

Lesson 5: Small Group Research: Reading and Taking Notes



CCS Standards

- **RI.K.1:** With prompting and support, ask and answer questions about key details in a text.
- **RI.K.2:** With prompting and support, identify the main topic and retell key details of a text.
- **RI.K.4:** With prompting and support, ask and answer questions about unknown words in a text.
- **W.K.7:** Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
- **W.K.8:** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
- **SL.K.1:** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
- **SL.K.1a:** Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
- **SL.K.1b:** Continue a conversation through multiple exchanges.
- **SL.K.3:** Ask and answer questions in order to seek help, get information, or clarify something that is not understood.



Daily Learning Targets

- I can research a text to answer a question using the words and pictures. (RI.K.1, RI.K.2, RI.K.4)
- I can describe my tree and what it needs using information from my research. (RI.K.1, RI.K.2, W.K.7, W.K.8, SL.K.1, SL.K.3)

Ongoing Assessment

- During Work Times B and C, continue to use the Reading Informational Text Checklist to track students' progress toward RI.K.1, RI.K.2, and RI.K.4 (see Assessment Overview and Resources).
- During Work Time C, use the Informational Writing Checklist to track students' progress toward W.K.7 and W.K.8 (see Assessment Overview and Resources).

Agenda

1. Opening

- A. Picture Tea Party Protocol: Tree Images (10 minutes)

2. Work Time

- A. Engaging the Researcher: Review Tree Texts (10 minutes)
- B. Reading to Research Trees: Tree Texts (20 minutes)
- C. Small Group Research: Tree: Small Group Notes (15 minutes)

3. Closing and Assessment

- A. Back-to-Back and Face-to-Face Protocol: Reflecting on Learning (5 minutes)

Teaching Notes

Purpose of lesson and alignment to standards:

- In this lesson, students become familiar with their research texts and begin the research process in small groups. They have some time to first explore and then discuss the text before explicitly reading the text to take small group notes.
- In Work Times B and C, students begin their small group research. Small groups are further divided into two pairs, with one pair researching and note-taking about what the tree looks like, and the other pair researching and note-taking about what the tree needs. Give the pairs in each small group the opportunity to choose whether they want to research what the tree looks like or what it needs. Consider using triads based on class size.
- The structure of Lesson 7 is similar to that of this lesson. Pay careful attention to the routines in this lesson in order to apply them in subsequent lessons.
- By researching trees, students continue to explore the Unit 3 guiding question: “What patterns can we observe in how living things meet their needs?” In this lesson, students research what a specific tree needs so that they will be able to speak to patterns among the needs that all trees have.

How this lesson builds on previous work:

- This lesson follows a similar structure to Lesson 2, allowing students to practice new research skills in a familiar and supported way.
- Similar to their work with the sugar maple, students complete research, writing, and an informational collage about their specific tree.

Areas in which students may need additional support:

- In Work Time B, students look through their tree text to find information to answer their research question. To provide additional support, create pre-determined pairs and triads with diverse reading abilities in mind and be prepared to define unfamiliar words for students. Also consider providing students with audio recordings to help them read the text.
- In Work Time B, the two pairs/triads within each small group chooses their research scope. This requires them to collaborate and work with the other pair/triad in their small group. Students may need support in negotiating these outcomes.
- To provide students with additional support, consider guiding a small group of students through the reading and researching process.

Down the road:

- This is the first in a series of five lessons that takes students through the research process and prepares them to complete their independent research writing for their performance task.
- In Work Times B and C, students choose their research scope and compile notes. After the lesson, verify that each small group has included all the important information in the text on their notes because they will be using them in Lessons 6 and 9 to participate in Science Talks, which serve as a speaking and listening assessment. It is okay if they do not complete this task independently; simply add the missing information to the Trees: Small Group Notes after the lesson.

In advance:

- Prepare:
 - Mystery images by printing them in color, if possible.
 - Living Things Word Wall card for *provide*.
 - Print and assemble two books per small group (see supporting Materials).
 - Audio recordings of yourself reading the tree texts for students who need additional support (optional).
 - Technology necessary to play audio recordings of yourself reading the tree texts (optional).
- Distribute Materials for Work Times A, B, and C at student workspaces.
- Pre-determine two pairs (or triads) within each specific tree small group for small group research purposes.
- Post: Learning targets and applicable anchor charts (see Materials list).

