

Lesson 3: Close Read-aloud, Session 2: *Fossils*, Pages 8–9



CCS Standards

- **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.2.4:** 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.
- **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.
- **SL.2.1a:** Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
- **L.2.1a:** Use collective nouns (e.g., *group*).
- **L.2.4:** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.
- **L.2.4a:** Use sentence-level context as a clue to the meaning of a word or phrase.
- **L.2.4c:** Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *addition*, *additional*).



Daily Learning Targets

- I can use text features to learn more about fossils. (RI.2.1, RI.2.5)
- I can define a word from a text using different strategies. (RI.2.4, L.2.4, L.2.4a, L.2.4c)
- I can make inferences about impressions after discussing observations with my group. (SL.2.1, SL.2.1a)

Ongoing Assessment

- During the close read-aloud in Work Time A, use the Reading Informational Text Checklist (RI.2.1, RI.2.4, RI.2.5) and the Language Checklist (L.2.4, L.2.4a, L.2.4c) to track students' progress toward these standards (see Assessment Overview and Resources).
- In Work Time B, monitor students' use of the discussion norms. Refer them to the Classroom Discussion Norms anchor chart when giving support. (SL.2.1, SL.2.1a)

Agenda

1. Opening

A. Poem and Movement: “A Group of Dinosaurs,” Version 2 and 3 (10 minutes)

2. Work Time

A. Close Read Aloud, Session 2: *Fossils*, Pages 8–9 (30 minutes)

B. Developing Language: Making Impressions (15 minutes)

3. Closing and Assessment

A. Reflecting on Learning (5 minutes)

Teaching Notes

Purpose of lesson and alignment to standards:

- The Equity Sticks participation strategy is introduced in the Opening. This is a total participation technique in which the teacher randomly calls on students after their name is pulled from the sticks. Allowing students to turn and talk before calling on one student supports the success with this strategy. Consider practicing this technique with students answering low-stakes questions before this lesson (e.g., “What is your favorite game? What is your favorite book?”).
- This lesson is the second of five close read-aloud sessions in this unit. In this lesson, students learn the strategy of using context clues to determine the meaning of words found in a text. They continue to practice gathering information from text features.
- Students participate in another hands-on experience in Work Time B to practice making inferences based on observations. Students use objects and pieces of play dough to create impressions and will discuss their observations of the impressions they have created. From there, they make an inference based on their observations and reflect on how you can learn about an object by examining the impressions it creates. Consider allowing an extra minute for students to play with the play dough before beginning the activity.
- In the Closing, students break down the definition of responsibility and reflect on one aspect of the definition, taking ownership of our actions.
- This lesson is the third in a series of three that include built-out instruction for the use of Goal 3 Conversation Cues to promote productive and equitable conversation (adapted from Michaels, Sarah and O’Connor, Cathy. *Talk Science Primer*. Cambridge, MA: TERC, 2012. http://inquiryproject.terc.edu/shared/pd/TalkScience_Primer.pdf. Based on Chapin, S., O’Connor, C., and Anderson, N. [2009]. *Classroom Discussions: Using Math Talk to Help Students Learn, Grades K–6*. Second Edition. Sausalito, CA: Math Solutions Publications). Goal 3 Conversation Cues encourage students to deepen their thinking. Continue drawing on Goal 1 and 2 Conversation Cues, introduced in Module 1, and add Goal 3 Conversation Cues to more strategically promote productive and equitable conversation. In Module 3, Goal 4 Conversation Cues are also introduced. Refer to the Module 1 Appendix for additional information on Conversation Cues. Consider providing students with a thinking journal or scrap paper.

How this lesson builds on previous work:

- In Session 1 of the close read-aloud, students were introduced to text features. In this lesson, they continue to encounter new text features to learn new things from an informational text.
- Students revisit their skills as close readers in a group setting. In this lesson, they add a new skill (determining the meaning of unknown words) to their Close Readers Do These Things anchor chart.

