

Lesson 10: Science Talk: What Makes a Bird a Bird?



CCSS

- **W.1.8:** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
- **SL.1.1:** Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
- **SL.1.1a:** Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
- **SL.1.1b:** Build on others' talk in conversations by responding to the comments of others through multiple exchanges.
- **SL.1.2:** Ask and answer questions about key details in a text read aloud or information presented orally or through other media.



Daily Learning Targets

- I can write one or more descriptive sentences to show my learning about what makes a bird a bird. (W.1.8)
- I can participate in a Science Talk to show my learning about what makes a bird a bird. (SL.1.1, SL.1.1a, SL.1.1b, SL.1.2)

Ongoing Assessment

- Use the Speaking and Listening Checklist to monitor students' progress toward SL 1.1a and SL.1.1b (see Assessment Overview and Resources).

Agenda

1. Opening

- A. Poem and Movement: "Wandering through the Zoo" Poem (10 minutes)

2. Work Time

- A. Independent Writing: Preparing for a Science Talk (20 minutes)
- B. Science Talk Protocol: What Makes a Bird a Bird? (20 minutes)

3. Closing and Assessment

- A. End of Unit Reflection (10 minutes)

Teaching Notes

Purpose of lesson and alignment to standards:

- During the Opening, students celebrate the work they have done with L.1.1f and L.1.5d. Students participate in a fun, action-packed role-play of the poem "Wandering through the Zoo" to reinforce their understanding of the adjectives used in the poem.

- This lesson provides multiple opportunities for students to revisit and reflect on the learning they did throughout the unit. It also offers multiple modes of demonstrating their understanding, from acting, to writing, and eventually to talking. Students reflect on what they have learned as well as how they have used what they have learned.

How this lesson builds on previous work:

- In this final lesson of the unit, students use all the information gained about birds to answer the unit guiding question during a Science Talk: “What makes a bird a bird?”

Areas in which students may need additional support:

- Students may need modeling or encouragement to act out parts of the poem. Help build a safe environment for students to act out the poem by putting them in groups of friends or acting their portion of the poem with them.

Down the road:

- Unit 1 focuses heavily on describing and shades of meaning with adjectives. Although students will continue to build their adjective Vocabulary in Unit 2, they will also begin to study shades of meaning with verbs.
- Unit 1 also focuses on the physical characteristics that make a bird a bird. In Unit 2, students will learn about how those physical characteristics help a bird to survive.
- Empathy is the habit of character focus in Unit 1. In Unit 2, students will use all of the important foundational knowledge about empathy to begin to learn about compassion.

In advance:

- Prepare enough space for the whole class to form a circle to act out the poem in the Opening.
- Pre-distribute Materials for Work Time A at student workspaces.
- Strategically group students into triads for the Science Talk in Work Time B and designate areas around the room for each triad.
- Post: Learning targets, “Wandering through the Zoo,” 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 and 2 to create anchor charts to share with families; to record students as they participate in discussions and protocols to review with students later and to share with families; and for students to listen to and annotate text, record ideas on note-catchers, and word-process writing.

Supporting English Language Learners

Supports guided in part by CA ELD Standards 1.I.A.1, 1.I.A.3, 1.I.B.5, 1.I.C.9, 1.I.C.10, and 1.I.C.11

Important points in the lesson itself

- The basic design of this lesson supports ELLs through opportunities to share their content knowledge about birds in a Science Talk protocol using Science Talk sentence starters to support adding to someone else's idea.
- ELLs may find processing language and following the conversation during the Science Talk protocol challenging (see “Levels of support” and the Meeting Students’ Needs column).

Levels of support

For lighter support:

- To prepare for Science Talk protocol, invite a group of students to model for the class using the Science Talk sentence starters.

For heavier support:

- To ensure students have quick access to the Science Talk sentence starters, consider giving students a copy of each sentence frame for reference during the Science Talk.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** In order to set themselves up for success for the end of unit reflection, students need to generalize the learning about characteristics of birds. Before asking students to share, activate prior knowledge by recalling learning from previous lessons. Also consider providing a visual display of learning from previous lessons in this unit.
- **Multiple Means of Action & Expression (MMAE):** In this lesson, students participate in a Science Talk. Continue to support students in setting appropriate goals for their effort and the level of difficulty expected.
- **Multiple Means of Engagement (MME):** Although holding high expectations is important, be aware that sometimes these expectations can raise student anxiety. During independent writing, emphasize the importance of process and effort by discussing how even when you try your best to write neatly you can sometimes make a mistake and that is okay.

