

Lesson 7: Focused Read-aloud, Session 1: *Does the Sun Sleep?* Noticing Sun, Moon, and Star Patterns



CCS Standards

- **RL.1.5:** Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.
- **RI.1.1:** Ask and answer questions about key details in a text.
- **RI.1.2:** Identify the main topic and retell key details of a text.
- **RI.1.4:** Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.
- **RI.1.6:** Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
- **RI.1.7:** Use the illustrations and details in a text to describe its key ideas.
- **W.1.8:** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
- **L.1.1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- **L.1.1f:** Use frequently occurring adjectives.
- **L.1.1i:** Use frequently occurring prepositions (e.g., *during*, *beyond*, *toward*).
- **L.1.1j:** Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.
- **L.1.6:** Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., *because*).



Daily Learning Targets

- I can distinguish what I learn from the illustrations and what I learn from the text in the book *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* to describe patterns of the moon. (RI.1.1, RI.1.2, RI.1.4, RI.1.6, RI.1.7)
- I can record my observations of images of the sky in the Sky Notebook. (W.1.8, L.1.1f, L.1.1i, L.1.1j, L.1.6)

Ongoing Assessment

- During the focused read-aloud in Work Time A, use the Reading Informational Text Checklist (RI.1.1, RI.1.2, RI.1.4, RI.1.6, RI.1.7) to track students' progress toward these reading standards and the Reading Literature Checklist to track progress towards RL.1.5. (see Assessment Overview and Resources).
- During the Closing, circulate and observe students independently writing in their Sky notebook. At the end of the lesson, collect students' writing samples to document progress toward W.1.8, L.1.1f, L.1.1i, L.1.1j, and L.1.6.

Agenda

1. Opening

- A. Poem and Movement: “Where Are They? The Sun, Moon, and Stars” Poem Version 2 (10 minutes)

2. Work Time

- A. Focused Read-aloud: *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns*, Pages 12–15 (20 minutes)
- B. Engaging the Scientist: Why Does the Moon Seem to Change Shape? (20 minutes)

3. Closing and Assessment

- A. Independent Writing: Sky Notebook (10 minutes)

Teaching Notes

Purpose of lesson and alignment to standards:

- This is the first of two lessons in which students engage in a cycle of inquiry with *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* (pages 12–15) to build understanding about the patterns of the moon and why the moon seems to change shape.
- Students work with the idea that the moon seems to change shape. Emphasize that the moon is not changing shape, but rather how much of the moon is visible or in shadow changes as it revolves around earth. The language *seems to* or *appears to* is important because it explains that the moon is not actually changing shape, but it looks like it is.
- In the Opening, students again engage with the “Where Are They? The Sun, Moon, and Stars” poem. The poem is prepared with missing prepositions and students are asked to use the Prepositions anchor chart to complete the poem.
- In Work Time B, students watch a 4-minute video embedded in the website National Science Teachers Association.
 - Citation: “Moon Phases Demonstration.” Video. National Science Teachers Association, 2016. Web. 13 June 2016. <<http://www.nsta.org/publications/press/extras/moon.aspx>> (For display. Used by permission.)
 - Purpose: To solidify students’ understanding of why the moon appears to change shape, and to prepare them to take part in the demonstration during Work Time B.
- Similar to Lessons 4–6, students independently write in their Sky notebooks to show progress toward mastery of W.1.8, L.1.1f, L.1.1i, L.1.1j, and L.1.6.
- If possible, give students access to *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* as a paperback or an eBook during the K-2 Labs and K-2 Reading Foundations Skills Block.

How this lesson builds on previous work:

- Students have experienced the cycle of reading a text, engaging in an activity or experience, and synthesizing through Science Talk from the close read-aloud sessions in Lessons 2–6. Students now engage in this cycle with a new text and scientific concept.
- The Prepositions anchor chart used in the Opening is created in advance using the prepositions that students identified in Lesson 6.

- In Work Time B, students review the Working to Become Ethical People anchor chart and focus on upholding integrity for their learning during the simulation.
- Continue to use Goal 1–3 Conversation Cues to promote productive and equitable conversation.
- This is the second lesson in which students independently describe a displayed photograph using adjectives and prepositions in the Sky notebooks. The specific skills of using adjectives to describe the appearance and prepositions to describe the precise location of an object in the sky have been taught and reviewed through shared and independent writing in previous lessons.

