

▲ FIGURE 8.1 The quilt shown here is unique in that the images in the center have been painted by hand. Can you find a pattern in this quilt? What objects or figures are repeated?

Faith Ringgold. *The Men: Mask Face Quilt #2.* 1986. Acrylic on canvas with fabric borders. 177.8 × 157.5 (70 × 62"). © 1986 Faith Ringgold.

Rhythm, Pattern, and Movement

L ife is full of rhythmic events and patterns. Think about the yearly cycle of the seasons. The regular routines or patterns of daily life create a sense of stability and security.

In this chapter, you will:

- Identify rhythms and patterns occurring in the world around you.
- Observe the relationship of motif to pattern.
- Compare and contrast the use of the art principles rhythm and pattern to organize the art elements in artworks.
- Create visual solutions that use the principles of rhythm and pattern.

Focus on Art History

Faith Ringgold (b. 1930) is known for her colorful

painted story quilts (**Figure 8.1**). She grew up in a close-knit family in Harlem, New York. Her early oil paintings focused on civil rights issues of the 1960s. Then in 1980, she was invited to make a quilt for a special exhibit. Her mother, who was a seamstress, helped her make *Echoes of Harlem*, a quilt of painted faces and fabrics. She has been creating quilts that combine storytelling and painting ever since. Her story quilts have also been used as illustrations in children's books that focus on the achievements of African Americans.

Analyze. Look again at Figure 8.1 to form a conclusion about the use of pattern. Can you find a repeated pattern in this quilt? Explain your answer.

Vocabulary

rhythm visual rhythm pattern motif module

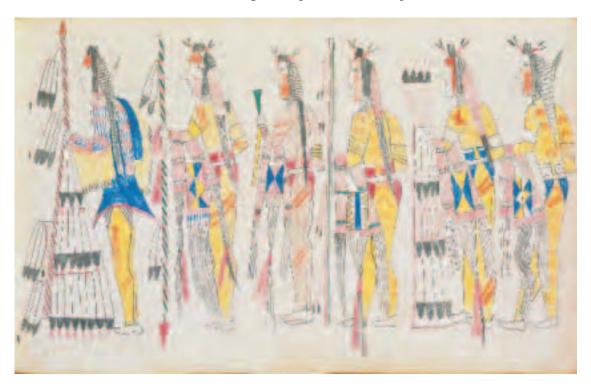
Rhythm and Pattern

hythm is the principle of art that indicates movement by the repetition of *elements or objects.* The principle of rhythm is found in all the arts: music, dance, poetry, and theatre. In music, rhythm is created by the measure of time between musical sounds. Beats are followed by rests. In poetry, the repetition of words, sounds, and phrases creates rhythm. The visual arts combine repetition and pauses to create rhythm.

Visual Rhythm

Visual rhythm is rhythm you receive through your eyes rather than through your ears. Visual rhythm is created by repeated positive shapes separated by negative spaces. Everywhere you look you can see visual rhythms. Books lined up in a bookcase and cars in a parking lot are examples of visual rhythms. A line of people in the cafeteria has visual rhythm. Each person is a positive shape, and the space between each person is a negative space.

In **Figure 8.2**, Chief Black Hawk has used visual rhythm to suggest the movements of a dance ceremony. The repeated images of the six Crow men are the major beats, or positive shapes, of the rhythm. The spaces between the men are the rests, or negative spaces, in the rhythm.



▲ FIGURE 8.2 In the winter of 1880–81, Chief Black Hawk, a Lakota man, supported his family by selling drawings to a trader on the reservation. He was unknown until 1994, when a book of his drawings emerged on the auction market. Chief Black Hawk's book shows natural history drawings, hunting and ceremonial activities of the Lakota, and many pictures of Crow ceremonies.

Chief Black Hawk. Crow Men in Ceremonial Dress. 1880–81. Ink and pencil on paper. 26×41.9 cm $(10^{1/4} \times 16^{1/2})^{1/2}$. Thaw Collection, Fenimore Art Museum, Cooperstown, New York.

MEET THE ARTIST

ROSA BONHEUR

French, 1822-1899

Rosa Bonheur (**roh**-zah bah-**nur**) was born in Bordeaux, France in 1822. When she was seven years old, her family moved to Paris. Her father, Raymond Bonheur, was a landscape artist and painting teacher. He trained Rosa and her three siblings. As a member of the religious group called Saint-Simonians, he believed in the equality of women. This attitude allowed Rosa Bonheur to develop unrestrained by traditional women's roles.

When she was ten years old, she refused to be apprenticed to a dressmaker, preferring instead to sketch animals in nearby woods and to draw scenes from the balcony of the family apartment. This lifelong love of animals would inspire her later art. She painted huge compositions in which horses and other animals played a major role. She visited slaughterhouses to learn the anatomy of animals. She also traveled to livestock markets. *The Horse Fair* (**Figure 8.3**) is a painting that depicts one of these scenes. Bonheur became a famous, well-known artist. In 1865, she became the first woman to be awarded the Grand Cross of the Legion of Honor.



▲ FIGURE 8.3 Bonheur, a lifelong animal lover, often created large-scale artworks with horses and other animals as the subject matter. In this painting Bonheur has used the horses as a motif. The rhythm the horses create pulls your eyes through the painting. Where does the movement start? From which direction does the viewer get drawn through the art?

Rosa Bonheur. The Horse Fair. 1853–55. Oil on canvas. 244.5×506.7 cm $(96\frac{1}{4} \times 199\frac{1}{2})$. The Metropolitan Museum of Art, New York, New York. Gift of Cornelius Vanderbilt, 1887. (87.25).

