

## Lesson 2: Reading and Writing: What Are Living and Nonliving Things?



### CCS Standards

- **RI.K.2:** With prompting and support, ask and answer questions about key details in a text.
- **RI.K.3:** With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.
- **RI.K.4:** With prompting and support, ask and answer questions about unknown words in a text.
- **RI.K.7:** With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
- **W.K.2:** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
- **SL.K.2:** Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- **L.K.5a:** Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.



### Daily Learning Targets

- I can seek out examples and patterns in the world around me to research living and nonliving things. (RI.K.3, SL.K.2, L.K.5a)
- I can record my observations with words and drawings like a researcher. (W.K.2)

### Ongoing Assessment

- During Work Time A, use the Speaking and Listening Checklist to monitor students' progress toward SL.K.2 (see Assessment Overview and Resources).
- During Reading Aloud to Research in Work Time B, continue to use the Reading Informational Text Checklist to track students' progress toward RI.K.2, RI.K.3, RI.K.4, and RI.K.7 (see Assessment Overview and Resources).

## Agenda

### 1. Opening

- A. Poem and Movement: “What’s Alive and What’s Not?” Version 1 (10 minutes)

### 2. Work Time

- A. Engaging the Researcher: Patterns in Living and Nonliving Things (10 minutes)
- B. Reading Aloud to Research Living and Nonliving Things: What’s Alive?, Pages 1–7 (15 minutes)
- C. Engaging the Researcher: Making and Recording Observations (20 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:

- This lesson connects to Next Generation Science Standard K-LS1. During Work Times A and B, students focus on the following cross-cutting concept: Patterns in the natural and human-designed world can be observed and used as evidence. Help students notice patterns that emerge when discussing the distinctions between living and nonliving things.
- Continue to nurture an inquiry-rich classroom environment by inviting students to engage in the research process to wonder, discover, and record about living and nonliving things. Let students continue wondering about what makes something a living thing and allow for misconceptions early on that will become clear as further inquiry is completed.
- This is the first lesson in a series of five (Lessons 2–6) in which students participate in Reading Aloud to Research Living and Nonliving Things using the informational text *What’s Alive?* (RI.K.3).
  - The protagonist of *What’s Alive?* is a white, middle-class, able-bodied girl in a suburban setting. Seek out literature that represents the ethnic, linguistic, and geographic diversity of your class. Look for this book or one like it in the different languages your students speak at school and/or at home.
  - On Page 5 of *What’s Alive?*, the author compares a child to a cat by saying that they both “run and jump.” If there are students with limited mobility or who use a wheelchair (or students who have a family member who does), take time to discuss the different ways people in wheelchairs can move and jump. Invite students to share how it makes them feel to not be represented.
- The observation activity during Work Time C is designed to provide each small group of students with a plant to observe. If you are unable to provide one small plant per small group, consider completing the observation activity whole group with one plant and make adjustments to the instructional sequence as necessary or use the photographs of plants provided (see supporting Materials).

**How this lesson builds on previous work:**

- In Lesson 1, students used the Sorting protocol to sort images into two categories: living and nonliving. In this lesson, they examine the Sorting Living and Nonliving Things anchor chart, a synthesized version of the sorted information organized into three columns (Living, Nonliving, and Not Sure Yet).
- In Lesson 1, students were introduced generally to the patterns of living and nonliving things through observation of a tree and a sorting activity. In this lesson, they begin to focus their understanding on the patterns of all living things by reading and discussing a section of *What's Alive?* that asks them to consider the similarities and differences between themselves and other living things (e.g., cats, plants, trees).

**Areas in which students may need additional support:**

- Students are introduced to the Living Things research notebook in Work Time C and invited to record their observations through independent writing. Consider providing supports such as limiting the space for sketching, enlarging the text to support independent reading of the sentence stems, or accepting dictation for student responses.

**Down the road:**

- Students continue to read aloud to research living and nonliving things with the text *What's Alive?* across Lessons 3–6.
- In Lessons 3–5, students will revisit the Sorting Living and Nonliving Things anchor chart to revise for accuracy.
- In Lessons 3–4, students will continue observing different combinations of the plants, each time comparing one plant that has been deprived of a certain need (Plants 2 or 3) with the plant that has had all needs met (Plant 1). Students also will continue observing, recording about, and caring for the class plants in the Explore Lab.
- As students continue to learn about the needs of living things, and specifically about plants, they will be gathering the information used to answer the questions: “Are trees living? Why or why not?” in an end of unit Science Talk in Lesson 8. This Science Talk will challenge students to connect what they learned about plants as living things to trees and to infer that trees are a type of plant.

