

Lesson 2: Speaking, Writing, and Drawing: Beginning Our Oral Presentations and Scientific Drawings



- **RI.2.1:** Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.
- **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.2.7:** 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.2.1f:** 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 notecards #1 and #2 for my oral presentation using information from the pollinator texts and My Pollinator Writing booklet. (W.2.7)
- I can create a scientific drawing and write a caption to show my pollinator feeding at a flower. (R.2.1, R.I.2.5, R.I.2.7, W.2.7, L.2.1f)

Ongoing Assessment

- In the Opening, students are introduced to Capture the Caption, the first in a series of four Openings providing opportunity to note student progress toward L.2.1f.
- During the Opening, circulate to observe students as they work to match and create captions. Use the Speaking and Listening Checklist to document progress toward L.2.1f (see Assessment Overview and Resources).
- During Work Time B, circulate as students work on the Scientific Drawings and Captions Template, and continue to notice if they use the resources available to inform their illustration and caption. (RI.2.1, RI.2.5, RI.2.7, W.2.7)

Agenda

1. Opening

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

2. Work Time

A. Modeling Writing Notes: Oral Presentation Notecards #1–2 (20 minutes)

B. Scientific Drawings and Captions: Adding Details of the Plant and Pollinator (25 minutes)

3. Closing and Assessment

A. Reflecting on Learning (5 minutes)

Teaching Notes

Purpose of lesson and alignment to standards:

- This is the first lesson in Unit 3 that invites students to write notes and marks a shift in the purpose of note-taking. In Unit 2, students took notes to keep track of their learning from informational texts that they read. In this lesson, students write notes for the purpose of remembering important information that they will later share in their oral presentations during the Celebration of Learning. Continue to highlight the different purposes for note-taking as students write notes throughout this unit.
- In the Opening, students are introduced to the Capture the Captions game, the first of three Openings in which they produce, expand, and rearrange both teacher-provided and student-generated sentences. This work supports students in the writing of captions for their own scientific drawings and is assessed in Lesson 5 through use of an entrance ticket.
- 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 consider how they will use their drawings and captions as a model when explaining the pollination process to others.

How this lesson builds on previous work:

- In Unit 2, students created their My Pollinator Writing booklet about a specific pollinator. In this lesson, students use these student-written texts as a resource while adding to their oral presentation notes, scientific drawings, and captions.
- In Unit 2, students created several scientific drawings of a specific pollinator. In this lesson, students create a scientific drawing to show their pollinator eating from the flower of a specific plant on their Scientific Drawings and Captions Template.
- Continue to use Goals 1–4 Conversation Cues to promote productive and equitable conversation.

Areas in which students may need additional support:

- In Work Time B, continue to support students in organizing their Materials and resources at their workspace.

Down the road:

- In Lessons 3–7, students will continue to build their scientific drawing skills as they complete the Scientific Drawings and Captions Template for their Performance Task Poster.
- In Lessons 3–5, students will continue to write their oral presentation notecards for the oral presentation portion of the performance task.

In advance:

- Prepare one plastic sandwich bag to hold each student’s oral presentation notecards by labeling the bag with the student’s name using a permanent marker.
- Pre-determine a workspace for scientific drawing in Work Time B: Students sit with their research group to share copies of the pollinator texts and photographs as they complete the drawing #2 and caption #2 on their Scientific Drawings and Captions Template.
- Preview the Materials for Capture the Caption to familiarize yourself with their purpose and use in Lessons 2–5.
- Post: Learning targets and applicable anchor charts (see Materials list).

Technology & Multimedia**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, and 2.II.A.1

Important points in the lesson itself

- The basic design of this lesson supports ELLs with opportunities to plan and orally process their scientific drawings and captions with peers.
- ELLs may find it challenging to understand the reason they are only writing words and phrases on their notecards as opposed to complete sentences. It might also be challenging for them to generate appropriate words and phrases for their notes to later extrapolate into complete sentences as they give their oral presentations. Model using both effective and ineffective notes to give a presentation. Invite students to notice which words and phrases are most helpful and least helpful for recalling and sharing information (see Meeting Students’ Needs column).

