Sounds of the Season

Unit: Henry as Naturalist
Topic: Exploring sounds in our surroundings

Thoreau Quotation
“What a delicious sound. It is not merely crow calling to crow, for it speaks to me too. I am part of one great creature with him; if he has voice, I have ears.”
—Journal, January 12, 1855

Background
Thoreau was a keen observer, not only with his eyes, but also with his ears. The sounds of a place could tell a very important story, as far as Thoreau was concerned. One of the chapters in Walden, his most popular book, is even called “Sounds.”

Objectives
1. To keenly observe the sounds of a particular place—or of several places
2. To identify patterns or rhythm in observed sounds
3. To draw conclusions about the purpose/function of sounds
4. To compare and contrast the sounds of different seasons/times in the same place (If done at several points throughout the year or day)

Time Required
45 - 60 minutes

Method
Students will make observations of the sounds of a place—or several places—and use their observations to find patterns and rhythm and to create stories about the place(s) where the sounds were heard.

Materials
• Field notebooks
• Pencils
• Space (outdoors is best)
Procedure

1. If an outdoor space is available to your class, this exercise is ideally conducted there! Otherwise, you can take students to a place in your building that they do not usually occupy.

2. Have the students spread out throughout the space so that if their neighbor is fidgety they can still hear other sounds, too.

3. Ask students to be silent for five minutes, and if they feel safe, to close their eyes so they can use their listening ears most effectively. In those five minutes, they are asked to listen—very closely—to the sounds of the space they are in. Here are some questions that may be used to prompt them in their listening:
   a. What are the regular, consistent sounds in that space?
   b. Which sounds only happen once or maybe a few times in those five minutes?
   c. Which sounds happen at even intervals? Are those intervals fast or slow?
   d. Which sounds seem to occur more randomly?
   e. Which sounds are loud?
   f. Which sounds are faint?
   g. Which sounds are high-pitched or low-pitched?

4. Students are then given another five minutes to continue to listen and to write about what they hear (feel free to give more time for this part). Instruct them to describe the sounds using onomatopoeia and explanation of frequency, volume, and clarity. Here are questions that may be used for them to describe the sounds:
   a. Does it come from a living or non-living thing?
   b. Is it pleasant or harsh to them?
   c. Is it something they would notice if they weren’t listening intently?

5. With 10-20 more minutes, students are asked to write a narrative about the sounds they have heard. Students can either write a literal tale about the sounds or get more creative. Potential prompts for their story:
   a. Where do the sounds come from?
   b. What do the sounds mean? Are they communicating something to other animals (including humans)? Are they the result of wind or some other force acting upon on something (water flowing)?
   c. What story do the sounds tell about the place?

Reflect and Explain

- Invite students to share their narratives with a partner and to continue their active listening skills. Once they have listened to each other’s story, discuss those sounds they heard that were the same and those that were unique to each student. Why might they hear some sounds that their partner did not hear?
• You can also discuss the notion of silence with students. Was sitting in silence uncomfortable for them? If so, why? If not, what is it that they find comforting about silence? How many opportunities are there for silence in our lives?
• Ask them to think about the sounds in their space at home. If you’d like, you can have them do the same exercise at home as homework and compare the sounds of home and school.
• Based on the quote from Thoreau’s journal, do the students think that Thoreau would have heard any of the sounds they heard today? What sounds might Henry have heard that they did not? How might the sounds be different today than they were when Henry was alive? Would he have heard more or fewer sounds than they heard when he was alive?

Extensions
1. To expand on the lesson, take students to the same spot once during each season or at different times throughout the day. Ask them to compare and contrast the sounds they hear each time. Which sounds are there each time they visit? Which are unique to a particular time of day or year? What do the differences in the sounds heard at different times say about that place?
2. You could also have students do the same exercise in multiple places and compare and contrast the sounds in different places.
3. Read an excerpt from the chapter “Sounds” in Walden. Identify the different sounds he writes about and ways in which Thoreau uses imagery, metaphor, personification, allusion, and other literary devices.

Vocabulary

damping - Dissipation of energy with time or distance.
frequency - The number of times a vibrating object oscillates (moves back and forth) in one second. Fast movements produce high frequency sound (high pitch/tone), but slow movements mean the frequency (pitch/tone) is low.
Hertz (Hz) - A measure of frequency. The number of oscillations (back and forth movements) per second.
onomatopoeia - the naming of a thing or action by a vocal imitation of the sound associated with it (such as buzz, hiss)
pitch - How high or low a tone sounds to a person. High frequency sound has a high pitch or tone (treble notes), but low frequency has a low/deep pitch or tone (bass notes). High sounds are usually above 2000 Hertz and low below 200 Hertz.
reflection - Bouncing back of wave energy such as light or sound - when a wave reaches a new material part or all is reflected.
resonance - A natural frequency of vibration determined by the size and shape of an object. For example, shorter guitar strings resonate at a higher frequency than longer guitar strings.

sound pollution - The concentration of sound to levels harmful to the natural environment (including humans).

sound waves - Vibrations of air molecules that travel through air carrying energy with them. Sound waves can also travel through water and solids, but cannot travel in space where there are no molecules to vibrate. When sound travels through air, the molecules do not actually move to a new location, instead each set of molecules “bumps” the molecules next to it, progressively transferring motion to new sets of molecules farther and farther away from the sound source until the wave motion dies out.

Common Core Standards

English Language Anchor (all grades)

- **CCSS.ELA-LITERACY.CCRA.W.3**
  Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

- **CCSS.ELA-LITERACY.CCRA.W.10**
  Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

- **CCSS.ELA-LITERACY.CCRA.SL.1**
  Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

- **CCSS.ELA-LITERACY.CCRA.SL.4**
  Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

- **CCSS.ELA-LITERACY.CCRA.L.1**
  Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- **CCSS.ELA-LITERACY.CCRA.L.2**
  Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- **CCSS.ELA-LITERACY.CCRA.L.3**
  Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.
• **CCSS.ELA-LITERACY.CCRA.L.4**
  Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

• **CCSS.ELA-LITERACY.CCRA.L.5**
  Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

• **CCSS.ELA-LITERACY.CCRA.L.6**
  Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.