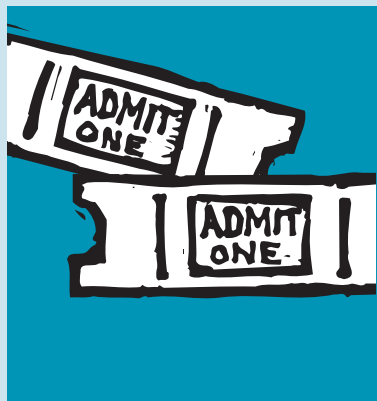


# SOUND and MUSIC:

Another educational program from



## *The* POWER *to* ENHANCE *the* STORY



### DEAR EDUCATOR:

Award-winning curriculum specialists Young Minds Inspired (YMI), in cooperation with the Academy of Motion Picture Arts and Sciences, is proud to present this newest addition to our series of study guides that focus on different branches of the Academy. In this guide, students will learn about sound and music. The kit has been designed for students in high school English, language arts, visual arts, and communications courses. As former teachers, we know that these critical-thinking activities capitalize on students' natural interest in current films and the excitement generated by the Academy Awards®.

The Academy, organized in 1927, is a professional honorary organization composed of more than 6,000 motion picture craftsmen and women. Its purposes include advancing the art and science of motion pictures, promoting cooperation among creative leaders for cultural, educational, and technological progress; recognizing outstanding achievements; and fostering educational activities between the professional community and the public. Academy members are the people who create movies—the cream of the industry's actors, animators, art directors, cinematographers, costume designers, directors, film editors, documentarians, make-up artists, composers, producers, sound and visual-effects experts and writers.

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Sincerely,

Roberta Nusim  
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former teacher

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**TEACHER'S RESOURCE GUIDE**



## PROGRAM COMPONENTS

1. This instructional guide
2. Six student activity masters
3. A four-color wall poster for classroom display
4. A response card for teacher comments

## TARGET AUDIENCE

This program has been designed for students in secondary school English, language arts and communications courses.

## PROGRAM OBJECTIVES

1. To enhance student interest in and knowledge about the motion picture development and production process
2. To encourage students to use critical thinking as they learn how a movie soundtrack is constructed
3. To engage students in an exploration of film as an art form and a medium of communication
4. To help students become more media literate

## INTRODUCTION

### ABOUT THE ACADEMY AND ITS AWARDS

The first Academy Awards were handed out on May 16, 1929, not long after the advent of “talkies.” By 1930, enthusiasm for the ceremonies was so great that a Los Angeles radio station did a live, one-hour broadcast, and the Awards have enjoyed broadcast coverage ever since. The number and types of awards have grown and changed over the years to keep up with the development of the motion picture industry. Awards of Merit—Oscars—are presented in each (or in subdivisions) of the following categories: acting, animation, art direction, cinematography, costume design, directing, documentary film, film editing, foreign language film, make-up, music, best picture, short film, sound, visual effects and writing. In an age when awards shows seem as common as nightly news programs, the Academy Awards are unique because the judges—the approximately 6,000 Academy members—are the top filmmakers from around the world. The question, “Who gets the Oscar?” is decided by a true jury of peers. The awards process provides a wonderful opportunity to teach your students about the many craft areas and the many communications techniques that play a part in creating a motion picture. Filmmaking is by nature a collaborative process, with each creative area supporting and being supported by the others. Because our space is limited, this kit focuses on the interconnected areas of sound and music.

## SELECTING FILMS FOR STUDENT VIEWING

Students may select the films they wish to view for the following activities, or you may wish to suggest films that are appropriate.

The following feature films have won Academy Awards for sound or sound editing, are available on videotape or DVD and may be appropriate for your students: *Raiders of the Lost Ark* (1981), *E.T. The Extra-*

*Terrestrial* (1982), *Dances With Wolves* (1990), *Apollo 13* (1995), and *Master and Commander: The Far Side of the World* (2003). Other features that have been nominated for Academy Awards for sound or sound editing include: *The Conversation* (1974), *Aladdin* (1992), *Independence Day* (1996), *The Thin Red Line* (1998), *The Mask of Zorro* (1998), *Monsters, Inc.* (2001) and *Pirates of the Caribbean: The Curse of the Black Pearl* (2003).

The following feature films have won Academy Awards for their musical score: *The Adventures of Robin Hood* (1938), *The Wizard of Oz* (1939), *Jaws* (1975), *Star Wars* (1977), *Beauty and the Beast* (1991), *Aladdin* (1992), *Titanic* (1997), *Life is Beautiful* (1998), *The Lord of the Rings: The Fellowship of the Ring* (2001), and *The Lord of the Rings: The Return of the King* (2003). Other features that have been nominated for their scores are *Singin' in the Rain* (1952), *Avalon* (1990), *Catch Me if You Can* (2002), and *Big Fish* (2003).

The following films have been nominated for or have won Academy Awards, and are R-rated, but have scenes that may be appropriate for your students: *The Godfather* (1972), *Apocalypse Now* (1979), *Saving Private Ryan* (1998), *Pleasantville* (1998), *The Insider* (1999), *Frida* (2002) and *The Last Samurai* (2003).