Levels of support

For lighter support:

- During Work Time A, invite a student to model writing a notecard for the class.

For heavier support:

- During Work Time A, provide students with notecards with one or two pre-written notes to model how the notes should look.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** Continue to support comprehension by activating prior knowledge and scaffold connections for students. Continue to provide a visual display of questions and student responses on a chart or board during discussions.
- **Multiple Means of Action & Expression (MMAE):** Continue to be aware that while holding high expectations is important, sometimes these expectations can raise student anxiety. Continue to emphasize the importance of process and effort by discussing how even when you try your best to write neatly, you can sometimes make a mistake, and that is okay.
- **Multiple Means of Engagement (MME):** Continue to provide prompts and sentences frames for those students who require them to be successful in peer interactions and collaboration. Also, support students in sustaining effort and/or attention by restating the goal of the activity.

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

New:

- add details, presentation, oral, approaching (L)

Review:

- caption, noun, verb, illustration, notes, model, introduction, secret, reveal (L)

Materials

- ✓ “Capture the Caption!” song (for teacher reference; one to display)
- ✓ Bee photographs #1-5 (from Unit 2, Lessons 5-6; one per pair and one to display)
- ✓ Captions for bee photographs #1 and #3 (one per pair and one to display)
- ✓ Oral Presentation Notecards: Bee Model (one set to display)
- ✓ Oral presentation notecards (one set per student)
- ✓ Sandwich bag (one 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)
- ✓ What Researchers Do anchor chart (begun in Unit 1, Lesson 2)
- ✓ Scientific Drawings and Captions Template: Bee Model (from Lesson 1; one to display)
- ✓ Scientific Drawings anchor chart (begun in Unit 2, Lesson 3)
- ✓ Scientific Drawings anchor chart (begun in Unit 2, Lesson 3; example, for teacher reference)
- ✓ Scientific Drawings and Captions Template (from Lesson 1; one per student)
- ✓ Pollinator photographs (from Lesson 1; one per student)
 - Butterflies and moths photographs #1-2 (from Lesson 1; one per student in the Butterflies and Moths group)
 - Wasps and flies photographs #1-2 (from Lesson 1; one per student in the Wasps and Flies group)
 - Beetles photographs #1-2 (from Lesson 1; one per student in the Beetles group)
- ✓ Plants and Pollinators Word Wall (begun in Unit 1, Lesson 3)

Opening

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

- Gather students whole group.
- Tell them that today they will play a matching game called Capture the Caption. Remind students that a *caption* is a text feature that describes an image in a variety of texts. Share that the purpose of this game is to help students produce excellent captions for their scientific drawings of plants and pollinators.
- Display the “**Capture the Caption!**” song and introduce the lyrics and tune to students. Invite them to sing along chorally to the tune of “Row, Row, Row Your Boat.”
- Briefly review the definitions of nouns, verbs, and using complete sentences, confirming that their goal is to speak using complete sentences during the oral presentations at the upcoming Celebration of Learning!
- Display **bee photograph #1** and **captions for bee photograph #1**, and model matching the best caption to the picture:
 - Share that while all of the captions could relate to the photograph, only one of them is the best match because it most clearly describes what is happening in the photograph.
 - Read the captions for bee photograph #1 aloud, thinking aloud about why “the bee pollinates the flower” is the best match (it clearly describes what is happening in the photograph).
- Display **bee photograph #2** and model producing a caption that matches the photograph. Think aloud while making observations and writing a caption that matches the photograph. (Example: The bee has landed on the white flower.)
- Display bee **photograph #3** and **captions for bee photograph #3**.
- Turn and Talk:

“Which caption best matches this photograph? Why do you think so?” (The bee eats nectar on the flower.)

- Refocus whole group and confirm that this is the best caption because it clearly describes what is happening in the photograph.
- Display bee **photograph #4**.
- Turn and Talk:
“What caption would you add to this photograph?” (Responses will vary, but may include: The bee landed on the yellow pollen. The bee is eating nectar. The bee has yellow pollen on its body.)
- Refocus whole group and share responses.
- Confirm that this work helps students create captions that match their scientific drawings, and that this will help create a high-quality presentation for the Celebration of Learning!