Areas in which students may need additional support:

- Equity sticks are introduced in the Opening. To support students who may feel uncomfortable offering an answer when their stick is chosen, try offering them an example of what they could say or have them ask a friend to whisper an answer into their ear for them to share with the class.
- During Work Time B, students use objects to make impressions in play dough. Some may be unsure what to describe when making observations. To support students, ask specific questions to help them describe what they see (e.g., “Can you see any shapes? Can you see any textures? What can you tell me about the size of the impression?”)

Down the road:

- Students will practice collective nouns independently in Lesson 4.
- Students will reflect on the last aspect of responsibility in Lesson 4.

In advance:

- Prepare:
 - Set of equity sticks for the class (Popsicle sticks with the name of one student on each one).
 - Fossils Word Wall card for *excavate* and *excavator*. Write or type the words on a card and create or find a visual to accompany each one.
- Add additional collective nouns to the Collective Nouns anchor chart (see supporting materials).
- Preview the Close Read-aloud Guide: *Fossils* to familiarize yourself with what will be required of students. Note that the Close Read-aloud Guide is divided into sessions. Complete only Session 2 in this lesson, as students will complete the remaining sessions in Lesson 4-6.
- Determine small groups of five or six students to work together in Work Time B.
- Consider distributing materials (impression objects, play dough pieces, and paleontologist’s notebooks) for Work Time B to ensure a smooth transition.
- Post: Learning targets and applicable anchor charts (see materials list).

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

- Opening: If you recorded students reciting the “A Group of Dinosaurs,” version 1 in Lesson 2, play this recording for them to join in with.
- Work Time A: Create the Fossils Word Wall in an online format—for example, Padlet (<https://padlet.com/>)—to share vocabulary words with families.

Supporting English Language Learners

Supports guided in part by CA ELD Standards 2.I.A.1, 2.I.B.5, and 2.I.B.6

Important points in the lesson itself

- The basic design of this lesson supports ELLs with opportunities to read closely and interpret academic text. Students will apply and deepen their understanding of academic content using multiple modalities, including participating in and discussing a hands-on experiment.
- ELLs may find it challenging to identify root words. When asking about root words throughout the lesson and the unit, write and display a word, such as *surrounding*, on the board. Color-code the root, *round*, with a different color. Read aloud and invite students to repeat, call and response, both the word and the root word within, in tandem.

Levels of support

For lighter support:

- During Work Time A, when asking about root words throughout the lesson and the unit, write and display a word, such as *surrounding*, on the board. Invite students to identify and underline the root within the word using a different color.

For heavier support:

- In Work Time A, create a manipulative word bank. On sentence strips, write each collective noun along with photographs or illustrations of the animals they describe. Model moving the sentence strip to the appropriate blanks in the poem.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** In this lesson, students reflect on how they showed responsibility with their actions during Work Time B. Some may need additional support recalling their actions in this activity if it is only presented orally. Offer alternatives for auditory information by listing the steps of Work Time B on chart paper or a white board for reference. (Example: (1) Made impression with an object in play dough. (2) Observed a partner’s impression. (3) Recorded my observations. (4) Made an inference. (5) Recorded my inference.)

- **Multiple Means of Action & Expression (MMAE):** During Opening A, students read the poem aloud with you. Support those who may not feel confident in their reading skills with modeling and supported practice. Provide differentiated mentors by seating students who may be more confident reading aloud near students who may not feel as confident.
- **Multiple Means of Engagement (MME):** During Work Time B, students create impressions in play dough with various objects, and then make observations of a partner's impression. Some students may need additional support sustaining engagement during this activity. Consider strategic pairings to support peer cooperation and sustained effort.

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

New:

- excavate, surrounding, heading, mist, traces, impressions (T)
- excavator (L)

Review:

- collective noun, observation, evidence, inference (L)

