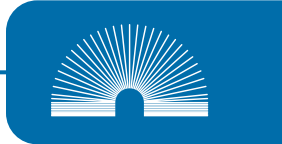


Activity 1A: The Power of Sound



Students listen to recorded sounds and discuss how sounds can evoke particular images and feelings and how they can help tell a story. Students complete a “Sound Scavenger Hunt,” in which they make recordings of different types of sounds. They identify the challenges in trying to convey an action, setting, or emotion through recorded sound and begin a list of techniques to address those recording challenges.

Sequence

1A.1: <i>What Do You Hear?</i>	Students listen and respond to recorded sounds and are introduced to the unit.
1A.2: <i>Sound Scavenger Hunt</i>	Students work in teams to find and record different types of sounds.
1A.3: <i>Share Recording Strategies and Challenges</i>	Students share their recordings from the Sound Scavenger Hunt and discuss the recording challenges they faced and the techniques they used.

Materials Needed

- **Handout 1: What Do You Hear?** (2 copies per student)
- Recorded sounds (see *Advance Preparation*)
- Optional: Audio clip, *Sound as Touch*, from 4:39 to 6:53
- **Handout 2: Unit 1 Overview**
- **Handout 3: Sound Scavenger Hunt**
- **Handout 4: Recording Techniques and Tips**
- **Handout 5: Unit 1 Journal Assignments**

Advance Preparation

- Before Activity 1A.1, compile five or six brief sound recordings to play in class. Choose different types of sounds—such as nature sounds, narrative voices, music, and sound effects. Ideally, pick sounds that elicit different reactions or strong emotional associations—for example, a carnival ride, cheering in a sports arena, an ambulance siren, crashing waves, a screaming person, a babbling brook, or a crying baby. See *Media & Resources* for links to sound recordings.
- Before Activity 1A.1, preview the portion of the audio clip *Sound as Touch* from 4:39 until 6:53. Decide whether to play the clip during the discussion of how sounds can evoke particular emotions. The clip describes how sound vibrations reach through the ear and into the brain, setting off a series of electrochemical reactions that stimulate neural pathways linked to emotion and memory. See *Media & Resources* for a link to the clip.



1A.1: What Do You Hear?

1. Describe the listening activity.

Distribute the first copy of **Handout 1: What Do You Hear?** Tell students that you will play a series of recorded sounds and they will write their reactions to each sound, responding to the questions on Handout 1.

2. Play sound recordings.

Play each recorded sounds you've chosen. Allow one minute for students to respond to each sound.

Teacher's Notes: Conducting the "What Do You Hear?" Activity

Tell students to write their initial reactions and associations to the sounds and not spend too much time thinking. Encourage them to quickly associate an image or feeling with each sound.

You may want to model an example for students. Here are some possible responses to the questions on Handout 1 for the recorded sound of a siren.

What sound do you hear?

A police or ambulance siren. It starts out soft, gets louder, then fades away. We can also hear street noises in the background.

What words or images come to mind when you hear this sound?

An ambulance, a police car, a crowded city street in the summer, a car chase, emergency, danger.

What feelings or emotions (if any) come to mind when you hear this sound?

Anxious or scared that something bad has happened; excited to see a car chase; annoyed or frustrated that traffic may be backed up.

Describe a story that this sound could be a part of.

A story about crime or a hospital drama.

3. Discuss students' reactions to the sounds.

Have a few students share the words, images, and feelings they wrote as they responded to the sounds.

Teacher's Notes: Sharing Students' Experiences

Encourage students to share specific associations they have with the sounds (if they feel comfortable doing so) in order to show how a sound can elicit strong emotions.

For example:

- A siren might remind a student of when his grandfather was taken to the hospital in an ambulance.
- A cheering crowd might remind a student of when she scored the winning goal in a soccer game.
- A crying baby might remind a student of the frustration he felt the first night he babysat for his cousins.

Discuss how a recorded sound can evoke memories, ideas, and emotions. Ask:

- Why do certain sounds make you feel certain emotions?

4. Optional: Discuss the scientific link between sound and emotion.

Play the audio clip from *Sound as Touch*, which describes how sound vibrations reach through the ear and into the brain, setting off a series of electrochemical reactions that stimulate neural pathways linked to emotion and memory. We react the same way whether the sound is made by an *actual* siren or a *recording* of a siren. Ask:

- What does this clip tell you about how sound reaches the brain?
- What does it tell you about how sound might stimulate memories or influence feelings?

5. Discuss how sounds tell stories.

Ask a few students to share the stories they associated with the recorded sounds.