Meeting Students' Needs

- For ELLs and students who may need additional support with language: (Clarifying Grammar: Complete Sentences) Explain that a complete sentence has a *subject* and a *predicate*. The subject tells who or what the sentence is about, and the predicate tells what the person or thing does or gives information about them. Display examples of sentence fragments and ask students why they are not complete sentences. (MMR)
- For ELLs and students who may need additional support with visual processing: (Reading Aloud) Read aloud or invite students to read aloud the captions under each photograph as students determine which captions best match each photograph. (MMR)

Work Time

A. Modeling Writing Notes: Oral Presentation Notecards #1–2 (20 minutes)

- Refocus whole group.
- Direct students' attention to the posted learning targets and read the first one aloud:
“I can write notecards #1 and #2 for my oral presentation using information from the pollinator texts and My Pollinator Writing booklet.”
- Remind students that yesterday they read informational texts to learn about two plants that their pollinator helps grow. Tell them that today they will begin writing notecards 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.
- Tell students that researchers can use notes for different purposes. Remind them that in Unit 2, they took notes from texts to remember what they read and learned about pollinators.
- Review the definition of *notes* (short messages that record some information or a comment).
- Tell students that researchers can also write notes to prepare for an oral presentation. Explain that the purpose of writing notes for an oral presentation is to remind them of what they would like to say about their learning.

- Display the **Oral Presentation Notecards: Bee Model**, with notecards #1–2, and orient students to the content and purpose of each notecard:
 - Notecard #1: Introduce your flower, fruit, or vegetable.
 - Notecard #2: Reveal the secret—your pollinator!
- Referring to the displayed notecards, read each one aloud. Point out that these notes, like the ones students wrote in Unit 2, are a few words or phrases.
- Analyze the meaning of each note. Say:
 - “Notecard #1 says, ‘Introduce your fruit, vegetable, or flower. Name it and share an interesting fact or why it is important: apples/Sentence Starter: apples are important to be me because ... use to make muffins.’”
 - “Notecard #2 says, ‘Reveal your pollinator. The secret behind the apple is ... bees! This is how bees help the apple flower.’”
- Ask:
 - *“What do these mean?” (They introduce the apple, tell why it is important, and reveal the secret of the bees that help apples grow.)*
 - *“What makes these high-quality work?” (They have all the information needed to present notes that are easy to read.)*
- Remind students that they have chosen one flower, fruit, or vegetable from the pollinator texts and they began drawing it in Lesson 1.
- Distribute oral **presentation notecards** and **sandwich bags**, and transition students to workspaces.
- Invite students to use their **pollinator texts** and **My Pollinator Writing booklet** to write their notes for notecards #1 and #2.
- Circulate to support students as they write their notes, reminding them to write in words and phrases to help them remember the important information they would like to say. Observe for specific, positive feedback to offer about their work and effort as they write notes.
- When 1 minute remains, provide brief directions for cleanup and invite students to move like their favorite pollinator to the whole group area.

Meeting Students' Needs

- For ELLs: (Generating Options: Notes) Invite students to generate different ways to introduce their fruits, flowers, or vegetables. Record and display possible notes they could write. (Examples: Fruit is famous because ____; vegetables can be found in the dish ____.)
- For ELLs and students who may need additional support with language: (Modeling and Thinking Aloud: Writing Words and Phrases) Display a complete sentence that contains useful information to share during the oral presentation. Ask:
 - *“What words and phrases in this sentence will help me remember to share this information?”*
- Underline key words and phrases and model transferring them to notecards. (Example: “The secret behind apples is pollinators!”) (MMR)