Materials

- ✓ "A Group of Dinosaurs," version 2 (one to display)
- ✓ Collective Nouns anchor chart (begun in Lesson 2; added to in advance; see supporting materials)
- ✓ Collective Nouns anchor chart (answers, for teacher reference)
- ✓ Equity sticks (class set; one per student)
- ✓ "A Group of Dinosaurs," version 3 (one to display)
- ✓ Close Read-aloud Guide: *Fossils* (from Lesson 2; Session 2; for teacher reference)
 - *Fossils* (from Lesson 2; one to display; for teacher read-aloud)
 - Reading Informational Text Checklist (RI.2.1, RI.2.4, RI.2.5) (for teacher reference; see Assessment Overview and Resources)
- ✓ Fossils Word Wall cards (new; teacher-created; two)
- ✓ Fossils Word Wall (begun in Unit 1, Lesson 1; added to during Work Time A)
- ✓ Close Readers Do These Things anchor chart (begun in Module 1; added to during Work Time A; see supporting materials)
- ✓ Impression objects (five or six objects per group)
- ✓ Play dough (one small piece per student)
- ✓ Paleontologist's notebook (from Unit 1, Lesson 10; page 6; one per student)
- ✓ Paleontologist's notebook (from Unit 1, Lesson 10, example, for teacher reference)
- ✓ Working to Become Effective Learners anchor chart (begun in Module 1)

Opening

A. Poem and Movement: “A Group of Dinosaurs,” Version 2 and 3 (10 minutes)

- Display “A Group of Dinosaurs,” version 2.
- Begin to read the poem and stop with surprise at the first blank.
- Ask volunteers to help you figure out what is missing from the poem. (collective nouns)
- Review that a *collective noun* is the word for a group of people or things.
- Read through the poem together as a class, calling on volunteers to help fill in the blanks by using the **Collective Nouns anchor chart**.
- Tell students that you have added a couple more collective nouns to the chart. Refer to the Collective **Nouns anchor chart (answers, for teacher reference)** as necessary.
- As a class, read the additional singular, plural, and collective nouns together. Consider reading them all with the sentence starters: “I saw one _____,” “I saw two _____,” and “A group of _____ is called a _____.”
- Invite students to turn and talk to an elbow partner:

“Use a new collective noun in a sentence.” (A pack of wolves chased a deer.)
- Explain that you are going to begin using **equity sticks** as a way of calling on students to share their ideas with the group. Each of their names is on a different Popsicle stick, and you will pull one at random. When you do, that student will share his or her ideas with the class.
- Display “A Group of Dinosaurs,” version 3.
- Tell students that there are plural nouns and collective nouns missing, and you will choose an equity stick for a student to help fill in the blanks using any of the collective nouns on the chart.
- Read the poem aloud. Pause after the first sentence with blanks. (“A group of _____ is called a _____; I said, “That’s really cool!”)
- Ask students to turn and talk, use equity sticks to select students to share their responses with the whole group:

“Which plural noun and collective noun would you choose to put into the blanks?” (Responses will vary, but should come from the chart.)
- Repeat the process with the second blank.
- Invite all students to stand and clap as they read through the entire poem together.

Meeting Students' Needs

- To minimize discomfort, perceived threats, or distractions when using equity sticks, consider alerting individual students that you are going to call on them next. (MME)

Work Time

A. Close Read-aloud, Session 2: *Fossils*, Pages 8–9 (30 minutes)

- Direct students' attention to the posted learning targets and read the first one aloud:

“I can use text features to learn more about fossils.”
- Remind students that text features in informational texts are one way that they can learn more about fossils. There are many ways to learn facts from the book.
- Invite students to whisper a response into their hand:

“What is one text feature you learned about in the last lesson?” (table of contents, chapter title, caption)
- Direct students' attention to the posted learning targets and read the second one aloud:

“I can define a word from a text using different strategies.”
- Tell students that they can also learn facts from a book by figuring out what important words mean.
- Share with students that together they will work to answer the unit guiding question (“How do readers learn more about a topic from informational texts?”) by looking at all the ways learning is included in an informational text.
- Using the **Close Read-aloud Guide: *Fossils* (Session 2; for teacher reference)**, guide students through the close read-aloud of *Fossils*. Consider using the **Reading Informational Text Checklist** (RI.2.1, RI.2.4, RI.2.5) during the close read-aloud (see Assessment Overview and Resources).
- After completing the close read-aloud, invite students to take a short break by standing to stretch while the **Fossils Word Wall cards** for *excavate* and *excavator* are added to the **Fossils Word Wall**. Follow a similar process as in Lesson 2: Provide each word's definition (insert definition for excavate; to dig up and remove something, definition for excavator: someone or something that excavates), clap out its syllables, use it in a sentence, and place the card on the Word Wall.
- Redirect students' attention to the posted learning targets and read the second one aloud:

