

DAY 14			
Preparing for the Presentation, Part 2			
Reading Strategy: Culminating Activity		Science Concept: Scientists collaborate on investigations by sharing data within their teams and then with other scientific teams to gain a better understanding about the world around them.	
Reading TEKS: (1)(b)(13)(D)	CCSS: W.1.7	NGSS: 1-LS2-2, 1-LS3-1	Science TEKS: 1(2)(D)(E)
Materials for Culminating Activity: See lesson			
Content Vocabulary: Claim – a statement that says something is true based on observations or an opinion Evidence –data that supports a claim or answer Data- details, information, or facts that come from research and investigations Reasoning- thinking about and explaining <i>how</i> the evidence supports a claim			
Science and Literacy Connection: At the end of an investigation, scientists share new knowledge with others in many ways including scientific presentations, published papers, and the media.			

Research Culminating Activity — 30 - minutes

OVERVIEW

Students have worked in inquiry circle groups to research various ecosystem. During this time, students have practiced becoming a scientist by speaking, reading, and writing like one. Inquiry circle groups will work together to create a product to share at the scientific symposium.

PROCEDURE:

1. Say something like, “We have spent several weeks researching our inquiry topic. Now we will create a product to share what we know in a scientific symposium.”
2. Say something like, “Groups will work together to pick one product to create. Remember, your product must show what you know about your ecosystem.”
3. Pass out the choice sheet and review the options. For technology-based products, be sure the app is available in your school district and that you are familiar with it.
4. Facilitate groups (if needed) to come to a consensus about which product to create.
5. Today is the last day scheduled to work on the culminating product.
6. Groups will present their products on the last day of the unit.

Science Culminating Activity — 30-45 minutes

OVERVIEW

Today teams will decide on and practice their roles for the “live interview”.

We suggest walking the students through the presentation using a team to model the procedure. We have designated 45 minutes for today’s work, but you may take as long as necessary. The teacher also has the option of breaking up this lesson into two parts to best fit the needs of the class.

GUIDING QUESTIONS

How will we share what we learned about our organisms from our research? How will we explain our research and science investigations?

BACKGROUND INFORMATION

All of the backyard organisms the children have researched are decomposers. They are considered detritivores because they feed on detritus, organic waste matter composed of dead plants and animals.

Decomposers play an important role in maintaining food chains and food webs. As natural recyclers, they return important organic nutrients back into the ecosystems where they live. Decomposers live in many different ecosystems and can be very different from the ones we find in our backyards!

The results of their science investigations may or may not be conclusive, depending on what the chosen food was. There should have been at least some change in certain foods, or perhaps students captured pill bugs actually feeding. Whatever the results, they should be congratulated for setting up the investigation and collecting data. Through their research, they should be able to communicate how all of the organisms are related and dependent on each other in their backyard environments.

SAFETY

When ready, caution children to carefully move their habitats into the designated place and let them know they will not be opening them. They are simply there for show.

MATERIALS

- Science journals
- pencils
- Labeled photos of the food in habitats
- Class inquiry chart
- Sheet of chart paper
- marker
- Pill bug habitats
- Research culminating project

SET UP

Before the class

- Write the following presentation roles on a sheet of chart paper: (**NOTE:** the number of presenters will be dependent on the number of students in a team. The teacher may decide which roles are needed, can be combined, or added. You may also decide to have 2 students in each role. Any combination works as long as **each student** has a role.)
 - Scientist who will speak about the science investigation -how you set it up.

- Scientist who will read the team CER chart.
- Scientist who will describe the photos as evidence to support the CER chart.
- Scientist who will summarize the research with the presentation of their culminating project
- Post the class inquiry chart where all can see it
- Designate table where children can place their habitats and research projects (if needed).
Students will need to stand around or behind the table to practice for the interview (preferably a small table or desk).

DAILY OBSERVATIONS

Pill bug observations have ended.

PROCEDURE

Engage

1. Announce to the class that today they will work on the final piece of their presentations.
2. Point to the posted class inquiry chart and explain, “As you did research to find the answers to these questions, each team became an “expert” in those answers.
3. “As scientific experts, each team will have a chance to explain what they have learned through the research by presenting their culminating research projects. “
4. Ask for any questions the class might have about this part of the presentation, and take time to answer or clarify. Let them know they can refer to the large class inquiry chart during the presentation if needed.