Technology & Multimedia

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

- Continue to use the technology tools recommended throughout Modules 1–2 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.
- Work Time B: Consider recording audio versions of the tree texts for students who may need additional support with their reading. Most devices (cellphones, tablets, laptop computers) come equipped with free video and audio recording apps or software.

Supporting English Language Learners

Supports guided in part by CA ELD Standards K.1.A.1, K.1.C.10, and K.2.C.6

Important points in the lesson itself

- The basic design of this lesson supports ELLs with opportunities to generate observations and questions about the images of the different trees they will be researching. Students build Vocabulary and fluency discussing content-specific knowledge as they make observations and pose questions in small groups about their assigned tree through processing informational text in the form of a tree text.
- In Work Time B, ELLs may find it challenging to read their tree text, process the information, and contribute to a small group discussion simultaneously. Consider allowing students to listen multiple times to the audio recording as they follow along with their tree text. It may be useful to stop the recording after each page to process. Encourage students to ask about any confusing or unknown words.

Levels of support

For lighter support:

- Before providing sentence frames or additional modeling during the Picture Tea Party Protocol, invite students to share the way they can talk about observations using a complete sentence, take turns, and be active listeners. Provide supportive frames and demonstrations only after students have grappled. Observe the areas in which they struggle to target appropriate support.

For heavier support:

- During Work Times A and B, observe closely equitable participation and engagement as students work together in small groups. If some students seem reserved or reluctant to share, sit and model asking and answering questions and sharing observations in that group. Celebrate risk-taking in participation.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** Continue to support students as they incorporate the most valuable information from photographs and texts into existing knowledge. Providing explicit cues or prompts supports students in attending to the features that matter most during the lesson. Activate background knowledge by previewing the questions you will ask during each activity.
- **Multiple Means of Action & Expression (MMAE):** Continue to support students in setting appropriate goals for their effort and level of difficulty expected.
- **Multiple Means of Engagement (MME):** Throughout this lesson, students have multiple opportunities to share ideas and thinking with classmates. Some may need support for engagement during these activities, so continue to encourage self-regulatory skills and help them anticipate and manage frustration by modeling what to do if they need help from their partners.

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

New:

- touches, underground, crumbly, shines, tiny, connected (T)

Review:

- pattern (L)
- some, bark, branches, water, sun, (T)

Materials

- ☒ Picture Tea Party Protocol anchor chart (begun in Module 2)
- ☒ Mystery images (one or two per student)
- ☒ Living Things Word Wall (begun in Unit 1, Lesson 1)
- ☒ Unit 3 Guiding Question anchor chart (begun in Lesson 1)
- ☒ Tree research questions (one to display)
- ☒ Tree texts (two or three per small group)
 - “Paper Birch” (one per pair in this small group)
 - “Live Oak” (one per pair in this small group)
 - “Quaking Aspen” (one per pair in this small group)
 - “Weeping Willow” (one per pair in this small group)
 - “Coast Redwood” (one per pair in this small group)
- ☒ “Sugar Maple” (from Lesson 2; one to display)
- ☒ Sticky notes (several per small group and two for teacher modeling)
- ☒ Tree texts (optional; audio recording; for students who need additional support)
- ☒ Sugar Maple: Class Notes (completed in Lesson 2, one to display)
- ☒ Paper (blank; several pieces per small group)
- ☒ Pencils (one per student)
- ☒ Crayons (class set; variety of colors per student)
- ☒ Tree: Small Group Notes (one per small group and one to display)
 - Coast Redwood: Small Group Notes (one per this small group)
 - Paper Birch: Small Group Notes (one per this small group)
 - Quaking Aspen: Small Group Notes (one per this small group)
 - Weeping Willow: Small Group Notes (one per this small group)
 - Live Oak: Small Group Notes (one per this small group)
- ☒ Glue sticks (one per pair)
- ☒ Tree: Small Group Notes (example, for teacher reference)
- ☒ Perseverance anchor chart (begun in Module 2)
- ☒ Back-to-Back and Face-to-Face Protocol anchor chart (begun in Module 2)

Opening

A. Picture Tea Party Protocol: Tree Images (10 minutes)

- Gather students whole group.
- Tell students they have done excellent work researching and writing about the sugar maple tree.
- Share that today is an exciting day because you have some mystery pictures to show them that will give them a clue about what they will be learning next.