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary Used in Writing

Review:

- science talk, reflect (L)

Materials

- ✓ “Wandering through the Zoo” (from Lesson 7; one to display)
- ✓ Ideas about Birds anchor chart (begun in Lesson 1; added to during Work Time B)
- ✓ What Makes a Bird a Bird? student notes (one per student and one for teacher modeling)
- ✓ Physical Characteristics of Birds anchor chart (begun in Lesson 4)
- ✓ Science Talk Protocol anchor chart (begun in Module 2)
- ✓ Classroom Discussion Norms anchor chart (begun in Module 1; added to during Work Time B; see supporting Materials)
- ✓ Science Talk sentence starters (one to display)
- ✓ Speaking and Listening Checklist (for teacher reference; see Assessment Overview and Resources)
- ✓ “To the Pond” (from Lesson 3; for teacher read-aloud)
- ✓ Back-to-Back and Face-to-Face Protocol anchor chart (begun in Module 1)
- ✓ Working to Become Ethical People anchor chart (begun in Module 2)
- ✓ Equity sticks (class set; one per student)

Opening

A. Poem and Movement: “Wandering through the Zoo” Poem (10 minutes)

- Follow the routine from the Opening of Lesson 5 to recite and act out the poem **“Wandering through the Zoo”** in various groups (e.g., big/humongous wings, little/minuscule beakers, etc.).

Meeting Students' Needs

- For ELLs: (Using visuals) Copy each word in the Adjectives Shades of Meaning, Version 2 anchor chart on a card and invite ELLs to be friends wandering through the zoo. Have them label each group of birds using the adjective cards.
- As the poem is read aloud together, minimize the threat for students who may not feel confident in their reading skills and may benefit from modeling. Provide differentiated mentors who may be more confident reading aloud near students who may not feel as confident. (MMAE)

Work Time

A. Independent Writing: Preparing for a Science Talk (20 minutes)

- Gather whole group.
- Direct students' attention to the **Ideas about Birds anchor chart** and read aloud the Unit 1 guiding question:
 - “What makes a bird a bird?”

- Direct students' attention to the posted learning targets and read the first one aloud:
"I can write one or more descriptive sentences to show my learning about what makes a bird a bird."
- Display the **What Makes a Bird a Bird? student notes** sheet and read the question aloud:
 - "What physical characteristics are unique to a bird?"
- Turn and Talk:
"What is one physical characteristic that is unique to a bird? (Responses will vary, but may include: sharp beaks, webbed feet, colorful bodies.)"
- 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."
- Invite one or two students to share.
- Model how to write a note on the notes sheet:
 - "Birds have sharp beaks that help them eat."
- Model how to draw a quick sketch to match the text.
- Tell students they will now write their own notes and create a quick sketch. Remind students to use a complete sentence and descriptive adjectives when writing.
- Tell students they will use these notes as evidence during the Science Talk in the next part of the lesson.
- Transition students back to their workspaces.
- Point out the What Makes a Bird a Bird? student notes sheet at students' workspaces and invite them to begin working.
- Circulate to support students as necessary. Encourage them to use the **Physical Characteristics of Birds anchor chart** and classroom resources (Word Walls, high-frequency word lists, and alphabet or letter sound combination charts).
- When 1 minute remains, give students a warning to finish up their writing and drawing.
- Refocus whole group and tell students to place their notes to the side so that they can use them for evidence during the upcoming Science Talk.

Meeting Students' Needs

- For ELLs: (Prompting Students to Use Adjectives and Complete Sentences) While circulating, support students in writing complete sentences by reminding them of resources around the room and prompting them to reflect on their work. Example: "Hmm, this just says *beaks and feathers*." Ask:
"Can you make a complete sentence out of those words?"
"Can you add adjectives?"
- For students who may need additional support with strategy development for written expression: Invite them to discuss and rehearse their sentences with a teacher or peer before writing. (MMAE)
- For students who may need additional support with self-regulation: When giving students a warning before the transition, continue to provide a clear routine for what to do with unfinished work and use a timer. (MME)

