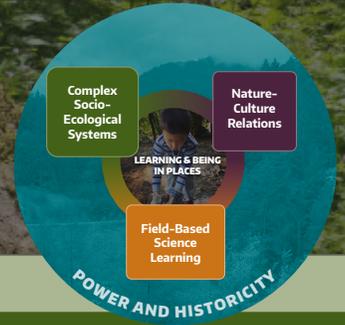




Family Science Learning Engagement



Bundle: Decision Making and Deliberation from Evidence

LE 9.A Returning Back to Our “Should We” Questions

Activity Purpose

Now that you have found some patterns in your data, you’re ready to reflect on what you’ve learned about your “Should We” question. This LE will help you review what you know, and decide what your next steps should be.

Activity Overview

This activity has 2 parts.

- » **Part 1:** Review your family’s “Should We” question.
- » **Part 2:** Review the data that you’ve collected so far and what you’ve learned from each of your investigations.



What can you do to support learning?

- » Returning to your “Should We” question is an important part of LE 9. Discuss with your family what you originally wanted to learn more about in order to explore your “Should We” question (this is the purpose of the investigations in LE7):
 - What “Should We” question were we asking? Why was that important to our family and community?
 - What do we know from our field-based, community-based, and media-based investigations?

Connecting with other families

- » Continue to collaborate with other families by comparing findings and data. You can also ask another family if they think you still need to gather more information before you take action. They might even have some ideas about what investigations you can do next!

Disciplinary Core Ideas and Important Phenomena

“Engaging in the practices of science helps students understand how scientific knowledge develops; such direct involvement gives them an appreciation of the wide range of approaches that are used to investigate, model, and explain the world.” (NRC Framework 2012, p. 42)

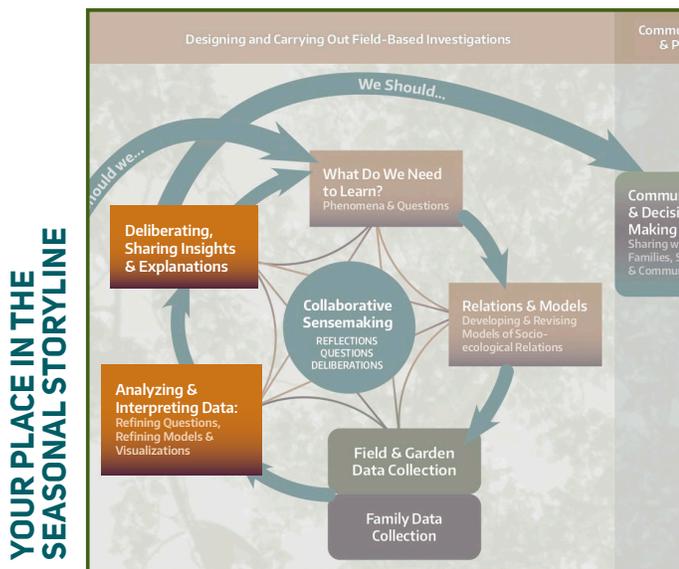
Science Practices Emphasized

- Analyzing and interpreting data
- Constructing explanations
- Obtaining, evaluating, and communicating information

Key Ideas

Analyzing and Interpreting Data

Often, people think that collecting data is the end of an investigation. However, there is an important step of analysis that requires that you look over all of the data you collected to figure out what patterns you can see. Often, the type of table or graph you make will help you see different patterns in data. Interpreting what the patterns mean is another important part of an investigation. This is the step of asking yourself “what patterns did I find and what do those patterns mean?”



CONNECT TO OTHER ACTIVITIES

- Learning Engagement 8.A: Summarizing and Visualizing Your Field-Based Data
- Learning Engagement 8.B: Summarizing Your Data from Your Community-Based Research

LEARNING IN PLACES FRAMEWORKS TO CONSIDER

- Constructing explanations
- Socio-Ecological Decision-Making and Ethical Deliberation



Connecting Our Investigations to Our Communities and Families through Our “Should We” Questions

Connecting back to the “Should We: question

You have now done some **field-based investigations**, talked to some members of your **community**, and done some **research** about what people already know. In LE8, you found patterns in your data. Your research may have helped you explain some of those patterns.

At this point in scientific investigations, scientists reflect **on what they’ve learned** and **decide what to do next**. This LE will help you reflect on what you’ve learned and will help you decide if you want to do another investigation or if you’re ready to move on to LE10 and take some action in your community around your “Should We” question.

The chart below will help you review all that you’ve learned so far. You have your own “Should We” question that you’ve been exploring. As a family, try to figure out what you have found out and what else you need to investigate in order to either answer or keep exploring your “Should We” question.



<p>1. Investigation question we asked: What field-based investigation question did we ask when we collected our data?</p>	
<p>2. Patterns we found in the field-based data: What patterns did we find?</p>	
<p>3. Community-based research: What did the community-members help us know about?</p>	
<p>4. Research we did to find out what information already exists to explain our patterns: What patterns did we find from this?</p>	
<p>Look across the patterns that you found in your data:</p> <ul style="list-style-type: none"> ● Are they all telling you the same thing, or do some of your data contradict each other? ● What do the data tell you about your decision around your “Should We” question? ● What do you need to know more about? 	
<p>5. Reflect on a possible decision: What should we do now?</p>	<p>Return to your model and add to it! (go to LE9.B to revise your initial model)</p>
<p>6. What else do we want to know? Are there other investigations we should do to find out more?</p>	<ul style="list-style-type: none"> ● Choose another investigation from LE7 to do to keep exploring your “Should We” question!