For a complete list of Academy Award winners and nominees check our Web site:

<http://www.oscars.org/awardsdatabase/index.html>

## ACTIVITY ONE

### *The* ORIGINS of SOUND FILM

Filmmakers have always understood the power that sound and music have to enhance storytelling.

Although silent films did not have dialogue or soundtracks as we know them, organists, pianists or full orchestras supplied live musical accompaniment in theaters, and often sound effects were created on the spot by sound-effects specialists.

Short sound films were being made as early as 1900. In 1926, Warner Bros. produced *Don Juan*, a 10-reel silent film, which was distributed with a Vitaphone disk recording of sound effects and orchestral music. Many of the world's top filmmakers and executives believed that this would be sound technology's ultimate usage, as silent film pantomime had created a “universal” language.

October 6, 1927, saw the debut of Warner Bros.' *The Jazz Singer*, a 90-minute film with a sound recording that featured a few synchronized songs and lines of dialogue, including Al Jolson's famous declaration “You ain't heard nothing yet!” Although Jolson was not the first person to speak or sing on film, audiences raved. The film won a special Academy Award as “a pioneer outstanding talking picture, which has revolutionized the industry.” In 1928, Warner Bros. released the first all-talking feature film, *Lights of New York*, and *Blackmail*, the first British “talkie,” was in theaters by 1929. That same year, U.S. film studios released over 300 sound films. By 1931, the last silent feature-length films had been released.

Sound films drew viewers, but the new technology created new problems for filmmakers. Previously mobile cameras were confined to soundproof boxes, and actors were forced to stay close to microphones concealed on the set. As a result, filmmakers emphasized the novelty of speech more than camera moves. Comedies, for example, depended less on visual slapstick for laughs and more on witty dialogue. Thick accents or unpleasant voices ended the careers of many popular silent film stars. The visual pantomime used by silent film actors seemed overstated when sound brought an added layer of realism to the performance, and soon younger, Broadway-trained stars brought new faces to the screen. This era is affectionately parodied in the 1952 musical *Singin' in the Rain*.

Before long, devices such as the “blimp,” a sound-proof camera covering that muffled noisy cameras, brought action back to movies. Now, instead of speaking into a hidden microphone, actors moved about the set followed by an operator with a “boom,” a microphone on a long pole, held above the camera frame line.

Early sound films continued to use sound-on-disk systems like Vitaphone. In theaters, it was often difficult to keep the sound and film reels going at the same speed, which meant that sometimes viewers heard a man's voice when a woman spoke or other comical misalignments. Movietone sound-on-film was developed during the same period by Fox Films, allowing for transferring sound directly onto the film print. This process ensured that sound and image were synchronized before movies reached the theaters, and by 1931, it had become the industry standard.

Have your students watch a short scene without the sound and note what information in the scene is conveyed just by the visuals. Then do the opposite: have them listen to another scene without looking at it and write down what they think is happening in the scene. *Amelie* and *The Black Stallion* are both good films to listen to without pictures. Other suggestions are the airplane crash scene in *Cast Away*, the scene in *In the Heat of the Night* where the police chief interrogates Tibbs or the opening shipboard scene in *Master and Commander: The Far Side of the World*. Ask your students to consider what is known about the age, gender and personalities of the characters, the tone, time of day, historical period and setting of the scene from the sound alone. Then have your students watch and listen to the scene and discuss the way sound adds to the experience. Ask them to look for instances where the picture and the soundtrack are giving different, or perhaps even conflicting, information simultaneously.

### SUPPLEMENTAL ACTIVITY

Play an old radio drama (available on tape or on disks) for your students and have them discuss how sounds were used to suggest visuals in the mind of the listener.

## ACTIVITY TWO DIALOGUE

A modern soundtrack is created and assembled in many interconnected stages by sound recordists, mixers, editors and music composers. Dialogue recorded by the production sound mixer during filming, on location or on a soundstage, makes up the initial layer of a movie soundtrack.

In addition to capturing live vocal performances, the production mixer tries to anticipate the needs of the sound editors and mixers who will work on the movie after filming ends. “Wild tracks” and “wild sound” recordings are made on the set when the camera is not running. If the movie takes place in a hospital, for instance, the mixer

might record 20 or 30 seconds of the sounds in the room at the end of the day. Wild sound often proves clearer or better timed than sound recorded during filming and can be cut into the soundtrack when needed.

Not all film dialogue is recorded live. Automated Dialogue Replacement (ADR) is used to record new dialogue if the live track is distorted, if it contains unwanted sounds, or if the director wants to change lines of dialogue or even an entire performance after filming is completed. During ADR, actors watch individual sections of a movie many times, trying to match new dialogue to the lip movements of the characters on screen.

Movies are filmed in small segments or scenes called “takes.” Dialogue editors review all takes, recorded live and in ADR, and edit together the best readings, so that all the dialogue appears continuous and natural.