**In advance:**

- Prepare:
  - Living Things Word Wall cards for *pattern*, *leaves*, and *roots*.
  - Sorting Living and Nonliving Things anchor chart by taking the Sorting Mats that students completed in pairs during Lesson 1 and synthesizing their understanding on the anchor chart. Attach the set of Living and Nonliving Things sorting images from Lesson 1 to the Sorting Living and Nonliving Things anchor chart with blue painter’s tape so you can easily move them in later lessons, as students’ thinking continues to evolve.
- If all students placed an image in a column, record this by placing the same image in the corresponding column (e.g., if all students sorted a dog in the Living column, place yours in the Living column as well). If answers varied and only some students sorted correctly, place the image in the Not Sure Yet column (e.g., some students put a car in the living category and some in the nonliving category, so place yours in the Not Sure Yet column). As students learn more about living and nonliving things, the class will revise the Sorting Living and Nonliving Things anchor chart.

- Follow care guide instructions in the Directions for Living Plants Observation Setup (see Lesson 1 supporting Materials) to prepare Plant 1 for students to observe and sketch in Work Time C.
- Distribute Materials for Work Time C at student workspaces.
- Post: Learning targets, “What’s Alive and What’s Not?” Version 1, 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.

**Supporting English Language Learners**

Supports guided in part by CA ELD Standards: K.1.A.1, K.1.A.3, K.1.B.5, and K.1.B.6

**Important points in the lesson itself**

- The basic design of this lesson supports ELLs with opportunities to interact with text in multiple ways (through movement, visuals, and discussion). Students participate in an observation of plants that supports content and language acquisition by providing structured practice during an engaging hands-on activity.
- ELLs may find it challenging to find words to describe the connection between the concrete attributes they observe when looking at the seedling and why those make it living or nonliving. After describing the task and before writing, consider having students brainstorm a list of words that everyone can use in their notebooks to describe their observations.

**Levels of support**

*For lighter support:*

- Collect and display realia for the new words you will highlight during the lesson: furry, leaves, roots, underground, and petal. During Work Time B, encourage students to identify pictures that exemplify specific sentences in the text. Ask them to consider how illustrations help us understand the text.

*For heavier support:*

- In the Opening, create index cards with illustrations that can be affixed with tape to accompany the concepts and Vocabulary in the poem. Students can use them to sequence the poem, demonstrate concept mastery and paraphrase.

- During Work Time B, model and think aloud the process of using illustrations to help understand the text with the first page you read. Say:  
*“I see a lot of things in this picture. What do you see?”*
- Offer them a sentence frame: “I see \_\_\_\_\_” or “I observe \_\_\_\_\_.” Lead students through a quick identification of all the things in the picture. Say:  
*“I wonder if we can find some of those in one of these sentences.”*
- After reading, ask students to say which of the things was described in the text.

### Universal Design for Learning

- **Multiple Means of Representation (MMR):** Some students may need additional support with visual perception. During the read-aloud, display the text on a document camera or use an enlarged copy of the text to help direct students to the appropriate sentences on each page as they follow along. Pausing for clarification of new Vocabulary will also support students who may need additional support with comprehension.
- **Multiple Means of Action & Expression (MMAE):** Continue to support students in setting appropriate goals for their effort and the level of difficulty expected.
- **Multiple Means of Engagement (MME):** As students engage with the text during this lesson, continue to support them in linking the information presented back to the learning target to emphasize and remind them of the instructional goal.

### Vocabulary

#### Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

#### New:

- noun, alive, pattern, growing, seek out (L)
- furry, leaves, roots, underground, petal (T)

#### Review:

- living, observation (L)

### Materials

- ✓ “What’s Alive and What’s Not” Version 1 (one to display)
- ✓ Living Things Word Wall cards (new; teacher-created; three)
- ✓ Living Things Word Wall (begun in Lesson 1; added to during the Opening and Work Time B; see Teaching Notes)
- ✓ What Researchers Do anchor chart (begun in Lesson 1; added to during Work Times A and C)
- ✓ Sorting Living and Nonliving Things anchor chart (new; teacher-created; see supporting Materials)
- ✓ Sorting Living and Nonliving Things anchor chart (example; for teacher reference)
- ✓ *What’s Alive?* (one to display; for teacher read-aloud)
- ✓ Plant 1 (one per small group)