Tell students that during this unit, they'll learn how to record sound and how to use sound to tell or enhance a story, as well as to evoke a powerful emotional reaction from an audience.

6. Introduce the unit.

Distribute **Handout 2: Unit 1 Overview**. Explain that students will learn the principles of audio production and produce an audio story for their unit project.

Point out that students will learn about the three phases of creating a media work: pre-production, production, and post-production. Explain that these phases apply to all media production, including videos, animations, and video games.

Draw attention to the vocabulary list on the handout. Tell students that they can refer to this list when they encounter unfamiliar terms.



Handout 1: What Do You Hear?

Your teacher will play a series of recorded sounds. Listen to each sound and note your reactions.

What sound do you hear?	What words or images come to mind when you hear this sound?	What feelings or emotions (if any) come to mind when you hear this sound?	Describe a story that this sound could be a part of.



Handout 2: Unit 1 Overview

Telling stories is what humans do. We tell stories to our friends, write stories in our journals, watch stories on TV and in the movies, and hear stories on the radio. Stories are told in different ways. A writer tells stories through words. An animator uses visual images and, perhaps, words, sounds, and music. A mime uses facial expressions, movement, and props without any words at all. In this unit, you will tell a story through sound you record. You'll use voice, music, and other kinds of sounds to establish your story's setting, to convey events or ideas, and to evoke emotion in your listeners.

Your work in this unit will revolve around the following questions:

- *How can voice, music, sound effects, and other sounds be used to evoke emotion and tell a story?*
- *What story do you want to tell? How can you tell your story using only sound?*
- *What are the different tasks involved in developing a media product from idea to completion?*

Unit Project

You will create a short audio story. Your story might be based on a team member's personal experience. It might be an exploration of a theme or issue or a profile of a person or place in your community. You'll choose a story idea that you think other teens would find interesting, provocative, or entertaining.

You'll take your audio story from conception to completion, going through the same production stages and using the same skills that professionals use. In the *pre-production* stage, you'll choose ideas, do research, develop the story, and plan your recordings. During *production*, you'll record and log interviews and other sounds. Finally, in *post-production*, you'll choose audio clips to include in your story, write a script, and edit your recording to create the finished piece.

What You Will Do in This Unit

Identify the qualities and effects of recorded sounds. Listen to different sounds and identify the images or emotions they evoke. Discuss how sound can be used to enhance or tell a story.

Identify compelling storytelling elements. Listen to and analyze audio documentaries to learn effective storytelling techniques.

Develop a story concept. With your team, choose a story to tell through sound. Describe the sounds you will use to tell your story and the reactions you want to evoke in your listening audience.





Critique audio stories. Listen to, describe, analyze, and critique an audio story on your own each week.

Conduct interviews. Learn interview strategies, practice interviewing techniques, and plan and conduct interviews.

Record sound. Learn and apply creative and technical skills to record sound and to solve challenges in recording sound.

Use basic sound editing skills. Apply editing skills to mix clips of interviews, ambient sounds, narration, music, and sound effects to produce a documentary audio story.

Profile an AME professional. Begin research on a project in which you'll choose an AME professional you admire, research his or her education and career path, and critique one of his or her projects.

Keep a journal. Keep a journal with your assignments, notes, and sketches on the development of your ideas, research, and reflections.

Vocabulary Used in This Unit

Acoustics: The characteristics of a physical space that determine the effect of sound transmitted there, such as clarity or volume. (Also, the branch of physics dealing with sound.)

Ambient sound: Background sounds in a scene or location, such as wind, water, office noises, traffic, birds, and crowds.

Anecdote: A short narrative of an interesting, amusing, or biographical incident.

Audio slate: Identifying information at the start of a recording. It can include the date, series title, episode number, director, planned air date, subject, and take.

Found sound: Sound that would occur regardless of whether it's being recorded, as opposed to sound that is created or manufactured. (*Ambient* sound is a type of found sound.)

Log: A list of all the contents of a recording, including subjects, shots, scenes, time code, time of day, takes, and notes of particularly good takes or sound bites ("gem" moments).

Post-production: The stage after all recording is done. Post-production tasks include logging recorded material, choosing clips, and *mixing*—arranging and layering the audio clips.

Pre-production: The stage in which a program is conceived, developed, and planned before recording begins. Pre-production tasks include story development and logistics, such as budgeting, scheduling, and selecting locations and sounds.

Production: The stage in which all scenes, interviews, sounds, and events are recorded.

