

We Skoolhouse



Ready-Made Curriculum: Sound & Vibration



Introduction: Sound & Vibration

This investigation invites children to explore the invisible yet powerful world of sound. Children will listen, watch, feel, and create vibrations, discovering how sound is made and how it moves through air, water, objects, and their own bodies.

In the first week, children will slow down and notice sounds in their everyday environment, discovering that all sound is caused by vibration. As the weeks progress, they will experiment with changing sounds—making them louder or quieter, higher or lower—and observe how different materials affect sound.

They will then move into studying how sound exists in nature and is used by animals and people to communicate. Finally, they will explore sound as a language of emotion and imagination, composing and performing their own sound stories.

This unit emphasizes hands-on experimentation, sensory integration, and creative expression. Children will have opportunities to represent what they discover through movement, mark-making, building, dramatic play, and collaborative documentation.

Books Used Throughout the Unit:

- Sounds All Around by Wendy Pfeffer
- The Listening Walk by Paul Showers
- Oscar and the Bat: A Book About Sound by Geoff Waring
- I Hear a Pickle by Rachel Isadora
- Because by Mo Willems (for emotional/symbolic sound toward the end)

Vocabulary

vibration, sound, quiet, loud, high, low, pitch, volume, echo, silence, hum, bang, ring, shake, rattle, pluck, tap, beat, rhythm, music, noise, listen, feel, pattern, voice, instrument, wave, travel

Week 1: Discovering Sound

Focus Concept: Sound is made when things vibrate.

Weekly Objective: Children will explore what sound is, where it comes from, and how it moves. They will use their senses to listen, watch, and feel vibrations.

Monday – What is Sound?

Morning Meeting

- Book: Oscar and the Bat: A Book About Sound by Geoff Waring
- Discussion Prompts:
 - What is sound?
 - Where does sound come from?

Follow-Up Investigation

- Sound Hunt Walk — Take children on a slow, mindful walk inside and/or outside. Carry clipboards for note taking.
- Pause often to listen. Children draw or tally sounds they hear (birds, doors, voices, wind, etc.).
- Optional Journal Prompt: “I heard...” (children may write and/or drawing their findings in their journal).

Closing Circle

- Reflect: “What sound surprised you today?”
- Optional: Begin a class “Sounds We Hear” chart. As children discover new and interesting sounds (or acquire facts about sounds, you may add it to the wall).



Tuesday – Feeling Vibration

Morning Meeting

- Book: Oscar and the Bat: A Book About Sound
- Discussion Prompts:
 - What makes sound happen?
 - Can we feel sound?
 - Where in our body do we feel it?
 - Optional extension: Encourage children to place hands on their throats while humming to feel vibration.

Follow-Up Investigation

- Stretch plastic wrap tightly over bowls and secure with rubber bands.
- Sprinkle a pinch of rice or salt on top.
- Invite children to tap the sides of the bowls with spoons or sticks, or place small speakers nearby playing short sounds.
- Watch the rice jump as the vibrations move through the surface.
- Provide hollow boxes and rubber bands to pluck, and allow children to rest their hands on the boxes while they play to feel the vibrations travel.
- Journal Prompt: "I saw the sound when..."

Closing Circle

- Reflect: "Where did you feel the sound?"

Wednesday – Loud & Quiet

Morning Meeting

- Book: Oscar and the Bat (focus pages 15–20)
- Discussion Prompts:
 - What sounds in the story were quiet? Which were loud?
 - Can the same thing make both kinds of sound?

Follow-Up Investigation

- Sound Sorting Station — Offer a mix of sound makers: bells, rainsticks, shakers, wood blocks, metal spoons, soft brushes for children to explore.
- Optional: Children explore and then sort them into "quiet" and "loud" baskets.
- Journal Prompt: "A loud sound was... A quiet sound was..."

Closing Circle

- Reflect: "How does your body feel when you hear quiet sounds? Loud sounds?"



Thursday – Fast & Slow Sounds

Morning Meeting

- Book: The Listening Walk by Paul Showers
- Discussion Prompts:
 - Can you make your own fast or slow sounds?
- How does the rhythm change what we hear?

Follow-Up Investigation

- Body Sound Orchestra — Children experiment with clapping, stomping, snapping, or patting laps to make rhythms. Alternate between fast and slow, loud and soft, and create short group patterns.
- Journal Prompt: "My body made sound by ..."

Closing Circle

- Reflect: "What happened when we all made sounds together?"



Friday – Listening Maps

Morning Meeting

- Book: The Listening Walk by Paul Showers
- Discussion Prompts:
 - What sounds can you find around our classroom or outside?

Follow-Up Investigation

- Sound Map Drawing — Sit quietly outside or near an open window. Children listen for a few minutes, then draw marks or symbols to show where each sound came from to deepen listening focus and spatial understanding of sound.
- Journal Prompt: "I heard sounds coming from ..."

Closing Circle

- Reflect: "What sound helped you know you were outside (or hear sounds coming from outside)? Which sound helped you know you were inside?"



Week 2: Changing Sound

Focus Concept: Sound changes based on how it is made, what it travels through, and the materials involved.

Weekly Objective: Children will explore how movement, force, and material affect sound, discovering that sound can change its speed, direction, and quality depending on where and how it travels.

Monday – Experimenting with Energy

Morning Meeting

- Book: Oscar and the Bat: A Book About Sound (revisit opening pages)
- Discussion Prompts:
 - “What happens when we use more energy to make a sound?”
 - What happens when we use less?
 - How do louder sounds feel different in our bodies?

Follow-Up Investigation

- Sound Energy Lab — Offer drums, shakers, spoons, and boxes. Children explore what happens when they tap, shake, or pluck softly vs. strongly. Add rice vibration trays or balloons to feel movement.
- Journal Prompt: “When I used more energy, my sound...”

Closing Circle

- Reflect: “How did your body know when you made a strong sound? What did you notice about vibration?”



Tuesday – Sound Through Different Materials

Morning Meeting

- Book: Oscar and the Bat (revisit sections where Bat explains how sound travels).
- Discussion Prompts:
 - When we hear something, how does the sound get to our ears?
 - Does sound move through everything the same way?

Follow-Up Investigation

- Sound Travel Stations: Set-up three simple experiments to explore how sound moves.
 - Air Station: Talk or hum through whisper tubes (dryer hose or long cardboard tubes). Try bending or covering the tube—does it change the sound?
 - Water Station: Tap two spoons together under a shallow bin of water. Watch the ripples and notice how sound feels softer underwater.
 - Solid Station: One child puts an ear on a wooden table or floor while another taps gently on the other side.

Closing Circle

- Reflect: “What surprised you about how sound moved?”

Wednesday – Nature's Instruments

Morning Meeting

- Book: Sounds All Around by Wendy Pfeffer (read pages about natural sounds—wind, rain, and animals).
- Discussion Prompts:
 - What sounds does nature make?
 - What can we use from nature to make sounds of our own?
 - How can we make calm or busy sounds with what we find?

Follow-Up Investigation

- Natural Sound Studio — Provide natural materials like sticks, rocks, shells, bark, and leaves. Children explore which can tap or shake, then build simple “instruments” (wind chimes, rainmakers, seed shakers).
- “My nature instrument is...”

Closing Circle

- Reflect: “Which materials made quiet sounds? Which were bright or sharp?” “What did your sound remind you of in nature?”



Thursday – Sound Composers

Morning Meeting

- Book: Sounds All Around Us
- Discussion Prompts:
 - “How can we use what we’ve learned to make a sound story?”
 - How can we change our sounds to show a feeling or idea?
 - How can we work together to make a beginning, middle, and end?

Follow-Up Investigation

- Sound Composition Workshop — Provide a mix of classroom and nature-made instruments (drums, shakers, tubes, rainsticks). In small groups, children create a “sound story.”

Closing Circle

- Reflect: “What kind of sound did your group create?” “How did your sound make you feel?”



Friday – Sound Composers (Extension)

Morning Meeting

- Book: Sounds All Around
- Discussion Prompts:
 - How do musicians or animals use sound to communicate?
 - How could we add movement or art to our sound story today?