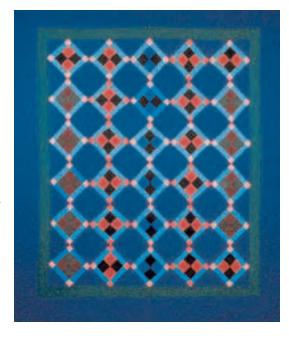


▲ FIGURE 8.4 In this unusual night view of New York City, you can see examples of rhythms made by the buildings and the lit windows. Notice how the value changes also create a sense of rhythm.

Berenice Abbott. *The Night View*. 1936. Photograph. Museum of the City of New York, New York. Gift of Mr. Todd Watts.

FIGURE 8.5
There are two major motifs in this design. One is a solid blue square set on its point.
The alternating motif is bordered with a light blue band and divided in the center into four smaller squares.

Annie M. Peachey. Four in Block Work Quilt. 1925–35. Cotton, rayon, and synthetics. 216 × 184 cm (85 × 72½"). Collection of the Museum of American Folk Art, New York, New York, New York off of Mr. and Mrs. William B. Wigton.



In visual rhythm, a beat may be one element or a combination of elements. Look at the photograph in **Figure 8.4.** The strongest beats are the big, tall buildings. The lighted windows are secondary rhythms. The streets and the spaces between the buildings create negative, empty space—the rests between the beats.

Visual rhythms create a sensation of movement. Rhythms cause the viewer's eyes to follow the visual beats through a work of art. Visual movement is different from real action, which involves a physical change in position. For example, a ball bouncing across a room is real action. Visual movement simply suggests movement. In an artwork, round shapes separated by negative spaces can create the visual sensation of the movement of a ball. Your eyes bounce from one round shape to the next. In **Figure** 8.6 on page 203, the artist has used rhythm to pull your eyes through the work. Notice how the curved figures and the slanted hoes give a sensation of visual movement.

Pattern

Pattern *is the principle of art that is concerned with decorative surface design.* It is usually a two-dimensional visual repetition. Blue stripes on a shirt are a pattern. Ten blue striped shirts arranged in a store window create a visual rhythm that in turn creates visual movement.

The unit that is repeated in visual pattern is called a **motif**. Sometimes, every motif is an exact duplicate of the first unit; sometimes, the repetitions vary from the original (**Figure 8.5**). Look around, and you will find examples of patterns created by the repetitions of one or more motifs. You can discover patterns in furniture, rugs, clothing, or the line of lockers in the hallway.



Visual Rhythms Create Visual Movement

Woodruff has used many random visual rhythms in this work to create the feeling that the workers are singing and working to the rhythm of the song as they hoe the cotton. In the diagram you can see how he has used repeated shapes to move your eyes through the work. How many visual beats can you find in this painting?





FIGURE 8.6

Hale Woodruff. *Poor Man's Cotton*. 1944. Watercolor on paper. $77.5 \times 57.2 \text{ cm } (30\frac{1}{2} \times 22\frac{1}{2}")$. The Newark Museum, Newark, New Jersey.



▲ FIGURE 8.7 This elevator grille is a delicate pattern of lines and round forms. It was once part of a large bank of elevators in the 1893 Chicago Stock Exchange. The building was torn down in 1972, but parts of it, such as this grille, have been saved and housed in various museums.

Louis Sullivan. *Grille of Elevator Enclosure Cage from the Chicago Stock Exchange Building*. 1893–94. Painted cast and wrought iron and bronze. 185.4 \times 78.7 cm (73 \times 31"). High Museum of Art, Atlanta, Georgia. Virginia Carroll Crawford Collection, 1982.291.

In sculpture and architecture *a three-dimensional motif* is sometimes called a **module.** Modular furniture is composed of standard matching units.

A pattern of lines can decorate a piece of fabric or wallpaper. **Figure 8.7** shows a pattern decorating an elevator grille. These are decorative patterns meant to be visually appealing. Other patterns are functional. A bricklayer places bricks in a certain pattern in order to build a sturdy, durable wall. The bricklayer may make the pattern more complex in order to create a finished work that is very decorative, but the main purpose is still functional.

Activity

Analyzing Motifs and Patterns

Comparing and Contrasting the Use of Pattern. Make a collection of decorative patterns. You may use photographs, clippings from magazines, scraps of fabric, and original drawings. Compare and contrast the use of pattern in your work and identify the motif in each pattern by drawing a circle around one. Organize your pattern collection into a poster, a bulletin board, a booklet, or some other type of presentation.

Computer Option. Start with a rectangle and design a simple motif. Use three colors or three original textures in black and white. Create a variety of pattern with that motif. Print your patterns. If your printer is black and white, you can add color with other media such as colored pencil after the design is printed out.



- **1.** Define *rhythm*.
- **2.** What is visual rhythm?
- **3.** What is pattern? How do motifs relate to pattern?

Types of Rhythm and Pattern

Arranging beats or motifs and space in different ways creates different visual rhythms and patterns. There are many ways to combine beats or motifs and space. Each combination gives a different character to the rhythm or pattern depicted.

Random

A motif repeated in no apparent order, with no regular spaces in between, creates a random rhythm. One example is autumn leaves that cover the ground. Cracks in mud and splashes of paint are also examples of random rhythm.

Crowds of people often create random rhythms —think of holiday shoppers, rush-hour commuters, and students in the halls between classes. A large group of people pushing onto a bus is full of rhythm. The beat is one person. Every person is different, and the space between and around each person is slightly different.