“I can define a new word in a text using different strategies.”
- Invite students to turn and talk with an elbow partner:

“What strategy did you use today in the close read-aloud to help you define a new word?” (context clues)
- Direct students' attention to the **Close Readers Do These Things anchor chart**.
- Tell students that as close readers, they will continue to work on using strategies to figure out the meaning of unknown words.
- Add to the Close Readers Do These Things anchor chart:

“Figure out the meaning of unknown words.”
- Tell students you heard them discussing that one way to figure out a new word is by using the context, or the sentence around the unknown word.
- Add as a sub-bullet on the Close Readers Do These Things anchor chart:

“Context: Read the sentence around the word.”
- Invite students to read the strategy aloud.

- Share that as close readers, in the next lesson students will get to figure out new words by looking for word parts, like a root word hiding inside a word.
- Add as a sub-bullets on the Close Readers Do These Things anchor chart:

“Word parts: Look for root words, prefixes, and suffixes.”

Meeting Students’ Needs

- For students who may need additional support in discerning the difference in font colors or size: Before the close read-aloud, provide an alternative way to highlight the differences in the font (e.g., underlining, circling, or boxing the words) for easier differentiation. (MMR)
- For ELLs: Mini Language Dive. Ask students about the meaning of the chunks from the sentence in the text: “Paleontologists / excavate, or dig and remove, them / from a surrounding rock.” Write and display student responses next to the chunks. Examples:
 - ***“What does this sentence mean?” (Responses will vary.)***
 - Point to and read aloud the chunk Paleontologists. Ask:
 - ***“Who is this sentence about?” (paleontologists; people who study fossils)***
 - Point to and read aloud the chunk: excavate, or dig and remove, them. Ask:
 - ***“What do the paleontologists do?” (excavate fossils)***
 - ***“What does excavate mean? What, in the sentence, makes you think so?” (It means to dig and remove. I know because after the word excavate, it says or dig and remove surrounded by commas. Sometimes authors will write or and tell the meaning of the word within commas in the same sentence.)***
 - ***“What are they excavating? What, in the text, makes you think so?” (fossils; I know because the heading says, “Digging Up Fossils,” and the sentence before is talking about fossils too.)***
 - Point to and read aloud the chunk: from a surrounding rock. Ask:
 - ***“Where do the paleontologists find the fossils?” (in a rock)***
 - ***“What is a surrounding rock? How do you know?” (It’s the rock that is all around and covering the fossil. I know because I figured it out from what I know about fossils. Also, I see the word round in surround, so that made me think the rock was around the fossil.)***
 - ***“What text features did you use to learn about fossils?” (I used the heading to help me understand the sentence.)***
 - ***“What, in the sentence, helped you learn the meaning of a new word?” (The author said the meaning; I used root words; I used the information I knew to figure it out.)***
 - ***“Now what do you think this sentence means?” (The paleontologist digs and removes the fossil from the rock.)***
 - ***“Can you complete the sentence frame? ? ‘Paleontologists excavate fossils from the surrounding ____.’” (sand; dirt; earth)***