- ✓ Plant photographs (optional; Plant 1; one per small group)
- ✓ Living Things research notebook (one per student and one for teacher modeling)
- ✓ Pencils (one per student)
- ✓ Crayons (class set; variety of colors per student)
- ✓ Living Things research notebook (example, for teacher reference)
- ✓ Back-to-Back and Face-to-Face Protocol anchor chart (begun in Module 1)

## Opening

### A. Poem and Movement: “What’s Alive and What’s Not?” Version 1 (10 minutes)

- Gather students whole group.
- Briefly review the definition of *noun* (a person, place, or thing).
- Display “**What’s Alive and What’s Not?**” and read the title. Tell students that you can say something is *living* or *alive*. They mean the same thing!
- Show students the **Living Things Word Wall card** for *alive* and follow the same process established in Modules 1–2: provide its definition (living, not dead), clap out its syllables, use it in a sentence, and place the Word Wall card and picture for it on the **Living Things Word Wall**.
- Follow the same routine established in Modules 1–2 to read the “What’s Alive and What’s Not?” poem.
  - Direct students’ attention to “What’s Alive and What’s Not?” Version 1.
  - Invite students to first listen as you read the poem aloud fluently and without interruption.
  - Invite students to contribute ideas for gestures/actions for the poem.
  - Reread each stanza with students and invite them to read along and act out the gestures/actions as you point to the text.

### Meeting Students’ Needs

- For ELLs and students who may need additional support with comprehension: (Illustration) Illustrate key words or phrases in the poem on removable index cards and affix them with tape on the poem. Explain that like the pictures in the books we read, these illustrations can help us make sense of the text. As students practice the poem throughout the unit, remove the index cards and reaffix them incorrectly, asking students to find/fix the errors. You can also remove them and ask students to use them to sequence/retell/paraphrase the poem. Have students explain why each goes where it does. (MMR)
- As students practice the poem with gestures, provide options for expression by echoing several times in different voices. (MMAE)



## Work Time

### A. Engaging the Researcher: Patterns in Living and Nonliving Things (10 minutes)

- Refocus whole group.
- Direct students' attention to the posted learning targets and read the first one aloud:  
***"I can seek out examples and patterns in the world around me to research living and non-living things."***
- Direct students' attention to the **What Researchers Do anchor chart** and focus them on the statement:
  - "Seek out examples and patterns in the world around them"
- Point out how this idea on the What Researchers Do anchor chart is similar to the learning target.
- Reread the first part of the statement, "Seek out examples and patterns," and ask:  
***"What does it mean to seek out examples?" (to look for things that provide evidence and that you can observe over and over because it repeats)***  
***"What is a pattern?" (something that repeats again and again)***
- Confirm students' understanding of the word *pattern*. Show them the Living Things Word Wall card for *pattern* and follow the same process established in Modules 1–2: provide its definition, clap out its syllables, use it in a sentence, and place the Word Wall card and picture for it on the Living Things Word Wall.
- Reread the final part of the statement, "in the world around them" and ask:  
***"What does it mean to look for these things 'in the world around them'?" (that researchers don't just look in one place, but all around to gather lots of evidence)***
- Invite students to create an accompanying gesture to go with this idea (e.g., pretending to hold binoculars and looking all around).
- Direct students' attention to the **Sorting Living and Nonliving Things anchor chart** and focus them on the three columns: Living, Nonliving, and Not Sure Yet.
- Tell students that you made this chart by looking at their sorting mats from Lesson 1 and organizing their ideas. Any ideas that were different from sorting mat to sorting mat were put in the Not Sure Yet column to continue thinking about.
- Turn and Talk:  
***"What examples or patterns can you find in the Sorting Living and Nonliving Things anchor chart?" (Responses will vary, but may include: lots of animals are in the Living column; lots of toys are in the Nonliving column, etc.)***  
***"How do we know if something is living?" (There is no correct or incorrect answer at this stage.)***
- If productive, use a Goal 4 Conversation Cue to encourage students to agree or disagree and explain why:  
***"Do you agree or disagree with what your classmate said? I'll give you time to think." (Responses will vary.)***

- Circulate and listen as students discuss. Take note of any misconceptions to revisit during future reading and research. Refer to the **Sorting Living and Nonliving Things anchor chart (example, for teacher reference)** as necessary.
- Invite students to choose one living thing to act like as they move safely and respectfully back to their spots in the whole group meeting area.