- Tell students they are going to use the Picture Tea Party protocol to view the mystery images and that they will discuss their observations and questions with partners during the protocol. Remind them that they used this protocol in Lesson 1 and review as necessary using the **Picture Tea Party Protocol anchor chart**. (Refer to the Classroom Protocols document for the full version of the protocol.)
- Distribute the **mystery images** and guide students through the protocol.
- Invite students back to the whole group area and collect the mystery images.
- Using a total participation technique, invite responses from the group:
 - “What did you notice in your pictures?” (Responses will vary depending on the picture, but may include: I saw a tree with different color leaves or I noticed the tree had long branches that touched the ground.)*
 - “Did you see some things that were the same in the pictures you had and the pictures of your classmates?” (Everyone had trees.)*
 - “Did you see some things that were different in the pictures you had and the pictures of your classmates?” (Everyone’s trees looked different. Some of them had different colors.)*
- Focus students’ attention on the word *pattern* on the **Living Things Word Wall** and briefly review the definition (something that is the same and repeats over and over again).
- Using a total participation technique, invite responses from the group:
 - “Did you notice any patterns in the pictures you had and the pictures of your classmates?” (Every picture had a tree in it. All the trees had the same parts.)*
- 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.”*
- Inform students that the pictures they looked at have to do with a new question they will research and that the question has to do with patterns.
- Direct students’ attention to the **Unit 3 Guiding Question anchor chart** and read it aloud:
 - “What patterns can we observe in how living things meet their needs to live and grow?”*
- Tell students that they will look for patterns among the trees and how trees meet their needs by answering two different research questions. Display the **tree research questions** and read them aloud:
 - “What does your tree look like?”*
 - “What do trees need to live and grow?”*
- Inform students that during this unit, they will answer the question by reading texts, gathering information, writing and drawing, and discussion.
- Using a total participation technique, invite responses from the group:
 - “Based on the pictures you saw and what you have already learned, what do you think the trees need to live and grow?” (All of them need food.)*

Meeting Students' Needs

- For ELLs and students who may need additional support with comprehension: (Making Connections) Consider asking students which of the trees featured in the photographs they have seen before, and when and where they saw them. (MMR)

- For students who may need additional support with organizing ideas for verbal expression: Provide scaffolds as students share what they noticed in the pictures. (Examples: "What did you notice about the leaves? What did you notice about the branches?") (MMAE)

Work Time

A. Engaging the Researcher: Review Tree Texts (10 minutes)

- Refocus students whole group.
- Offer specific, positive feedback on their engagement during the Picture Tea Party protocol.
- Tell students that in a moment, they will transition back to their workspaces with their research groups, where they will explore new books to use in research and have the opportunity to share what they notice and wonder.
- Using a total participation technique, invite responses from the group:
"What should it look like when you are observing your research Materials for the first time?" (Look at the book carefully.)
"What types of things can you look for in your research Materials?" (to see what it is about, or look at the pictures and try to read some of the words.)
- Move students into pre-determined research groups and transition them to a workspace to begin observing their assigned **tree texts**. Tell them that they will have a couple of minutes to observe before you have them turn and talk with a partner about what they notice.
- While students are working, circulate to support them as necessary and take note of what students notice and wonder about the books.
- After about 5 minutes, stop students and tell them they will talk with a partner in their research group. After each turn and talk, select a few volunteers to share out.
- Turn and Talk:
"What did you notice about the books?" (Each one is all about one tree. It is like the "Sugar Maple" book.)
"What will you be able to learn from the books?" (what the tree needs; what animals eat from the tree)
"How will these books be helpful as we work on our performance task?" (They will help us create a collage of a tree because we know what it looks like.)

Meeting Students' Needs

- For students who may need additional support with planning: As students share responses during the discussion, record responses on a chart for visual reinforcement of what they will be doing during this research time. (MMR, MMAE)