Room tone: The sound present in a room when nothing identifiable is happening. Every location has a distinct mix of subtle sounds and reverberations, so a microphone placed in two different empty rooms will produce different room tones. Room tone is recorded to provide a consistent sound background, smooth out edit points, and bring a feeling of life to a story.

Transcribe: To put spoken words and sounds into written or printed form.

Transcript: A written account of spoken or recorded material, such as an interview.



1A.2: Sound Scavenger Hunt

1. Describe the activity.

Tell students that they're going to record sounds of their own choosing and learn the creative and the technical skills required to convey an idea or feeling through sound.

Divide the class into teams and distribute **Handout 3: Sound Scavenger Hunt**. Tell students that they are going to work in teams to record four different sounds that convey information, without using any narration or explanation in their recording.

Explain that teams will choose their sounds to record after learning about recording techniques.

Teacher's Notes: Recording Logistics

Recording all the sounds will likely take an entire class period. Ideally, students should be able to leave the classroom and record in different parts of the school. If you are running short on time, you may want to have each team choose only one sound to record.

If equipment is limited, plan a schedule that allows teams to share. You may also want to give teams the option of completing their recordings after school.

2. Model how to operate sound equipment.

Distribute a portable recording device to each team.

Have one team put together and operate its device for the class. Walk through the process with the class, making sure that students understand how to put in batteries, turn on the device, attach the microphone, adjust input levels, record sound, and play back sound.

3. Discuss the importance of labeling recordings.

Show students how to label their tape or audio source so that they can keep track of their recordings after production.

Note: If the recording devices record directly to a memory card or disk, have students check that the correct date and time are set. Later in the unit, when students import their recordings into a computer, the exact date and time of each recording will be associated with each file.



4. Discuss recording techniques and tips.

Distribute **Handout 4: Recording Techniques and Tips** and go over it with students. Point out the blank chart on the last page of the handout. Tell students that they'll use this handout throughout the unit, adding to the list of tips and techniques as they make their sound recordings.

5. Have students choose sounds and assign production roles.

Have team members look over the roles on Handout 4 and assign a production manager for the activity.

Have teams decide what sounds they're going to record and list them on **Handout 3: Sound Scavenger Hunt**. Tell teams to assign a sound engineer for each of the four recordings.

Note: Make sure that each student takes on the role of sound engineer for at least one recording.

6. Have students create an equipment list.

Have teams list their equipment—such as the recorder, batteries, microphone, tapes, and any labels and markers they use to identify recordings. Each team should test each piece of equipment before using it. Tell students to use this list to make sure that they return all the equipment after they finish recording.

7. Have students record sounds.

Note: This activity provides a good opportunity for formative assessment.

Teacher's Notes: Ethical Considerations in Recordings

Before students begin, you may want to discuss appropriate and inappropriate sound recordings. Consider setting ground rules about types of sounds that are inappropriate to record (for example, recording people's voices without their permission or recording sounds in a locker room or bathroom).

There will be a fuller discussion about legal and ethical considerations during Activity 2B.



Handout 3: Sound Scavenger Hunt

Work with your team to come up with ideas for different kinds of sounds. Think of a specific sound for each item in the list below:

- The sound of an *activity* that students do in school (for example, students going from one class to another or eating lunch)
- A sound related to a *place* that is familiar to students
- The sound of an *object* that you use in school
- A sound that captures an *emotion or mood* (for example, the excitement of a sports team winning a game, the nervousness of preparing for exams, or the calmness of the school yard before the day begins)

Write your sounds in the chart below. Be specific. (For example, "A basketball being dribbled.")

Go on a scavenger hunt to find the sounds you identified. Record each sound. Each recording should be no longer than 60 seconds.

Each sound recording should convey information without using any explanation or narration. Your recordings might include people's voices in the background, but you should not interview anyone or record narration.

Kind of Sound	Specific Sound
Sound of an activity	
Sound related to a place	
Sound of an object	
Sound that captures a mood or emotion	



Handout 4: Recording Techniques and Tips

Sound is an essential component of radio, TV, film, animations, and video games. Whatever media you create, you want to capture sound that is clear, audible, and realistic. This handout describes principles of audio recording and techniques for recording good sound.