### Meeting Students' Needs

- For ELLs and students who may need additional support with comprehension: (Highlighting) Consider highlighting, underlining, and color-coding the learning target in chunks to draw student attention to the parts that will be unpacked. (MMR)
- For ELLs and students who may need additional support with Vocabulary: (Visuals) Consider drawing two icons: a simple "ABAB" pattern above *pattern* and globe above *world*. (MMR)
- For ELLs: (Metacognitive) Ask students to explain why you used coding and visuals with the learning target.
- For ELLs and students who may need additional support with transfer of knowledge: (Cross-disciplinary Connections) Consider reminding students of patterns they have seen in math and showing a few examples. (MMR)
- For ELLs: (Restating) Invite a few students to restate the learning target in their own words.
- For ELLs: (Translation): Consider asking students to share the translation of the word *pattern* in other languages they know.
- For students who may be uncomfortable sharing their own ideas with the entire class: Consider allowing them to share what their partner said so that they still have a chance to speak in front of the class. (MMAE, MME)

### Work Time

#### B. Reading Aloud to Research Living and Nonliving Things: *What's Alive?*, Pages 1–7 (15 minutes)

- Refocus students whole group.
- Briefly review the definition of *alive* and remind students that it is another way to say *living*.
- Lead students through Reading Aloud to Research Living and Nonliving Things for *What's Alive?* pages 4–7:
  - Display the What Researchers Do anchor chart, emphasizing the third idea, “gather information from text,” which means to seek out more information and examples through reading.
  - Remind students that they are researching to gather information to answer the Unit 1 guiding question: “How do we know if something is living?”
  - Display *What's Alive?* and tell students that today they are going to read as a researcher, listening and looking closely to gather information from the text to help them answer that question.



- Read aloud one page of the text at a time, fluently, pausing to:
- Define in context the following words: *growing* (becoming larger by natural development), *furry* (having a coat of fur), *underground* (located, living, or taking place beneath the earth's surface), and *petal* (one of the separate leaves that form the outer part of a flower head; petals are usually a different color from the plant's other leaves).
- Pause after each page and invite students to act out how the different living things eat, drink, breathe, or move and grow.
- Turn and Talk:

***“What information does this page tell us about how to know if something is living or alive?”***

- When reading page 7, show students the Living Things Word Wall card for *leaves* (a flat part of a plant or tree that grows from the stem or branch and is usually green) and *roots* (the part of a plant that grows under the ground; roots take in water and nutrients, and they hold the plant in the soil) and follow the same process established in Modules 1–2: provide their definitions, clap out their syllables, use them in a sentence, and place the Word Wall cards and pictures for them on the Living Things Word Wall.
- After reading page 7, ask:
 

***“Was anything the same about the (cat, bird, flower, and tree)?” (Yes, they all grow; they all need water; etc.)***
- Invite students to join with a partner sitting nearby to act like the roots wriggling underground and leaves waving in the breeze.
- Tell students that next they will observe more living things to gather information to try and answer the Unit 1 guiding question: “How do we know if something is living?”

### Meeting Students' Needs

- For ELLs: (Restating) After displaying the text and before reading, challenge students to restate the task in their own words. Affirm and repeat back their answers, replacing and extending when necessary with the language from the anchor chart. (Example:
  - Student: “We’re finding information in the book to help answer the question.”
  - Teacher: “That’s right, we’re gathering information from the text to answer the question: How do we know if something is living?”)
- For ELLs: (Realia) Consider having realia or labeled picture cards ready for reference to demonstrate the words that will be highlighted during the read-aloud (a furry stuffed animal, a picture of an arrow pointing underground, a flower with petals, or one real petal).
- Before reading, consider providing white boards and dry-erase markers as an option for students to record (in drawing or writing) their ideas. This helps scaffold active listening for key details. (MMR, MMAE)