Work Time

B. Reading to Research Trees: Tree Texts (20 minutes)

- Gather and refocus students whole group.
- Tell them that they have learned a lot about their texts by just looking at them. Now they will use them to research information about their specific tree.
- Direct students' attention to the posted learning targets and read the first one aloud:
"I can research a text to answer a question using the words and pictures."
- Tell students that in a moment, their small group will split up into pairs, and each pair will be responsible for reading their text and finding information to answer a specific question about their tree. Then they will come back together with their small group to share the information they learned.
- Remind students that they used a similar text to research the sugar maple tree. Display **"Sugar Maple"** and follow these steps to model where to find answers to the research question:
 - Read aloud the research question:
"What does your tree look like?"
 - Using a total participation technique, invite responses from the group:
"Where should you look in your text to find the answer to this question?" (Responses may vary, but should include: the photograph of the tree on the cover.)
 - Look through the "Sugar Maple" text to find the page students reference.
 - Read the page and mark the information with a **sticky note**.
 - Repeat this process with the second research question:
"What does your tree need to survive?"
- Move students into pre-determined pairs within each small group. Remind them that each pair will research a different question. Tell them it is important that both questions are answered, so before they start researching, every person in the small group needs to agree about what each is researching.
- Once all pairs have settled on a research question, point out the sticky notes already at students' workspaces and invite them to begin working.
- Circulate to support students as they read and research.
- Consider using tree texts (optional; audio recording; for students needing additional support) as necessary.
- After about 10 minutes, refocus whole group. Invite pairs to rejoin their research group and share the answer to their research question with the other pair.

Meeting Students' Needs

- For ELLs and students who may need additional support with motivation: (Summarizing the Target) Ask students to summarize and then to personalize the learning target. (MMR, MME)

Work Time

C. Small Group Research: Tree: Small Group Notes (15 minutes)

- Gather and refocus students whole group.
- Offer specific, positive feedback on their engagement during the small group research.
- Tell students that before they turn their research into a booklet for the informational collage, they need to take good notes. The notes will help them write and also help the people on the other team write about their tree.
- Direct students' attention to the posted learning targets and read the second one aloud:
"I can describe my tree and what it needs using information from my research."
- Display the **Sugar Maple: Class Notes** and remind students that they researched to answer a question about the sugar maple tree and then recorded the information with a picture and a label so it would be clear for everyone.
 - If necessary, show students that the information about how much water a sugar maple needs is on page 2 of "Sugar Maple" and how it matches the information in the student-created note on the Sugar Maple: Class Notes.
- Transition students to go back to their workspaces. Point out the **paper, pencils, and crayons** already there. Tell students they will now work with their partner or triad to create a picture and label to represent their learning about the question they just researched.
- Invite pairs or triads to begin working.
- Circulate as pairs or triads work and offer support by reminding students of the question they researched, directing them to the correct information in their tree text, and encouraging them as they draw a picture and add labels to represent the information they gathered.
- After about 7 minutes, refocus whole group and display the **Tree: Small Group Notes**.
 - Point to the first column and read aloud the heading:
"What does the tree look like?"
 - Tell students that the pair or triad that researched what the tree looks like will add their notes to this column.
 - Repeat this process with the second column and heading.
- Distribute Tree: Small Group Notes and **glue sticks**.
- Invite students to add their notes to the correct column of their Tree: Small Group Notes chart.
- Circulate to support students as they work. Refer to the **Tree: Small Group Notes (example, for teacher reference)** as necessary.

Meeting Students' Needs

- For students who may need additional support anticipating and managing frustration: Model what to do if they have a disagreement as they create their group notes. Consider providing index cards of previously taught sentence frames as support for communication and frustration. (MMR, MMAE, MME)

Closing and Assessment

A. Back-to-Back and Face-to-Face Protocol: Reflecting on Learning (5 minutes)

- Gather students whole group.
- Offer specific, positive feedback on their work creating clear Tree: Small Group Notes.
- Direct students' attention to the **Perseverance anchor chart** and briefly review it.
- Tell students they are going to use the Back-to-Back and Face-to-Face protocol to share how they used perseverance while researching. Remind them that they used this protocol in previous lessons and review as necessary using the **Back-to-Back and Face-to-Face Protocol anchor chart**. (Refer to the Classroom Protocols document for the full version of the protocol.)
- Guide students through two rounds of the protocol using the following questions:
 - “What was challenging for you today?”*
 - “How did you use perseverance to complete your work?”*
- Refocus students whole group and offer specific, positive feedback on how they showed perseverance during today's lesson.
- Remind students that over the next several lessons, they will continue gathering information about their specific tree so that they can create a high-quality informational collage and share their learning with others!

Meeting Students' Needs

- For ELLs: (Paraphrasing) Invite students to think of other ways to say *perseverance*.
- For ELLs: (Partner Share-Out) Invite students to share what their partners said.