

Lesson 4: Speaking, Writing, and Drawing: Completing Our Scientific Drawings and Receiving Peer Feedback



- **RI.2.5:** Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.
- **RI.2.7:** Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.
- **W.2.5:** With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
- **W.2.7:** Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
- **L.2.1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- **L.2.1e:** Use adjectives and adverbs, and choose between them depending on what is to be modified.
- **L.2.1f:** Produce, expand, and rearrange complete simple and compound sentences (e.g., *The boy watched the movie*; *The little boy watched the movie*; *The action movie was watched by the little boy*).



Daily Learning Targets

- I can write notecard #4 for my oral presentation using information from the pollinator texts and My Pollinator Writing booklet. (W.2.7)
- I can revise my work based on my partner's feedback. (W.2.5, W.2.7)

Ongoing Assessment

- During Work Time A, circulate and observe as students write notecard #4 for evidence of progress toward W.2.7 and L.2.1e.

Agenda

1. Opening

- A. Developing Language: Capture the Caption Activity (10 minutes)

2. Work Time

- A. Modeling Writing Notes: Oral Presentation Notecard #4 (20 minutes)
- B. Peer Critique Protocol: Scientific Drawings and Captions (25 minutes)

3. Closing and Assessment

- A. Reflecting on Learning (5 minutes)

Teaching Notes

Purpose of lesson and alignment to standards:

- In Lesson 4, students are provided with their first opportunity to participate in a Peer Critique protocol. Following the protocol, students use their peer's suggestions to revise their Scientific Drawings and Captions Template.
- Students continue practicing writing notes as words and phrases in preparation for their oral presentations. Continue to highlight the different purposes for writing notes, including taking notes to learn new information (as students did in Unit 2) and writing notes to prepare for presentation.
- This lesson connects to Next Generation Science Standard LS2-2. During Work Time B, students focus on the following science and engineering practice: developing and using models. Help students to consider how they will use their scientific drawings and captions as a model when explaining the pollination process to others.

How this lesson builds on previous work:

- Students again play Capture the Caption with a focus on rearranging sentences. Students will be assessed on their progress toward standard L.2.1f in the Opening of Lesson 5.

Areas in which students may need additional support:

- Students have given and received peer feedback in previous modules. However, this is the first time they have participated in a structured feedback protocol. Some students may be particularly sensitive to receiving feedback, feel a lack of confidence in their scientific drawing skills, or need additional support to provide empathic feedback to peers. Consider supporting students in a small group with additional teacher modeling or strategic partnering for the Peer Critique protocol in Work Time B. Pair students with varying levels of confidence using oral language. The students with greater confidence using oral language can serve as models in their partnership, initiating discussion and providing implicit sentence frames.
- For students who benefit from additional language support, consider the use of word banks and sentence frames to support caption writing during the Opening.

Down the road:

- In Lesson 5, students will complete a reflection on the impact of feedback on their Scientific Drawings and Captions Template and use that reflection to write notecard #6 for their oral presentations.
- In Lesson 6, students will co-construct criteria for effective oral presentations before practicing and receiving feedback on portions of their presentations in Lessons 7–10.

In advance:

- Review the Peer Critique protocol. (Refer to the Classroom Protocols document for the full version of the protocol.)
- Post: Learning targets, the “Capture the Caption!” song, and applicable anchor charts (see Materials list).

Consider using an interactive white board or document camera to display lesson materials.

- Continue to use the technology tools recommended throughout Modules 1 and 2 to create anchor charts to share with families; to record students as they participate in discussions and protocols to review with students later and to share with families; and for students to listen to and annotate text, record ideas on note-catchers, and word-process writing.

Supporting English Language Learners

Supports guided in part by CA ELD Standards 2.I.B.5, 2.I.C.10, 2.II.A.1, 2.II.B.4, and 2.II.B.5

Important points in the lesson itself

- The basic design of this lesson supports ELLs with opportunities to use their speaking and listening skills as they give and receive feedback.
- ELLs may find it challenging to rearrange sentences during Opening A. To provide additional support with this skill, identify specific language structures, provide tactile experiences, and offer more time for practice (see Levels of support and Meeting Students' Needs column).

Levels of support

For lighter support:

- During Opening A, invite a student to facilitate a Mini Language Dive discussion with the caption they created.