Philip Moulthrop, the creator of the *White Pine Mosaic Bowl* in **Figure 8.8,** is an artist and craftsman. He uses a machine called a lathe to create the form of his wooden bowls. At the beginning of the twentieth century, wood turning was considered an industrial activity since lathes had been used to



✓ FIGURE 8.8 To create this random rhythm of round shapes on the surface of his turned bowl, Moulthrop placed white pine branches in a specific arrangement and embedded them in a black resin mixture.

Philip Moulthrop. *White Pine Mosaic Bowl.* 1993. White pine, resin, lathe-turned. 23.5 x 29.8 x 29.8 cm (9¹/₄ × 11³/₄"). Mint Museum of Craft + Design, Charlotte, North Carolina.



▲ FIGURE 8.9 This building was the first office building to rise above 1,000 feet. Notice how the pairs of windows form a regular beat both vertically and horizontally. The negative spaces between them are the rests between the beats.

William van Alen. *Chrysler Building,* New York, New York. Completed in 1930.

Activity

Using Random Rhythm

Applying Your Skills. Choose one letter of the alphabet. Look through newspapers and magazines for large examples of that letter. Cut out about 20 letters. Arrange them on a piece of colored paper in a random pattern. If you have trouble finding large letters, draw letters of your own on your design.

Computer Option. Choose one letter of the alphabet. Using different fonts, create about 20 different examples of the letter. You can use Flip, Rotate, Size Change, and Color options if your program has them. Then arrange the letters in a random pattern.

mass-produce furniture. Gradually, the turners became accepted as craftspeople. They believed that the finding of a piece of wood with specific qualities led to the quality of the finished piece of work. In Figure 8.8, the pieces of wood create a beautiful random pattern. Today, you will find turned-wood vessels in crafts museums around the world.

Regular

Regular rhythms and patterns have identical beats or motifs and equal amounts of space between them (Figure 8.9). Regular rhythm has a steady beat. Regular repetitions are used to organize objects. Parking spaces are laid out with regular rhythm. Stores organize merchandise into regular stacks and rows. This makes it easier for you to find things, and it also makes the displays more attractive than if items were arranged in a random fashion.

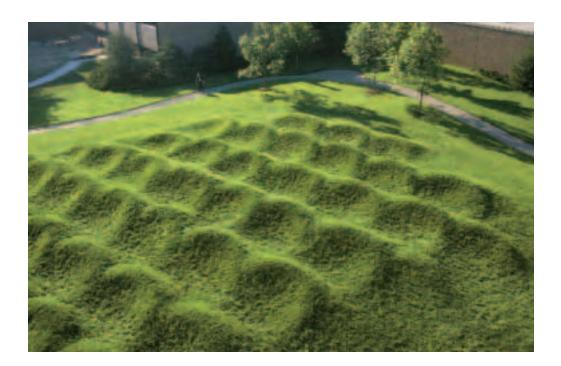


FIGURE 8.10

While doing research for this project, Maya Lin stumbled on a photo of the "Stokes Wave" that occurs naturally on the open sea. She transformed something that was liquid and moving into a solid sculpture in the landlocked, Midwestern landscape.

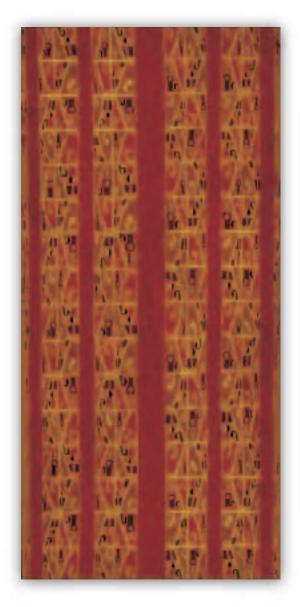
Maya Lin. *The Wave Field.* 1995. Shaped earth. 30.5 \times 30.5 m (100 \times 100'). University of Michigan, Ann Arbor, Michigan.

A grid is based on regular rhythm. It is a regular arrangement of parallel lines. A football field is laid out in a grid, as is a checkerboard. Windows form a grid pattern on the side of a building. Maya Lin used a grid to lay out her *Wave Field* in **Figure 8.10.** It is a series of 50 grass waves in eight rows. The texture of the grasses and curved forms engage the viewer. The field was built with a combination of soil and sand and covered with green sod. The crest of each wave is three feet high. Lin has created an interesting space for relaxing, studying, or playing.

The tunic in **Figure 8.11** was woven to be part to the formal dress of the ancient Peruvian people known as the Huari. It was worn at court and placed on the body for burial. Another strong example of regular rhythm is Figure 1.18 on page 20.

► FIGURE 8.11 Look closely at the designs in the repeated geometric shapes. They are stylized eyes and mouths with fangs that symbolize powerful feline deities.

Peru, Huari. Tunic. c. A.D. 800–1000. Cotton and wool. Height: 210.8 cm (83"). Detroit Institute of Arts, Detroit, Michigan. Founders Society Purchase with funds from Lee and Tina Hills.





▲ FIGURE 8.12 Notice how this artist has switched the direction of every other column so that the designs seem to reverse as you look across the row of designs.

Upper Orinoco River, Venezuela. Yekuana *muaho* (woven beaded apron). Early twentieth century. 25.1×33.7 cm $(9^{7}/8 \times 13^{1}/4'')$. Courtesy National Museum of the American Indian, Smithsonian Institution, Washington, D.C.