Work Time

B. Scientific Drawings and Captions: Adding Details of the Plant and Pollinator (25 minutes)

- Refocus whole group.
- Offer students specific, positive feedback on their work and effort to analyze the model notes about bees and in writing their own notes for their oral presentations.
- Direct students' attention to the **What Researchers Do anchor chart** and review the idea that scientists use models to explain an idea.
- Review the definition of a *model* (a small copy of something).
- Remind students that, in the previous lesson, they started working on 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 create a scientific drawing and write a caption to show my pollinator feeding at a flower."
- Display the **Scientific Drawings and Captions Template: Bee Model** for students and confirm that this is the model they will create.
- Orient students to the drawing and captions.
- Share that today students will create a scientific drawing and write a caption for the second column, which will show their pollinator feeding at a flower.
- Using a total participation technique, invite responses from the group:
"What do you notice about drawing #2?" (The bee is on the apple flower.)
"What makes this high-quality work?" (Responses will vary, but may include: observations about the shape and size of the bee or flower, using details, careful coloring, only drawing what you see, and the arrangement of the bee on the flower.)
- Follow the routine from Work Time B of Lesson 1 to guide students through reviewing the new scientific drawing skill.
 - Direct students' attention to the **Scientific Drawings anchor chart** and briefly review it.
 - Read the new bullet:
"add details"
 - Define *add details* (including smaller parts that you can see).
 - Discuss how the details in the drawings help to make them more realistic (yellow pollen on the bee's leg, hair on the legs and body, long tongue to eat nectar, yellow pollen on the flower). Confirm why these details are important and why they contribute to high-quality work. Refer to the **Scientific Drawings anchor chart (example, for teacher reference)** as necessary.
 - Distribute the **Scientific Drawings and Captions Template** and invite students to orally process how they will create their scientific drawings with a partner.
 - Prompt students to take the following Materials and transition to their pre-determined workspaces. Once there, invite them to sit next to their partner from yesterday.

- My Pollinator Writing booklet
 - Point out the **pollinator photographs** already at their workspaces.
 - Invite students to begin scientific drawing #2.
 - After 10–12 minutes, refocus students whole group.
 - Point out and read aloud caption #2 on the Scientific Drawings and Captions Template: Bee Model.
 - Invite students to orally process the caption they will write with a partner.
 - Invite students to write their caption. Remind students to refer to the **Plants and Pollinators Word Wall** or their My Pollinator Writing booklet for spelling support as needed.
 - After 4–5 minutes, refocus students whole group.
 - Provide brief directions for cleanup and invite students to move like their favorite pollinator as they come back to the whole group meeting area.

Meeting Students' Needs

- For ELLs and students who may need additional support with activating prior knowledge: (Recalling Prior Work) Remind students that in yesterday's model, they drew their pollinators approaching a flower. Invite them to predict where they might draw their pollinators today. (MMR, MME)
- For ELLs and students who may need additional support with Vocabulary: (Clarifying Vocabulary) Discuss the meaning of the word *feeding* in the context of a pollinator *feeding* at a flower. Example:

“What do you think it means that a pollinator is feeding at a flower?” (eating; drinking the nectar) (MMR)
- For ELLs: (Sentence Frames: Heavier Support) Provide sentence frames to support writing.

Closing and Assessment

A. Reflecting on Learning (5 minutes)

- Refocus whole group.
- Offer students specific, positive feedback on their work and attention to detail in their scientific drawings.
- Referring to the posted learning targets, read the second one aloud:

“I can create a scientific drawing and write a caption to show my pollinator feeding at a flower.”
- Invite students to share their scientific drawing and caption #2 with an elbow partner.
- Think-Pair-Share:

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

- If productive, cue students to think about their thinking:
“How does creating scientific drawings add to your understanding of how we get the fruits, flowers, and vegetables we enjoy? I’ll give you time to think and discuss with a partner.” (Responses will vary.)
- Preview tomorrow’s work: continued preparation for oral presentations and drafting the final scientific drawing and caption!

Meeting Students’ Needs

- For ELLs and students who may need additional support with motivation: (Revisiting the Learning Targets) Revisit the learning target introduced in Work Time B. Ask students to give specific examples of how they worked toward achieving it in this lesson. Invite students to rephrase the learning target now that they have more experience creating scientific drawings and writing captions. (MME)