Off-screen narration or voiceovers are also recorded during post-production. Voiceovers supply the voices of characters in animated films and the narration in documentaries and educational films. Voiceover narration also is used in fiction films to connect seemingly unrelated images or scenes or to present the observations and thoughts of one or more of the characters. *Sunset Blvd.*, for instance, is narrated by a dead character. In *Annie Hall*, voiceovers are employed to contrast the characters' thoughts with their onscreen dialogue for comic effect.

According to Oscar-winning film and sound editor Walter Murch, we can focus on a maximum of two sounds at a time. In daily life, most people hear only the sounds that are important to them, tuning out the rest. Encourage your students to begin to listen discriminately to all sounds by asking them to sit quietly at home, in a park, a restaurant or a shopping mall and list the many different sounds they hear. Ask them to listen for sounds with particular qualities, for example, high-pitched, low-pitched, fast, slow, loud, soft, regular or irregular, and to identify any unexpected sounds. Have them describe how it feels to listen carefully to sounds and explain whether they agree or disagree with Murch's statement.

### SUPPLEMENTAL ACTIVITY

Show your students a short scene of an actor speaking. Have them try to say the lines along with the actor several times, matching intonation, timing and lip movements until they feel comfortable with the lines. Then turn off the sound and let them try to lip-sync the lines while they watch the scene.

## ACTIVITY THREE SOUND EFFECTS

Much of what the audience sees in a movie has been faked for the camera. Actors fighting onscreen do not really hit each other very hard, for instance, so fight sounds must be added by the sound effects crew. Sound effects include natural sounds such as birds, wind and rain; human sounds such as breathing or heartbeats; the mechanical sounds of engines or explosions; and sounds that identify the film's location.

Footsteps, breathing, the rustle of clothes and the sound of props such as coffee cups or squeaky chairs are created on a Foley stage, named for Jack Foley, who pioneered the technique of recording live sound effects in synchronization with the picture. While watching the projected film, the Foley team uses bodies, voices and props to replace or enhance live sound. Performing Foley is sometimes called “walking Foley” because footsteps are such an important part of the process.

The sound effects editor is responsible for all sounds that are not



dialogue or made in Foley. Car engines, explosions and other mechanical sounds as well as “atmospheric sounds,” such as animals in a jungle, are deemed sound effects. Sound effects are either manufactured in the recording studio, retrieved from a sound library or recorded in the real world by the sound effects editor.

Sometimes the sound effects crew will use recordings of the actual sounds of the objects on the screen specifically for that film as in *The Thin Red Line*, which used new location recordings of vintage World War II weaponry, artillery and machinery. Other films, for reasons of convenience or necessity, demand more creative solutions. To generate the whine of alien space ships in *Independence Day*, for example, the sound crew used a recording of screaming baboons. Fabricated sounds can be more effective than real sounds. In *Saving Private Ryan*, fly fishing lines cast into water were used to replicate gunshots hitting the English Channel during the D-Day invasion. The cartoon-like smack of a face punch in *Raiders of the Lost Ark* was accomplished by combining several different sounds, including that of a leather jacket thrown onto the hood of an old fire engine and ripe fruit dropped on concrete.

Many sound effects can be made using simple materials. Cellophane being crumpled sounds like fire; salt sprinkled on paper evokes rain; hands squishing soggy newspaper suggest a character walking in mud. Some additional ideas are cutting a cabbage in half to represent a limb amputation; flapping a pair of leather gloves together to reproduce the sound of a flock of birds taking off; and squishing cornstarch to sound like footsteps on snow. A headache tablet dissolved in water stands in for fizzing champagne. Rubber tires squealing on pavement can be simulated by a hot water bottle rubbed against a plastic bag. Crunched up lifesavers could be small bones breaking.

Have your students write a short scene or take a scene from a book or story. Using some of the suggestions above or ideas of their own, have the students put together sound effects for the events in the story.

## SUPPLEMENTAL ACTIVITY

Contrast the submarine scenes in *U-571* and *Das Boot* or *The Hunt for Red October* or any two or three similar scenes from films of your choice. Some other suggestions are *Master and Commander: The Far Side of the World* and *Pirates of the Caribbean: The Curse of the Black Pearl*; *Three Kings*, *The Thin Red Line* and *Saving Private Ryan*; *Space Cowboys* and *Apollo 13*; *Independence Day* and *Contact*; *Shakespeare in Love* and *Moulin Rouge*. Ask your students to consider the ways that sound and silence are used to create the atmosphere of the scenes. Have them discuss the way different sound portraits work to convey the mood and time period of the film.



## ACTIVITY FOUR MUSICAL SCORE

Using rhythm and tempo, melodic harmony or dissonant tones, a film score conveys mood, emotion and character in ways that dialogue alone cannot. As early as 1908, French composer Camille Saint-Saens wrote the

first score tailored for a specific film, the silent *L'Assassinat du Duc de Guise*, and Russian director Sergei Eisenstein commissioned a forceful percussive score from composer Edmund Meisel for his 1925 silent film *The Battleship Potemkin*.

Generally, however, silent films were released without musical accompaniment. “Fake books” helped theater organists or musical directors find appropriate compositions for each scene. These books included compositions to cover almost any on-screen situation from romance to battles to comedy.

During the early days of sound film, composers condensed or adapted existing musical pieces. Then, in 1933, Max Steiner wrote an innovative score for the RKO film, *King Kong*, which still influences movie scores today.

Rather than a series of musical interludes, Steiner provided a musical illustration of the film’s narrative content. Steiner and the film’s director Merian Cooper agreed not to employ a score during the first part of the film, which showed the realities of Depression-era New York. Instead, the music begins when the characters enter the dream-like fog surrounding mysterious Skull Island. From then on, music accompanies most of the film’s action. A few scenes, like King Kong’s fight with a dinosaur and his battle with circling aircraft from on top of the Empire State Building, were so full of sound that music was judged unnecessary.

Following a nineteenth-century operatic model, Steiner used leitmotifs, or themes, for different characters and situations. (One of the best-known examples of a leitmotif is the two-note theme that signals the appearance of the shark in *Jaws*.) Although King Kong does not speak, his complex personality is depicted through music. The giant ape’s brutality is conveyed by dissonant tunes and the use of brass instruments, for example, while his tragic loneliness is represented by a yearning melody.

As Steiner proved, musical scores can provide more than just a background to the rest of the film. The 1945 film *The Lost Weekend*, starring Ray Milland as an alcoholic on a weekend bender, was originally screened without a musical score. When the audience laughed during the dramatic drunk scenes, the film was immediately withdrawn, and composer Miklos Rosza was hired to write a score. The newly scored film went on to win Best Actor, Best Picture and Best Directing Oscars.

Music can also underscore the humor or pathos of a scene by playing against what is seen onscreen. For example, in *Life Is Beautiful*, light-hearted music performed on the soundtrack while a tragedy unfolds intensifies the sense of loss. Intercutting the cheerful song “Whatever Will Be, Will Be (Que Sera, Sera)” with attempts to free a small boy from his kidnappers heightens the tension in the 1958 film *The Man Who Knew Too Much*.

In some scenes, absence of music is the most eloquent accompaniment. Peter Weir, the director of *Master and Commander*, requested breaks in the underscore so the audience could hear the sounds of the ship and sink into the daily life of the characters.

Before composing the score, the composer attends a



“spotting session,” a meeting with the producer, director and music editor, during which they decide how and where to use music in the film. The composer then begins to compose the musical phrases or “cues.” Cue sheets indicate each place in the action where the music enters and exits. When woven together, these cues make up the score.

The composer’s choice of instruments is often guided by the content of the scene. In *The Lord of the Rings: The Two Towers*, composer Howard Shore used a Norwegian fiddle to subtly allude to the Viking-like qualities of Rohan culture, and the jittery sounds of a hammered dulcimer contribute an unbalanced feeling to “Gollum’s” scenes.

Show your students a scene from one of the films listed below or a film of your choice and ask them to identify as many different musical themes or leitmotifs as possible. Some suggestions are *The Adventures of Robin Hood* (1938), *Jaws*, *Star Wars*, *E.T. The Extra-Terrestrial* or any of *The Lord of the Rings* trilogy. Ask them to identify the tone or mood of each motif. Discuss with your students the purpose of a musical motif and consider the way each theme adds to character development and the ways it helps communicate the storyline.

### SUPPLEMENTAL ACTIVITY

Screen a silent film with a recorded music track for your students. Discuss the way the music is used to represent the sound effects or dialogue of a sound film. Play the same film with different music and discuss the ways this changes the film.

### ACTIVITY FIVE SONGS

Instrumental music is only part of the composer’s tool kit. Songs are often employed to emphasize or comment on the dramatic action in non-musical films. Through listening to the song “When She Loved Me,” in *Toy Story 2*, the audience learns the sad story of the character “Jesse.” Whether a song is heard on the soundtrack or performed live in the film, the lyrics may express or emphasize the thoughts or emotions of the characters, as they do in *Toy Story 2*. Or a song may be deliberately chosen to play against them, as in *Chicago*, when slick lawyer Billy Flynn sings “All I Care About Is Love.” The audience knows he feels exactly the opposite, and Billy’s duplicitous nature is exposed.

By using existing popular songs, the composer takes advantage of the audience’s prior associations with the music. Well-known songs can establish an historical period as in *Pleasantville* and *O Brother Where Art Thou?* or evoke a foreign country as in *Frida*. Songs are so evocative that Lawrence Kasdan, the director of *The Big Chill* (1983), played 1960s music on the set to help his actors get into the mood of that period. When songs completely or principally comprise the music, as in *The Big Chill* or the 1973 film *American Graffiti*, it is called a compilation song score.

Original songs, written specifically for a film, such as

the Oscar-winning songs “The Hands That Built America” from the film *Gangs of New York* and “Moon River,” from *Breakfast at Tiffany’s*, may either highlight a single dramatic or emotional moment or make a statement about the entire film. The popularity of theme songs like “My Heart Will Go On,” the Oscar-winning song from *Titanic*, is often exploited to promote the film.

In musicals, songs function as a type of dialogue. The music and especially the lyrics of the songs are closely interwoven with the script, whether written expressly for the musical as in *Chicago* (2002) and the 1991 animated film *Beauty and the Beast*, or when historical or contemporary popular songs are used, as in *Singin’ in the Rain* and the 2001 film *Moulin Rouge*.

