

Lesson 1: Reading Informational Texts to Draw and Write: Launching the Performance Task



- **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).
- **SL.2.1:** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.



Daily Learning Targets

- I can read to collect information about the relationship between a specific plant and pollinator. (RI.2.1, RI.2.5, RI.2.7)
- I can create a scientific drawing and write a caption to show my pollinator approaching a flower. (RI.2.5, W.2.7)

Ongoing Assessment

- In Work Time A, use the Reading Informational Text Checklist (RI.2.1, RI.2.5, RI.2.7) to track students' progress toward these reading standards (see Assessment Overview and Resources).
- During Work Time B, circulate as students work on the Scientific Drawings and Captions Template and notice if they use the resources available (photographs, informational text, My Pollinator Writing booklet) to inform their illustration and caption. (RI.2.1, RI.2.5, RI.2.7, W.2.7)

Agenda

1. Opening

- A. Revisiting the Module Guiding Questions and Launching the Performance Task (10 minutes)

2. Work Time

- A. Engaging the Reader: Informational Texts about Fruits, Flowers, and Vegetables (20 minutes)
- B. Scientific Drawing and Caption: Arrangement 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 lesson marks a pivot in the module as students use their knowledge about plants and pollinators (as well as the research skills they have built) to begin sharing what they have learned with others. In the Opening, students revisit the module guiding questions, reflecting on the secret behind the fruits, flowers, and vegetables they enjoy. Equipped with their knowledge about plants from Unit 1 and about pollinators from Unit 2, students use their research skills to collect information about a specific plant from an informational text. Students also create a scientific drawing (which will become a part of the Performance Task Poster) that shows their pollinator and a specific plant beginning the pollination process.
- In the Opening, students watch a 4-minute video entitled “Louie Schwartzberg: The Hidden Beauty of Pollination.” This invites students to remember the secret behind the fruits, flowers, and vegetables they enjoy (pollinators) and engages them in the content once again as they prepare to create their performance task.
- In Work Time A, students read an informational text about two plants that their pollinator helps grow. Using their knowledge about text features, students collect information about the plant from this text to use in their performance task. This text is also used as a resource when students draw the plant on the Scientific Drawings and Captions Template in Work Time B.
- 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 this lesson, students use their My Pollinator Writing booklet from Unit 2 as a resource while completing drawing and caption #1 on their Scientific Drawings and Captions Template.
- In Unit 2, students created several scientific drawings of a specific pollinator. In this lesson, students create a scientific drawing to show their pollinator approaching the flower of a specific plant.
- 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, research groups and partners may be challenged to organize the Materials and resources at their workspaces. Consider providing specific instructions to help students organize their workspaces. (Example: “Put your Scientific Drawings and Captions Template in the center of your workspace. To the right, place your My Pollinator Writing booklet. Put the photographs in the middle of the workspace so everyone in your research group can use them. Put your copy of the informational text next to your partner so you can share it.”)

Down the road:

- In Lessons 2–7, students will continue to build their scientific drawing skills as they complete the Scientific Drawings and Captions Template for their Performance Task Poster.

- In Lesson 2, students will begin to prepare the oral presentation portion of the performance task.
- In Lessons 10–12, students will be assessed on their progress toward SL.2.4 as they rehearse their oral presentation.
- In Lesson 13, students’ families and members of the school community will be invited to a Celebration of Learning so students can share their knowledge about the secret behind the fruits, flowers, and vegetables they enjoy.

In advance:

- Prepare:
 - A sample (four to six items) of real flowers, fruits, and vegetables for the Opening.
 - Technology necessary to play “Louie Schwartzberg: The Hidden Beauty of Pollination” in the Opening.
 - Print in color one copy of “Merci Beaucoup, Bees!” text (see supporting Materials)
 - Print in color other pollinator texts (enough for a third of the class for each text; see supporting materials)
- Pre-determine a workspace for the following research groups in Work Time B: two flies and wasps research groups, two butterflies and moths research groups, and two beetles research groups. Students will sit with their research group (including their partner from Work time A) to share copies of the pollinator texts and photographs as they complete drawing #1 and caption #1 on their Scientific Drawings and Captions Template.
- Prepare for the Celebration of Learning (Lesson 13) by inviting families and members of the school community to attend. Consider inviting students to create invitations to build excitement about sharing their learning with others.
- Pair students who researched the same pollinator(s) in Unit 2 for Work Time A (e.g., two students who researched butterflies and moths in Unit 2).
- Post: Learning targets; “Merci Beaucoup, Bees!”; 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.
- Opening: Set up “Louie Schwartzberg: The Hidden Beauty of Pollination.” Video. ted.com. March 2011. Web. 11 Nov. 2016. http://www.ted.com/talks/louie_schwartzberg_the_hidden_beauty_of_pollination?language=en
- Work Time B: Consider displaying the Scientific Drawings and Captions Template: Bee Model using a document camera or interactive white board so students can view the details of the drawing easily.