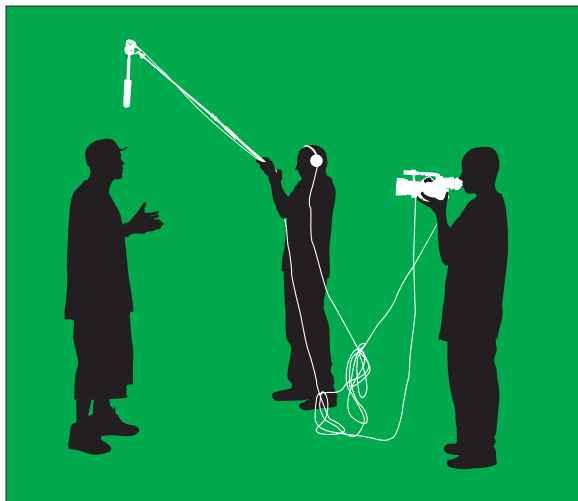
Pre-Production: What to Do Before You Record

Familiarize Yourself with Your Equipment

Microphones

Microphones are a key component of sound recording. An external microphone helps you isolate the sound that you want to record. The list below explains the types of microphones that are commonly used for documentary production similar to what you will do for your audio story.

Boom mics



These microphones are mounted on a pole. They are designed to pick up sound only in the direction in which they are pointed and to minimize sounds at the sides and rear of the mic. Boom mics are ideal for isolating a subject's voice in a noisy or crowded environment.

Lavalier mics



Lavalier mics are tiny mics that can be attached to a person's shirt. They are often used in documentary film because they are easily hidden from the camera and they do an excellent job of picking up the speaker's voice. This is because the mic is worn near the throat and chest (where sound is generated).



Handheld mics



These mics are passed around the audience on TV talk shows and are also used for person-on-the-street interviews.

Windscreens



These coverings slip over any type of mic and reduce the sound of moving air, whether from the wind or particularly breathy voices. Some camcorders have an electronic windscreen that automatically removes certain sound frequencies.

Headphones

Headphones help you focus on the sound you're recording without being distracted by background sounds. If you use headphones with volume control, you might want to adjust the volume slightly higher than you normally would so that you can hear everything that you record.



Make an Equipment List

List all your equipment—such as the recorder, batteries, microphone, tapes (if any), labels, and markers.

Check Your Equipment

Check that your equipment is operating correctly. Do a 30-second test recording and play back the sound while you listen with headphones.

Label Your Recordings

If your recording device uses tapes, label the tapes before you start. This will help you keep track of where and when you made your recordings. It also helps to prevent accidental re-recording over an existing recording.

Assign Roles

Your team members will take turns assuming four different roles:

- **Production manager:** Oversees the logistics of production and acts as the main contact person for interviewees and others involved with the recording (for example, if you need to make arrangements with the owner of a building where you're recording).
- **Sound engineer:** Is in charge of operating the recording equipment, including setting up the space and equipment to maximize sound quality and listening with headphones during interviews to ensure high-quality sound.
- **Logger:** Keeps track of sound while it is recorded. During interviews, the logger lists the topics discussed and the approximate time span of each topic.
- **Interviewer:** Conducts an in-person interview.

Decide as a team which role each member will play for each recording session. For some sessions, you may not need the role of interviewer—for example, when you are recording background sounds.

Production: What to Do During a Recording Session

Be Aware of Your Environment

Listen for any extra sounds that drown out the main sound you want to record. Microphones pick up all sorts of extra noises. If possible, record in quiet locations, especially if you're recording a person's voice.

Experiment with Different Microphone Positions

Keep the microphone pointed toward and close to the sound you're recording, especially when you're recording a person's voice.

If the microphone is too close to the speaker's mouth, you may hear a popping sound when the person speaks words that start with "p" or "b." To prevent this, hold the microphone at a slight angle and position it near one side of the speaker's mouth.

Listen with headphones throughout the recording. If the sound doesn't come through well, try a different microphone position and re-record.





Stay Still

Maintain your chosen microphone distance and position for the entire recording so that the sound quality is consistent throughout. Moving the microphone creates noise that is difficult to remove in editing.

If your mic is connected to your recording device with a cable, make sure that there isn't too much slack in the cable. A moving cable can create extra noise as well.

Adjust Audio Input Levels

Some recording devices allow you to manually adjust the sound level for your microphone. Look at the meter that shows the volume level. Be careful about setting the level too high or too low. Set it high enough to get a good recording, but not so high that the sound gets distorted.

It's important to achieve good sound levels while you're recording because it's difficult to fix low-level sounds later when you edit the recording. Editing to make the sound louder distorts the dialogue and increases the volume of the background noise.

Recording Challenges and Techniques

Keep track of the challenges you face in making sound recordings and the strategies you use to meet those challenges. Make a chart like the one below. Keep it in a notebook so that you can take it with you when you record. Add to the chart as you make recordings throughout the unit.

Recording Challenges	Recording Tips and Techniques