or is impacted by other places across the earth and interacts with other time scales			
<b>Living Ethical Responsibilities and Possibilities Time:</b> What's possible for this place?			