Ojibwe. Bandolier Bag. Beaded cloth. 108×33.7 cm $(42^{1}/2 \times 13^{1}/4'')$. Courtesy National Museum of the American Indian, Smithsonian Institution, Washington, D.C.



Alternating

Alternating rhythm and pattern can be created in several ways. One way is to introduce a second beat or motif. Another way is to make a change in the placement or content of the original beat or motif. A third way is to change the spaces between the beats or motifs. Sometimes, alternation is created simply by changing the position of the motif. For example, the motif may be turned upside down. The native Venezuelan artist used alternation to make the beaded apron in **Figure 8.12** more interesting. The Ojibwe Native American who sewed the beads on the bandolier bag in **Figure 8.13** made the design interesting by alternating the colors of the beaded flowers.

Flowing

Flowing rhythm is created by repeating wavy lines. Curved shapes, such as rolling hills or ocean waves, create

Activity

Alternating Pattern

Demonstrating Effective Use of Art Media in Design. Using a pen or pencil, draw a checkerboard grid on a sheet of white paper. Create an alternating pattern using one motif. Turn the motif upside down in every other box. Next, draw a checkerboard grid and create an alternating pattern using two motifs.

Computer Option. Design two motifs using the tools of your choice. Use the Select tool and the Copy and Paste options to create an alternating pattern using both motifs. On a new screen, create an alternating pattern using only one motif. In this design, you can change the placement of the motif—for example, turn it upside down, or change the spaces between the motifs. Label and save both designs.

flowing rhythms. In **Figure 8.14**, the artist was able to capture the flowing movement of the waterfall as it rolled over the rocks. Your eyes follow the curving path as it changes direction gradually. There are no sudden breaks in the line. In **Figure 8.15**, the artist has used flowing rhythm to arrange the heads of the singers to create the mood of the flowing melody coming from the harp.

Flowing rhythm is created using upward swells and downward slides. You might think of the upward moves as the beats and the downward moves as the rests. Allan Houser has used flowing rhythms symbolically in his sculpture, *Coming of Age* (Figure 8.16). The work expresses the symbolic union of nature and femininity. The thick, rhythmically flowing strands of hair suggest motion and the act of running. They also suggest the movement



▲ FIGURE 8.15 This sculpture was inspired by the song Lift Every Voice and Sing, which was a popular song among African Americans in the 1930s. This is a cast-iron souvenir version of the original sculpture, a 16-foot plaster work exhibited at the 1939 World's Fair.

Augusta Savage. *Lift Every Voice and Sing.* 1939. Cast iron. $27.6 \times 23.5 \times 11.4$ cm $(10\% \times 9\% \times 4\%)$. Countee Cullen Collection, Hampton University Museum, Hampton, Virginia.



▲ FIGURE 8.14 Borsky captured the white flow of this waterfall in his photograph by increasing the amount of time he exposed the film to light.

David Borsky. Waterfall. Photograph. Courtesy of the artist.



▲ FIGURE 8.16 This sculpture was created to celebrate feminine youth and beauty. The upturned head symbolizes the girl's desire to run to the four directions of the earth. The small shape above her forehead represents an abalone shell, a fertility symbol. The feather in her hair signifies a long life.

Allan Houser. *Coming of Age.* 1977. Bronze, edition of 12. 19.2 \times 39.4 \times 17.8 cm ($7^{1}/_{2} \times 15^{1}/_{2} \times 7''$). Denver Art Museum, Denver, Colorado.

Progressive

In *progressive* rhythm, there is a change in the beat each time it is repeated. The change is a steady one. Each time the beat appears, it is slightly different (**Figure 8.17**). A progressive rhythm may start with a square. The size of the square may be changed by making it slightly smaller each time it is repeated, or each square may be made a different color of the spectrum or a different step on the value scale each time it is repeated. Shapes can be progressively changed. The sides of a square can be gradually rounded until the square becomes a circle.



▲ FIGURE 8.17 In this etching, Escher creates a progressive rhythm of reptiles climbing out of a flat drawing and evolving into fully formed creatures. The progression ends with a fully three-dimensional reptile standing on the polygon, steam blowing from its nostrils. Then the reptile reenters the two-dimensional drawing.

M. C. Escher. Reptiles. 1943. Lithograph. 33.3 \times 40 cm (13 1 /s \times 15 3 /4"). © 2003 Cordon Art, Baarn, Holland. All rights reserved.

Activity

Progressive Rhythm

Applying Your Skills. Start with a simple geometric shape, such as a square, for your motif. Create a progressive rhythm by gradually changing the square into a free-form shape. Next, draw a picture using simple shapes. Change the shapes gradually, using progressive rhythm, to tell a visual story.

Computer Option. Look around the room and select a simple handmade object such as a stapler, a chair, or a faucet. Use the tools of your choice to draw the outline of this shape, adding details. Consider what shapes can be used to simplify and represent the object circles, squares, rectangles, or triangles. Gradually change the image using a minimum of six or seven steps so that the transition appears smooth. Begin in black and white but later you may explore changes in size, value, or color to enhance the progression. Tip: After completing each step, make a copy of it and place it next to the one you are about to alter, or use the tracing paper option, if available, to guide your changes.



Check Your Understanding

- **1.** Explain the difference between random and regular rhythm and pattern.
- **2.** In what ways can an alternating rhythm and pattern be created?
- **3.** Compare and contrast the use of pattern in Figures 8.12 and 8.13 on page 208.

How Artists Use Rhythm to Create Movement

A rtists use rhythm in a work of art just as they use the elements and other principles of art—to convey feelings and ideas. Rhythm, which can be comforting and predictable, can also be monotonous, symbolic, or graceful, depending on the artist's goals. Rhythm can also create visual movement.