Areas in which students may need additional support:

- In order to understand why the moon seems to change shape, students need to have a strong comprehension of what causes light (sunshine) and darkness (shadow) on earth. The idea of the earth’s shadow creating areas of darkness on the moon is integral to this understanding.
- The video in Work Time B includes some scientific terminology that is not explicitly taught at this grade level. Allot time to pause and explain further as you see fit.
- Students may need additional support completing the Sky notebook independently. Remind them to use the tools around the room such as the Sun, Moon, and Stars Word Wall, the Adjectives and Prepositions anchor charts, and the High-Frequency Word Wall.

Down the road:

- In Lesson 8, students will continue building an understanding of the observable pattern of the moon as they transfer information from the Patterns of the Moon anchor chart into their own individual notes, and then use those notes to take part in a Science Talk.
- Students will continue their practice with using adjectives (taught in Lessons 2–4) and prepositions (taught in Lessons 5–7) while writing in the Sky notebook.
- The cycle of reading, experiencing, and discussing is repeated throughout pairs of lessons (Lessons 7–8, Lessons 9–10). This repetition is designed to build students’ skills and comprehension in advance of the Unit 2 Assessment, in which students will select individual notes as evidence when responding to the Unit 2 guiding question: What patterns can we observe in the sky?

In advance:

- Prepare:
 - “Where Are They? The Sun, Moon, and Stars” poem version 2.
 - Sun, Moon, and Stars Word Wall cards for the words *change*, *waxing*, and *waning*. Write or type the word on a card and create or find a visual to accompany each word.
 - Technology necessary to play “Moon Phases Demonstration” in Work Time B.
 - Technology necessary to display *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* as an eBook, if that is how you plan to access it during Work Time A.
 - Moon photograph 5 and sun photograph 5 in color, if possible.
- Gather materials for the science experience during Work Time B:
 - Copy onto cardstock and cut out signs for the moon.
 - Ensure there is a working flashlight.
 - Cover windows ahead of time to ensure the room will be dark enough to see the change in shape.

- Prepare a space in the room to enact the movement of the earth and moon so all students have a clear view.
- Pre-determine groups for the experiment (half will participate while the other half observes; then switch) in Work Time B.
- Pre-distribute materials for the Closing to ensure a smooth transition.
- Post: Learning targets, “Where Are They? The Sun, Moon, and Stars” poem, and applicable anchor charts (see materials list).

Technology & Multimedia

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

- Create the “Where Are They? The Sun, Moon and Stars” poem version 2 in an online format—for example, a Google Doc—to display and complete, and for families to access at home to reinforce these skills.
- Work Time A: Consider displaying *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* in the eBook format available at amazon.com.
- Work Time B: Show NSTA video clip: “Moon Phases Demonstration.” Video. National Science Teachers Association, 2016. Web. 13 June 2016. <<http://www.nsta.org/publications/press/extras/moon.aspx>> (For display. Used by permission.)
- Video record students as they simulate the phases of the moon in Work Time B to watch with students to evaluate strengths and areas for improvement. Post it on a teacher webpage or on a portfolio app such as Seesaw (<http://web.seesaw.me>) for students to watch at home with families. 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 1.I.B.5, 1.I.B.6, 1.I.C.10, 1.I.C.12, 1.II.B.4, and 1.II.B.5

Important points in the lesson itself

- The basic design of this lesson supports ELLs with opportunities to participate in and observe a physical simulation representing the waxing and waning moon.
- ELLs may find the explanation of why the moon appears to get bigger and smaller, and how it relates to the simulation, abstract. Support students by making clear the most important points to understand, even if all of the details are not apparent. (Examples: “The moon does not really get bigger and smaller,” “The light from the sun changes the way we see the moon,” and “The way the moon appears in the sky is a pattern.”)

Levels of support*For lighter support:*

- Support students as they distinguish information learned in the text and information learned with illustrations. Ask: “Did you learn how the earth moves from the text, or did you learn that from an illustration? Can you show me which part of the text or which illustration helped you learn that information?”

For heavier support:

- During Work Time B, invite students who need heavier support to observe the simulation first as students who need lighter support perform the simulation.
- During Closing and Assessment, consider working closely with a small group of students who are not ready to complete their Sky notebooks independently. Complete the activity as a shared or interactive writing experience.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** In this lesson, students again write independently in their Sky notebooks. Support those students with developing spelling skills and would benefit from environmental support to sound out words in their writing. Some students may need explicit prompting to use environmental print when they cannot recall letter sounds or sight words. When modeling writing, emphasize process and effort.
- **Multiple Means of Action & Expression (MMAE):** In this lesson, individual students are asked to share ideas with the whole group. As students share out, provide options for expression and communication by using sentence frames. (Example: “I noticed the part of the moon that was lit up _____ and then it _____.”)
- **Multiple Means of Engagement (MME):** During the focused read-aloud in Work Time A, some students may need explicit prompts to relate to this text. Optimize relevance by making the information in the text personalized and contextualized to students’ lives. (Example: Pause as appropriate and ask students to share connections to the text based on their own lives: “Have you ever looked up to see the moon at night? What did it look like? Did it look the same every time you have looked at it?”)