Work Time

B. Developing Language: Making Impressions (15 minutes)

- Direct students' attention to the posted learning targets and read the third one aloud:
"I can make inferences about impressions after discussing observations with my group."
- Using a total participation technique, invite responses from the group:
"What is the meaning of observation?" (what is noticed or seen)
- Remind students that they can use observations as *evidence*, or proof, to come up with an answer about their work.
- Invite students to turn and talk with an elbow partner:
"What does it mean to make an inference?" (to make a good guess based on observations and facts)
- Use equity sticks to cold call students to share out.
- Share with students that they will be working in groups again. They will be given a few different objects, and each person will get a piece of play dough. Each person will take a turn pressing an object into his or her play dough and look at the impression it leaves in the play dough.
- Tell students that their impressions are similar to some fossils that are created the same way, although fossils take much longer. Students will get the chance to see how a paleontologist can study a fossil closely and make inferences based on what he or she observes.
- Briefly define the word *impression* (a mark made by pressing).
- Tell students that while they are working on their impressions, they should be thinking about the question: "What do paleontologists learn by studying fossils closely?"
- Divide students into pre-determined groups and distribute **five or six impression objects** to each group and a piece of **play dough** to each student.
- Invite students to begin using objects to make impressions in their play dough.
- Prompt students to share observations about their impression with their group members. Challenge the group to offer answers to the one of the Unit 2 guiding question: "What can we learn by studying a fossil closely?"
- Circulate to support students by reminding them of discussion norms to practice. Support them to make observations about the impressions they create by asking them to describe what they see in the play dough and what that impression can tell them about the object that made it.
- When 8 minutes remain, invite students to choose one item to press into their play dough and stop.
- Invite students to switch play dough impressions with a partner in their group. When students have received a new play dough impression, invite them to lay the play dough on the table in front of them.
- Ask students to retrieve their **paleontologist's notebooks** and open to page 6.
- Using a student's play dough impression as an example, model making an observation about the impression by thinking aloud. Say:
"I can see that this impression was of something round. I can see that this impression has small bumps in the middle."

- Invite students to look closely at their play dough impression to discuss and write two observations individually.
- Using the same play dough impression from the last example, model making an inference based on the observations you have made. Say:

“This impression is round and has bumps. I infer that this object was a coin.”

- Have students make an inference to their partner about the object that was used for the impression they are working with.
- Invite students to write that inference in their notebook.
- When 1 minute remains, invite students to turn and talk in their small group:

“What can I learn about a fossil by studying it closely?” (how big it was, its size, its shape, textures on the object/fossil)

- If productive, use a Goal 3 Conversation Cue to encourage students to think about their thinking:

“How did making impressions in clay add to our understanding of fossils? I’ll give you time to think and discuss with a partner.” (Responses will vary.)

Meeting Students’ Needs

- For students who may need additional support with planning and written expression: Provide descriptive words as students write in their notebook to scaffold their description of the impression. (Example: Offer index cards pre-printed with *small, bumpy, hole, round, smooth.*) (MMAE)
- For ELLs: Provide additional opportunities and prompts for students to practice using domain-specific language as they observe the impressions that their classmates have made. Example: “I see evidence of a _____ in this impression, so I infer _____.” (thumbprint; this impression was made by someone’s thumb and fingers.)

Closing and Assessment

A. Reflecting on Learning (5 minutes)

- Direct students’ attention to the **Working to Become Effective Learners anchor chart** and invite them to read aloud the definition of responsibility.
- Remind students that in the last lesson, they reflected on showing responsibility with their space.
- Tell students that, as responsible learners, we need to be aware of and responsible for our actions.
- Invite students to turn and talk with an elbow partner:

“What does it mean to show responsibility with our actions?” (We are careful with our bodies; we think through our choices and words; we act and speak safely and kindly.)

“How did you show responsibility with your actions during the impressions activity today?” (I asked to kindly use an object; I took turns with some of the objects in our group.)

“How do you think paleontologists show responsibility with their actions?” (They clean up the dirt; they hang up their tools, etc.)

- Tell students that they can show responsibility for their space and actions in many parts of the day!
- If productive, use a Goal 3 Conversation Cue to encourage students to think about their thinking:

“What strategies helped you achieve the learning targets in this lesson? I’ll give you time to think and discuss with a partner.” (using context clues; taking responsibility)

Meeting Students' Needs

- To foster a sense of community and provide options for physical action after students share their responses, invite the whole class to join you in a special applause (e.g., silent cheer, firecracker, raise the roof, hip-hip hooray). (MMAE, MME)
- For ELLs: Invite students, whole class, to generate ideas about how they showed responsibility. Record and display student thinking. Invite students to draw from these ideas as they think about and discuss ways they showed responsibility with their partners. (Examples: I asked to kindly use an object. I took turns with some of the objects in our group.)