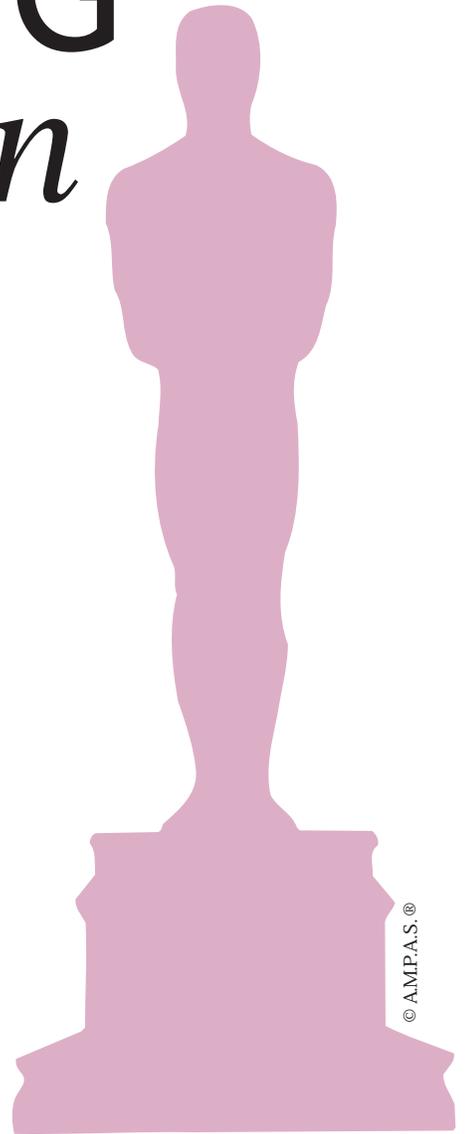
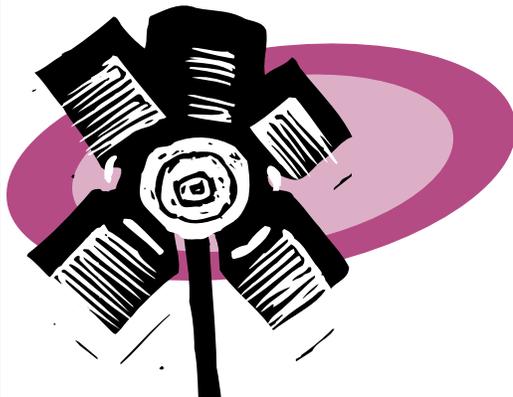


CINEMATOGRAPHY:

CAPTURING IMAGES *on* FILM



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Teacher's
Resource
Guide



Dear Educator:

Youth Media International, in cooperation with the Academy of Motion Picture Arts and Sciences, is proud to present the second in a series of annual study guides that will focus on the different branches of the Academy. In this guide, students will learn about cinematography, one of the many craft areas involved in creating a motion picture, as they complete the activities in this kit. The kit has been designed for students in secondary school English, language arts, visual arts and communications courses. The activities have been developed to capitalize on students' natural interest in current films and the excitement generated by the Academy Awards®. They are designed to teach valuable lessons in critical thinking and to develop visual literacy skills.

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; fostering cooperation among creative leaders for cultural, educational and technological progress; recognizing outstanding achievements, and fostering educational activities between the professional community and the public at large. Academy members are the people who create movies—the cream of the industry's actors, art directors, cinematographers, costume designers, directors, film editors, make-up artists, composers, producers, sound- and visual-effects experts, and writers.

Please share this material with other teachers in your school. Although the material is copyrighted, you may make as many photocopies as necessary to meet your students' needs.

To ensure that you receive future mailings, please fill out and return the enclosed reply card. Also, feel free to e-mail us at schoolroom@aol.com to comment about the program at any time. We welcome your thoughts and suggestions.

Sincerely,

Roberta Nusim

Roberta Nusim, Publisher

This is the second in a series of guides that will focus on different branches of the Academy of Motion Picture Arts and Sciences. If you would like to receive future kits from the Academy and its various branches, please be sure to fill out and return the enclosed reply card.

Program Components

1. This instructional guide
2. Four 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, visual 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 cinematographers contribute to the process of creating a motion picture.
3. To engage students in an exploration of film as a medium of communication.
4. To help students become more visually literate.



