

**Grade 3:** Life Science Module: Unit 2

# Lesson Sequence 5: Summative Assessment: Designing a Frog Pond

## Lesson Sequence 5: Summative Assessment: Designing a Frog Pond

### Overview

**Total Time: 3.5 hours of instruction (divided into two sections)**

Students create their explanatory model of a frog pond that meets all the needs of frogs during all phases of their life cycle. The final assessment is to construct an argument for the school board (optional: parks and recreation boards or an audience of neighbors) about how their designed frog pond meets all the needs of frogs at each stage of their life cycle and is therefore a good solution to frog habitat loss.



### Unit 2 Guiding Question and Big Ideas

**What are necessary parts of a frog habitat, and how do they interact to support the survival of frogs throughout their life cycle? How can we build that (in the schoolyard or in the community or a local park)?**

- Frog habitats must meet the needs of food, water, shelter, space, and air for the frog at all stages of its life cycle.
- Frogs have very distinct phases in their life cycle, and each phase has unique needs.
  - A frog’s eggs do not need food, but they do need to be sheltered in a safe place that keeps them wet at all times. This is typically the shallow-water edge of a pond, with leaf litter and twigs to provide protection from possible predators.
  - When frogs are tadpoles, the food that is consumed is algae found along the edge or on the bottom of the pond.
  - When the tadpoles become froglets, their diet includes small insects in the water.
  - As adults, frogs will live on both the shore of the pond as well as throughout the water of the pond. The adult frog consumes insects and minnows—any animal small enough to fit into its mouth.
- Frog ponds can be built by finding a suitable site, making a plan for the shape and depth of the pond as well as what structures and features will meet the needs of the amphibians that will inhabit the pond.

### Long-Term Learning Addressed (Based on NGSS)

Make a claim about the merit of a solution to a problem by citing relevant evidence about how the solution meets the criteria and constraints of the problem of habitat loss for amphibians. (Based on NGSS 3-LS4-4)

This lesson sequence explicitly addresses:

### Science and Engineering Practices

- **Engaging in Argument from Evidence:** Construct and/or support an argument with evidence, data, and/or a model. *Students develop and use a model to make a claim about how well their frog pond design solves the problem of habitat loss and reflect on the quality of their solution based on peer feedback.*

## Crosscutting Concepts

- **Systems and Systems Model:** A system is a group of related parts that make up a whole and can carry out functions that its individual parts cannot. *Students design a complete system model of a functional frog habitat by understanding the interworking system of a pond and how a healthy pond meets the needs of the organisms within it.*

## Disciplinary Core Ideas

- **LS4.D Biodiversity and Humans:** Populations live in a variety of habitats, and change in those habitats affects the organisms living there. *Students apply their knowledge of the different components of a pond habitat and design a pond that is a healthy habitat in order to solve the problem of frog habitat loss.*
- **LS2.C Ecosystem Dynamics, Functioning, and Resilience:** When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. *Students design a pond to restore or create a new habitat where frogs can thrive in each part of their life cycle.*



## Lesson Sequence Learning Targets

- I can design a frog pond that functions as a system and meets all of the needs of the organisms that live there.
- I can construct and support an argument with evidence about how well my designed frog pond meets the needs of the frogs that will live in it.

## Ongoing Assessment

- Performance Task: Designed Frog Pond Explanatory Model
- Scientists Meeting: Making Meaning
- Summative Assessment: My Frog Pond Is a Good Solution

## Agenda

**Total Time: 3.5 hours of instruction**

### Section 1

#### 1. Opening

A. Reviewing Learning Targets (15 minutes)

*Optional Extension: Visit Pond Site*

#### 2. Engineering Design Cycle

A. Introducing the Challenge (10 minutes)

B. Imagining: Frog Ponds (10 minutes)

C. Planning: The General Shape and Structures of the Pond (15 minutes)

D. Creating: Frog Pond Explanatory Model (30 minutes)

*Optional Extension: 3-D Pond Design*

- E. Praise, Question, Suggestion: Frog Pond Explanatory Model (15 minutes)
  - F. Revising: Frog Pond Explanatory Model (30 minutes)
  - G. Pair Share: Frog Pond Explanatory Model (10 minutes)
- Optional Extension: Build a student-designed frog pond*

**3. Evaluating Information**

- A. Scientists Meeting: Making Meaning (15 minutes)