Work Time

B. Science Talk Protocol: What Makes a Bird a Bird? (20 minutes)

- Direct students' attention to the posted learning targets and read the second one aloud:
"I can participate in a Science Talk to show my learning about what makes a bird a bird."
- Remind students that throughout the course of the unit, they have researched how the physical characteristics make a bird a bird.
- Tell students that they will now use the Science Talk protocol to discuss their learning. Remind them that they used this protocol in Module 2, and review as necessary using the **Science Talk Protocol anchor chart**. (Refer to the Classroom Protocols document for the full version of the protocol.)
- Direct students' attention to the **Classroom Discussion Norms anchor chart** and ask:
"What does it mean to add onto someone's ideas?" (listen to what they say; add new or different details)
- If productive, cue students to compare their ideas:
"How is what ____ said the same as/different from what ____ said? I'll give you time to think." (Responses will vary.)
- Remind students that during previous Science Talks, they used sentence frames to help them add on to a classmate's comments. Display the **Science Talk sentence starters** and review them by reading them aloud:
 - "I think he/she means ____."
 - "I'd like to add ____."
 - "This makes me think ____ because ____."
- Remind students that as they engage in the Science Talk protocol, they should use one of the sentence frames to add onto or to build on what another group member might have said.
- Invite students to bring their What Makes a Bird a Bird? student notes and move them into pre-determined triads.
- Invite triads to begin the Science Talk protocol using the Unit 1 guiding question:
"What makes a bird a bird?"
- Circulate to support students as they discuss. As much as possible, allow students to complete the Science Talk protocol independently. Only provide reminders about directions. Observe students sharing information about what makes a bird a bird, using sentence frames to add on to the discussion, and using their notes as a resource as they share and discuss. Use the **Speaking and Listening Checklist** to make note of observations and progress toward SL.1.1a, SL.1.1b, SL.1.4, and SL.1.6.
- After 10 minutes, gather students together whole group by reciting **"To the Pond."**
- Direct students' attention to the Ideas about Birds anchor chart.
- Invite volunteers to offer new ideas about 'what makes a bird a bird' and capture students' responses on the chart.
- Tell students they have learned a lot about birds and they will keep the chart to continue learning more interesting things about birds!

Meeting Students' Needs

- For ELLs: (Using Science Talk Starters) Review how to use the Science Talk sentence starters. Ask:
 - “What sentence starter will you use if you want to say what someone else has said in your own words?” (“I think he/she means _____.”)*
 - “What sentence starter will you use if you want to say more about what someone else has said?” (“I’d like to add _____.”)*
 - “What sentence starter would you use if you have a connection with what someone else says?” (“This makes me think ____ because _____.”)*
- For ELLs: (Empowering Students) Encourage students to speak up when they would like to hear something repeated. Empower them with questions they can ask to regulate the pace of the conversation. (Examples: Can you please repeat what you said? Can you please speak more slowly?)
- Before students begin the Science Talk, help them anticipate and manage frustration by modeling what to do if they get stuck on building on others' ideas. Consider providing index cards of previously taught sentence frames as support for communication and frustration. (MMR, MMAE, MME)

Closing and Assessment

A. End of Unit Reflection (10 minutes)

- Refocus students and give them specific, positive feedback for engaging in meaningful discussions.
- Tell them that they will now have a chance to reflect on all of the thinking and learning they did during this module.
- Remind students that *reflect* means to think about something we have done or learned.
- Tell students they are going to use the Back-to-Back and Face-to-Face protocol to reflect on their skills of observational drawing and what they have learned about empathy. Remind them that they used this protocol in Module 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.)
- Guide students through four rounds of the protocol using the following questions:
 - “What is something you learned about how to create an observational drawing?”*
 - “What did you have to think about when you created your final draft?”*
 - “Why is it important to show empathy?”*
 - “How did you show empathy toward a classmate as he or she shared a drawing?”*
- As students talk, circulate and listen in. Refer them to the **Working to Become Ethical People anchor chart** as needed as they talk about empathy.
- Invite students to be seated again.
- Use **equity sticks** to select three or four students to share out what they discussed with their partners during the protocol.

- Tell students they have had many opportunities to learn about and show empathy throughout the unit and will continue to work on this habit in the next several units.
- Give students specific, positive feedback on all of their hard work during this unit, including researching and learning about the unique physical characteristics of birds and engaging in rich discussions with their classmates.

Meeting Students' Needs

- For ELLs: (Celebrating Learning) Consider giving feedback on what an ELL did well. This will help the student build his or her self-confidence and to identify and repeat that success next time.
- For students who may need additional support with auditory perception: Offer alternative for auditory information by providing discussion questions visually on the board or chart paper. (MMR)