Explore

5. “Now, let’s read about the different speaking roles that are available. You will decide as a team who will speak about the different topics. “ **(Assure that you have a role for each member of the team.)**
6. Direct their attention to the posted chart paper with presentation roles and read them out loud. (If you decide to have more than one person on each role, or have added a role, indicate that on the list.
 - Scientist who will speak about the science investigation -how you set up the habitat.
 - Scientist who will read the team CER chart.
 - Scientist who will describe the photos and journal drawings as evidence to support the CER chart.
 - Scientist who will summarize the research.
7. “I will give you 5 minutes to decide as a team what each of you will speak about.” (As students confer, move among them to help in their decision-making if needed.)

Explain

8. When time is up and/or decisions are made, gather the students together again.
9. Begin by placing the habitat on the designated table or desk. Explain, “When it is time for the live interview, you will stand on either side of or around the table. You will place your mini-habitat and research project on the table.”
If more than 1 team member is talking about a topic, instruct them to stand together.
10. “The order of presentations will be”: (point to the chart paper)
 - Scientist who will speak about the science investigation -how you set it up.
 - Scientist who will read the team CER chart.
 - Scientist who will describe the photos as evidence to support the CER chart.
 - Scientist who will summarize the research

11. "The team member who will describe how you set up your investigation will speak first. As you practice, think about how you set up your habitat and decided on which food to test on the pill bugs."
12. Point to the practice CER chart. Explain that depending on how many are presenting the chart, each could have a part to read. For example, one person reads the claim, another the evidence, etc. If only one person is presenting then they will read the whole page.
13. Next, hold up one of the photos of the food and explain, "Remember that you will also present pictures of your food and the drawings from your journals as evidence to back up your claim. You will want to describe what happened to the food. Was it eaten? Did the pill bugs ignore it? Did you see them eating anything?"
14. The last presenters will be summarizing what they learned about the organisms they researched using the information from their research culminating project.
15. Explain that you will be the "host" conducting the interviews and will ask the questions about their investigations.
16. "I will begin the interview by introducing you, saying something like: "I'd like to introduce Team _____. Can you tell the audience how you set up your investigation?" Teacher should prompt the students with one question in the order of presentations.
17. Let them know that **each team** will only have 5 minutes for their presentation. Instruct the presenters to speak clearly and only when it is their turn. Instruct the children in the "audience" to be very quiet and respectful during the presentations. Ask if there are any questions.

Elaborate

18. After discussion or clarifications, allow the teams to practice! Instruct the **Lead scientists** to make sure everyone follows the directions and ask the **Lab Directors** to distribute all the materials needed for practicing.
19. Once again, the teacher should move between the teams to ensure that everyone has a role and they are practicing their parts. Offer guidance and support as needed.
20. Allow enough time for the teams to organize and practice their presentations.
21. Before the class ends, take time to ask again if there are any questions about the presentation. Additionally, highlight any comments or actions that demonstrated good teamwork or new knowledge.
22. Remind the students "Every day as you worked on your research and science investigations, you were doing the work of scientists! You should feel very good about the work you have done! And, you have shown how you can work together in teams, with each one of you helping each other to get things done. Tomorrow you will share and celebrate your success!"

Evaluate

23. Did students organize their information as directed?
24. Was there evidence of teamwork as they organized their presentations?
25. Did students use science language in their work?
26. Did they communicate understanding of the results of their research and science investigations?

Reading TEKS: (1)(b)(13)(D) Inquiry and research: listening, speaking, reading, writing, and thinking using multiple texts. The student engages in both short-term and sustained recursive inquiry processes for a variety of purposes. The student is expected to (D) demonstrate understanding of information gathered with adult assistance.

CCSS: (W.1.7) Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).

NGSS: NGSS: : (1-LS2-2) Science uses drawings, sketches, and models as a way to communicate ideas. 1-LS3-1 Science & Engineering Practices-Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.

Science TEKS: 1(2)(D) record and organize data using pictures, numbers, and words; and (E) communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations.