



Sound Map Activity

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**This activity has been adapted from multiple sources. Many place-based organizations have a version of this activity*

Goal: Students learn that scientists make observations using a variety of senses. Students practice the skill of observation through listening to collect data in their local environment.

Learning Objective:

- I can observe and map sounds outdoors using only my sense of hearing.
- I can identify living and nonliving things in my environment from sounds.

Materials:

- Sound Map Activity Sheet
- Clipboard (optional, but helpful)
- Reliable Writing Utensil (pen or pencil)
- Any outdoor space

Procedure:

1. **OPTIONAL:** I often precede this activity by reading aloud to students [The Other Way to Listen](#) by Byrd Baylor. This picture book introduces the idea of learning about things in our environment by listening closely.
2. Students select a place outdoors to observe sounds. You can set the boundaries according to your comfort level, the space you have, and your experience with the variety of sounds students could potentially hear. I have done this in our school yard, near rivers and the ocean, in forests or woods, and in backyards. Any place will do!
3. Students find their own spot within the boundaries to sit comfortably. They should be at least 3 arm lengths (or any other distance that works for you) from any other student. Use as much space as you can within your boundaries - the farther apart they are the more variety of sounds they may hear - which can lead to engaging discussions! For students that have trouble sitting, they may stand quietly in their spot.
4. Students mark an X (or any symbol they want) to represent themselves in the middle of their map. Remind students: "That's **you!**"
5. *Review with students the idea of mapping with distance and direction.*
 - a. For **direction**, sounds they hear in front of them will be placed in the top quarter of the map; sounds they hear behind them will be placed in the bottom quarter of the map; and so forth for left and right. They should place the sound on their map in the approximate direction from their body.
 - b. For **distance**, sounds far away should be placed far away from the center of the map; sounds close to them should be placed closer to the center; and so forth for in between. These distances won't be to "scale" - just to represent distance.
6. Have students close their eyes and just listen for at least 1 minute, to focus on the sounds, without yet writing anything down. *Remind students to stay very quiet to hear all the sounds around them!*
7. After 1 minute, have students add sounds they heard. Then have them close their eyes to listen again for 2-3 more minutes (your choice of time, depending on age and activity level). When they hear a sound they can quickly open their eyes and add the sound to their map and then close their eyes again to continue listening.
8. Students mark a **symbol** on their map for each different sound that they hear in relation to their body position. Remind students, Is it...
 - a. *In front of you? or behind? Left or right?*
 - b. *In the air? On the ground?*



- c. *Close to you? Farther away?*
 - d. *Is it staying in one place? Moving around?*
9. You can encourage students to make “fox ears” – cup their hands around their ears. *Face their hands forward or backward to pick up far-away or really soft sounds.*
10. **After listening and mapping, have students label** (if they haven’t already) what they think each sound is (it’s ok if they don’t know!). *Is it a nature sound? A human sound?*
11. **Follow up Discussion Questions:**
- a. What sounds were easy to hear? Why?
 - b. What sounds were hard to hear? Why?
 - c. What sounds were from living things? Non-living things?
 - d. What sounds were human-caused? Other-than-human sounds (“nature” sounds)? Which sounds were easier to hear?
 - e. What did you hear that was unexpected or that you might not have heard if you hadn’t stayed very quiet?
 - f. Compare your map to a peer’s map (someone farther away from you). What is similar? What is different?
 - g. How might their map be different at a different time of day? Or a different season? Or a different location?



Sound Map Activity

We often observe the world by looking with our eyes. Sound mapping is a great way to practice observing the world by listening. Taking a few quiet moments to listen will tune in your ears - what do you notice that's hidden? Or too quiet to hear among the everyday noises?

- ★ Find a place outside that you want to observe. Sit or stand quietly in your own spot.
 - ★ On your “map” mark an X in the middle. That’s **you!** *What sounds do you hear all around you?*
 - ★ Close your eyes to focus on the sounds. *Try to keep them closed for at least 1 minute and just listen.*
 - ★ Stay very quiet to hear all the sounds around you!
 - ★ Make “fox ears” – cup your hands around your ears. *Face your hands forward or backward to pick up far-away or really soft sounds.*
- ★ On your map, mark a **symbol** for each different sound that you hear in relation to your body position. Is it...
 - ★ *In front of you? or behind? Left or right?*
 - ★ *In the air? On the ground?*
 - ★ *Close to you? Farther away?*
 - ★ *Is it staying in one place? Moving around?*
 - ★ **Label** what you think it is (it’s ok if you don’t know!) *Is it a nature sound? A human sound?*





Sound Map

A large, empty rectangular box with a thick black border, intended for students to draw a sound map of their listening experience.

★ Thinking about listening...

- What sounds were easy to hear? Why?

- What sounds were hard to hear? Why?

- What did you hear that was unexpected or that you might not have heard if you hadn't stayed very quiet?