Supporting English Language Learners

Supports guided in part by CA ELD Standards 2.I.A.1, 2.I.B.6, 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 review the content of previous units to prepare them to work on their performance tasks.
- It may be difficult for ELLs to read and comprehend the pollinator texts independently during the time allotted. Consider providing additional time to read these texts during Work Time A. Consider grouping students into heterogeneous triads as they decipher these texts. For heavier support, assign some students the text that was modeled and previously read aloud, “Merci Beaucoup, Bees!”

Levels of support

For lighter support:

- Display a model Performance Task Poster during Work Time A. Note: The entire class examines a model in Lesson 11; preview that lesson and consider whether to show it to your ELLs in advance. This will help motivate students by providing a concrete example of the project toward which they will be working.
- During Work Time B, invite students to create sentence frames for students who need heavier support to use as they write captions.

For heavier support:

- During Work Time A, consider reading aloud one of the pollinator texts to a group of students who need heavier support.
- During Work Time B, distribute a copy of the Scientific Drawings and Captions Template with pre-written sentence frames for captions.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** In this lesson, students notice conventions of nonfiction text. Students need strong flexible thinking and metacognitive skills as they develop this knowledge. Provide scaffolds to support diverse abilities in using these skills, such as explicit highlighting of information in the text to guide students in new understandings.
- **Multiple Means of Action & Expression (MMAE):** Continue to support a range of fine motor abilities and writing needs by offering students options for drawing utensils and writing tools. Recall that varying tools for construction and composition supports students’ ability to express knowledge.
- **Multiple Means of Engagement (MME):** Continue to sustain engagement and effort by reminding students of the goal for the work they are doing in this lesson.

Vocabulary

Key:

- (L): Lesson-Specific Vocabulary
- (T): Text-Specific Vocabulary
- (W): Vocabulary Used in Writing

New:

- arrangement (L)

Review:

- model (L)

Materials

- Sample of real fruits, flowers, and vegetables (to display)
- “Louie Schwartzberg: The Hidden Beauty of Pollination” (video; play 3:15–7:30; see Technology and Multimedia)
- Module Guiding Questions anchor chart (begun in Unit 1, Lesson 1)
- My Pollinator Writing booklet (completed in Unit 2, Lesson 15; one per student)
- Pollinator texts:
 - “Merci Beaucoup, Bees!” (one to display)
 - “Forever Grateful, Flies and Wasps!” (enough for a third of the class)
 - “Thanks a Bunch, Beetles!” (enough for a third of the class)
 - “¡Muchas Gracias, Butterflies and Moths!” (enough for a third of the class)
- What Researchers Do anchor chart (begun in Unit 1, Lesson 2)
- Scientific Drawings and Captions Template: Bee Model (one to display)
- Scientific Drawings anchor chart (begun in Unit 2, Lesson 5)
- Scientific Drawings anchor chart (begun in Unit 2, Lesson 5; example, for teacher reference)
- Scientific Drawings and Captions Template (one per student)
- Pollinator photographs (from Unit 2, Lesson 8; one per student)
 - Butterflies and moths photographs #1–2 (one per student in the Butterflies and Moths group)
 - Wasps and flies photographs #1–2 (one per student in the Wasps and Flies group)
 - Beetles photographs #1–2 (one per student in the Beetles group)
- Pencil (one per student)
- Plants and Pollinators Word Wall (begun in Unit 1, Lesson 3)

