

Lesson 4: Reading Informational Texts: What Are the Parts of a Plant?



- **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.2.2:** Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.
- **RI.2.4:** Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.
- **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.2.6:** Identify the main purpose of a text, including what the author wants to answer, explain, or describe.
- **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.2.5:** Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.



Daily Learning Targets

- I can sketch and label a scientific drawing of a plant. (W.2.7)
- I can answer questions using information from the text to learn about the parts of a plant. (RI.2.1, RI.2.2, RI.2.4, RI.2.5, RI.2.6, RI.2.7)

Ongoing Assessment

- During the Opening, circulate and monitor students' ability to sketch a scientific drawing of a plant. (W.2.7)
- During the focused reading in Work Time A, continue to use the Reading Informational Text Checklist to track students' progress toward RI.2.1, RI.2.2, RI.2.3, RI.2.4, RI.2.5, RI.2.6, and RI.2.7 (see Assessment Overview and Resources).
- After Work Time B, collect students' Plants and Pollinators research notebook, Part I to review page 4 and measure progress toward RI.2.5, RI.2.7, and W.2.7.
- During Work Time C, listen for students to provide information for the Plant Frayer Model anchor chart using information from the text *Seed to Plant*. (W.2.7, SL.2.5)

Agenda

1. Opening

A. Making Observations: Plant Drawings (10 minutes)

2. Work Time

A. Focused Reading: *Seed to Plant*, Pages 8–9 (20 minutes)

B. Engaging the Writer: Adding Labels to Plant Drawings (10 minutes)

C. Shared Writing: Plant Frayer Model (15 minutes)

3. Closing and Assessment

A. Reflecting on Learning (10 minutes)

Teaching Notes

Purpose of lesson and alignment to standards:

- In this lesson, students continue to build knowledge about how plants grow and survive by learning about the parts of a plant. As in Lesson 3, students read an excerpt from *Seed to Plant* to gain information about the parts of a plant. In this focused reading session, students continue to use various text features to gain information from the text efficiently.

How this lesson builds on previous work:

- This lesson follows a similar structure to Lesson 3, inviting students to participate in a focused reading session, engage in a hands-on experience to supplement learning about the topic, and add information to the Frayer Model anchor chart.
- As in Lesson 3, students revisit the Text Features anchor chart and add additional text features (diagrams and labels) to it.
- Lessons 1–3 featured built-out instruction for Goal 4 Conversation Cues. Moving forward, this will only appear as reminders after selected questions. Continue using Goals 1–4 Conversation Cues to promote productive and equitable conversation. Refer to the Module 1 Appendix for additional information on Conversation Cues.
- In this lesson and throughout Modules 3 and 4, ELL supports and the Mini Language Dives within the Meeting Students’ Needs column will continue to be labeled and condensed. The Language Dives follow a new format. For more information, see the Teaching Notes in Lesson 1.

Areas in which students may need additional support:

- During the Opening, students observe and sketch a plant. Some students may be challenged by the concept of a sketch and will want to provide greater detail in their drawing than time allows. For those students, consider presenting the activity as a playful challenge: “Can you sketch a plant in 2 minutes?” or inviting them to make their sketch on a white board using a white board marker.

Down the road:

- In Lesson 6, students will take the Unit 1 Assessment to measure their progress toward RI.2.1, RI.2.2, RI.2.3, RI.2.4, RI.2.5, RI.2.6, and RI.2.7.

In advance:

- Prepare the Plants and Pollinators Word Wall cards for the words *roots*, *stem*, and *leaves*.
- Gather four live plants to use for observational drawings during the Opening. Consider choosing a selection of plants that include variety (e.g., different kinds of leaves, some with flowers) if possible.
- Pre-determine four workspaces for students to go to for sketching their observational drawing during Opening A.
- Pre-divide the class into two groups to work with the Plant Frayer Model anchor chart in Work Time C.
- Strategically partner students for focused reading during Work Time B, partnering students with varying levels of reading proficiency together.
- 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.B.6, and 2.I.C.10

Important points in the lesson itself

- The basic design of this lesson supports ELLs with opportunities to ask and answer questions about plants and to use text features to find information.
- ELLs may find it challenging to comprehend and answer the pattern of questioning (“How does the [text feature] help the reader?”) because it may sound abstract. Restate and rephrase these questions to support comprehension. (Examples: “How does this help me understand...? How did I know...?”)

Levels of support

For lighter support:

- During the Mini Language Dive, challenge students to generate questions about the sentence before asking the prepared questions. (Example: “What questions can we ask about this sentence? Let’s see if we can answer them together.”)