Follow-Up Investigation

- Sound Story Rehearsal and Performance — Groups revisit their compositions from Thursday, adding small extensions—body movement, rhythm changes, or changing their sounds altogether.
- Invite groups to “perform” for one another, practicing listening and appreciation (but please keep this part optional and flexible as we want to invite children to share and perform, not demand or direct it).
- Journal prompt: “When we shared our sound story, I felt...”

Closing Circle

- “What did we learn about how sound can change?” “How can sound tell a story without words?”

Week 3: Sounds In Our World

Focus Concept: Sound helps us understand and connect with the world around us.

Weekly Objective: Children will listen intentionally to sounds in nature, in their community, and in daily life, discovering how people and animals use sound to communicate.

Monday – Sounds Around Us

Morning Meeting

- Book: The Listening Walk by Paul Showers (read full book).
- Discussion Prompts:
 - What sounds did the girl and her father hear on their walk?
 - What sounds do we notice when we walk to school or play outside?
- Follow-Up Investigation
 - Community Sound Hunt — Take clipboards or sound cards outside. Pause to listen for birds, cars, wind, or voices. Encourage children to sketch or mark what they hear.
- Journal Prompt: "I heard..."

Closing Circle

- Reflect: "What sounds told you we were outside?" "What was your favorite sound today?"



Tuesday - Sounds of Nature

Morning Meeting

- Book: The Listening Walk
- Discussion Prompts:
 - What sounds come from nature?
 - What sounds might we hear if we were in the forest, near water, or in the sky?

Follow-Up Investigation

- Nature Sound Creation — Take a walk outside and listen for sounds of nature (wind, animals, leaves rustling).
 - Invite children to bring back natural artifacts to continue to explore sounds they can make. You can also offer and supplement additional materials like seashells, sea glass, etc. for broader exploration.
 - Record or replay short clips of the sounds children make for them to identify.
- Journal Prompt: "My favorite sound in nature is..."

Closing Circle

- Reflect: "Which natural sound felt calm? Which was busy or exciting?"



Wednesday – Animal Communication

Morning Meeting

- Book: The Listening Walk
- Discussion Prompts:
 - How do animals use sound to talk or warn each other?
 - Why do animals need to make or listen to sound?

Follow-Up Investigation

- Animal Sound Investigation — Listen to short clips of animals communicating (birds, frogs, dolphins, bees).
- Provide matching figurines and invite children to create "sound scenes" with the animals.
- Set up sensory bin with natural materials and animal figures discussed to make connections.
- Optional extension: explore how bats or whales use echoes to "see" with sound.
- Journal Prompt: "Animals use sound to..."

Closing Circle

- Reflect: "Which animal used sound in a way that surprised you?" "How is that like how we talk or listen?"

Thursday - Mapping Sound & Feeling

Morning Meeting

- I Hear a Pickle by Rachel Isadora
- Discussion Prompts:
 - What kinds of sounds do we hear in our daily lives?
 - How do different sounds make us feel inside?
 - Can we use colors, shapes, or lines to show how a sound feels?

Follow-Up Investigation

- Sound and Emotion Map — Play or replay familiar sounds from earlier in the week (wind, birds, water).
- Provide large paper and colored chalk or paint. Invite children to draw or paint the feeling of each sound — quick lines, swirls, dots, or soft shading.
- Journal Prompt: "The sound of ____ makes me feel..."

Closing Circle

- Reflect: "Which sound made you feel happy? Calm? Curious?" "How did you show that in your drawing?"



Friday – Our Class Sound Map

Morning Meeting

- Books: Revisit The Listening Walk or I Hear a Pickle
- Discussion Prompts:
 - What sounds do we hear in different places?
 - How can we show where we heard each sound this week?

Follow-Up Investigation

- Use a large classroom map or mural paper. Children add their drawings, sound symbols, and marks to represent sounds from their week - inside, outside, near, far.
- You may play different soundscapes, recorded sounds, etc. as children work.
 - Please note, children are free to create what and how they want.

Closing Circle

- Reflect: "What sounds tell you you're home?" "What sounds remind you of our class?"



Week 4: Sound as Expression

Focus Concept: Sound can show emotion, tell stories, and bring people together.

Weekly Objective: Children will explore how sound expresses feeling through music, rhythm, and movement, and how collective sound experiences create joy and connection.

