Day 13 Preparing the Science Presentation Part 1				
Literacy Strategy: Culminating Activity		investigations by sh and then with othe	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)	
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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 *how* 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.

Literacy Culminating Activity — 30-45 minutes

OVERVIEW

Students have worked in inquiry circle groups to research various ecosystems. 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."
- Say something like, "Groups will work together to pick one product to create. Remember, your product must show what you know about your animals and their dependence on other organisms in their environment."

- 3. Distribute the "Inquiry Circle Menu of Choices" sheet (1 per student), 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.
- Including today, there are two days scheduled to work on the culminating product. The time from the mini-lesson and inquiry groups have been combined.
- 6. Groups will present their products on the last day of the unit.

Inquiry Circle Menu of Choices

- Choose an option from the choices below to show what you know!
- Be sure your project shows what you know about your organism's physical traits in adults and offspring.



Baylor College of Medicine. Field Test Version: Do not distribute, photocopy or forward this document for use at other locations inquiry Circle Menu of Choices.

Science Culminating Activity — 30-45 minutes

OVERVIEW

Throughout the unit, students have worked in science inquiry circles to research various backyard organisms and have developed new knowledge about them as decomposers. They have also conducted a science investigation to determine what pill bugs eat. Now, teams prepare for a "live interview" where they will share what they have learned about the organisms they have researched and the science investigation they have conducted. Today teams will be guided by the teacher to complete a team CER chart.

It is anticipated that students will spend 2 days (including today) working to prepare their presentation with guidance from the teacher. The suggested time per day is 45 minutes, but the teacher can decide how much time to allow based on schedule and student need.

GUIDING QUESTIONS

What claim can we make based on our observations during our investigation? What evidence do we have to support the claim?

BACKGROUND INFORMATION

Scientists share their research and investigation findings with others in many ways. Sometimes, it is presented at a large science meeting, or it is published in journals or books. Often, they are interviewed in public media to reach large audiences.

SAFETY

There are no safety issues.

MATERIALS

- Science journals
- Pencils
- Sheet of chart paper
- Practice CER student page and the class CER chart from yesterday.
- Team CER Chart docx.
- Printed copies of the habitat photos taken by the teacher (showing the food).

SET UP

•	My prediction was "We think pill bugs will eat"
	(Claim) We can now say that pill bugs (do or do not eat)
	(Evidence) We know because .
,	(Reasoning) We think You will need to print out the photos you took of the food in the habitat if you have not alread

- done so. Label them "Day 1" and "Day 5". Each team will need one set of their food photos.
- Print out one copy of the Team CER Chart for each team member.

DAILY OBSERVATIONS

Pill bug observations have ended.

PROCEDURE

Engage

- 1. Remind the class, "You have conducted your own investigations as a team just like scientists do, with each of you having a specific role. "
- 2. "I congratulate you for being able to generate "authentic". Authentic data is information that has come from your own work!" Remind them that their "data", or information, is in their journals in the form of their drawings and words that they completed every day.
- 3. "Now that your investigations are complete, you will work with your teams to organize all of the information and present it to the other science teams.
- 4. Explain that scientists do the same thing when they complete their research and investigations. They hold team meetings to look over the results of their work. Sometimes they gather in much larger meetings where scientists come together to share and talk about their investigations.
- 5. Tell the class that you have decided to do a "live interview" as a fun way for them to present their results. Explain that just like television, you will ask them questions and they will use Team CER charts, drawings, and Inquiry charts to share and explain what they found out.

Explore

- 6. (Instruct the Equipment Director to distribute the "Team CER Charts", one to each team member.) "Let's begin by working on the Team CER chart. You will write in your team information in the same way we did the practice CER chart." (Point to class CER chart)
- 7. "Remember that each team picked a different food to place in their habitat." (Point to the chart and read.) "Our prediction was 'We think pill bugs will eat______.' On your chart, write the name of your food choice here. (Allow time for them to write.)
- 8. "Next, you will write your claim- what you think is true. (Point to the chart and read.) "(Claim) We can now say that pill bugs (do or do not eat) ______." "Think, did your pill bugs eat your food? What will you write here?" (Allow time for them to write.)
- 9. "Now, how do you know they do or do not eat that food? What is your evidence or clue? (Point to the chart and read.) "(Evidence)**We know because**_____." "Write your evidence here. Look at the chart we did yesterday- what was my evidence?" (Provide help as needed.)
- 10. "The last thing you need to write about is what the evidence is telling you. "(Point to the chart and read.) "(Reasoning) We think ______." (Refer back to the practice chart and read what you wrote.) Ask, "What will you write here?" (Provide help as needed.)
- 11. Commend the teams for their work and explain they will present one of their charts during the "live interview". The team can decide who will talk about it. Let them know there will be other talking parts for the others on the team too!

Explain

- 12. (Hand out the labeled food photos.) Remind the teams they also have pictures that you took of the food in their habitats, and the drawings they made in their journals. This is more evidence to support their claim! Another member of the team can talk about that!
- 13. Ask if there are any other questions about what they are doing and allow time for discussion or clarification.
- 14. If there are no other questions, ask the Data Scientists to share any observations their team has made about their work today.
- 15. Explain they will work on the last part of their presentation tomorrow, using the team inquiry chart.

Elaborate.

16. Inform them that the "live interview" will be done on the last day of the unit. Tomorrow they will have time to practice!

Evaluate

- 17. Did students communicate a reasonable understanding about "claims," "evidence," and how the evidence supports their claims?
- 18. Are students using more scientific vocabulary in their communications?

Expanded Standards

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: : (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.