For heavier support:

- During Work Time B, consider working with individual students, or a small group of students who need heavier support, to complete some of the labels on page 4 of the research notebooks.
- During Work Time C, consider placing students who need heavier support in the group assigned to generate visuals. Engaging with a less challenging task may scaffold student participation with the Frayer model.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** To facilitate effective learning during this lesson, ensure that all students have access to the directions in each session and feel comfortable with the expectations. Continue to vary the ways in which you convey expectations for each activity or task.
- **Multiple Means of Action & Expression (MMAE):** During Work Time A, some students may benefit from sensory input and opportunities for movement while they are sitting. Provide options for differentiated seating.
- **Multiple Means of Engagement (MME):** As students label the parts of their sketched plant, support sustained motivation and effort by providing mastery-oriented feedback by providing feedback that is frequent, timely, and specific to students as they label their drawing. (Example: “I can see that you are working hard to use the word bank to spell each word correctly. Using resources to spell correctly helps us become better writers, so keep it up!”)

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

New

- scientific drawing, diagram, label, roots, stem, leaves (L)

Review

- table of contents, headings, captions (L)

Materials

- ✓ What Researchers Do anchor chart (begun in Lesson 2)
- ✓ Plant #1 (one to display; used by the teacher to model observational drawing)
- ✓ Plants and Pollinators research notebook, Part I (begun in Lesson 2; page 4; one per student and one to display)
- ✓ Pencils (one per student and one for teacher modeling)
- ✓ Plant #2 (one to display; used by students to create an observational drawing)
- ✓ Plant #3 (one to display; used by students to create an observational drawing)

- ✓ Plant #4 (one to display; used by students to create an observational drawing)
- ✓ Plants and Pollinators research notebook, Part I (from Lesson 2; example, for teacher reference)
- ✓ Text Features anchor chart (begun in Lesson 3; added to during Work Time B; see supporting Materials)
- ✓ *Seed to Plant* (from Lesson 3; one per student and one to display; for teacher read-aloud)
- ✓ Reading Informational Text Checklist (RI.2.1, RI.2.2, RI.2.3, RI.2.4, RI.2.5, RI.2.6, and RI.2.7) (for teacher reference; see Assessment Overview and Resources)
- ✓ Text Features anchor chart (begun in Lesson 3; example, for teacher reference)
- ✓ Plant Frayer Model anchor chart (begun in Lesson 2; added to during Work Time A; see supporting Materials)
- ✓ Plant Frayer Model anchor chart (begun in Lesson 2; example, for teacher references)
- ✓ Sticky notes (two to three per pair)
- ✓ Plants and Pollinators Word Wall card (new; teacher-created; three)
- ✓ Plants and Pollinators Word Wall (begun in Lesson 3; added to during Work Time C; see Teaching Notes)

Opening

A. Making Observations: Plant Drawings (10 minutes)

- Direct students' attention to the posted learning targets and read the first one aloud:
"I can sketch and label a scientific drawing of a plant."
- Share that a *scientific drawing* is a drawing that scientists create based on observing something closely and recording what they see.
- Direct students' attention to the **What Researchers Do anchor chart** and read the fourth bullet:
 - "Observe and record."
- With excitement, share that students will now practice their research skills by closely observing and drawing a real plant.
- Display **Plant #1**.
- Using a total participation technique, invite responses from the group:
"What do you notice when you look at this plant? What shapes or colors do you notice?"
(Responses will vary, but should be related to the physical features of the plant.)
- Display page 4 of the **Plants and Pollinators research notebook, Part I**.
- Model beginning a scientific drawing of the plant using a **pencil**:
 - Sketch the basic shape of the plant.
 - Fill in a few lines and/or details, paying attention to the plant's parts (stem, leaves).
- Remind students that a sketch should be a quick and simple drawing, and they should not add labels to their drawings yet.

- Transition students to four pre-determined workspaces and distribute their Plants and Pollinators research notebook, Part I.
- Invite students to open to page 4 and draw Plant #1, **Plant #2**, **Plant #3**, or **Plant #4** on page 4 of their Plants and Pollinators research notebook, Part I.
- Circulate to support students and consider prompting them with questions such as: “What shapes and lines do you notice when you look closely at the plant?” Refer to the **Plants and Pollinators research notebook, Part I (example, for teacher reference)** as necessary.
- After 5–6 minutes, signal students to stop working and transition back to the classroom whole group gathering area. Collect students’ research notebooks.