Cinematographer James Wong Howe shooting *The Rescue*

Introduction

The first Academy Awards were handed out on May 16, 1929, just after the advent of "talkies." By 1930, enthusiasm 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. Since 1981, Awards of Merit—Oscars—have been presented in each (or in sub-divisions) of the following categories: acting, art direction, cinematography, costume design, directing, feature and short documentary film, film editing, foreign-language film, make-up, music, best picture, best animated and best live-action short film, sound, sound-effects editing, 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—Academy members—are the top filmmakers from around the world. The question, "Who gets the Oscar?," is decided by a true jury of peers.

With the exception of the best picture, which is decided by the entire Academy, and the documentary, foreign-language film and short-film categories, which are selected by special viewing committees, nominations



are determined by a secret ballot of Academy members representing each craft. All Academy members vote to select the final winners.

The awards nomination and selection 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 craft area supporting and being supported by the others. Because our space is limited, this kit focuses on just one of those areas—cinematography.

Selecting Films for Student Viewing

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

The following films have won Academy Awards for cinematography and may be appropriate for your students: *Titanic* (1997), *Schindler's List* (1993), *A River Runs Through It* (1992), *Dances With Wolves* (1990), *Mississippi Burning* (1988), *The Last Emperor* (1987) and *Out of Africa* (1985).

The following films were nominated for Academy Awards for cinematography and may be appropriate for your students: *Shakespeare in Love* (1998), *Amistad* (1997), *Evita* (1996), *Sense and Sensibility* (1995) and *Howards End* (1992). For younger students, *A Little Princess* (1995) and *Fly Away Home* (1996) may be good choices.

Activity 1. ANGLING the CAMERA

The cinematographer works closely with the director to compose the images that are captured on film. While some cinematographers operate the camera, many others supervise a team that includes one or more camera operators, who do the actual filming, and camera assistants, who load the film, mount the cameras and focus the lenses.

For each shot in a film, the cinematographer must plan how far from the subject the camera will be, what kind of lens is necessary and the angle from which the shot will be made. The cinematographer can create very different effects by varying the angle—or point of view—of the shot. A stationary camera can be rotated



on the axis of the camera mount (*panning*); it also can be moved up or down in a 90-degree arc (*tilting*). When a camera is mounted on a dolly it can be rolled forward, backward and sideways. Cameras also can be mounted on power-operated cranes that allow for even more flexibility. Lightweight hand-held cameras also are used, at least in part, on many films.

In this activity your students will learn about the basic camera angles and techniques and the special effects they can create. As they view a film, they will identify the various techniques used by the cinematographer, and they will plan how they would film a variation on one scene in that film.

Supplementary Activity: Using a video camera, have students work in small groups to experiment with various camera techniques as they film original short scenes. Provide class time for each group to screen its film segment and explain the techniques they used and the effects they were trying to achieve.

Activity 2.

LIGHTING the SCENE

There are various styles of lighting that a cinematographer can use. Lighting style is generally determined in consultation with the director (and often

the production designer), and depends on the setting, mood and character of the story or the scene. Three basic styles of lighting are high-key, low-key and graduated tonality.

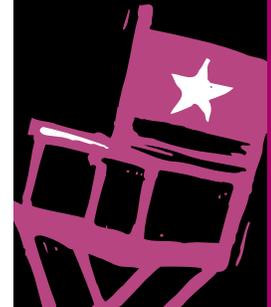
A *high-key* scene appears bright. The cinematographer uses soft, diffused lighting and there are few shadows. In a *low-key* scene, the lighting is defined by lights that cast sharper shadows. *Graduated tonality* is often achieved by using soft light to light the

scene and create soft shadows, often from a single source. (It is important to note that other factors also can enhance the effects of the lighting. Costumes and scenery can be intentionally dark, for example, and sometimes tonal gradations are painted onto the sets or the costumes or even included in the actors' makeup.)

While there are no hard-and-fast rules about lighting, drama generally is done in a low-key style and comedy generally is done in a high-key style of lighting. Graduated tonality is used in all



Orson Welles and cinematographer Gregg Toland on the set of *Citizen Kane* (1941).





kinds of situations. Lighting also is used to create the illusion of depth and dimension, and to illuminate different contours and textures. Depth can be emphasized by back- and side-lighting the actors to create highlights on prominent features and leave the background in shadow. Sometimes color gels are used over lights to

enhance the depth of a scene (warm tones might be used to light the actors, while cooler colors might be used for the background lights, for example). How the lights are positioned to create shadows controls how textures are viewed. The human face, with its changing contours, provides the greatest lighting challenge of all!

Note: If your students have access to instant cameras, you may want to have them take photographs of the setting they observe in the first part of this activity.

SUPPLEMENTARY ACTIVITY:

Have your students work in pairs to create photographic studies of various landmarks in your community under different lighting conditions (weather conditions, time of day, etc.). One student in each pair should use black-and-white film and the other should use color film. Create a class display. Discuss the differences between the black-and-white and color images. For example, how does the lack of color affect the mood and tone of the photographs?

ACTIVITY 3.

FRAMING *the* SHOT

The “framing” of a shot simply indicates where the cinematographer has placed the borders of an image. For every individual shot in a film, someone has to decide where the camera will be in relation to the actors and the space they are in. The cinematographer’s decisions about the movement of the camera are critical in telling the story effectively.

At the beginning of a new scene, the cinematographer will generally include an *establishing shot*. This term is sometimes used in a very literal way—to describe a shot of the building in which the next scene will take place, for example—but more often it refers to an initial wide shot that establishes the spatial relationships of people and other details that will be shown later in the scene in closer shots. The establishing shot helps the viewer become oriented to the new location.

Framing is not unique to filmmaking, as your students will see as they view and discuss paintings and still pho-

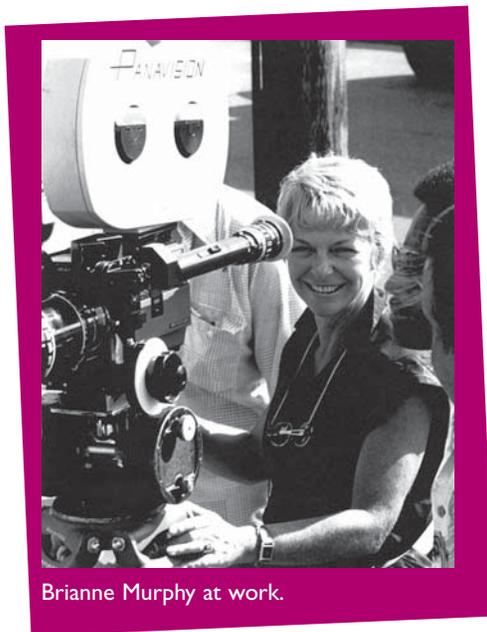
tographs in the first section of the activity sheet. You might also want to discuss with your students the staging of a play as a form of framing.

Constructing a cardboard viewfinder: The standard aspect ratio of a screen image until the mid-1950s was four units wide and three units high (this is expressed as 1.33:1), which is still standard for television screens. For film, the ratio is 1.85:1. To construct a viewfinder with the same ratio, students will need a piece of cardboard that measures 8.5” x 11”. They should mark three points that are 2.25” from each edge on the 8.5” sides and three points that are 1.8’ (approximately 1 7/8’)

from each edge on the 11’ sides. They should connect the points, outlining a 4’ x 7.4’ (approximately 7 3/8’) rectangle. Students should carefully cut along the lines to create their viewfinders.

SUPPLEMENTARY ACTIVITY:

Have your students view a recent film. As they watch, ask them to pay special attention to the framing of important scenes in the film. Students should analyze each scene using the same criteria they used for still pictures and paintings.



Brianne Murphy at work.

ACTIVITY 4.

LEARNING *from the* BEST

Each year, the film industry produces an array of outstanding

new releases. Some are especially appropriate for families, some are appealing to teens, and some are geared toward adult audiences. If you or the parents of your students feel that some, or even all, of this year’s nominees might be inappropriate for viewing by young people, you can modify this activity in several ways. Students can locate reviews in newspapers and magazines, compare what the critics have to say, and try to predict which of the year’s films will be honored for the strength of their cinematography. They can view Academy Award nominees and Academy Award-winning films from past years to complete the exercises. A list of past nominees and winners appears at the beginning of this teacher’s guide.



ACADEMY OF MOTION PICTURE ARTS AND SCIENCES





ANGLING *the* CAMERA

The cinematographer, or director of photography, has an extremely complex and challenging job. He or she must translate the ideas of the director and the writer onto film. The cinematographer must know how to use the camera to capture the images in the most effective way possible, and consider lighting, composition, camera moves and angles, different types of film, lenses and cameras, use of color, etc., when filming each shot. In composing a shot, the cinematographer must consider how each image relates to the images that came before it, and how it will relate to those that will follow it. Most shots are filmed several times to ensure that the end result will be just right. Each of these filming segments is called a “take.” The resulting takes are edited together to create the film’s sequence of action that, in turn, moves the story forward.

For 1998, *Saving Private Ryan* won the Academy Award for cinematography. Pick a film you would like to see that was recognized for achievement in cinematography (an outstanding example is *Citizen Kane*, honored in 1941). As you watch the film, try to focus on the details of the images. For example, think about the angles of different shots. The cinematographer can convey a great deal simply by changing the angle of the camera: A shot taken from above can make a figure seem small or insignificant; one taken from below can make a figure seem larger, important, and even menacing. Use of a hand-held camera can give a feeling of intimacy and reality to a scene. Select one scene from the film and complete the following (use the other side of this sheet if necessary):

Title of film: _____

What is the tone of the scene, and how does the camera placement and movement contribute to it?

Is the camera placed higher, lower, or on the same level as the actors, and how does the placement make you feel about the characters? Are some characters treated differently than others by the camera placement?

Does the camera move a great deal, or is it fixed, with the action moving within a fixed frame?

Now, let’s take a closer look. View the film again, but this time turn the sound down so you can focus more easily on what you see. Watch how transitions are made visually from one scene to another, and look for other special camera techniques. How many of the following could you identify in your film?

- ★ Slow motion
- ★ Tracking shot
- ★ Soft focus
- ★ Zoom shot
- ★ Aerial shot
- ★ Shallow focus
- ★ Deep focus
- ★ Pan

Now, think about a scene in the film that you could present differently. What characters are involved in the scene? Briefly describe what happens: _____

How would you place the camera relative to the characters to let the audience in on your feelings about them? _____

What objects are included in the scene? Would the camera treat some of them with the same importance as the characters? Why or why not? _____

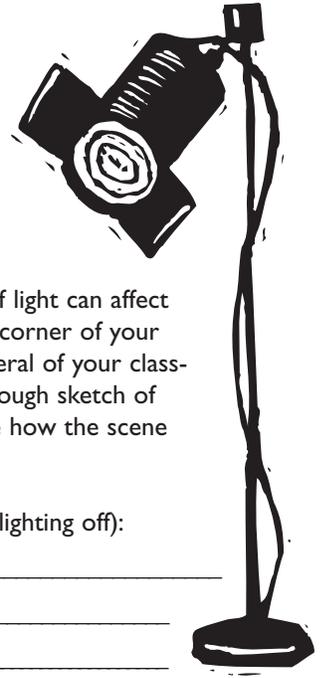
How and why will your scene differ from the original scene? _____

On another sheet of paper, make rough sketches that show the sequence of action in the original scene and then in your revised scene. Pay particular attention to the relationship between the camera, the characters and the action. Annotate your sketches with notes about the camera placement and movement you will use and the meaning you intend to convey with each.

SOME CAMERA TECHNIQUES

- Aerial shot:** A shot taken from the air, as from an airplane, helicopter, balloon, etc., or a high-angle shot from a camera mounted on a crane.
- Deep focus:** The photographic technique of keeping the entire image—no matter how far from the camera—in sharp focus. This allows action to occur at different distances in the same scene. The opposite technique, known as *shallow focus*, uses a small depth of field to create a shallow focal plane. It is often used to direct the viewer’s attention to something specific.
- Pan:** A broad horizontal camera movement on a fixed camera mount. A *swish pan* is a very fast panoramic movement of the camera, resulting in a blurred image, that sometimes is used as a transition between scenes.
- Slow motion:** A shot that makes people or objects appear to be moving more slowly than normal. This is achieved by moving film through the camera more quickly when filming but projecting it at a normal speed.
- Soft focus:** Reducing the sharpness of the image by changing the lens or by placing material such as gauze between the lens and the object being photographed.
- Tracking shot:** A shot in which the camera moves from one point to another—either sideways, in, or out. This is also known as a *traveling shot*.

