

Unit 4: Communicating with Sound and Light

WEEK 2 Studios





How does sound change?

Children continue making, collecting, and representing sounds with a variety of media. In the Library Studio, as in previous units, children write book reviews of new texts. At the Science and Engineering Studio, children continue investigating changing sounds with the tuning fork, from Science & Engineering lessons.

Big Idea	Vibrating materials make sound. Sound makes materials vibrate.
Materials and Preparation	<ul style="list-style-type: none"> ● Studios prompts, cut apart and added to each bin ● Studios Planner ● observation sheets <p>Bring to the whole group meeting only those bins needed for introductions.</p> <p><u>For the Building Studio:</u></p> <ul style="list-style-type: none"> ● containers of various sizes, shapes, materials ● cloth and paper ● tape and elastic bands ● collections of small objects, such as pennies, beads, pebbles <p><u>For the Drama Studio:</u></p> <ul style="list-style-type: none"> ● fabric and clothespins ● other props commonly used for acting out stories <p><u>For the Library Studio:</u></p> <ul style="list-style-type: none"> ● a variety of books, including all Unit 4 books ● Book Review sheets, as used in previous units ● clipboards ● writing tools <p><u>For the Math Studio:</u></p>

	<ul style="list-style-type: none"> ● manipulatives, such as counters ● white board and markers <p><u>For the Science and Engineering Studio:</u></p> <ul style="list-style-type: none"> ● materials from Science lessons, including tuning forks ● science journals ● colored pencils <p>Review Studios descriptions below. Decide which studios to introduce explicitly. Prepare the Opening basket and materials accordingly.</p>
<p>Opening</p>	<p><i>There is so much to explore about sound! Most of the studios this week are the same as last week, so you have an opportunity to keep experimenting or to try something new.</i></p> <p><i>At the Drama Studio, you might create and act out a story in which sounds are important. Include as many sounds as you can! They might be sounds made by humans, made by animals, or made by other things in the environment, like... [wind, thunder, waves]. When you come to a sound in your story, you could make an action for the sound, as well as the sound itself!</i></p> <p><i>At the Library Studio, please consider writing a book review so you and your classmates can learn about some of the books we have added, related to our new study of sound and light.</i></p> <p><i>At the Math Studio this week, we will play another new game called Math Whisper.</i></p> <p><i>At the Science and Engineering Studio, you can continue your investigations of how sound is made using the tuning fork.</i></p> <p>Describe and model each studio to the extent needed for children to begin their work.</p> <p>Check in about agreements made in Week 1 to keep the classroom noise level at a manageable level for everyone, and review the signal for bringing down the volume if needed. It may also be important to remind children about appropriate use of elastic bands.</p> <p><i>Turn and tell your partner your plan and your backup plan.</i></p> <p>Ask a couple of children to share their plans, and dismiss all children to begin working.</p>

<p>Facilitation</p>	<p>As children work, circulate and engage children in conversation about their endeavors. Exploit opportunities to highlight children’s connections to the Weekly Question and the unit’s Big Ideas. Offer support in the form of material and print resources, strategies, adaptive tools, and consultation with peers.</p> <p>Listen in, observe, and take notes about children’s experiences with and observations and questions about sound. Use these notes to plan for upcoming Studios sessions.</p> <p>While children work, consider which piece of work to bring to a Thinking and Feedback meeting.</p>
<p>Closing Studios</p>	<p>Support smooth clean up of studios materials and organization of works in progress.</p> <p>Facilitate a short, whole group meeting after Studios to discuss children’s activities, discoveries, and questions.</p>

<p>Art</p> 	<p>Representing Sounds in Art <i>Continues from previous week</i></p> <p><u>Objective:</u> I can represent sounds and how they make me feel in visual artwork.</p>
<p>Building</p> 	<p>Making Sounds <i>Continues from previous week</i></p> <p><u>Objective:</u> I can use available resources to make instruments.</p> <p><u>Extension:</u> Invite children to make a variety of instruments, including drums and shakers, experimenting with containers and other materials of varying sizes, thicknesses, and shapes. Ask children to articulate what might account for the different kinds and qualities of sounds these instruments make.</p>
<p>Drama</p>	<p>Collecting and Acting Out Sounds <i>Continues from previous week</i></p> <p><u>Objective:</u> I can collect sounds from my environment. I can act out the sounds I</p>



collect.

Extension:

Invite children to create a story that features sounds (and possibly the absence of sound). Challenge them to include as many sounds as possible (made by humans, other animals, the environment), and to add gestures or actions to the sounds as they appear in their story.

Library



Book Reviews

Objective:

I can make recommendations about books for others to read.

Introduction:

You wrote book reviews for many of the books from our first three units of study about communities, animals, and resources. Now that we are starting a new study, Communicating with Sound and Light, we have some new books! You already know how to write reviews as book critics. We'll use the same form for our new reviews of books about how people get what they need and want.