Meeting Students’ Needs

- For ELLs: (Discussing Vocabulary) Ask students about the word *record*. Examples:
 - “*What do you think it means to record something?*” (to write or draw so you can keep the information)
 - “*What are some different ways we can record something?*” (write; draw; enter it into the computer)
 - “*Can you guess another word we use to call information we record?*” (a record)
- For students who may need additional support with oral language and processing: Allow ample wait time during the discussion. (MMAE, MME)

Work Time

A. Focused Reading: *Seed to Plant*, Pages 8–9 (20 minutes)

- Direct students’ attention to the posted learning targets and read the second one aloud:
 - “*I can answer questions using information from the text to learn about the parts of a plant.*”
- Direct students’ attention to the What Researchers Do anchor chart and remind students that researchers “Ask and search for answers to questions.”
- Direct students’ attention to the posted **Text Features anchor chart** and briefly review the text features students explored in Lesson 3: *table of contents, headings, captions*.
- Display page 3 of *Seed to Plant*. Consider using the **Reading Informational Text Checklist** (RI.2.1, RI.2.2, RI.2.5, RI.2.6, and RI.2.7) during this focused reading session to assess students’ progress (see Assessment Overview and Resources).
- Invite students to listen for a chapter title that sounds like it might contain information about plants and show a quiet thumbs-up when they hear it.
- Read the first six chapter titles aloud.
- Confirm that the chapter entitled “Parts of a Plant” probably contains this information.
- Using a total participation technique, invite responses from the group:
 - “*What page is ‘Parts of a Plant’ located on?*” (page 8)
- Invite all students to open to page 8 of their text.

- Display pages 8–9 of *Seed to Plant* and orient students to the diagram of a plant on page 9. Share that a picture with labels is called a *diagram*.
- Using a total participation technique, invite responses from the group:
“What information does this diagram give you?” (what the parts of a plant look like, the names of the parts of a plant)
- Confirm that this diagram names the parts of a plant.
- Read the fourth text feature listed on the Text Features anchor chart aloud: “Diagram.”
- Using a total participation technique, invite responses from the group:
“How does a diagram help the reader?” (shows a picture of the parts of something or how something works)
- Add “a picture that shows the parts of something or how something works” to the fourth bullet on the Text Features anchor chart. Refer to the **Text Features anchor chart (example, for teacher reference)** as necessary.
- Point to the chapter title and invite a student to read it aloud: “Parts of a Plant.”
- Using a total participation technique, invite responses from the group:
“What do you think this chapter will contain information about?” (Responses will vary, but may include: what the parts of a plant are, how the parts of a plant work)
- If productive, cue students to explain why a classmate came up with a particular response:
“Who can explain why your classmate came up with that response?”
- Remind students that this heading tells the reader what the section is about.
- Invite partners to read pages 8–9 of the text together, making a tent with their arms when they are finished.
- Pointing to the labels on page 8 of the text, explain that a *label* names a part of something.
- Turn and Talk:
“What do the labels in the diagram on page 8 name?” (how a person’s body part is like a plant’s part)
“What do the labels on page 9 name?” (the parts of a plant)
- Referring to the Text Features anchor chart, read the fifth text feature listed on the Text Features anchor chart aloud: “Labels.”
- Using a total participation technique, invite responses from the group:
“How does a label help the reader?” (names a part of something)
- Add “names a part of something” to the fifth bullet on the Text Features anchor chart. Refer to the Text Features anchor chart (example, for teacher reference) as necessary.
- Turn and Talk:
“What do roots do to help the plant?” (hold it in the ground)
“What does the stem do to help the plant?” (helps the plant stand up tall)
“What do leaves do to help the plant?” (soak up sunlight)

- Confirm that a plant's parts help it to survive and grow.
- Using a total participation technique, invite responses from the group:
“What is one thing you learned about plants from this text?” (Plants have roots, stems, and leaves; roots hold the plant in the ground, the stems helps the plant stand up, and the leaves get sunlight for the plant.)
- Encourage students that they are working hard to read like researchers as they continue to learn about plants and their parts!

Meeting Students' Needs

- For ELLs: Mini Language Dive. “Leaves/soak up the sunlight.”
 - Deconstruct: Invite students to discuss the meaning of the sentence and grapple with the meaning of each chunk. Encourage extended conversation and practice with the focus structure in the highlighted chunk, keeping the following language goals in mind:
“What?”/Meaning: soak up the sunlight is the action that the leaves do. (verb phrase)
soak + up: “What?”/Meaning: soak up means to collect and hold; absorb. Suggested questions: “Why do the leaves soak up the sunlight? What, in the sentence, makes you think so?” “What is another way to say this chunk?” (collect sunlight; absorb nutrients from the sun). (phrasal verb)
 - Practice: ____ soak up the _____. (Sponges; water)
 - Reconstruct: Reread the sentence. Ask:
“Now what do you think the sentence means?”
“How does your understanding of this sentence add to your understanding of how leaves help plants?”
 - Practice: Consider inviting students to pretend their arms are like leaves. Invite them to narrate what their arms are doing using the sentence structure. Ask:
“What is another way to say this sentence?”
- For students who may need additional support with reading: Strategically pair students with a peer model who will support students' efforts at reading pages 8–9. (MME)