For heavier support:

- During Work Time B, consider grouping students in heterogeneous triads. Students who need heavier support can observe others giving feedback to one another before giving and receiving feedback themselves.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** Similar to Units 1 and 2, this lesson offers a variety of visual anchors to cue students' thinking. Continue to support students by creating additional or individual anchor charts for reference and charting student responses during whole class discussions to aid with comprehension.
- **Multiple Means of Action & Expression (MMAE):** Continue to support a range of fine motor abilities and writing needs by offering students options for writing utensils. Also, consider supporting students' expressive skills by offering partial dictation of student responses.
- **Multiple Means of Engagement (MME):** Continue to foster collaboration and community by providing prompts that guide students in knowing when and how to ask classmates or teachers for help.

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

Review:

- revise, feedback, kind, specific, helpful (L)

Materials

- ✓ "Capture the Caption!" song (from Lesson 2; one to display)
- ✓ Upgrading Sentences anchor chart (begun in Lesson 3)
- ✓ Upgrading Sentences anchor chart (example, for teacher reference; begun in Lesson 3)
- ✓ Bee photographs #4–5 (from Unit 2, Lesson 6; one to display)
- ✓ Oral Presentation Notecards: Bee Model (from Lesson 2; one set to display)
- ✓ Oral presentation notecards (from Lesson 2; one set per student)
- ✓ Pollinator texts (from Lesson 1; one per student)
 - "Forever Grateful, Flies and Wasps!" (from Lesson 1; one per student in this group)
 - "Thanks a Bunch, Beetles!" (from Lesson 1; one per student in this group)
 - "¡Muchas Gracias, Butterflies and Moths!" (from Lesson 1; one per student in this group)
- ✓ My Pollinator Writing booklet (completed in Unit 2, Lesson 13; one per student)
- ✓ Sandwich bag (from Lesson 2; one per student)
- ✓ What Researchers Do anchor chart (begun in Unit 1, Lesson 2)
- ✓ What Does Peer Feedback Look and Sound Like? anchor chart (new; teacher-created)
- ✓ What Does Peer Feedback Look and Sound Like? anchor chart (example, for teacher reference)
- ✓ Peer Critique Protocol anchor chart (new; teacher-created)
- ✓ Peer Critique Protocol anchor chart (example, for teacher reference)
- ✓ Scientific Drawings and Captions Template: Bee Model (from Lesson 1; one to display)
- ✓ Scientific Drawings anchor chart (begun in Lesson 2)
- ✓ Scientific Drawings and Captions Template (from Lesson 1; one per student)

Opening

A. Developing Language: Capture the Caption Activity (10 minutes)

- Gather students whole group.
- Display the "**Capture the Caption!**" song and invite students to sing chorally.
- Remind students that yesterday they worked together to upgrade sentences to Level 2 by adding adjectives and adverbs to their captions about a pollinator photograph.

- Tell students that they will again work to “capture the caption” for some pollinator photographs, and that this time, they will work to upgrade to a level of higher quality by writing a compound sentence!
- Direct students’ attention to the **Upgrading Sentences anchor chart**. Briefly review compound sentences and the examples that have been added to the chart. Share that when a sentence tells about more than one thing happening with the subject of the sentence, we call this a *compound sentence*. Refer to the **Upgrading Sentences anchor chart (example, for teacher reference)** as necessary.
- Share that today, students will work to expand and rearrange their sentences to experiment with different ways to describe pollinators using compound sentences.
- Display bee photograph #4 and model writing a compound sentence that tells about more than one idea that is visible in the photograph. (Example: The busy bee pollinated the bright white flower while it was looking for food.)
- Turn and Talk:
“What two ideas or actions from the picture did I write in my caption to make it a compound sentence?” (bee pollinating, bee looking for food)
- Move students into pairs and distribute **bee photograph #5**.
- Turn and Talk:
“Write a caption about bee photograph #5 using a compound sentence that tells about more than one idea that is visible in the photograph. Use your knowledge of pollination and sentence-writing to help you do this.”
- Similar to the previous lesson, consider using a word bank and sentence frames as needed.
- Refocus whole group as pairs finish writing their caption.
- Focus students on the displayed model caption for bee photograph #4. Share that authors often experiment with rearranging their sentences to express the same idea in a different way.
- Model how to rearrange your sentence using the same information, but to be focused on the flower first.
(Example: The bright white flower was pollinated by the busy bee that was looking for food.)
- Invite students to work to rearrange the sentences they wrote with their partner, using your example as a model.
- Using a total participation technique, invite students to share their new captions with the group.
- Turn and Talk:
“Which of your sentences sounds more interesting to you? Which best describes the photograph?”
- Give students specific, positive feedback on their effort to create Level 3 sentences!