Finding the right words and melodies to fit the characters and the story is the job of the songwriters, who look for moments in the script that call for a song or for a line of dialogue to inspire the first words of a song. Characters in musicals often break into song when they experience strong feelings they cannot contain. The makers of *Chicago*, worried that contemporary audiences would find this improbable, presented the musical numbers as being in the imagination of the main character, Roxie Hart.

Unlike typical film scores, which are usually composed after the film has finished shooting, songs for musicals are written and recorded before production begins. Then, during filming, the actors lip-sync to the pre-recorded numbers. *Moulin Rouge* exploits this practice to make the audience aware that the film they are watching is a work of fiction, as for example, when a character seems to be inventing the song “The Sound of Music” although the audience is fully aware that the song was composed years after the period of the film and years before the movie they are watching.

Play for your students a song from a movie or a musical. Discuss with them the way the song’s use of rhythm, instrumentation, lyrics and melody reveal or comment on the nature of the character or situation it accompanies. Listen to other sections of the score where the song is reprised or worked into the underscore. Ask your students why they think the composer chose to use the song again in these places. Is it associated with the same characters or the same emotions?

### SUPPLEMENTAL ACTIVITY

Many musicals such as *Yankee Doodle Dandy*, *Cabaret*, *Funny Girl*, *The Sound of Music*, *All That Jazz*, *Topsy-Turvy* and *Chicago* are based on real life events. Show your students one of these films or a similar film of your choice, or have them view a film on their own. Ask them to research the true story or characters and compare it to the musical version. Discuss with them if the characters and situations are enhanced by the songs, or if they make the story seem less real.





## ACTIVITY SIX SOUND MIXING

The final sound mix, called the rerecording mix, combines and balances separate dialogue, sound effects and music tracks into one final soundtrack. The rerecording mixer sets the level of each sound element to highlight the most important sounds. Generally, the mixer emphasizes dialogue and key sound effects while softening background noises like car engines or street sounds, unless the story demands that dialogue be difficult to hear, as in a battle scene.

Contrast between sound and image or between sound and silence is effective to build tension or to deliver more information. The final shootout in *Road to Perdition* takes place in a downpour. Instead of the expected pounding deluge on the soundtrack, we hear only the whisper of gentle rain, a subtle cue that this is a scene envisioned many years later by the killer's son. Loud sound effects are more jarring if they are followed or preceded by soft sounds or by silence.

Because the film viewer cannot hear everything that is seen on the screen, sound mixers must direct the viewer's attention to the important elements. One way to do this is by using sound as it might be heard by a character in the film. This is called "point of audition." At one point in the D-Day invasion scene in *Saving Private Ryan*, the sound-track is muffled because we are hearing sound from the perspective of a character temporarily deafened by the bombing. Just like a movie camera, sound can move the viewer from a "long-shot" to a "close-up." By fading noisy background chatter in a crowded room, a filmmaker can direct the audience's attention to an intimate conversation between two people.

Movie sound is usually associated with the people and objects onscreen. When the film shows a woman walking a dog down a busy street, the audience hears her voice, the jingle of the dog's leash, and the roar of the passing cars. This is called "source sound." Narration, voiceovers and musical scores are the most common examples of non-source sound. Other offscreen sounds can alert the viewer to a change in scene, mood or character. In *The Last Samurai*, for instance, the audience hears the almost supernatural sounds of the advancing samurai troops for some time before they emerge from the mist.

Overlapping sound can connect unrelated settings, places or times. At the beginning of *Apocalypse Now*, the synthesized sound of helicopter blades is merged with that of a ceiling fan, taking the story from the main character's memories of fighting in the Vietnamese jungle to his present location in a Saigon hotel.

Sound differs depending on a scene's mood, location, historical period and time of day. It can be used to enhance characterizations. When Michael Corleone kills his dinner companions in *The Godfather*, a train outside thunders past like an unuttered scream, mirroring his disturbed emotional state. The soundtrack, as much as the visual effects, help the animated characters in *Stuart Little* hold their own with the live actors.

Modern 35mm film stock carries four sound tracks: Dolby stereo, an analog system, Dolby SR-D digital, SDDS (Sony Dynamic Digital Sound) and DTS (Digital Theater Systems). By using this combined format, one film print can be screened in any theater, no matter what sound system is in use.

Have your students think about the following scene: A boy and girl walk down a quiet road. Turning a corner, they see a menacing bulldog behind a sagging chain link fence. The angry dog lunges against its restraints, banging into the fence. The children give the dog a wide berth, but the boy slips in a puddle of water. The girl pulls him up by his hands, and they run quickly to safety.

Ask your students to identify the characters, objects and actions in the scene and list the sounds each would make. For example, the boy's footsteps would sound different from the girl's. When they spot the dog, they would try to be quiet, but their breathing might be loud and ragged. Then ask them what sounds might be heard in the background. Have them discuss how the sounds would differ if the scene were comic instead of scary.