Opening

A. Revisiting the Module Guiding Questions and Launching the Performance Task (10 minutes)

- Gather students in the whole group meeting area.
- With excitement, display a **sample of real fruits, flowers, and vegetables**.
- Think-Pair-Share:
 - *“What do these fruits, flowers, and vegetables have to do with plants and pollinators?” (Responses will vary, but may include: Pollinators help make them grow; plants grow fruits, flowers, and vegetables; pollination helps these things to grow.)*
- If productive, cue students to agree or disagree and explain why:
 - *“Do you agree or disagree with what your classmate said? Why? I’ll give you time to think.”*
- Confirm that pollinators help plants grow fruits, flowers, and vegetables.
- Tell students they will now watch a video clip to learn the secret behind fruits, flowers, and vegetables.
- Play **“Louie Schwartzberg: The Hidden Beauty of Pollination.”**
- Turn and Talk:
 - *“What did you notice in this video?” (Responses will vary, but should include ideas about the pollinators and plants in the video.)*
- Direct students’ attention to the **Module Guiding Questions anchor chart** and read it aloud:
 - “How do we get the fruits, flowers, and vegetables we enjoy?”
 - “How do we become researchers and share our learning?”
- Remind students that they have been learning about the secret behind fruits, flowers, and vegetables.
- Invite students to make a “drumroll” sound by patting their legs and join in as you say the secret aloud together: “The secret behind the fruits, flowers, and vegetables we enjoy is ... pollinators!”
- Review the performance task: Students will use their informational writing about a pollinator to create an oral presentation and presentation poster board to share their learning with their families and members of the school community at a Celebration of Learning.
- Invite students to “buzz like a bee” if they are ready to begin!

Meeting Students’ Needs

- For ELLs and students who may need additional support with comprehension: (Processing Video) Invite students to orally process what they observed in the video with a partner. (MMR, MMAE)

Work Time

A. Engaging the Reader: Informational Texts about Fruits, Flowers, and Vegetables (20 minutes)

- Direct students' attention to the posted learning targets and read the first one aloud:
"I can read to collect information about the relationship between a specific plant and pollinator."
- Remind students that they researched and wrote about a pollinator in Unit 2. Clarify that his target states that students will read to collect information about a specific plant that this pollinator helps grow.
- Distribute students' **My Pollinator Writing booklet** and invite them to reread their booklet quietly.
- After students have finished reading, refocus whole group.
- Share that now students will read an informational text about their pollinator containing information about specific plants that the pollinator helps grow.
- Display **"Merci Beaucoup, Bees!"** and read the title aloud.
- Point out that two of the texts, "Merci Beaucoup, Bees" and "¡Muchas Gracias, Butterflies and Moths!" have titles in different languages. Invite students who may know these languages to identify each language and share the translations of the titles in English.
- Orient students to the two columns, explaining that this text contains information about a few plants that bees pollinate: apple trees and tomato plants.
- Briefly review the text features included in the text: title, captions, and labels.
- Share that now students will read a text about their own pollinator with a partner from their Unit 2 research group, and then they will choose one plant from that text that they would like to include in their performance task.
- Move students into pairs. Distribute copies of **"Forever Grateful, Flies and Wasps!"**; **"Thanks a Bunch, Beetles!"**; and **"¡ Muchas Gracias, Butterflies and Moths!"**
- Instruct students to read their informational text with their partners.
- After about 2–3 minutes, refocus whole group.
- Turn and Talk:
"What was the text about?" (plants that my pollinator pollinates; fruits, flowers, or vegetables that my pollinator helps to grow)
"What is one new piece of information you learned from this text?" (Responses will vary, but should include specific information from the text.)
"What text features helped you learn new information in the text?" (title, captions, and/or labels)
- Prompt students to look at the text again and think about which plant they would like to include in their performance task.
- Invite students to point quietly to their chosen plant, assuring them that it is fine for both partners to select the same plant.

- With excitement, share that soon students will begin creating scientific drawings and captions for the performance task.

Meeting Students' Needs

- For ELLs: Mini Language Dive. "I can read/to collect information/**about a specific plant and pollinator.**"
 - Deconstruct: Discuss the sentence and each chunk. Language goals for focus structure:
 - "What?" / Meaning: The topic of the information we collect is a plant and pollinator. (prepositional phrase)
 - *specific*: This describes the plant and pollinator and tells us we will each collect information about just one plant and just one pollinator. (adjective)
 - *and*: This joins *plant* and *pollinator*; also, this connects the nouns with the same adjective, *specific*. (conjunction)
 - Reconstruct: Reread the sentence. Ask:
 - "Now what do you think the sentence means?"**
 - "How does this sentence help you understand what we will do in this lesson?"**
 - Practice: I can read to collect information about ____ [specific plant] and ____ [specific pollinator]. (tomato plants; bees) Ask:
 - "Can we divide this sentence into two or more sentences? How?"**
- For ELLs and students who may need additional support with comprehension: (Annotating a Model: Text Features) When reviewing the text features in "Merci Beaucoup, Bees!" write the name of each text feature on a sticky note and post each sticky note next to its corresponding text feature. (MMR)

Work Time

B. Scientific Drawing and Caption: Arrangement of the Plant and Pollinator (25 minutes)

- 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).
- Share that students will create 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 approaching a flower."**
- Display the **Scientific Drawings and Captions Template: Bee Model** and confirm that this is a part of the Performance Task Poster that students will assemble later in Unit 3.
- Orient students to the scientific drawings and captions.
- Share that today students will draw and write a caption for the first column, which will show their pollinator approaching the flower.