## Work Time

### C. Engaging the Researcher: Making and Recording Observations (20 minutes)

- Refocus whole group.
- Direct students' attention to the posted learning targets and read the second one aloud:  
*"I can record my observations with words and drawings like a researcher."*
- Remind students of the definition of the word *observation* (what you notice).
- Direct students' attention to the What Researchers Do anchor chart and read aloud the two ideas:  
*"observe closely"*  
*"record observations with drawings and labels"*
- Using a total participation technique, invite responses from the group:  
*"What does it mean to record observations with drawings and labels?" (to write and draw about what you see)*
- With excitement, display the **Living Things research notebook**. Briefly flip through the pages, giving students a sneak peek of what they will use for their recordings.
- Model how to write your name on the cover page.
- Display **Plant 1** (or the **plant photographs**) and explain that students will observe these seedlings and other plants to learn more about living things. Tell them that they will also care for the plants during the Explore Lab.
- Invite students to whisper a response into their hand:  
*"What is one thing you observe about Plant 1?"*
- Tell students that observing something closely and making observations can teach them a lot about it. Tell them that you have special steps that will help them closely observe.
- Use the following routine to model and think aloud as you closely observe the plant in order to talk, draw, and write about it.  
*"Look at the whole." Think aloud as you notice what shape it is, what size it is, what it reminds you of (e.g., "The whole thing is a plant with different parts like leaves and stems").*  
*"Look from the bottom to the top." Think aloud as you notice what is the same or different as you look up. (e.g., "At the bottom I can see stems coming up from the ground, and at the top they shoot off into small leaves").*  
*"Look from side to side." Think aloud as you notice what is the same and different about the sides (e.g., "Both sides have leaves, but the right side has more leaves than the left side").*  
*"Pick one spot and zoom in." Think aloud as you notice what is interesting about this specific part (e.g., "The leaf has little lines running through it").*  
*"Look again at the whole." Think aloud as you notice something new (e.g., "Now I can see that all the leaves have tiny lines running through them").*
- Ask:  
*"What are some hand gestures, motions, or actions that could go along with each observation step?" (Responses will vary, but may include: holding arms wide for the whole and moving your eyes and head up and down to show looking from bottom to top.)*

- Invite students to participate in the gestures as you model.
- Display page 1 of the Living Things research notebook and model how to complete the different sections of the page. Demonstrate how to take your time and include details and labels in your drawings using both a **pencil** and **crayons**. Refer to the **Living Things research notebook (example, for teacher reference)** as necessary.
- Remind students that they were observing closely to get ready to talk, draw, and write about Plant 1. With excitement, tell students that now they will talk.
- Turn and Talk:  
*“What is something that you observed about Plant 1 that you will write and draw about in your Living Things research notebook?” (Responses will vary.)*
- Tell students that they will find their Living Things research notebook, pencils, and crayons already at their workspaces.
- As you dismiss students to their workspaces, invite them to safely and respectfully move like a living thing of their choice.
- Invite students to write their name on the cover page of their notebook and then complete page 1.
- After about 8 minutes, signal students to stop working and collect students’ notebooks.

### Meeting Students’ Needs

- For ELLs: (Leadership) Invite a few students who might normally shy away from participation to demonstrate the gestures you decide upon in front of the class.
- For students who may need additional support with fine motor skills: Vary methods for responses by offering options for drawing utensils and writing tools. (MMAE, MME)

## Closing and Assessment

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

- Gather whole group.
- Offer students specific, positive feedback on their drawing and writing in the Living Things research notebook.
- Direct students’ attention to the posted learning targets and reread them aloud.
- Tell students they are going to use the Back-to-Back and Face-to-Face protocol today. Remind them that they used this protocol in Lesson 1 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.)
- Tell students that as they share with their partner today, they should practice using the sentence frame from Lesson 1 to add more information to something their partner said. Post and review the sentence frame as needed:
  - “I would like to add \_\_\_\_\_.”

- Guide students through the protocol using the following question:  
***“What patterns and examples of living and nonliving things did you find during today’s lesson?” (Responses will vary.)***
- Circulate and listen as students share, taking note of specific understandings or misunderstandings of living and nonliving things and students’ use of the sentence frame.
- Offer students specific, positive feedback on their ideas and questions about patterns of living things and use of the sentence frame to add onto each other’s ideas.
- With excitement, tell students that they will continue researching about living and nonliving things to try to answer the unit guiding question: “How do we know if something is living?”

### Meeting Students’ Needs

- For ELLs: (Discussion Gestures: Adding On) To reinforce the frame “I would like to add\_\_\_\_\_,” invite students to cross their index fingers to create the addition symbol (+). Tell students they can use this gesture with the frame to show they have something to add.
- For students who may need additional support with communication and engagement: Strategically pair students to ensure that they have a strong, politely helpful partner to support their efforts at sharing. (MME)