*Section 2*

**1. Evaluating and Communicating Information**

- A. Summative Assessment (50 minutes)
- Optional Extension: Presentation to Authentic Audience*
- B. Reflecting on Learning (10 minutes)

## Teaching Notes

**Purpose of lesson sequence and alignment with NGSS standards:**

- In this lesson sequence, students demonstrate their understanding of life cycles and the importance of a stable habitat (a Disciplinary Core Idea).
- In Section 1, students create their explanatory model of a frog pond. They use the Engineering Design Cycle to create a cross-section diagram of a pond. They add explanatory labels and arrows to show how the pond is a system (a Crosscutting Concept) in which each component supports the frog throughout its life cycle.
- In Section 2, students construct an argument (a Science and Engineering Practice) that their designed frog pond is a good solution to the problem of frog habitat loss and meets the criteria for success.

**How it builds on previous work in the Life Science Module:**

- This lesson sequence is the culmination of learning for the Life Science Module. Using what they learned in Unit 1 about the life cycle of frogs and Unit 2 about the relationship between frogs and their habitats, students design a healthy frog habitat. To do this, they complete an Engineering Design Challenge, where they work in groups to imagine, plan, create, improve, and communicate about their designed frog pond. They then construct an argument about why their designed frog pond is a good solution to the problem of frog habitat loss. The evidence to support this argument comes from their learning throughout Unit 2 and their explanatory model.
- In preparation for writing their own argument in the summative assessment, students read an example argument written based on the question that they practiced arguing during Lesson Sequence 4 during the Back-to-Back and Face-to-Face protocol: “What is the most important part of a pond?”

**How it connects to the CCSS Standards and EL Education’s Language Arts Grade 3****Module 2:**

- Students may be familiar with the Praise, Question, Suggestion protocol from Language Arts Grade 3 Module 2.
- The student arguments in Section 1 and Section 2 provide students with an opportunity to practice argument writing (CCSS ELA W.3.1).

**Possible student misconceptions:**

- Students may think that building frog ponds is the only solution to habitat loss because that is the focus of this module. If this misconception arises, provide students with examples of other ways to help save frog habitats, such as engineered amphibian road crossings, green building techniques, and protected areas.

**Possible broader connections:**

- Connect to students’ lives by actually building one of the student-designed frog ponds. There are many foundations that will sponsor such building expenses, and students benefit hugely from this type of active learning experience.
- Connect to other sciences by discussing how the engineering design cycle is used by all branches of science. From life sciences for constructing artificial limbs to physical science for designing efficient cars, engineering is an important part of human life.

**Areas where students may need additional support:**

- For students who may need additional support when completing a neatly drawn model of a pond, encourage them to take their time and go through multiple phases of revision. Consider providing these students with additional work time throughout the day if necessary.
- For students who may need additional support with organizational structures, consider photocopying the parts of the students’ science notebooks that will be used as evidence for the summative assessment so that they don’t have to flip back and forth in their notebooks.
- If students have not previously participated in a peer critique cycle, spend additional time discussing the purpose of peer critique and the steps for providing useful feedback to peers.
- For students who need additional support organizing their ideas in conversation, provide discussion questions from the Scientists Meeting in advance and provide ample processing time.

**Down the road:**

- N/A

**In advance:**

- Read each section and complete the Preparing to Teach: Self-Coaching Guide.
- Select a frog pond cross-section diagram created by a student in Lesson Sequence 4 to serve as an exemplar in Section 1.
- Decide whether students will fill in all three columns of Performance Task Rubric or if you will complete the rubric based on student ideas and your own grading requirements. If you decide to have students participate in creating the rubric, make one master version and copies for each student to reference while he or she works on the Engineering Design Challenge.

- Create a space in the classroom for students to reference materials used in previous lessons, especially the pond pictures from Habitat Station #1 from Lesson Sequence 4 for ideas about how to draw various pond structures.
- Review the Praise, Question, Suggestion protocol (see Classroom Protocols pack on Curriculum.ELeducation.org).
- Determine groups of three to five students for the Praise, Question, Suggestion protocol in Section 1.
- Post: Unit 2 guiding questions, lesson sequence learning targets, Concepts Scientists Think About anchor chart, Performance Task anchor chart, Habitat anchor chart, Norms of a Scientists Meeting anchor chart, Planning a Frog Pond anchor chart, and Scientists Do These Things anchor chart.