### SUPPLEMENTAL ACTIVITY

Twentieth-century composer John Cage has stated, "there is no such thing as silence." Even someone in a completely sound-proofed room would hear the sound of his own breathing or her heart pounding. In films, silence is usually conveyed by the use of a "quiet" sound. Because a crackling leaf underfoot is a soft sound, the viewer knows it must be very quiet for it to be heard. Show your students a short scene or sequence from a film that uses silence as an important part of the soundtrack. Some suggestions are *Road to Perdition*, *U-571*, *The Thin Red Line*, *Master and Commander: The Far Side of the World*, and *Three Kings*. Ask them to discuss Cage's statement and what it means in terms of a movie soundtrack. You might also ask them to compare the use of silence on the soundtrack with the use of slow-motion in visuals.

### ADDITIONAL RESOURCES

*Complete Guide to Film Scoring: The Art and Business of Writing Music for Movies and TV*, by Richard Davis. Berklee Press, 1999.  
*Eyewitness Books Film*, by Richard Platt. Knopf, 2000.  
*Film Music Screencraft*, by Mark Russell and James Young. Focal Press, 2000. Includes CD of sample cues from film music scores  
*Knowing the Score: Film Composers Talk about the Art, Craft, Blood, Sweat, and Tears of Writing for Cinema*, by David Morgan. HarperEntertainment, 2000.  
*On the Track: A Guide to Contemporary Film Scoring*, by Fred Karlin, Rayburn Wright, John Williams. Routledge, 2004.  
*Practical Art of Motion Picture Sound*, by David Lewis Yewdall. Focal Press, 2003. Includes CD.  
*Sound Design: The Expressive Power of Music, Voice, and Sound Effects in Cinema*, by David Sonnenschein. Michael Wiese Productions, 2001.  
*The Young Oxford Book of the Movies*, by David Parkinson. Oxford University Press. 1997.

### WEB SITES

[www.oscars.org](http://www.oscars.org) or [www.oscar.com](http://www.oscar.com) for more information about the Academy of Motion Picture Arts and Sciences.  
[www.filmeducation.org](http://www.filmeducation.org) for teaching resources, free education packets and additional reading from the British Film Institute.  
[www.filmsound.org](http://www.filmsound.org) information about film sound.  
[www.marblehead.net/foley](http://www.marblehead.net/foley) for a comprehensive tutorial in the art of Foley.  
[www.musicals101.com](http://www.musicals101.com) includes history, reviews and examples of film and theatrical musicals  
[www.vhl.com/partners/vhl\\_music\\_studio/](http://www.vhl.com/partners/vhl_music_studio/)  
 Monthly music lesson plans  
[www.ymiteacher.com](http://www.ymiteacher.com)

### DVDs

*The Lord of the Rings: The Two Towers* (Platinum Series Special Extended Edition). Includes a sound design demonstration and extensive interviews with composer Howard Shore.  
*The Adventures of Robin Hood* (1938 Features separated audio tracks with music only playback capability.







# The ORIGINS of SOUND FILM

From the beginning, sound and music have been part of the movie-going experience. Although originally films did not have dialogue or soundtracks as movies do today, theater owners hired organists, pianists or full orchestras to play along with the “silent” film. At times, they even hired people to create sound effects on the spot. Other filmmakers recorded music and sound effects on phonograph records and distributed these with their films. On October 6, 1927, Warner Bros.’ 90-minute film *The Jazz Singer*, starring Al Jolson, was released with a few recorded songs and lines of dialogue. Although Jolson was not the first person to speak or sing in synchronization with a film, audiences raved when

they heard and saw him say “You ain’t heard nothing yet!” “Talkies” brought new audiences into the movie theaters, and by 1931, only a few years later, the last silent feature-length film was released.

Although audiences loved sound, it created new problems for filmmakers. To make a clear recording, noisy cameras were enclosed in soundproof boxes. Actors had to stay close to microphones hidden on the set and could not move around freely. Thick accents or unpleasant voices ended the careers of many popular silent film stars. Before long, however, improved microphones and portable devices that muffled camera noise were developed; sound became an integral part of every movie.

Oscar-winning sound designer and mixer Randy Thom has quoted director Francis Ford Coppola’s statement that sound is 50 percent of the film experience. Listen to the movie scene your teacher has chosen without looking at the picture. Write down what you think is happening in the scene.

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Is the film a comedy or drama? Is it scary or sad? What sounds make you think so?

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How many characters are there in the scene? Are they male or female? Young or old? What are their personalities like?

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Where is the scene set? Is it indoors, outdoors, in a home or office? Is it contemporary or historical? What do the sounds tell you about the setting?

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Now watch and listen to the scene. What information did the combination give you that the sound alone did not?

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W.S. Van Dyke directs Nils Asther and Raquel Torres in a love scene, while cameraman John Arnold films the action from a sound-proof glass booth.

Are there times when the picture and the soundtrack are giving different or conflicting information at the same time? Why do you think the filmmaker chose to do that?

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Do you agree that sound is 50 percent of the film-going experience? Why or why not?