Meeting Students’ Needs

- For ELLs and students who may need additional support with language: (Word Bank: Conjunctions) Create a word bank for conjunctions that students can use as they add information to their captions. Briefly generate examples of how students might use these conjunctions in their captions. (Examples: *while, with, before, so, and*) (MMR)

- For ELLs: (Form: Passive Voice) To support rearranging sentences to make the flower the focus of the sentence, point out that we need to add the phrase *was ____ by*. Practice changing some additional sentences to passive voice using this structure. (Example: Ken's mom drove him to school. Ken was driven by his mom.)
- For ELLs: Mini Language Dive. "The bright white flower/was pollinated by the busy bee/that was looking for food."
 - Deconstruct: Discuss the sentence and each chunk. Language goals for focus structure:
 - *was pollinated*: "What?" / Meaning: The flower was pollinated. Pollen got into the flower so that it could make a new plant. (passive voice)
 - *by*: This tells what or who pollinated the flower. We know that the bee pollinated the flower. (preposition)
 - *busy*: This adjective describes the bee.
 - Practice: Rearrange the following sentences using *was ____ by*: The butterfly drank the nectar; the moth carried the pollen to another flower.
 - Reconstruct: Reread the sentence. Ask:

"Now what do you think the sentence means?"
 - Practice:

"Can you take away the adjectives and adverbs in this sentence and rearrange it back to a simple sentence?" (The bee pollinated the flower.)

Work Time

A. Modeling Writing Notes: Oral Presentation Notecard #4 (20 minutes)

- Refocus whole group.
- Direct students' attention to the posted learning targets and read the first one aloud:

"I can write notecard #4 for my oral presentation using information from the pollinator texts and My Pollinator Writing booklet."
- Remind students that yesterday they wrote notecard #3 to help them share what they have learned about the secret of pollination with their families and members of the school community at the upcoming Celebration of Learning.
- Follow the same routine from Work Time A of Lesson 2 to guide students through understanding the content and purpose of the new notecard and what makes it high-quality work, as well as creating their own new notecard:
 - Display the **Oral Presentation Notecards: Bee Model** and orient students to the content and purpose of notecard #4 (a conclusion statement reconnecting the pollination process to your flower, fruit, or vegetable).
 - Read aloud the notecard and review the meaning of the notes. Say:

"Notecard #4 says, 'Connect the pollination process to your flower, fruit, or vegetable again (conclusion statement); Sentence Starter: Here is how bees help apple plants; Bees pollinate new flower, apples grow; Seed forms inside apple, new plants can grow!'"

– Ask:

“What do these notes mean?” (They connect the pollination process back to the fruit, flower, or vegetable.)

“What makes this high-quality work?” (It has all of the information needed to present notes that are easy to read.)

- Distribute **oral presentation notecards** and invite students to write their notes for notecard #4 using their **pollinator texts** and **My Pollinator Writing booklet** as needed.
- Circulate to support students as they work.
- When 1 minute remains, invite students to clean up and move like their favorite pollinator back to the whole group area with their oral presentation notecards in their labeled sandwich bag.

Meeting Students' Needs

- For ELLs: (Generating Options: Notes) Invite students to generate different ways to present conclusion statements. Record and display possible notes they could write.
- For ELLs and students who may need additional support with strategy development: (Modeling and Thinking Aloud: Using Resources) Model and think aloud the process of getting information from their pollinator texts and their My Pollinator Writing booklets from Unit 2 to support writing notes. (MMAE)

Work Time

B. Peer Critique Protocol: Scientific Drawings and Captions (25 minutes)

- Refocus whole group and collect students' oral presentation notecards.
- Offer specific, positive feedback for the students' work and effort in writing notecard #4.
- Direct students' attention to the What **Researchers Do anchor chart** and review the idea that scientists use models to explain an idea.
- Remind students that they have been working on their scientific drawings and captions as a model to explain the pollination process to others at the Celebration of Learning.
- Direct students' attention to the posted learning targets and read the second one aloud:
“I can revise my work based on my partner's feedback.”
- Review the meaning of the underlined words (*revise*: to change or make different to improve; *feedback*: suggestions for improvement), noting student-friendly words, phrases, or images directly on the displayed learning targets to support understanding of this academic Vocabulary.
- Direct students' attention to the **What Does Peer Feedback Look and Sound Like? anchor chart**, and tell students they will have an opportunity to revise their scientific drawings using the feedback provided by a classmate.