Vocabulary**Key:**

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

New:

- change, seems to, appears to, phase, simulation (L)
- waxing, waning (T)

Review:

- moon, pattern, shine (L)

Materials

- ✓✓ Prepositions anchor chart (new; teacher-created; see supporting materials)
- ✓✓ “Where Are They? The Sun, Moon, and Stars” poem version 2 (one to display; for teacher read-aloud)
- ✓✓ Equity sticks (class set; one per student)
- ✓✓ Unit 2 Guiding Question anchor chart (begun in Lesson 2)
- ✓✓ *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* (one to display; for teacher read-aloud)
- ✓✓ Reading Literature Checklist (for teacher reference; see Assessment Overview and Resources)
- ✓✓ Reading Informational Text Checklist (for teacher reference; see Assessment Overview and Resources)
- ✓✓ Sun, Moon, and Stars Word Wall cards (new; teacher-created; 3)
- ✓✓ Sun, Moon, and Stars Word Wall (begun in Unit 1, Lesson 1)
- ✓✓ Patterns of the Moon anchor chart (new; co-created with students during Work Time A; see supporting materials)
- ✓✓ Patterns of the Moon anchor chart (answers, for teacher reference)
- ✓✓ “Moon Phases Demonstration” (video; play 2:24 to end; see Teaching Notes)
- ✓✓ Working to Become Ethical People anchor chart (begun in Unit 1, Lesson 4)
- ✓✓ Light bulb (one for teacher modeling)
- ✓✓ Moon sign (one for teacher modeling)
- ✓✓ Sky notebook (from Lesson 4; pages 5–6; one per student)
- ✓✓ Sun photograph 5 (one to display)
- ✓✓ Moon photograph 5 (one to display)
- ✓✓ Pencils (one per student)
- ✓✓ Colored pencils (class set; variety of colors per student)
- ✓✓ Adjectives anchor chart (begun in Lesson 4)

Opening

A. Poem and Movement: “Where Are They? The Sun, Moon, and Stars” Poem Version 2 (10 minutes)

- Display the **Prepositions anchor chart** and say: “We did great work finding all the prepositions in the poem yesterday. I pulled them out and put them onto this chart.”
- Read the Prepositions anchor chart and invite students to move their hands to show the location (e.g., for “on top of,” put their hands on top of their heads).
- Display **“Where Are They? The Sun, Moon, and Stars” poem version 2** and read it aloud, pausing at the missing prepositions.

- Use **equity sticks** to select students to come up and use the Prepositions anchor chart to fill in the correct word or phrase. Continue to call students until the entire poem is filled in.
- Say: “As I reread the poem today, I want you to listen for prepositions. When you hear a preposition read aloud, quietly put a thumb out in front of your chest.” Model the hand gesture if necessary.
- Invite students to quietly push the imaginary button on their brains to show they are ready to listen for prepositions.
- Reread the completed poem and look for students to put up their thumbs when a preposition is read aloud.
- Invite students to turn and talk with an elbow partner:
“In your own words, what is a preposition?” (a word that tells the position of a person, place, or thing)
- Cold call on two or three students to share out.
- Tell students that they will continue practicing reading and writing with prepositions.

Meeting Students’ Needs

- Before reading the poem, support students’ expressive skills by offering index cards preprinted with prepositions from the poem to select as they participate in selecting missing words. (MMAE)
- For ELLs: Challenge students by displaying the poem without prepositions and without the blank spaces to indicate where they belong. Invite students to determine where the prepositions should be placed within the poem.

Work Time

A. Focused Read-aloud: *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns*, Pages 12–15 (20 minutes)

- Direct students’ attention to the posted learning targets and read the first target aloud:
*“I can distinguish what I learn from the illustrations and what I learn from the text in the book *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* to describe patterns of the moon.”*
- Display the **Unit 2 Guiding Question anchor chart** and read the question aloud:
“What patterns can we observe in the sky?”
- Share with students that today they will read to find out what patterns they can observe about the moon.
- Display *Does the Sun Sleep?: Noticing Sun, Moon, and Star Patterns* and model using the table of contents to find the chapter titled “The Moon.”
- Using a total participation technique, invite responses from the group:
*“How is this text similar to the close read aloud text, *What Makes Day and Night?*” (they are both informational texts that teach us about the sun and the moon.)*
- As students share their thinking about this question, use the **Reading Literature Checklist** to track students’ progress towards RL 1.5.

- Read pages 12–13 slowly, fluently, with expression, and without interruption.
- Use the **Reading Informational Text Checklist** as students respond to the following series of questions to track students' progress towards the targeted standards.
- Ask students to look closely at the diagram of the phases of the moon. Invite students to turn and talk to an elbow partner:
“What do you notice about the moon’s shape over time? What is this diagram showing us about the moon?” (It changes. Sometimes it is a thin crescent, sometimes it’s a half-moon, sometimes it’s full.)
- Cold call on two to three students to share out.
- Show students the **Sun, Moon, and Stars Word Wall card** for *change* and ask:
“What does it mean if something is changing?” (It is different from how it was before.)
- Cold call on one or two students to share out.
- Define the word *change* (to make different or alter).
- Place the Word Wall card on the **Sun, Moon, and Stars Word Wall**.
- Reread the note on page 12 (“The moon follows a pattern of waxing and waning ...”) and ask:
“What new information does this note provide us? What more have we learned about the moon from the text?” (There are special words used to describe how the moon changes. Waxing is when the moon gets bigger, and waning is when the moon gets smaller.)
- Cold call on two to three students to share out.
- Show students the Sun, Moon, and Stars Word Wall cards for *waxing* and *waning*.
- Invite students to make a hand gesture with you to demonstrate the meaning as you define the words (appearing to become larger; appearing to become smaller).
- Place the Word Wall cards on the Sun, Moon, and Stars Word Wall.
- Reread the Unit 2 guiding question and invite students to give a thumbs-up if they have learned about a pattern of the moon.
- Draw students' attention back to the text and read aloud page 14 fluently and without interruption. Ask:
“What causes the moon to shine at night?” (The moon is lit up by the sun.)
- As students share out, capture their responses on **Patterns of the Moon anchor chart**. Refer to **Patterns of the Moon anchor chart (answers, for teacher reference)** as necessary.
- Draw students' attention back to the text and read aloud page 15 fluently and without interruption. Ask:
“How does the moon move?” (The moon goes around the earth.)
- As students share out, capture their responses on the Patterns of the Moon anchor chart. Refer to Patterns of the Moon anchor chart (answers, for teacher reference) as necessary.
- Draw students' attention back to the text and reread the last two sentences of page 15 and ask:
“Is the moon changing shape?” (We only see what is lit up by the sun, so what we see from earth looks different if the whole moon is not in the light from the sun. The moon isn’t actually changing, but what we can see looks different.)
- As students share out, capture their responses on the Patterns of the Moon anchor chart. Refer to Patterns of the Moon anchor chart (answers, for teacher reference) as necessary.

- Introduce the Sun, Moon, and Stars Word Wall cards for *seems to* and *appears to* and explain that we can use these terms to describe what something looks like. The moon seems to, or appears to, be changing shape, but it's not. Place the Word Wall cards on the Sun, Moon, and Stars Word Wall.
- Invite students to turn and talk with an elbow partner:
“What is one piece of new information you learned about patterns of the moon?” (Responses will vary, but may include: the moon seems to change shape, the moon isn't actually changing.)
- Reread the information added to the Patterns of the Moon anchor chart and tell students that now they will watch a video and do a simulation to understand better why the moon looks like it is changing.

Meeting Students' Needs

- Before the focused read-aloud, provide white boards and dry-erase markers as an option for students to record (in drawing or writing) their ideas. This will also help scaffold active listening for key details. (MMR, MMAE)
- For ELLs: Invite students to practice using the phrases *seems to* and *appears to*. Prompt students by asking them what else the sun and moon seem to or appear to do. (Examples: The moon appears to move across the sky. The sun seems to disappear under the horizon.)

Work Time

B. Engaging the Scientist: Why Does the Moon Seem to Change Shape? (20 minutes)

- Share with students that now that they have read about the patterns of the moon and why the moon's shape seems to change, they will watch a video demonstration about the phases of the moon and do a simulation.
- Review the Sun, Moon, and Stars Word Wall cards for *full moon*, *half-moon*, and *crescent moon*.
- Play “**Moon Phases Demonstration.**”
- Invite students to turn and talk with an elbow partner:
“What did you notice about the appearance of the moon as it circled around?” (The part of the moon that was lit up grew bigger and bigger until it was a full moon; then it grew smaller and smaller.)
- Cold call on two to three students to share out.
- Tell students that people call this appeared change of the moon the “phases of the moon” and that we see the moon go through one complete phase, or pattern, in about a month.
- Tell students that now they are going to try the demonstration shown in the video. Direct students' attention to the **Working to Become Ethical People anchor chart** and review the big ideas.
- Remind students that integrity means to do the right thing even when it's hard. Tell them that you will be observing during the simulation to look for great examples of integrity.
- Ask students to sit in a circle in the whole group meeting area.