### Optional extensions:

- *Visit Pond Site:* Students visit the site where the pond will be built to take measurements and photos.
- *3-D Pond Design:* Students can design 3-D pond diagrams in a shoebox, out of modeling clay, or using computer software.
- *Build a student-designed frog pond:* Students build one of their designed frog ponds. View a video for step-by-step directions for construction (<https://www.youtube.com/watch?v=56bacePG8hA>).
- *Presentation to Authentic Audience:* Students can present their ideas to the school board, neighborhood association, or neighborhood.
- *Alternative Writing Assessment:* Create a flyer and/or commercial to convey information.

### Vocabulary

**Engineering Design Cycle:** scientific process for designing something; steps: challenge introduced, imagine, plan, create, improve, communicate

### Materials

#### General Materials

- ✓ Concepts Scientists Think About anchor chart (begun in Unit 1, Lesson Sequence 2; added to during Section 1; see supporting materials)
- ✓ Student science notebook (from Unit 1, Lesson Sequence 1; one per student)
  - The Pond Is a System entry (from Unit 2, Lesson Sequence 3; page 38 of the student science notebook)
  - Habitat entry (from Unit 2, Lesson Sequence 4; page 42 of the notebook)
  - Designing a Frog Pond entry (page 46 of the notebook)
- ✓ Performance Task anchor chart (begun in Unit 2, Lesson Sequence 1)
- ✓ Frog pond cross-section diagram student exemplar (one to display)
- ✓ Pond Diagram and Argument Rubric (for teacher reference)
- ✓ Pond Diagram and Argument Rubric (one per student; co-constructed with students during Section 1; see Teaching Notes)

- ✓ Habitat anchor chart (begun in Lesson Sequence 2)
- ✓ Pictures from Habitat Station #1 (from Lesson Sequence 4; to display)
- ✓ Explanatory Model Revision Checklist (one per student)
- ✓ Norms of a Scientists Meeting anchor chart (begun in Unit 1, Lesson Sequence 1)
- ✓ Planning a Frog Pond anchor chart (begun in Lesson Sequence 1; added to in Section 1)
- ✓ Scientists Do These Things anchor chart (begun in Unit 1, Lesson Sequence 2)
- ✓ Example Argument: Parts of a Pond (one per student)
- ✓ My Frog Pond Is a Good Solution (one per student and one to display)
- ✓ My Frog Pond Is a Good Solution (example, for teacher reference)

### Science-Specific Materials (gathered by the teacher)

- ✓ Materials for pond explanatory model (enough for every student; used in Section 1)
  - Graph paper (one piece per student)
  - Sticky notes (optional; five per student; used in Section 1)
  - Timer (optional; used in Section 1)
  - Colored pencils (10 per student)
  - Fine-tipped pen (10 per student)

## Section 1: Opening

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### A. Reviewing Learning Targets (15 minutes)

- Give students specific positive feedback regarding all the good work they have done as scientists in sharing and listening to ideas to learn about the problem of frog habitat loss and the solution of building a frog pond. (Example: “I’ve noticed that you have been thinking hard about what a frog needs to survive and how a pond habitat can provide those needs.”)
- Tell students that they are going to be using all of their learning from the past few weeks to design a frog pond that meets all the needs of the frogs living in it. After they’ve created their design, they will complete a written argument explaining why they have designed a good frog pond that will meet all the needs of frogs in order to help solve the problem of frog habitat loss <sup>(1)</sup>.
- Direct students to the posted module guiding question and lesson sequence learning targets and select a volunteer to read them aloud:

***“What are necessary parts of a frog habitat, and how do they interact to support the survival of frogs throughout their life cycle? How can we build that (in the schoolyard or in the community or a local park)?”***

***“I can design a frog pond that functions as a system and meets all of the needs of the organisms that live there.”***

***“I can construct and support an argument with evidence about how well my designed frog pond meets the needs of the frogs that will live in it.”***

- Answer clarifying questions.