Visual Movement

Visual movement is the principle of art used to create the look and feeling of action and to guide the viewer's eyes throughout the work of art. In **Figure 8.18**, the artist has used visual movement to tell her story. Xiong has arranged the figures and objects in her art using visual rhythm to create the sense of movement. The main beat is Xiong's family. Notice how the figures change slightly from one appearance to the next. Is the rhythm random, alternating, or progressive?



Vocabulary

visual movement kinetic

FIGURE 8.18 This story cloth tells the story of the artist's flight from Laos, across the Mekong River, to an American refugee camp in Thailand. The story starts in the upper right corner. Can you follow the family as it moves toward safety?

Chaing Xiong. *Hmong Story Cloth.* 1987. Pieced and embroidered polyester, cotton blend. 140.3 × 145.4 cm (55\(^1/4\) × 57\(^1/4\)'). Wadsworth Atheneum, Hartford, Connecticut. Florence Paull Berger Fund.



▲ FIGURE 8.19 What kind of rhythm does Stella use to create this celebration of movement and light at the Coney Island Amusement Park? Which elements does he use to create his rhythms?

Joseph Stella. Battle of Lights, Coney Island, Mardi Gras. 1913–14. Oil on canvas. $1.9 \times 2.2 \text{ m}$ ($6'4'' \times 7'1''$). Yale University Art Gallery, New Haven, Connecticut.

One group of artists tried to do more than control the way in which viewers looked at works of art. This group of artists, called the *Futurists*, used rhythm to capture the idea of movement itself. The Futurists used the word *dynamism* to refer to the forces of movement. They believed that nothing was solid or stable and that art should show such dynamism. In their artworks, the dynamic movement of forms is shown by slanting

and overlapping shapes. In **Figure 8.19**, the artist, Joseph Stella, captures the excitement and movement of the Amusement Park at Coney Island. A frenzy of movement is created through the use of rhythms and patterns of colors and shapes. Can you find indications of amusement park rides such as a Ferris wheel and a roller coaster? Do you recognize any other rides? Can you find indications of people?



FIGURE 8.20
Look closely at the places where the rods are joined by a carefully planned set of loops. Calder's works are so carefully balanced that the slightest movement of air will set the sculpture in motion. Watching a Calder sculpture is like watching a graceful dancer.

Alexander Calder. *Untitled*. c. 1942. Painted aluminum sheet, steel sheet, and steel wire. 147.3 × 182.9 × 114.3 cm (58 × 72 × 45"). Amon Carter Museum, Fort Worth, Texas. 1999.6. © 2003 Estate of Alexander Calder/Artists Rights Society (ARS), New York.

You can also see movement in the visual art of Alexander Calder. He was a mechanical engineer who believed in what the Futurists were doing. In his work he repeated abstract shapes and put them into real motion. He did this using the real forces of air currents and gravity. Calder's creations were dubbed **kinetic** sculpture, because they *actually move in space* (Figure 8.20). Artist Marcel Duchamp gave Calder's moving sculptures another name, *mobiles*. Moving sculptures of this kind have been called mobiles ever since.

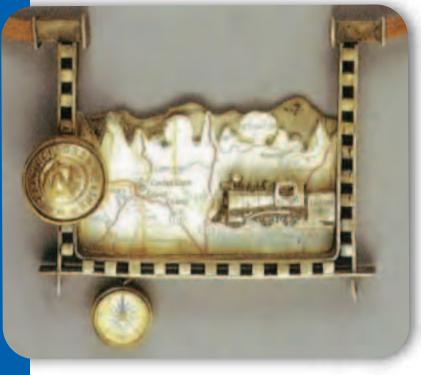


- 1. Define visual movement.
- **2.** Which group of artists used rhythm to capture the idea of movement itself?
- **3.** Describe a kinetic sculpture.
- **4.** Compare and contrast the use of rhythm in Figure 8.18 on page 211 and Figure 8.19 on page 212.

STUDIO PROJECT

8-1

Found Objects Jewelry



▲ FIGURE 8.21

Ramona Solberg. *Cracker Jack Choo Choo*. 1995. Cast and forged silver, compass, map, button, Lucite, leather. 66 cm long, 8.2×10.2 cm (26'' long, $3^{1}/_{4} \times 4''$). Collection of Jean Anderson.

SUPPLIES

- Assorted found objects
- Sketchbook and pencil
- Small piping cord for wire coiling and/or hanging neck pieces
- Scrap or precut metal shapes, such as copper
- Wire (copper, brass, nickel silver) in a variety of gauges
- Wire cutters, needle nose pliers, screwdrivers
- Jeweler's saw and blades
- Hand files and/or abrasive papers
- Drill and bits
- Super-strength adhesives
- Pin backs, chain, or cord for necklaces

Historical and Cultural Context

Jewelry is the making or use of objects for body adornment and decoration. Among ancient peoples, the wearing of jewelry was often limited to royalty and/or tribal leaders. Materials were specific to the environment of the craftsperson. These might include bone, stone, shell, claws, hair, plant fibers, ceramic, metal ores, and semiprecious gems. As trade between cultures increased, so did the availability of materials. Jewelry began to show more variety and became available to commoners.

The necklace pendant in **Figure 8.21** was crafted by Ramona Solberg, a contemporary jewelry maker, but bears resemblances to jewelry crafted long ago. Not the least of the similarities is the use of found objects. Notice the title. What do you think was the source of the found object central to this work?

