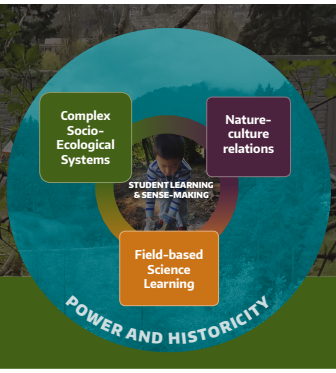
Learning in Places

Family Science Learning Engagement



LE 6.A Modeling a Neighborhood "Should We" Question

Activity Purpose

Use this activity to ask a neighborhood "Should We" question based on observations from walks in your neighborhood, and then create a model of your "Should We" question. You can use the activity sheet provided for this activity to keep track of your writings and drawings, or use blank sheets of paper. Page 1 of the activity sheet explains what "Should We" questions are and provides a few examples of "Should We" questions.

Activity Overview

This is a three-part activity.

- **Part 1:** Go on a neighborhood walk, and write or draw your observations. Then, ask "Should We" questions related to your neighborhood that are based on your observations.
- **Part 2:** From your list of neighborhood "Should We" questions, pick one that your family wants to focus on. Discuss important parts of your question.
- **Part 3:** Create an initial model of your neighborhood "Should We" question.
- **Extension activity ideas** are listed on page 4 of the activity sheet.

What can you do to support learning?

» If family members are finding it difficult to think about the different elements of your neighborhood "Should We" question, you can ask them questions like:

- Who and what (for example, animals, plants, people, elements like water and the sun, and/or human-made artifacts) are involved in our "Should We" question?
- How are the "who" and "what" we have identified specific to our neighborhood?
- What types of relationships are the "who" and "what" in with each other, and with place?

Connecting with other families

Share "Should We" questions and initial models with other family members and friends, explaining them to each other and explaining why they are important and related to your neighborhoods.

Disciplinary Core Ideas

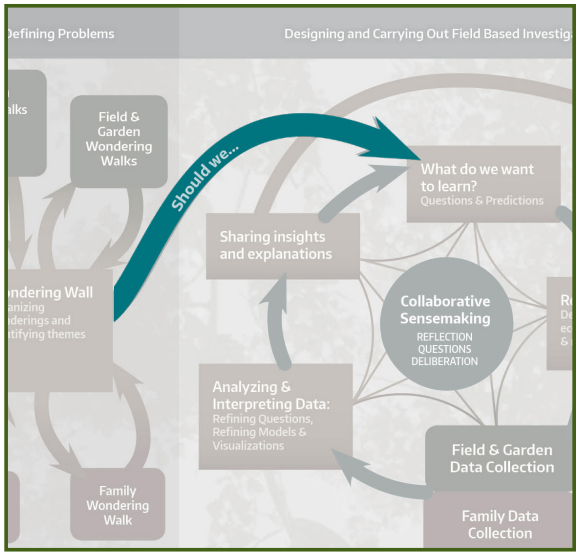
Human communities have always made socio-ecological decisions that are shaped by values and cultural practices. These choices reflect how human communities construct their relations (everyday, institutional, legal, etc....) with the natural world.

"Scientists use models...to represent their current understanding of a system (or parts of a system) under study, to aid in the development of questions and explanations, and to communicate ideas to others..." (National Research Council, 2012, p. 57).

Science Practices Emphasized

- Asking Questions
- Developing and Using Models
- Obtaining, Evaluating, and Communicating Information

YOUR PLACE IN THE SEASONAL STORYLINE



Key Ideas

"Should We" Questions

Asking "what should we do" and then making a decision is something that all people do everyday. Deciding what to do involves using knowledge, clarifying values and goals, and exploring potential impacts. "Should we" questions sometimes have clear answers but often do not, and exploring them can come from observations and wonderings. "Should We" questions involve (1) exploring relationships between humans and the natural world, (2) recognizing how our decisions impact families, communities, and the natural world, and (3) understanding how we can be more thoughtful and accountable in our roles within the natural and social world. "Should We" questions ask us to think about scales of time, including seasons, and processes of change. "Should We" questions require deliberation and action even with uncertainty.

Modeling

Working with models helps scientists and science learners visualize their thinking and better understand the kinds, relationships, behaviors, and various scales being explored. Scientific models are not static. Instead, they are dynamic and change based on new information learned through investigations of phenomena, discussions with others, new learnings from sources like family and community, and media of various types, as well as deliberations about "Should We" questions.

CONNECT TO OTHER ACTIVITIES

- Learning Engagement 5.A What should we do? Exploring your family's decisions
- Learning Engagement 6.B: Modeling Connections and Relationships

LEARNING IN PLACES FRAMEWORKS TO CONSIDER

- Socio-Ecological Deliberation & Decision Making
- Modeling Socio-Ecological Phenomena