- Direct students' attention to the **Concepts Scientists Think About anchor chart** and add the following to the "Systems" column:
  - "If any parts are taken out, the system doesn't work."
- Tell students they thought about each part of the pond and how important all the parts are to a frog in Lesson Sequences 3 and 4.
- Using a total participation technique, invite responses from the group <sup>(2)</sup>:
  - "What is an example of how the parts of a pond form a system?" (The shallow edge of the pond is important to the eggs of a frog, and the deeper water is important for the froglets and tadpoles.)*
  - "Why is it important to remember this system as you design a pond?" (The pond is a successful system only if it has parts to meet all of the needs of a frog at different points in the frog's life cycle.)*

### Preparing to Teach: Self-Coaching Guide

1. Are my students ready for the assessment? How do I know?
2. Is there anything I should reteach before they move on to the assessment?

## Section 1: Engineering Design Cycle

### A. Introducing the Challenge (10 minutes)

- Remind students that they have been learning about the relationship between habitats and organisms in order to solve the problem of not having enough frog habitats.
- Tell students that their challenge is to design a frog pond that meets all the needs of a frog in all parts of its life cycle and create an explanatory model of their designed frog pond. They can use their initial cross-section pond diagram from Lesson Sequence 3 and their Habitat note-catcher from Lesson Sequence 4 as resources. Both of these are found in their **student science notebooks** in **The Pond Is a System** and **Habitat entries**, respectively.
- Direct students' attention to the posted **Performance Task anchor chart**; read the task aloud and discuss what makes a model explanatory. Display the **frog pond cross-section diagram student exemplar** and walk students through how to change this diagram to an explanatory model by adding labels and descriptions of the role that each part of the diagram plays. Refer to the **Pond Diagram and Argument Rubric (for teacher reference)** for guidance <sup>(1)</sup>.
  - Label one part of the pond as "shelter/space," "food," or "water."
  - Tell students they will explain how each part of the pond provides these parts of a habitat for a frog.
  - Model by saying: "For example, here is a log. I'm going to add a label ("shelter/space") and an arrow pointing to the log. Then I'm going to write an explanation. "This log provides a place for the adult frog to hide from predators." I'm going to think about how each part of my diagram provides all the needs for the frog in every stage of its life cycle."

- Discuss with students the general constraints for their pond designs as well as any additional constraints specific to your school's location and needs.

*“What does an explanatory model of a frog habitat need to include?” (have labels, explain the relationship between the parts, explain how frogs will get their needs for food, shelter, space, and water met)*

*“How can you convince someone that your frog pond will be successful?” (Include evidence from what I have learned.)*

*“What makes something high quality?” (has had multiple drafts and revisions, is neat and well crafted)*

- Answer clarifying questions.
- As students share, capture their ideas on the blank **Pond Diagram and Argument Rubric**. Make copies of this completed rubric and distribute to students for reference when they are completing their pond design and argument. For now, leave the co-constructed rubric on display <sup>(2)</sup>.

### Preparing to Teach: Self-Coaching Guide

1. What experience do my students have with explanatory models? What student exemplars could I show (or create)?
2. How familiar are my students with co-constructing rubrics? Do I need to take more time here?

### B. Imagining: Frog Ponds (10 minutes)

- Refocus students whole group.
- Ask:
 

*“What will make your pond a successful habitat?” (It has all of the parts necessary to meet the needs of food, water, and shelter at all phases of the frog’s life.)*
- Invite students to open their student science notebook to The Pond Is a System entry and review their initial pond cross-section diagram.
- Invite students to turn and talk to an elbow partner:
 

*“Imagine and brainstorm possibilities for your pond design. Use your student science notebook to remind you about what you’ve learned.”*
- As students work, circulate and monitor for those who may need additional support designing their pond. Encourage these students to reference the **Habitat anchor chart** for parts that they should include in their design <sup>(3)</sup>.
- Remind students that they will have opportunities to revise their work, but they should make sure to consider what a frog needs in all stages of the life cycle.

### Preparing to Teach: Self-Coaching Guide

1. What students will I be sure to check in with during this time?

### C. Planning: The General Shape and Structures of the Pond (15 minutes)

- Refocus students whole group. Tell them they are now going to plan the general shape and structures of their pond.

- Tell students this is just the first step in drawing their pond. Share that planning, drafting, receiving feedback, and revising are all steps they will follow to create a high-quality final product.
- Invite students to open their student science notebooks to the **Designing a Frog Pond entry** and find the space provided for planning their diagram.
- Tell students this is the space where they will draw the general shape of their pond. Ask them to begin drawing.
- Circulate to assist students as they draw.
- Once students have drawn the basic shape of their pond, have them choose what plants and other details they will include <sup>(1)</sup>.
- Remind students that they should consider what living structures (like plants) and non-living structures (like rocks) will be necessary for meeting all of the frog's needs at each phase of its life cycle.
- Draw students' attention to the **pictures from Habitat Station #1** for ideas about how to draw various structures found throughout a pond.