- Place the **lightbulb** in the middle of the meeting area and turn it on. Gather the **moon sign** to hold toward the light during the simulation.
- Prepare students for the simulation by telling them that just as in the video, in order to see the phases, or pattern, of the moon the room needs to be dark. Encourage students to uphold integrity during the experiment and stay on task. Tell them that the class will be split in half: One half will take part in the simulation and the other half will observe. Then they will switch.
- Call up half of the class.
- Have students stand around you as you orbit the moon sign around your head (the earth). Make sure you are standing close enough to the lightbulb (the sun) to ensure good light and shadow.
- Invite students to name the phases of the moon as they see the change occur across the face of the moon.
- As you engage in the simulation, think aloud about how the moon's shape is not changing, but the amount of the moon you can see lit up by the sun seems to grow bigger and smaller as it circles the earth.
- Switch groups and repeat the demonstration.
- Direct students back to their seats in the whole group meeting area.
- Ask students to turn and talk with an elbow partner:
"Why does the moon seem to change?" (because it is circling the earth, and as it does the amount of sunlight shining on it changes as it moves)
- Cold call on two to three students to share out.
- If productive, cue students to clarify the conversation by confirming what they mean and to listen carefully and seek to understand:
"So, do you mean ____?" (Responses will vary.)
"Who can tell us what your classmate said in your own words?" (Responses will vary.)
- Give students specific, positive feedback on upholding their integrity for learning during the demonstration. (Example: "Sophia, I noticed that as you were waiting for your turn to do the experiment, you were watching the other group to understand what to do.")

Meeting Students' Needs

- Facilitate personal coping and self-regulation skills by modeling socially appropriate ways to express enthusiasm and excitement about this simulation. For example, give a silent cheer, give yourself a hug, take a deep breath and smile, or raise the roof. (MME)
- For ELLs: Watch the "Moon Phases Demonstration" video clip twice. Students will be able to absorb and process more information during their second viewing after they understand the general idea during the first viewing. Before watching the video, consider introducing and displaying the question "What did you notice about the appearance of the moon as it circled around?"
- For ELLs: To prepare students to share their answers to the question "Why does the moon seem to change?" ask the question before the first simulation and record and display responses. After the second simulation, review the responses and ask students if they have anything to add before beginning the turn and talk.

Closing and Assessment

A. Independent Writing: Sky notebook (10 minutes)

- Direct students' attention to the second posted learning target and read it aloud:
"I can record my observations of images of the sky in the Sky notebook."
- Remind students that they will be writing in their Sky notebooks to reach this target.
- Display:
 - Pages 5–6 of the **Sky notebook**
 - **Sun photograph 5**
 - **Moon photograph 5**
- Tell students that similar to previous lessons, they will use the sun and moon photographs to complete these pages in their Sky notebook
- Point out the Sky notebooks, **pencils**, and **colored pencils** at students' workspaces.
- Remind them that they should include an adjective to describe the sun and moon, and a preposition to state the precise location. Remind students to use the Sun, Moon, and Stars Word Wall, the Prepositions anchor chart, and the **Adjectives anchor chart** while writing.
- Briefly review the instructions on pages 5 and 6 of the Sky notebook. Invite students to circle the moon on page 6 that looks most like the moon in the photograph.
- Tell students that if they would like to take a closer look at the photographs, they are welcome to quietly get up and move closer during writing time, taking care to be respectful of their classmates.
- Direct students to their seats and tell them to begin writing in their Sky notebooks.
- Circulate and listen in as students write.
- When 2 minutes remain, give students a time reminder.
- Signal all students to stop writing through a designated sound. Ask students to put away their Sky notebooks in the designated turn-in area.
- Collect the Sky notebooks.
- If productive, cue students to think about their thinking:
"How does our Sky notebook add to your understanding of adjectives and prepositions? I'll give you time to think and discuss with a partner." (Responses will vary.)
- Tell students that tomorrow they will use the information they learned about the moon to take part in a Science Talk with their classmates, so they should continue thinking about the pattern of the moon and how its shape seems to change.

Meeting Students' Needs

- Before the transition to clean up, support self-regulation and independence during the transition by providing a clear routine for what to do with unfinished work and using a visual timer. (MME)
- For ELLs: Provide students with a sentence frame to support their writing in their Sky notebooks. (Example: The moon is _____ the horizon.")