Refresh children's memory of the Book Review sheet and the system for making them available to other readers.

Process:

Children browse books independently and with classmates. They talk about what they find. Then they write book reviews to recommend texts to others.

Facilitation:


*I notice you stopped here. What interests you on this page?
What do you think about this book? What do you like about it?
What do you want to tell others about this book? How will you communicate that in your Book Review?*



Ongoing Assessment:

Review children's Book Reviews to understand their approach to text and illustration, their comprehension, their drawing and writing, and their interests. Compare these observations to those made earlier, in previous units.

Thinking and Feedback Possibilities:

Invite a reviewer to share a book and elaborate on the information included in their Book Review. Generate feedback about the clarity of

	<p>the review: Was there some information that was not easily understood, and how could that be made more clear?</p>
<p>Math</p> 	<p>Math Whisper <u>Objective:</u> I can whisper math phrases/equations and accurately solve the equation.</p> <p><u>Introduction:</u> <i>We will play a new game today. It is similar to “telephone” but you can only whisper math equations or numbers.</i></p> <p><u>Process:</u></p> <ul style="list-style-type: none"> ● Children sit/stand in a line or a circle. ● One child is given the initial message (a math phrase or equation) to whisper to the next child. ● The recipient then whispers the message to the next child, and so on, down the line. ● Once the message reaches the last child, the child says the message out loud. The original message is often altered due to mishearing. ● The last child solves the problem/equation. The rest of the children can support. ● The content is specific to math, such as definitions, equations, or word problems. <p><u>Facilitation:</u> <i>What strategies can you use to solve the problem?</i> <i>How could you use the same numbers to make a different equation?</i> <i>How could you work together to figure out the answer?</i> <i>What makes a good group/partner?</i></p> <p><u>Ongoing Assessment:</u> Listen to see if children are finding the correct answer to equations or problems stated.</p>
<p>Science and Engineering</p>	<p>Changing Sounds <u>Objective:</u> I can use tools to explore the volume and pitch of sounds.</p> <p><u>Introduction:</u> Reintroduce materials and processes, as needed, from the week’s</p>

	<p>Science and Engineering lessons.</p> <p><u>Process:</u> Children continue their investigations from Science lessons, flexibly and playfully exploring the variety of ways to create and change sounds of differing volume and pitch.</p> <p><u>Facilitation:</u> <i>What have you discovered about how to make a sound louder? Softer? What ways have you discovered for changing a sound's pitch? Why do you think that is so? What more do you want to find out?</i></p> <p><u>Ongoing Assessment:</u> Observe as children work and review their science journal entries. Make note of emerging understandings, questions, and misconceptions. Consider what other materials from around the classroom might be useful in helping children build further knowledge.</p> <p><u>Thinking and Feedback Possibilities:</u> Children will engage in Science Circles during Science and Engineering lessons to extend their thinking and work.</p>
<p>Writing and Drawing</p> 	<p>Recording Sounds <i>Continues from previous week</i></p> <p><u>Objective:</u> I can record and describe the sounds I have created.</p>
<p>Standards</p>	<p>Standards addressed will depend upon the studios in which children work. Possibilities include those listed in the Studios Introduction (Part 2: Components) and the following studio-specific standards.</p> <p>Visual Arts 1.2 (BOSTON) Create artwork in a variety of two-dimensional (2D) and three-dimensional (3D) media, for example: 2D – drawing, painting, collage, printmaking, weaving; 3D – plastic (malleable) materials such as clay and paper, wood, or found objects for assemblage and construction.</p> <p>SA 1.1 (BOSTON) Label and recognize emotions. Express understanding of emotions using different forms of representation.</p> <p><u>Drama:</u></p>

	<p>L.5.1.d Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.</p> <p><u>Library:</u></p> <p>R.11.1.c With prompting and support, describe the relationship between the text and what person, place, thing, or idea the illustration depicts.</p> <p>R.11.1.d With prompting and support, compare and contrast two texts on the same topic.</p> <p>R.12.1.a Read various on-level text with purpose and understanding.</p> <p>W.3 Routinely produce a variety of clear and coherent writing in which the development, organization, and style are appropriate to task, audience, and purpose</p> <p><u>Math:</u></p> <p>NBT.A.1 Count to 120, starting at any number less than 120.</p> <p>OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p> <p>1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.</p> <p><u>Science and Engineering:</u></p> <p>1-PS4-1. Demonstrate that vibrating materials can make sound and that sound can make materials vibrate. Clarification Statements: • Examples of vibrating materials that make sound could include tuning forks, a stretched string or rubber band, and a drum head. • Examples of how sound can make materials vibrate could include holding a piece of paper near a speaker making sound and holding an object near a vibrating tuning fork.</p> <p>Practice 1. Asking questions and defining problems</p> <p>Practice 2. Developing and using models</p> <p>Practice 6. Constructing explanations and designing solutions</p>
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<p>Notes</p>