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## TERMS

**DUBBING:** Adding dialogue and sound effects after filming is completed, in post-production.

**SOUND-ON-DISK:** An early method of recording movie sound on phonograph disks that were played simultaneously and in synchronization with the picture. Techniques developed at the same time to transfer sound directly onto the film strip became the industry standard.

**SYNCHRONIZATION:** Correctly aligning the visual and audio portions of a film so that the image and sound are heard and seen simultaneously.

**TALKIES:** The nickname given to the earliest sound films because the actors spoke out loud rather than acting without sound as they had done in the movies of the “silent” era.



# DIALOGUE

A movie soundtrack is put together in many interconnected stages by a number of different sound professionals. The first step in assembling the soundtrack is recording the dialogue, which includes not only conversations between two or more people, but also voiceovers and narration. Most of the dialogue is recorded during filming on the soundstage or on location by the production sound mixer and his or her crew. When the cameras are not running, the production sound crew records “wild tracks” or “wild sound” for post-production use by sound editors and mixers. These recordings can later be cut into the soundtrack if they are needed.

Not all film dialogue is recorded live. Automated Dialogue Replacement or ADR is used to record new dialogue if the live track is unusable or if the director wants to change some of the actors’ lines. During ADR, actors watch a scene many times and practice matching the words to the lip movements of the characters onscreen.



A microphone boom captures the voices of actors Virginia Weidler and Dickie Moore during the filming of Paramount’s 1935 film *Peter Ibbetson*.

Narration and voiceovers and specific sound effects are also recorded in post-production. Voiceovers can clue us into a character’s private thoughts or provide voices for animated characters. The most common example of narration is found in documentary or educational films, when a voice on the soundtrack informs the audience about the happenings onscreen.

According to Oscar-winning film and sound editor Walter Murch, humans can

focus on a maximum of two sounds at a time. In daily life, we tune out most of the background noise, focusing only on what is important to us.

## DIALOGUE TERMS

**DIALOGUE:** All the words spoken in a film, offscreen and onscreen, whether by the characters or by a narrator.

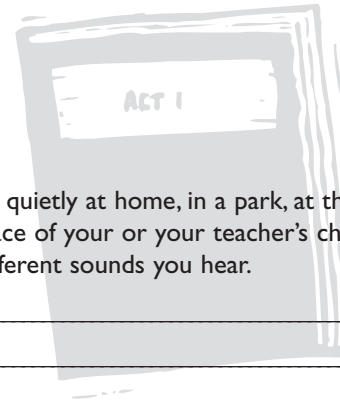
**LOCATION:** Any site outside a movie studio where filming takes place.

**NARRATION:** A technique for conveying story information that is not part of the dialogue. Voiceovers are the most common way of presenting a narration.

**POST-PRODUCTION:** Any part of the filmmaking process that occurs after filming has been completed. Most of the components of a soundtrack are created in post-production.

**SOUNDSTAGE:** A large, soundproofed room in which a film set is built.

**WILD TRACKS:** Sound recorded on the set but not in synchronization with the camera. Also called wild sound.



Sit quietly at home, in a park, at the mall or in a place of your or your teacher’s choice. List all the different sounds you hear.

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Now describe the qualities of each sound. Is it high- or low-pitched? Is it fast or slow? Loud or soft? Rhythmic?

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Did you hear any unexpected sounds? What were they?

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Was it ever completely silent?

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How did it feel to listen carefully to sound? Do you agree with Walter Murch’s statement? Why or why not?

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Simple materials can be used to create many sound effects. Cellophane being crumpled sounds like fire, while crunched up Life Savers could be small bones breaking. What other materials at home or at school can you use to make sound effects? Remember to think creatively. The most obvious sound is not always the best.

[illegible]

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

**SOUND LIBRARY:** A collection of recordings of different sounds—natural, mechanical and environmental. Many sound professionals maintain their own libraries or rent from commercial libraries.

# MUSICAL SCORE

Music enhances the emotional impact of a film by reinforcing the mood of a scene or by hinting at unspoken conflicts or feelings. Its effectiveness was so well understood that even “silent” movies were generally accompanied by some type of music. Some early filmmakers commissioned musical scores from well-known composers, as Sergei Eisenstein did for his 1925 silent film *The Battleship Potemkin*. In 1933, Max Steiner composed the first modern-style score for the film *King Kong*. Steiner’s innovations set a standard for Hollywood film scores that is still followed today. His score provided a musical illustration of the story, and he also pioneered the use in films of individual themes, or leitmotifs, for different characters and situations. A good example of a leitmotif is the two-note theme that signals the appearance of the shark in *Jaws*.



Composer Franz Waxman (in front of podium), director James Whale (seated) and conductor Gilbert Kurland at a recording session for *Bride of Frankenstein*.

As you listen to the film clip your teacher has chosen, try to identify as many musical themes as possible. List the themes using the characters’ names or a brief reference to the situation or emotion represented by the music.

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Pick two of the themes. What does the music tell you about each character or situation? For example, is the music light-hearted? Sad? Threatening?

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How does each theme use pitch, melody and rhythm?

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Does the musical theme reveal something about the character that you would not have known without it?