What You Will Learn

You will create a jewelry design for practical application using found objects, alternative materials, and simple cold connection techniques. Cold connections are usually wire, loops, glue, or any means of connection without the use of a torch or heat. Your work will make use of visually compatible or related objects organized in a balanced composition. The arrangement of your chosen design-related components will make use of random, regular, alternating, or flowing rhythm.

Creating

Brainstorm with classmates about materials and sources for found objects appropriate to this project. Locate items at home, make a trip to a local hardware store, or acquire materials from donated sources. Share extra parts and items not needed with classmates. This creates a wider variety of materials from which to choose. (*Note:* This activity is not about restringing broken necklace beads or buttons.)

Step 1 Select approximately seven items of similar shape, color, or texture. This will help establish a sense of rhythm and unity in your arrangement.

your found items in interesting ways. Attempt to "view" a grouping that might be suitable for a pin or a suspended neckpiece. Make sketches of arrangements that appeal to your design sense. Determine whether additional items are needed to complete an idea for which you are missing components.

Step 3 Choose your best design.

Step 4 Problem-solve ways to attach your items. Possible solutions might include drilling holes and "sewing" with wire, super-strength adhesives, wire jump rings, and so on. Be flexible if an idea is not successful, and rethink your strategy. (*Note:* If using super-strength adhesives, you might try putting a small amount on a scrap of mat. Then you can apply the glue with a toothpick.)

Step 5 Attach a pin back or cord to present your piece when finished.

Evaluating Your Work

- ▶ DESCRIBE Identify the objects you used in your art object. How were these objects connected in the final work?
- ► **ANALYZE** Compare and contrast the use of color, texture, and form to create rhythm in your work. Describe how balance was used in your composition.
- ▶ **INTERPRET** What feeling is conveyed by the materials, use of rhythm, and composition of your piece? Give your piece a title. What type of person might enjoy wearing this piece? Explain your answer.
- ▶ JUDGE What aesthetic theory is best applied to your work? Are you satisfied with your finished art object? What might you change if you were to do this activity again? Explain your answer.



FIGURE 8.21A

Student work.

STUDIO PROJECT

8-2

Rhythm and Movement Painting



▲ FIGURE 8.22

Jacob Lawrence. *Harriet Tubman Series Number 4*. 1939–40. Casein tempera on gessoed hardboard. 30.5×45.4 cm $(12 \times 17^{7/8}")$. Hampton University Museum, Hampton, Virginia.

SUPPLIES

- Sketchbook and drawing pencils
- Scissors
- 12 × 8" watercolor paper
- Watercolor paints
- Watercolor brushes
- Colored pencils

Historical and Cultural Context

Some art captures a moment in time. Jacob Lawrence, the artist who painted the work in **Figure 8.22**, captured many moments—all in the life of one person. That person was Harriet Tubman, the heroic African American who led countless fellow enslaved persons to freedom via her "Underground Railroad." Take a look at the figures in this painting. Notice their body language and facial expressions. Can you sense what point they are at in their long journey to freedom?

What You Will Learn

The success of Lawrence's painting depends on the use of two art principles—rhythm and movement. In this activity, you will do the same. You will create a mixed-media work using active figures organized in a repeated rhythm to express visual movement. A secondary rhythm of background shapes will be painted in a color scheme that contrasts with that of the main figures.

Creating

Working in groups of at least five, brainstorm ideas for poses from activities that have strong movement. Possibilities include sports, cheerleading, dance, and running. Each group member is to take turns doing an action pose. Others in the group will meanwhile make gesture drawings of the model, trying to get the proportions as accurate as possible (Technique Tips Handbook, page 428). Each group member should end up with at least five sketches.

Step 1 Select at least two drawings to use multiple times. Cut the figures out. Then plan how you will arrange the repeated shapes on a sheet of water-color paper. When you are satisfied with a figure's placement, lightly trace around the shape with pencil. Remember to emphasize a flowing, rhythmic movement that pulls the viewer's eyes throughout the composition.

Step 2 Divide the background into shapes that create a secondary rhythm. Leave about a quarter of an inch of white space between the shapes.

Step 3 Choose a color to paint the main figures. Proceed with the painting.

Step 4 While the paint is drying, plan a background color scheme that will contrast harmoniously with the figures you painted. Once the paint is dry, paint the background shapes.

step 5 Plan an alternating pattern using lines and shapes that can be used throughout the unpainted areas. Select two shades of colored pencil that are reflected in the background color scheme. Using these, apply alternating patterns. Place your lines and shapes close together when creating your pattern. Fill all the white areas.

Evaluating Your Work

- ▶ **DESCRIBE** What action poses are represented in your finished painting? Tell why you chose the poses you did.
- ▶ **ANALYZE** Did you use rhythm and repetition in arranging the active figures? Does the background show a secondary rhythm? Compare and contrast the use of color and line organized by the principles of rhythm and pattern. Does your work seem to convey visual movement?
- ▶ **INTERPRET** What kind of mood does your work express? Name a song you know that would fit the mood of your work.
- ▶ JUDGE How well do you feel your artwork shows rhythm and visual movement? If you were to do it over again, how would you improve your work? Which of the three aesthetic theories would you use to judge this work?

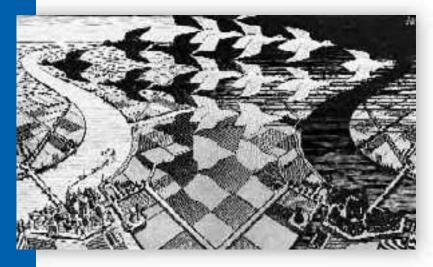


FIGURE 8.22A

Student work.