Monday – Painting with What We Hear

Morning Meeting

- Book: Because by Mo Willems
- Discussion Prompts:
 - How did the music in the story make people feel?
 - What might happen if we listened with our ears instead of our eyes while we paint?

Follow-Up Investigation

- Listening and Painting Studio — Set up a calm, inviting art space with large paper, tempera paint, and music ready to play in short segments (classical, jazz, drums, lullaby).
- Children paint responding to rhythm and tempo.
 - Optional addition: Offer a chance to paint with eyes covered or closed, focusing only on what they hear & feel.
- Repeat using a contrasting music style, e.g. slow vs. upbeat

Closing Circle

- “How did it feel to paint what you heard?”
- “What changed when the music changed?”



Tuesday - Making Music Together

Morning Meeting

- Book: Because
- Discussion Prompts:
 - What happens when people make music together?
 - How can we create rhythm as a group?

Follow-Up Investigation

- Sound Orchestra — Provide classroom instruments and found objects (drums, sticks, shakers, xylophones, pots).
- Journal Prompt: "The instrument I explored was a..."

Closing Circle

- Reflect: "How did we know when to start or stop?" "How did it feel to make sound as a group?"



Wednesday – Music From Materials

Morning Meeting

- Book: I Hear a Pickle
- Discussion Prompts:
 - What kinds of materials can make music?
 - What happens when we combine different textures and objects?
 - Can we invent our own instruments?

Follow-Up Investigation

- Inventors' Workshop — Offer recyclables, rubber bands, boxes, jars, and string.
- Children design and test their own "instruments," exploring vibration and tone.
- Journal Prompt: "My instrument makes sound when..."

Closing Circle

- Reflect: "How did your instrument make sound?"



Thursday -Expressing Sound Through Art

Morning Meeting

- Book: Because
- Discussion Prompts:
 - How can we show sound using art?
 - What kind of music do you want to paint today?

Follow-Up Investigation

- Music Painting — Play different genres (classical, jazz, drums, lullabies).
- Children paint freely to the rhythm, tempo, and mood of each piece.
 - Some may paint one long song; others may switch with the music.
- Journal Prompt: "My painting sounds like..."

Closing Circle

- Reflect: "How did the music influence your art and movement?"



Friday – Sound Celebration

Morning Meeting

- Book: Revisit class favorite book
- Discussion Prompts:
 - How do sound and music bring people together?
 - What have we learned about sound?
 - How can we celebrate what we've made and discovered?

Follow-Up Investigation

- Sound & Music Celebration — Children revisit their instruments, group compositions, and sound art.
- Create a small classroom "performance" for peers or families—drumming, singing, or replaying favorite sound explorations. Invite them to add movement, dance, or visual art as part of the show.
- Journal Prompt: "My favorite sound is..."

Closing Circle

- Reflect: "What was your favorite discovery as we explored sounds?"



About Centers, Provocations, and Materials

The following center setups and materials are designed to support the investigation across the unit. The intention is not to do everything at once—but to select, rotate, and adapt based on the children's interests, developmental needs, and the rhythm of the group.

These ideas should be seen as options to choose from, not a checklist to complete. Overloading the space with too many choices can overwhelm young children. Instead, offer a small number of materials at a time, and observe how children engage with them before introducing more.

You might choose to:

- Keep certain materials consistent for multiple weeks to allow for repetition and mastery.
- Rotate in new elements slowly to spark renewed interest or deeper thinking.
- Modify invitations to become more complex or more accessible as needed.

Children should be welcomed to:

- Make choices about how and where they work within the classroom.
- Move materials between areas (when appropriate) to support their ideas or projects.
- Combine materials across centers to create more layered and meaningful representations.
- Take responsibility for the tools they use by helping to return them when finished.

While autonomy is encouraged, a sense of shared care and responsibility is expected. In all cases, the role of the adult is to:

- Observe how materials are used and what thinking is emerging.
- Document children's approaches, choices, and discoveries.
- Decide when to step back, when to scaffold, and when to offer something new.





Art Studio

Purpose: Encourage creative expression through color, texture, and sound-inspired movement.