Work Time

B. Engaging the Writer: Adding Labels to Plant Drawings (10 minutes)

- Redirect students' attention to the posted learning targets and reread the first learning target:
“I can sketch and label a scientific drawing of a plant.”
- Redistribute students' Plants and Pollinators research notebook, Part I and pencils. Invite students to open to page 4.
- Display page 4 of the Plants and Pollinators research notebook, Part I and orient students to the directions.
- Read aloud the words listed in the Plant Parts Word Bank and confirm that students will now use these words to label the drawings they created in the Opening.

- Invite students to begin working on page 4. Allow students 5–6 minutes to work, circulating as needed to remind students to use labels in their drawing and referring students to the Plant Parts Word Bank as needed.
- After 5–6 minutes, refocus students whole group and invite them to share their sketches and labels with an elbow partner.
- For ELLs: (Sentence Frames: Lighter Support) Invite students to create sentence frames to support sharing their labels. Invite students who need heavier support to use the frames. (Example: “This part of the plant is _____. It helps the plant because _____.”)
- For students who may need additional support with Vocabulary: Provide scaffolding for the Plant Parts Word Bank by adding a quick sketch of each part next to the word as visual support. (MMR)

C. Shared Writing: Plant Frayer Model (10 minutes)

- Direct students’ attention to the **Plant Frayer Model anchor chart**.
- Remind students that yesterday they worked in groups to add information to several sections of this anchor chart.
- Display pages 8–9 of *Seed to Plant* and read them aloud for gist. Tell students that today they will be adding information about plant parts.
- Follow the same routine established in Lesson 3 to add information about plant parts onto the Plant Frayer Model anchor chart:
 - Briefly review the meaning of each section.
 - Divide the class into two sections: Characteristics and Visuals (tell students there won’t be new definitions or examples in this part of the text).
 - Move students into pairs and distribute *Seed to Plant* and **sticky notes**.
 - Allow students 2–3 minutes to reread and put a sticky note on information that matches their section.
 - Orient students to each section of the Plant Frayer Model anchor chart, inviting the group of students to share the information they marked in the text and recording it in the corresponding section.
- Show students the **Plants and Pollinators Word Wall cards** for *roots* (the part of the plant that grows under the ground; roots take in water and food, and they hold the plant in the soil); *stem* (the main part of a plant that supports the branches, leaves, and other parts); and *leaves* (a flat part of a plant or tree that grows from the stem or branch; leaves are usually green), and follow the same process established in Modules 1 and 2: provide their definitions, clap out their syllables, use them in a sentence, and place the Word Wall cards and pictures for them on the **Plants and Pollinators Word Wall**.

Meeting Students’ Needs (continued)

- For ELLs: (Whole Class Practice) Before dividing students into groups, consider working as a class to practice identifying evidence for one item on the Frayer model.
- For students who may need additional support with comprehension: Continue to prepare sticky notes with pre-written words from the text. As students read, they can match the characteristic or visual represented on the sticky note with the text. (MMR, MMAE)

Closing and Assessment

A. Reflecting on Learning (10 minutes)

- Follow the same routine from the Closing of Lesson 3 to guide students through reflecting on how they took initiative to learn new information about plants today.
 - Direct students’ attention to the What Researchers Do anchor chart and remind them that they took initiative as researchers today when they observed, sketched, and labeled a plant and added to the Plant Frayer Model anchor chart.
 - Invite students to think quietly to answer this question:
“You took initiative to learn new information about plants today. What is one thing you learned?” (Responses will vary.)
 - Instruct students to write a sentence to record what they learned on page 4 of their Plants and Pollinators research notebook, Part I.
 - Refocus whole group and invite students to share their sentence with an elbow partner.
 - Refocus whole group and review tomorrow’s work by sharing that students will continue to work as researchers to learn about plants and how they grow!

Meeting Students’ Needs

- For ELLs: (Recalling Language Dive) Invite students to recall the sentence they discussed during the Mini Language Dive. Encourage them to use language from the sentence as they discuss one thing they learned.
- For students who may need additional support with oral language and processing: Continue to pair students with strategic elbow partners to ensure that they have a strong, politely helpful partner to support their efforts as they share their writing. (MMAE)