Digital Rendering of Reflections



▲ FIGURE 8.23

M. C. Escher. Day and Night. 1938. Woodcut in black and gray, printed from two blocks. 39.1 \times 67.7 cm (15 $^2/_5$ \times 26 $^2/_3$ "). © Cordon Art, Baarn, Holland.

SUPPLIES

- Sketchbook and pencils
- Computer
- 3-D modeling program
- Scanner (optional)
- Color printer

Historical and Cultural Context

The unusual image in Figure 8.23 is by twentieth-century Dutch graphic artist M. C. Escher. It is one of many the artist did in which one set of objects or shapes gradually changes—or metamorphoses—into another. In this case, the objects undergoing this transformation are two flocks of birds, one white and one black. Notice how the figures (the birds) on one side of the image little by little become the ground (the land) for the other side. In fact, the two sides of the work are mirror images of each other. At least they would be if it weren't night on one side and day on the other.

What You Will Learn

You will create a complex image using repeated reflections of the same objects within the artwork. You will use a 3-D modeling program (Digital Media Handbook, page 451). Your composition is to be arranged such that there is progressive rhythm throughout the work.

Creating

Think of as many highly reflective objects as you can, such as mirrors, puddles, sunglass lenses, and chrome bumpers. Sketch several of these items.

Step 1 Choose your two best sketches. These forms will be the basis

of your artwork.

Step 2 Using a 3-D modeling program, model these forms, using basic geometry. You may, if you like, scan in your sketches. Make sure you name all of the surfaces, especially the areas that will have the reflection properties applied to them. Be sure to save your work often.

Step 3 Once you have modeled and named each surface, import the forms into the program's layout area.

Step 4 Arrange and angle multiple instances of one or both forms into a composition in which each is reflected at least once. There should a minimum of nine reflections altogether. At least some of the images should be reflected in such a manner as to show progressive rhythm.

Step 5 Set your surface properties for each surface area to Maximum Reflection. Then set your Lighting by determining the type of light (for example, Spotlight, Diffused Light), how many lights you will use, and from what direction each light source will be coming. You cannot have reflection if you have no light to reflect.

Evaluating Your Work

- ▶ **DESCRIBE** Tell what objects you modeled for your artwork. Explain how you modeled your objects and arranged them in layout.
- ► **ANALYZE** Compare and contrast your use of form and rhythm. Did your forms change at all with each reflection, and if so, how? Did you create a natural progressive rhythm?
- ▶ **INTERPRET** What mood does your artwork express? Give a title to your work that sums up the feelings you are trying to express in your work.
- ▶ **JUDGE** Were you successful at creating a work of art using progressive rhythm? Evaluate and justify your artistic decisions.

Step 6 Save your layout of the scene. Then test render the scene. Repeat steps 4 through 6 as needed until you are satisfied with your output.

Step 7 Once satisfied, set the antialiasing to low, and render your final picture.



FIGURE 8.23A

Student work.

STUDENT ART PORTFOLIO

Rhythm, Pattern, and Movement

Rhythm in art, as in music, gives stability to a composition. By repeating a visual "beat" or motif, the artist creates movement and interesting patterns. As you examine the student artworks on these pages:

- Compare and contrast them in terms of their use of rhythm, pattern, and movement.
- Analyze the works, forming precise conclusions about the type of rhythm or pattern each displays.

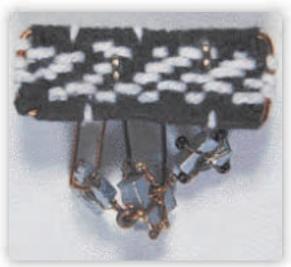


FIGURE 8.24

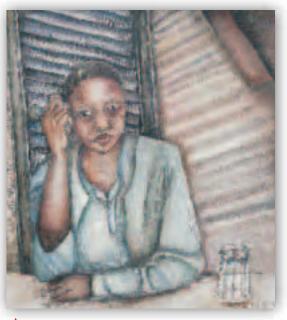
Student work. *Untitled*. Black and white yarn woven on copper frame with beads and metal nuts.

Activity 8.25 Regular rhythm.

Compare the rhythm in this painting and Figure 4.18 (page 79). Identify the repeated lines or shapes that contribute to the movement in each.

Activity 8.24 Visual rhythm.

Analyze this student artwork to form a conclusion about pattern. Which objects carry the visual "beat"? Describe the repeating pattern of these objects.



▲ FIGURE 8.25

Student work. The Culture of Salt. Watercolor and ink.

Activity 8.26 Pattern.

Analyze the motif that is repeated in this painting. Would you describe the repetition as regular or random? Explain.



▲ FIGURE 8.26

Student work. Butterflies. Acrylic.

Activity 8.27 Repetition and motif.

This artwork illustrates how direct observation of rhythms in everyday objects can form the basis of art. Evaluate the main focus of the work. How many motifs can you find? Explain.



▲ FIGURE 8.27

Student work. ${\it Glasses.}$ Color pencil.

For Your Portfolio

Select and Analyze Exhibitions. Add a critical review to your portfolio. With your teacher's guidance, organize class exhibitions at your school. Select and analyze these peer exhibitions to form conclusions about formal qualities, historical and cultural contexts, intents, and meanings. Compile your critical analysis into a four-part report that you can add to your portfolio.



To view more student artworks, visit the Glencoe Student Art Gallery at art.glencoe.com.