LIGHTING *the* SCENE



Noted filmmaker, author and teacher Kris Malkiewicz describes lighting as “the most important element in cinematography...the task to which a cinematographer gives his primary attention.”

The cinematographer must know how to manipulate the lighting—using the right quality of light and distributing it in just the right way—to create the mood that is required for each scene in the film. The cinematographer must know how and when to use *hard light* (light that travels directly from its source undiffused, creating sharply defined shadows) and *soft light* (light that bounces off another source or is diffused through a translucent material, such as tracing paper, thereby softening the shadows). He or she also must consider the angle of the *throw* (the path the light follows). This is important in creating the mood of a scene and suggesting the time of day. Additionally, the cinematographer must be able to communicate clearly to those who set and focus the lighting instruments precisely how he or she wants a scene lit.

The primary source of light outdoors is sunlight. Although often supplementing sunlight with artificial lights, when shooting outdoors the cinematographer must consider how the angle of the sun at different times of day affects the setting and changes its mood and appearance. Try this experiment to see just how much impact the angle of the sun can have. Pick a location (a room in your house with a large window, a spot in your yard, the street in front of your house, etc.) that you can easily observe at sunrise, at midday, at sunset and at twilight.

The setting I will observe is: _____

Record what you see in the chart below. Think about such things as the amount of light, the shadows the light casts and their angles, whether colors are bright and vivid or muted and subdued and how the scene “feels” (warm and inviting, alive and energized, etc.).

TIME OF DAY	HOW THE SETTING LOOKS	MOOD CONVEYED BY THE SETTING
Sunrise	_____	_____
Midday	_____	_____
Sunset	_____	_____
Twilight	_____	_____

Now, let’s look at how other sources of light can affect the mood and feeling of a scene. In a corner of your classroom, create a vignette by posing several of your classmates. On the back of this sheet, draw a rough sketch of your vignette. In the space below, describe how the scene changes as the lighting source changes.

Natural light from the window (overhead lighting off):

Overhead fluorescent lights (curtains closed):

Spotlight (the beam from a large flashlight, for example):

Candlelight:

SOME IMPORTANT LIGHTING TERMS

Back light: A light designed to separate the actors from the background.

The actor is lit from directly behind, creating a halo effect that emphasizes hair or a profile while leaving the face in shadow. The *kicker light* has a similar function, but is placed in a three-quarters-back position on the opposite side of the face from the key light and often is lower to the floor than the back light.

Key light: The main source used to light a subject.

Fill light: Light that is used to fill in the shadows created by the key light.

Set light: A light that is used to illuminate the walls and furniture on a set.

Source light: Light that appears to be coming from a source within the scene, for example, a lamp on a table or a fireplace.

FRAMING *the* SHOT

Framing, the overall composition of the shot, is the placement of people and objects within the border of the film frame. Composition greatly influences the audience's experience of a movie and allows the filmmaker to emphasize people or objects that hold more importance than others. For example, if a filmmaker chooses to place a character center and more forward in the frame and light that character more brightly, the audience's attention will focus more directly on that character. The cinematographer generally works with the director to determine how each shot will be framed. But framing isn't unique to filmmaking—still photographers and painters also must determine how they will frame their compositions.

In a book or on the Internet, find a picture of a painting that especially appeals to you. Consider the following questions as you view the painting. How did the artist “frame” the painting? How are the people and/or objects in the painting arranged? How did the artist light the scene through use of light and shadow?

Name of painting: _____

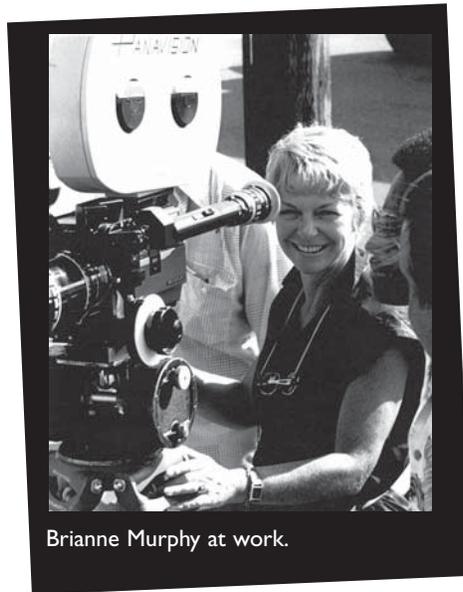
Artist: _____

In a sentence or two, describe why you think the framing in the painting you selected is effective:

Locate a photograph by Ansel Adams (1902-1984), who is known for his dramatic pictures of western landscapes. Ask yourself the same set of questions as you view the photograph.