- Using a total participation technique, invite responses from the group:
“What do you notice about drawing #1?” (The bee is flying to the apple flower.)
- Direct students’ attention to the **Scientific Drawings anchor chart** and briefly review it.
- Ask:
“What makes this drawing high-quality work?” (Responses will vary, but should include observations about the shape and size of the bee or flower, using details, careful coloring, and only drawing what you see.)
- Read aloud the new bullet:
 - “Think about arrangement.”
- Define *arrangement* (group of things that are put in order). Refer to the **Scientific Drawings anchor chart (example, for teacher reference)** as necessary.
- Using a total participation technique, invite responses from the group:
“In drawing #1, how are the bee and the flower arranged?” (The bee is facing the flower.)
- Confirm that the bee is facing the flower because it wants to approach it and drink nectar, and this also makes drawing #1 high-quality work.
- Distribute the **Scientific Drawings and Captions Template**.
- Turn and Talk:
“For your own drawing #1, how will you arrange your pollinator and flower?” (My pollinator will be facing the flower.)
“For your own drawing #1, describe what you plan to draw. Be sure to include both your pollinator and your plant.” (Responses will vary, but should include a description of the plant and pollinator.)
- Prompt students to take their My Pollinator Writing booklet and one of the following Materials, and transition to their pre-determined workspaces, sitting next to their partner from Work Time A:
 - “Forever Grateful, Flies and Wasps!”
 - “Thanks a Bunch, Beetles!”
 - “¡Muchas Gracias, Butterflies and Moths!”
- Once all students are settled next to their partner, point out the **pollinator photographs** already at their workspaces.
- Invite students to begin creating drawing #1 on their Scientific Drawings and Captions Template using a **pencil** and the pollinator photographs. As students work, circulate and support them in using the resources. Also, refer students to the Scientific Drawings anchor chart and Scientific Drawings and Captions Template: Bee Model as needed.
- After 10–12 minutes, refocus whole group.
- Remind students that they looked closely at the model of the scientific drawing and then created their own. Now they will read a caption to match the drawing and then write their own caption.
- Referring to the Scientific Drawings and Captions Template: Bee Model, read caption #1 aloud:
 - “A bee is flying to an apple tree to eat nectar.”

- Remind students that the caption is a sentence that describes what is happening in the drawing.
- Turn and Talk:
“Tell your partner what you plan to write for caption #1. Be sure to include both your pollinator and your plant.” (Responses will vary, but should include a sentence describing the pollinator approaching the plant.)
- Invite students to write caption #1 on their Scientific Drawings and Captions Template. Remind them that they can 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 come back to the whole group meeting area.

Meeting Students' Needs

- For ELLs and students who may need additional support with Vocabulary: (Clarifying Vocabulary) Clarify the meaning of *approaching*. Invite students to generate sentences using concrete examples from their lives. (MMR, MME)
- For ELLs and students who may need additional support with comprehension: (Providing Non-examples) Sketch pictures of a pollinator in different positions and arrangements in relation to a flower. Ask students to identify which sketch shows the pollinator approaching the flower and why. (MMR)
- For ELLs and students who may need additional support with written expression: (Sentence Frames: Heavier Support) Provide sentence frames to support writing. (Example: A bee is ____ to the ____.) (MMAE)

Closing and Assessment

A. Reflecting on Learning (5 minutes)

- Direct students' attention to the What Researchers Do anchor chart.
- Think-Pair-Share:
 - *“How did you use your research skills as you began creating your performance task today?” (used a model, collected information from texts, observed closely, shared what I learned through writing)*
 - *“What did these skills help you learn about plants and pollinators?” (Responses will vary, but should be related to facts from informational texts.)*
- If productive, cue students to think about their thinking:
 - *“What habits of character helped you succeed in this task? I’ll give you time to think and discuss with a partner.” (Responses will vary.)*
- Refocus students whole group and invite several students to share their responses.
- Preview tomorrow’s work by sharing that students will continue creating their Scientific Drawings and Captions Template and will also begin preparing their oral presentation!

Meeting Students' Needs

- For students who may need additional support with memory: Consider displaying a list of the activities in this lesson for students to use as a reference in preparation for the Think-Pair-Share. (MMAE)