Become a "student" of visual rhythms in the world around you. Illustrate ideas for artworks by directly observing objects that you handle on a daily basis, such as paper money. Find motifs on these objects. Notice the type of repetition each pattern uses. Practice sketching various rhythms in your visual journal, noting their types.

Art Criticism in Action



▲ FIGURE 8.28

Alfredo Arreguin. *Nuestra Señora de la Selva*. 1989. 182.9 \times 121.9 cm (72 \times 48"). Collection of the artist

Critiquing the Artwork

- **DESCRIBE** What do you see?

 List all the information found in the credit line.
 - What do you see in the foreground?
 - What do you see in the background?
- During this step you will collect information about the way the elements of art are organized using the principles of rhythm, pattern, and movement. This is still a clue-collecting step, so do not make guesses.
 - What geometric shapes can you find in this painting?
 Identify them.
 - Where do you see patterns? What kinds of repetition do they show? What relationship can you find between the patterns on the floor and the woman's skirt?
 - Where do you see visual rhythms that create visual movement?
- **3 INTERPRET** What message does this artwork communicate to you?

Combine the clues you have collected to form a creative interpretation of the work.

- Form conclusions about the meaning of this work.
 What do the floor tiles in the foreground represent?
 What does the background represent?
- Notice that the woman stands behind the tile floor but in front of the nature scene. What does this mean?
- JUDGE What do you think of the work?

 Decide if this is a successful work of art.
 - Did the artist use the principles of rhythm and pattern successfully?
 - Do you think the artist has successfully expressed his beliefs in this painting? Why or why not? Defend your opinion using one or more of the aesthetic theories.



Alfredo Arreguin (b. 1935)



Alfredo Arreguin was born in Mexico. As a child, Arreguin loved to explore the tropical forests of Mexico. In the summer of 1955, he met an American family. A strong friendship grew between them. Arreguin's new friends invited him to visit them at their home in Seattle. He remained to study at the University of Washington, ultimately settling in Seattle. Many of his paintings, like Figure 8.28, express his concern for natural conservation in an age of industrialization.

MOVING ART

With The Lion King, director Julie Taymor brings the movement of art to theater.

ulie Taymor had a challenge. She was hired to turn the animated movie *The Lion King* into a play with real actors. Luckily, Taymor, a renowned theater director, is a wizard at puppetry, costumes, and illusion. She put a jungle full of animals onstage without using a single live beast.

In the stage version of *The Lion King*, actors use puppets and masks to portray animals. A headpiece and four stilts turn an actor into a long-legged giraffe. A cheetah prowls the stage, pushed by an actor behind the puppet. Life-size elephants, moved by actors in each leg, lumber down the aisles of the theater. By having the actors recre-

ate the movements of these

animals, Taymor brought an African habitat to life. Taymor uses different types of movements to create emotions, moods, and settings. When the lionesses

cry over the death of their leader, they show tears by pulling ribbons of fabric from their eyes. Actors shake long lengths of blue silk to make a rushing waterfall. These visual movements serve the

purpose of theater: they create visual effects that transport the audience into another world.



Actors portraying animals join with puppets to create graceful stage movements.



Theater and film directors often ask actors to use body language and movement to communicate ideas and feelings.

Watch a television show or a movie and notice how the actors communicate through gestures, movements, and body language. Then write a critical review of the show, discussing the acting, writing, directing, costumes, and sets.

 As part of your review, include your reaction to the nonverbal techniques the actors use to express meaning. Is the "unspoken" as powerful as the "spoken"? Can movements speak louder than words?

By using movement and donning a mask, an actor transforms into a lion.

IOAN MARCUS/TIME PICTURE COLLECTION

CHAPTER

REVIEW

Building Vocabulary

On a separate sheet of paper, write the term that best matches each definition given below.

- 1. The principle of art that indicates movement by the repetition of elements and objects.
- **2.** Rhythm you receive through your eyes rather than through your ears.
- **3.** The principle of art concerned with decorative surface design.
- **4.** A unit that is repeated in visual rhythm.
- **5.** A three-dimensional motif.
- **6.** The principle of art used to create the look and feeling of action and to guide the viewer's eyes throughout the work of art.
- **7.** A work of art that actually moves in space.

Reviewing Art Facts

Answer the following questions using complete sentences.

- **8.** In general, how is visual rhythm created?
- 9. How does rhythm add a sense of movement to a work of art?
- **10.** How are different rhythms and patterns created?
- 11. What is the difference between a module and a motif?
- **12.** Name and describe four types of rhythm and pattern.
- **13.** What is *dynamism* and with what group is it associated?

Thinking Critically About Art

- **14.** Compare and Contrast. Study the subject matter of the Poor Man's Cotton (Figure 8.6 on page 203) and *Hmong Story Cloth* (Figure 8.18 on page 211). List the similarities and differences you find. Are the themes of the two works similar or different? Explain your answer.
- 15. Historical/Cultural Heritage. Read about Rosa Bonheur's lifelong love of animals in the Meet the Artist feature on page 201. Animals and their relationship to humans were a major theme in Bonheur's work. Compare and contrast her depiction of man's attempt to dominate animals in Figure 8.3 on page 201 with the depiction of a similar scene in Figure 7.4 on page 174. How did both artists use movement in their works?



Pattern is used in many everyday materials and objects. Fabric designers are

responsible for creating fabric patterns. Their designs can be found in everything from rugs and sheets to high-fashion clothing. Visit art.glencoe.com to compare and contrast career opportunities in art.

Linking to the Performing Arts

Explore rhythm and movement with Chuck Davis and the African American Dance

Ensemble in the Performing Arts Handbook on page 420.