Name/description of photograph: _____

In a sentence or two, describe why you think the way Adams framed his photograph is effective:



Brianne Murphy at work.

Now, using your cardboard viewfinder, practice framing your own photographic compositions. Keep in mind the relationships between the people and objects in each frame, the source of lighting, etc.

Finally, imagine a brief scene that takes place in your school—in the library or cafeteria or on the athletic field, for example.

The location for my scene is:

The main characters are: _____

In a sentence or two, describe what happens:

What is the tone of your scene?



Part of telling the story is choosing how you would frame each portion of the scene. Divide your scene into ten pieces. With an instant camera or simple sketches, illustrate the story you are telling within the scene.

THE BASICS OF FRAMING

Close-up shot: A very “tight” frame. A close-up of a person is generally just the face. A close-up of an object would include the object alone, or part of the object.

Medium shot: A frame that includes much of the object or person. The character might be shown from the waist up, for example.

Long shot: A frame that includes the entire object or person along with some of the surrounding environment.

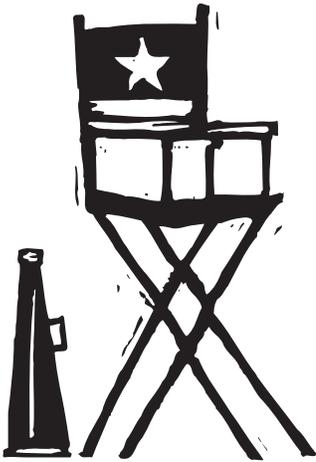


LEARNING *from* *the* BEST

In the first three activities, we learned that the cinematographer's job is to capture on film the images that tell the story. We learned a little about camera techniques, the use of lighting and framing a scene. Now it's time to look at this year's nominees. They will be announced on February 15, 2000. List the nominees for best cinematography in the space below:

- ★ _____
- ★ _____
- ★ _____
- ★ _____
- ★ _____

Pick one film that you would like to see from the list of nominees. As you watch the film, consider some of the guidelines that members of the Academy follow when making their award selections:



- ★ How well did the cinematographer succeed at capturing just the right images to enhance the story?
- ★ How does the mood of the cinematography help to tell the story?
- ★ How does the lighting help to create that mood?
- ★ Does the composition of the shots reflect an aesthetic sense? Are the camera moves well-conceived and unobtrusive? Do they contribute to the story-telling, adding surprise, impact and emotional value where needed?

After viewing the film, describe why you think the nomination was or was not appropriate. (Keep in mind that beautiful scenery and elaborate settings should not be factors in your evaluation.)



Orson Welles and cinematographer Gregg Toland on the set of *Citizen Kane* (1941).

Now, put yourself in the shoes of an Academy member. Using what you know about each of the nominated films—either from seeing them or reading about them—predict how the professional filmmakers in the Academy will vote. Then, watch the Academy Awards on March 26 or read the paper the following day to see how you did with your predictions. Alternatively, view some films honored in the past for achievement in cinematography and describe on the other side of this sheet why you think they won in that category.

FOR MORE INFORMATION ABOUT THE ACADEMY OF MOTION PICTURE ARTS AND SCIENCES, VISIT THESE WEB SITES:

- ★ <http://www.cinematographer.com> (American Society of Cinematographers)
- ★ <http://www.oscars.com>
- ★ <http://www.oscars.org>

ADDITIONAL RESOURCES

American Cinematography magazine
Cinematography, by Kris Malkiewicz. New York: Fireside, 1989.
The Filmmaker's Handbook, by Edward Pincus and Steven Ascher. New York: New American Library, 1984.
Frame by Frame: A Handbook for Creative Filmmaking, by Eric Sherman. Los Angeles: Acrobat Books, 1987.
Masters of Light: Conversations with Contemporary Cinematographers, by Dennis Schaefer and Larry Salvato. Berkeley, CA: University of California Press, 1984.
Principal Photography, by Vincent Lobrutto. Praeger Publications Text, 1999.