### Preparing to Teach: Self-Coaching Guide

1. Would my students benefit from brainstorming a list of possible components of a pond? (Perhaps The Pond Is a System entry would be helpful.)

#### D. Creating: Frog Pond Explanatory Model (30 minutes)

- Distribute **graph paper**.
- Give students specific drawing guidelines <sup>(1)</sup>:
  - Look at the whole page and get a sense of how much of the page should be filled with the illustration.
  - Use a pencil, not a pen.
  - Hold your pencil loosely, and sketch light lines. Do not press hard and commit to a line at first. It's okay to have a lot of sketchy lines on the page (without erasing the ones that are off).
  - Choose the lines that look best and darken them.
  - Add labels and details to your pond.
- Invite students to begin drawing.
- As students work, circulate to support them. Encourage them to include as many details as possible in this rough draft.

### Preparing to Teach: Self-Coaching Guide

1. How can I support my students in creating a high-quality drawing? Would more time be helpful? Would they benefit from direct instruction?

#### E. Praise, Question, Suggestion: Frog Pond Explanatory Model (15 minutes)

- Tell students they are going to use the Praise, Question, Suggestion protocol to provide their classmates with feedback that will help them improve their explanatory models. Remind them that they have used this protocol in the Language Arts module. Review as necessary. Refer to the Classroom Protocols pack on Curriculum.ELeducation.org for the full version of the protocol <sup>(1)</sup>.

- Remind (or teach) students of the classroom norms for peer critique:
  - Be helpful
  - Be kind
  - Be specific
- Move students into groups and distribute the **Explanatory Model Revision Checklist**. Explain that they will use this checklist to give one comment of praise, one question, and one suggestion about the explanatory model of each member of their peer review group <sup>(2)</sup>.
- Provide students with a few **sticky notes** to record their feedback to place on specific parts of their group members' drawings.
- Let students know that at this point, their feedback should be focused on the shape and structures of the pond.
- Ask students to begin the protocol. Consider using a **timer** to ensure that all students have adequate time to provide and share their feedback.
- Refocus students whole group and ask them to return to their seats.

### Preparing to Teach: Self-Coaching Guide

1. What experience do my students have with peer critique?
2. What intentional groups will I create?

### F. Revising: Frog Pond Explanatory Model (30 minutes)

- Distribute **colored pencils**.
- Invite students to use their group members' feedback to complete another draft of their explanatory model or add additional details to their model, depending on the level of revision needed. Encourage them to use the colored pencils to add realistic, clarifying details to their completed explanatory models <sup>(1)</sup>.

### Preparing to Teach: Self-Coaching Guide

1. How much time will my students need to create a design they are proud of? How can I build in that time?

### G. Pair Share: Frog Pond Explanatory Model (10 minutes)

- Refocus whole group.
- Tell students they will now have the opportunity to share their completed explanatory model with a partner.
- Invite students to take their explanatory models and move to sit with a partner they have not worked with in this lesson sequence <sup>(1)</sup>.
- Post the following directions on the board and read them with students:
  - Decide who will be Partner A and who will be Partner B.
  - Partner A shows Partner B his/her explanatory model and reads the labels aloud.
  - Partner B asks at least one question about the explanatory model.
  - Partner A answers Partner B's question(s).
  - Partner B provides feedback: "I like how you \_\_\_\_\_," and "I learned \_\_\_\_\_."
  - Repeat these steps, reversing roles, so Partner B can share.