- Review the meaning and expectations for kind, specific, and helpful feedback.
 - *Kind* (gentle, good, caring)
 - *Specific* (certain and exact, particular)
 - *Helpful* (useful or aids you in some way)
- Turn and Talk:

“What do you think kind, specific, and helpful feedback could look like and sound like?”
- Invite students to share out. As students share out, capture their ideas on the What Does Peer Feedback Look and Sound Like? anchor chart. Refer to the **What Does Peer Feedback Look and Sound Like? anchor chart (example, for teacher reference)** as necessary.
- Referring to the **Peer Critique Protocol anchor chart**, explain the expectations for students:
 - Face your partner and label yourselves A and B.
 - Partner A reads aloud his or her writing.
 - Partner B listens carefully as partner A reads.
 - Partner B offers feedback to partner A on his or her work. Partner B consults the criteria for quality when thinking about feedback.
 - Partner B first points out something partner A did well using the sentence frame: “You did a good job of ____.”
 - Partner B points out something that partner A could add to or change about their writing using the sentence frame “I think you should ____ because ____.”
 - Partner A and partner B will switch roles and repeat these steps.
- Answer clarifying questions.
- Invite students to listen as you model a short round of feedback with a student volunteer.
 - Direct the student volunteer to sit across from you.
 - Assign yourself as partner A and the student volunteer as partner B.
 - Share that your partner will offer feedback on one of your scientific drawings.
 - Display the **Scientific Drawings and Captions Template: Bee Model** and refer to the first drawing as the piece of work for which your partner will offer feedback.
 - Review the skills on the **Scientific Drawings anchor chart**.
 - Encourage your partner to choose one skill you used well from the Scientific Drawings anchor chart and describe it with the sentence frame: “You did a good job of ____.” As needed, allow the student volunteer to “phone a friend” by calling on a classmate to help name an area of strength.
 - Repeat the previous step with an area where you could improve.
 - Thank your partner for the feedback and invite the class give a brief round of applause for the student volunteer.
- Move students into pairs and distribute the **Scientific Drawings and Captions Template**.
- Guide students through the Peer Critique protocol to give feedback on their partner’s Scientific Drawing and Captions Template, encouraging feedback that is kind, specific, and helpful.
- Refocus whole group.

- Think-Pair-Share:

“What is one revision you will make to a scientific drawing based on the feedback you received?” (Responses will vary.)

- Invite students to revise their drawing.
- Circulate to support students as they discuss and make revisions.
- When 2 minutes remain, provide brief directions for cleanup and invite students to move like their favorite pollinator as they return to the whole group meeting area.

Meeting Students' Needs

- For ELLs: (Modeling and Thinking Aloud: Feedback) Consider thinking aloud the process of giving kind feedback. Example: “You had a funny look on your face when I practiced my conclusion, so I could see you didn’t understand me. I read it again and you asked me if I meant ‘Bees move pollen from flower to flower.’ I said, ‘yes,’ and added *move*. That means you listened carefully, and this helped me make sure my writing made sense.”
- For ELLs and students who may need additional support with verbal expression: (Brainstorming Words and Phrases for Feedback) Invite the class to brainstorm different words and phrases they could use to provide kind, specific, and helpful feedback about their partner. Write the words and phrases on chart paper and encourage students to refer to it as they work with their partners. (MMAE)

Closing and Assessment

A. Reflecting on Learning (5 minutes)

- Refocus whole group.
- Offer students specific, positive feedback on their effort to provide feedback to a peer and make revisions based on feedback.
- Referring to the posted learning targets, read the second one aloud:

“I can revise my work based on my partner’s feedback.”

- Invite students to share their revision with a partner.
- Think-Pair-Share:

“How does this work show your progress toward this learning target?” (Responses will vary.)

- If productive, cue students to add on to what a classmate said:
“Who can add on to what your classmate said? I’ll give you time to think.”
- Preview tomorrow’s work: reflecting on peer feedback and writing the final oral presentation notecard!

Meeting Students' Needs

- For students who may need additional support with engagement: Invite students to discuss how they worked toward the learning target in previous lessons. (MMR, MME)