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## MUSICAL SCORE TERMS

**CUE:** A short piece of music written and performed in relation to one of a film’s scenes or segments. All the cues together make up the film’s score.

**LEITMOTIF:** A short musical phrase representing and recurring with a character, situation or emotion. The device derives from 19th-century opera.

**SONG SCORE:** When songs completely or principally make up a film’s musical score.

**SPOTTING SESSION:** A meeting between the composer, the producer and the director where they decide how and when to use music in the film. Usually the composer does not begin to work until after the spotting session.



# SONGS

Songs in films, whether they are existing popular songs or composed specifically for a film, express or emphasize the thoughts and emotions of the characters or heighten the mood of the film in both musical and non-musical films. They may highlight a single dramatic moment or represent the theme of the entire movie. Movie theme songs often become so popular that people enjoy them long after the film has left theaters. Composers can employ well-known songs to set the film's historical period or evoke the music of a foreign country.

Characters in musicals often break into song when they cannot express the strength of their feelings in any other way. Songwriters will search the script for places where the story lends itself to songs. Sometimes a line of dialogue provides the first words of the song.

While movie scores are usually written after the film has been completed, songs and song scores for musicals are written and recorded before filming begins. (Often a musical



Catherine Zeta Jones and Queen Latifah sing the Oscar-nominated song "I Move On," by John Kander and Fred Ebb, during the telecast of the 75th Academy Awards.

existed as a live-theater production well before it became a movie musical.) The actors then lip-sync to the recorded songs during their performances. This ensures the songs will sound "perfect" and allow the actors to concentrate on their visual performances. Often actors who cannot sing well lip-sync to pre-recorded singing by another performer.

Listen to the song from a movie or musical that your teacher has chosen to play. What is the title of the song? What does the title tell you about the song?

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How does the song use rhythm, instrumentation, lyrics and melody to develop the character or situation?

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Does the song mirror the visuals or does it contradict them?

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Now listen to more of the score. Note where you hear the song or parts of the song recur.

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Why do you think the composer chose to use the song again in these places?

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## SONG TERMS

**MELODY:** A linear sequence of notes that make up the most recognizable part of a piece of music. Melody is usually pleasing to the ear.

**PITCH:** The relative highness or lowness of a musical note. In general, bigger objects make deeper noises and smaller objects make higher-pitched sounds. Low-pitched sounds and music can sound threatening or sad, while high-pitched sounds tend to be perceived as happy or carefree.

**RHYTHM:** A regular, repeated pattern formed by a series of notes of differing duration and stress which give music its character.



# SOUND MIXING

After dialogue is recorded, sound effects added and music composed, the various tracks are combined, or mixed, into one complete stereophonic soundtrack by the rerecording mixer. Rerecording mixers set sound levels so that dialogue and key sound effects stand out against the background. Contrasting sound levels also make the story more dramatic. A loud explosion, for example, will be especially shocking if it takes place when everything else is silent.

Just as a camera can move from one character to another, sound can shift the audience's attention between characters or parts of a scene. By fading noisy background chatter in a crowded room, the filmmaker can direct the audience to an intimate conversation between two people. Heartbeats or heavy breathing can alert us to a character's fear. When the soundtrack plays only the sounds heard by one specific character, the technique is called "point of audition."

Silence is another useful tool for the sound mixer. In the final shootout in *Road to Perdition*, there are no gunshots on the soundtrack until the main character kills the older man who has been his mentor. The sudden shocking sound of gunfire lets the audience know how difficult it is for the character to murder his old friend.

Most of the sound heard on a movie soundtrack comes from the people or objects onscreen. This is called "source" sound. Musical scores and voiceovers are the most common types of non-source sound, but offscreen sounds can also build suspense, provide hints of upcoming action and connect unrelated settings, places or times.

Identify the characters, objects and actions in the following scene.

A boy and girl walk down a quiet road. Turning a corner, they see a menacing bulldog behind a sagging chain link fence. The angry dog lunges against its restraints, banging into the fence. The children give the dog a wide berth, but the boy slips in a puddle of water. The girl pulls him up by his hands, and they run quickly to safety.

What sounds would be involved here? Use the back of this sheet if you need more space.

Characters: \_\_\_\_\_

\_\_\_\_\_



Academy Governor Kevin O'Connell mixes dialogue on the Harrison Motion Picture Console in the Cary Grant Theater at Sony Studios.

Objects: \_\_\_\_\_

\_\_\_\_\_

Actions: \_\_\_\_\_

\_\_\_\_\_

What is the mood of this scene? Which sounds let you know this?

\_\_\_\_\_

What offscreen sounds might be heard? \_\_\_\_\_

\_\_\_\_\_

## SOUND MIXING TERMS:

**MIXING:** The process of setting levels of dialogue, music and sound effects and combining them into one continuous whole.

**OFFSCREEN:** Anything that takes place where the audience cannot see it, for example, the sound of traffic outside the room where the actors are talking. The musical score is another example of an offscreen sound.

**POINT OF AUDITION:** Sound as it might be heard by a character within the film. Similar to visual point of view.

**SOURCE SOUND:** Sound that appears to come from an object seen onscreen, such as a radio or television, animals or actors.