## Preparing to Teach: Self-Coaching Guide

1. How can I help my students transition quickly and quietly?

### Section 1: Evaluating Information

#### A. Scientists Meeting: Making Meaning (15 minutes)

- Ask students to bring their student science notebooks and gather for a Scientists Meeting.
- Direct students' attention to the **Norms of a Scientists Meeting anchor chart**.
- Using a total participation technique, invite responses from the group:
 

*“What are the norms of a Scientists Meeting?” (take turns talking, build on one another’s ideas, disagree respectfully, ask questions to clarify information)*
- Tell students that the goal of this meeting is to practice making arguments <sup>(3)</sup>.
- Direct students' attention to the module guiding question and select a volunteer to read it aloud:
  - What are necessary parts of a frog habitat, and how do they interact to support the survival of frogs throughout their life cycle? How can we build that?
- Direct students' attention to the **Planning a Frog Pond anchor chart** and remind students of all the work that they've done in collecting information to plan their ponds.
- Invite students to take out the final draft of their explanatory models.
- Using a total participation technique, invite responses from the group:
 

*“What is your argument for how your pond diagram meets all of a frog’s needs at all points in its life cycle?”*
- As students share out, prompt them to provide evidence and reasoning with their argument. Ask them to evaluate their evidence.
 

*“What is your evidence?”*

*“What is your reasoning?”*

*“Do you think this is good evidence? Why?”*

*“What additional evidence would be helpful? Why?”*
- As students share out, prompt them to see connections between one another's work:
 

*“Does anyone have something similar?”*

*“How are these ideas the same? How are they different?”*

*“Can someone paraphrase what Student A said?”*

*“Who thinks something similar or different?”*

*“Can you add to what Student A said?”*
- After a few minutes of noticing and naming similarities, lead the class to drawing conclusions about how needs can best be met. Say:
 

*“I’m seeing some patterns emerge. I think that we are all agreeing and building consensus around what makes a good pond design.”*
- Record students' ideas on the Planning a Frog Pond anchor chart.

## Preparing to Teach: Self-Coaching Guide

1. Note: The purpose of this meeting is to provide students with a chance to verbally organize the explanations and arguments that they will write during the summative assessment. Encourage full group participation in both listening and speaking.

## Section 2: Evaluating and Communicating Information

### A. Summative Assessment (50 minutes)

- Introduce the assessment with language such as: “You all have been working hard to do the work of scientists: to make arguments based on evidence. Today you are going to show what you know independently” (1).
- Direct students’ attention to the **Scientists Do These Things anchor chart** and select a volunteer to read aloud the steps under the Engaging in Argument column.
- Remind students about when they practiced engaging in argument in Lesson Sequence 4 regarding the question “What is the most important part of a pond?” and tell them that they will now read an example written argument about this question.
- Display **Example Argument: Parts of a Pond** and read it aloud.
- Using a total participation technique, invite responses from the group:
 

**“What are the various parts of the written argument?” (claim, evidence, scientific reasoning, and evaluation of evidence)**
- Emphasize the two types of evidence (data and learning), as well as how scientific reasoning should be used to explain how each piece of evidence supports the claim.
- Distribute and display **My Frog Pond Is a Good Solution** and read it aloud as students follow along, reading silently in their heads.
- Clarify the task for students (2):
  - Use the graphic organizer to make a claim about how your pond design is a good solution to the problem of frog habitat loss.
  - Describe the evidence from data you’ve collected in your student science notebook.
  - Explain your reasoning for how your evidence supports your claim.
  - Discuss whether or not you have enough quality evidence for making this claim.
- Ask students to give a thumbs-up if they understand the task.
- Ask students to give a thumbs-up if they have an idea about the evidence they will use. Note students who are unsure about what they will write. Direct them to stay in the circle and provide a quick example and answer clarifying questions.
- Invite students to return to their seats and take out their student science notebooks and the final drafts of their explanatory models of their pond as they move to their desks.
- Tell them that they may use these resources if they are helpful while constructing their argument.
- Answer clarifying questions and invite students to begin writing their argument on the My Frog Pond Is a Good Solution handout.
- Collect students’ writing to formally assess using the Pond Diagram and Argument Rubric.

### Preparing to Teach: Self-Coaching Guide

1. How could I support my students during the summative assessment?
2. Would my students benefit from constructing this argument orally rather than written? The graphic organizer could also scaffold an oral argument.

### B. Reflecting on Learning (10 minutes)

- Refocus whole group.
- Invite students to turn to an elbow partner and share the piece of learning they found to be most interesting about the relationship between organisms and habitat <sup>(1)</sup>.
- Circulate as students share. Encourage students who may need additional support to use a sentence stem: “I used to \_\_\_\_\_, but now I \_\_\_\_\_.” (Example: “I used to think that ponds were nothing special, but now I think that they are important for helping frogs survive.”)

### Preparing to Teach: Self-Coaching Guide

1. Would my students benefit from reflecting in a more formal way?