Materials & Setup Options:

- Music Exposure: On low volume, play different genres of music different days while children explore free art exploration.
- Eyes-Covered Painting: Invite children to paint with eyes covered while listening closely to music.
- Instrument Decoration: Offer materials for decorating the instruments made in Science & Discovery (paint, collage, tape, natural materials).
- Sound & Color Exploration: Use cellophane, colored film, or translucent materials to explore how colors reflect sound moods.



Notes: As always with art, there is never an expectation as to what a child's work should look like. We offer the materials, but we want children to lead their own experiences.

Dramatic Play

Purpose: Encourage collaboration, performance, and storytelling through sound, rhythm, and imagination.

Materials & Setup Options:

- Concert Hall Setup: Stage area with scarves, microphones, and child-made instruments for spontaneous shows.
- Conductor's Podium: Baton or stick for children to lead peers in group rhythm play.
- Sound Story Theater: Props and cards (rainstorm, parade, forest) for acting out sound scenes.
- Audience Corner: Tickets, chairs, and simple programs for performance roles.

Notes: Invite child-led performances with materials, but never make them feel pressured to do so. This is a provocation to invite a new type of play, but the children may not run with it and that's okay.

Sensory Table

Purpose: Support sensory-motor exploration of sound through touch, vibration, and rhythm-making materials.

Materials & Setup Options:

- Sound Water Play: Metal, bamboo, and plastic cups that make unique tones when tapped or splashed.
- Bubble Symphony: Soap, straws, and cups for blowing bubbles and listening to popping sounds.
- Sand Shakers: Hidden beads or pebbles in containers for auditory guessing and comparison.
- Wind and Whistle Corner: Tubes, ribbons, and chimes for children to blow or wave to create gentle sound.

Notes: Encourage descriptive vocabulary: "This sound is sharp," "This one hums softly," "That one tickles my fingers."





Science & Discovery

Purpose: Explore vibration, pitch, and resonance through hands-on sound investigations.

Materials & Setup Options:

- **Mystery Sound Match:** Identical containers filled in pairs with rice, beans, pebbles, or buttons. Children shake and listen to find matching sounds.
- **Water Music Station:** Glass jars with varying water levels to test and compare pitch.
- **String Sound Testers:** Rubber bands over boxes to explore tight vs. loose tension.
- **DIY Instrument Lab:** Recycled materials (tubes, bands, jars) for building simple sound-makers and testing how material and size change tone.

Notes: Encourage observation and comparison: "Which sound is softest?" "How did you change your sound?" Add vocabulary like vibration, pitch, tone, and match.

Blocks and Construction

Purpose: Explore how sound interacts with space, structure, and material through creative building and experimentation.

Materials & Setup Options:

- Sound Tunnel Building: Use blocks, cardboard tubes, or hollow boxes to construct tunnels or caves that amplify, echo, or muffle sound. Children can test their voices, instruments, or objects inside.
- Echo Wall: Cover different surfaces (foil, cardboard, fabric, wood) and let children clap, drum, or tap to compare which ones reflect or absorb sound best.
- Rhythm Ramp: Use cardboard or wooden ramps and rolling objects (balls, marbles, pebbles) to create rhythmic sound patterns. Invite children to experiment with angles and surfaces.

Notes: Encourage hypothesis and reflection: "What happens when we make the tunnel longer?" "Which wall made the strongest echo?" Document discoveries with photos and sound charts.

Literacy Center

Purpose: Strengthen auditory awareness, vocabulary, and storytelling through sound-inspired language and reflection.

Materials & Setup Options:

- Sound Word Wall: Add expressive vocabulary (buzz, clap, hum, crash, whisper, sing, echo) with picture cues. Encourage children to use the words in journal entries and dictations.
- Because Journals: Use prompts like "Because I heard..." or "Because of sound, I..." to connect sound with imagination, memory, and emotion.
- Picture & Sound Match: Provide images of real environments (rainforest, city, ocean, orchestra) with recordings of related sounds. Children match visuals to audio and describe what they notice.

Notes: Encourage rich descriptive language: "How would you describe that sound to someone who couldn't hear it?" "What words or pictures can show what that sound feels like?"



**“If you want to find the secrets of the universe,
think in terms of energy, frequency and
vibration.” — Nikola Tesla**