

▲ FIGURE 9.1 This art object, a painted portable scroll, uses different kinds of balance. There is a border at the top of the scroll that is balanced by one at the bottom. Likewise, the four large circles are balanced side by side and top and bottom. Compare and contrast the balance used in the images within the four largest circles.

Central Tibet, Tsang (Ngor Monastery), Sakya order. Four Mandalas of the Vajravali Series. c. 1429–56. Thangka, gouache on cotton. 88.9×73.7 cm ($35 \times 29''$). Kimbell Art Museum, Fort Worth, Texas.

Balance

Have you ever lost your balance, perhaps while skating or bicycling? Maintaining your balance in such situations is critical to your well-being. Balance is important, not only to life but also to art. It is used by artists to bring a sense of wholeness, or *unity*, to their works.

In this chapter, you will:

- Describe types of balance and why balance is important in a work of art.
- Compare and contrast the use of different types of balance in artworks.
- Create visual solutions using direct observation and imagination to explore the art principle balance.
- Analyze the expressive qualities of balance in artworks.

Focus On Culture

Figure 9.1 dates to the fifteenth century. It is a

thangka, a portable scroll. It was used during the 1400s for meditation by followers of Vajrayana (**vahj**-ree-ah-na) Buddhism. Also known as the Diamond Path to spiritual knowledge, Vajrayana was the main Buddhist sect in the Asian country Tibet. The four large circles on this thangka are *mandalas*. In Hindu and Buddhist religion, a mandala is seen as a symbolic map of the spiritual universe. It is believed that worshippers actually entered this mystic realm during prayer.

Describe. Examine an art object from another culture and time in Figure 9.9 on page 232. Describe the general characteristics of the artworks in Figures 9.1 and 9.9.

Vocabulary

balance central axis formal balance symmetry radial balance

FIGURE 9.2 This building is known throughout the world, not because of its beauty or because the architect is well known, but because it leansit is off balance. The many diagonal lines tell the viewer that this building must either straighten up or fall down.

Bell Tower of the Cathedral at Pisa (The Leaning Tower of Pisa). Begun in 1174.

Visual Balance

work of art must contain balance. **Balance** is the principle of art concerned with equalizing visual forces, or elements, in a work of art. Visual balance causes you to feel that the elements have been arranged well.

If visual balance creates a feeling that the elements have been arranged just right, visual imbalance creates the opposite feeling. It causes a feeling of uneasiness. It makes you feel that something is not quite right. The Leaning



Tower of Pisa (Figure 9.2) attracts attention because it is out of balance. It had tilted into a danger zone and was closed to the public in January 2000. Engineers corrected the tilt by 17¹/₂ inches. (See page 252 for more details.)

In order to know whether two objects are of equal weight—that is, if they balance—a balance scale can be used. In the visual arts, however, balance must be seen rather than weighed. The art elements become the visual forces, or weights, in an art object. A central **axis** is a dividing line that works like the point of balance in the balance scale. Many works of art have a central vertical axis (Figure 9.3) with equal visual weight on both sides of the dividing line. Works of art can also have a horizontal axis. In this case, the visual weight is balanced between top and bottom (Figure 9.4).

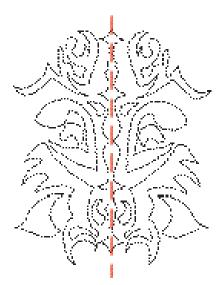


FIGURE 9.3 With a vertical axis, there is equal visual weight on both sides.

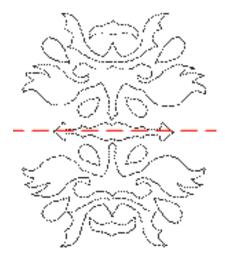


FIGURE 9.4 With a horizontal axis, there is equal visual weight above and below.

ARTIST



Mexican, 1886-1957

Diego Rivera. *Self-Portrait.* 1941. Oil on canvas. 61×43.2 cm (24×17 "). Smith College Museum of Art, Northampton, Massachusetts.

Diego Rivera, the son of two teachers, was born in 1886 in the small town of Guanajuato, Mexico. As a young man, Rivera received a government grant to study art in Spain. He also studied with Picasso in France and traveled to Italy to study the works of Raphael and Michelangelo.

When he returned to Mexico, he decided to paint only Mexican subjects. He used the simplified forms of pre-Columbian art in his work. His concern for the workers, the poor, and the illiterate influenced all of his art. He painted many murals with political themes, considering them a way to teach people who could not read. In his art, he combined the techniques of European painters with the history of Mexico to create a new way to portray his ideas about the people and culture of Mexico.



► FIGURE 9.5 Rivera used his art to show his serious concern for the Mexican working people. Many of his works depicted the labors of the Mexican peasants. His work reflects the style of the solid-looking, pre-Columbian artwork of the Mayans.

Diego Rivera. Flower Day. 1925. Oil on canvas. 147.3×120.7 cm $(58 \times 47^{1/2})''$). Los Angeles County Museum of Art, Los Angeles, California. Los Angeles County Fund. Reproducción autorizada por el Instituto Nacional de Bellas Artes y Literatura.

Formal Balance

One type of balance is called formal balance. **Formal balance** occurs *when equal, or very similar, elements are placed on opposite sides of a central axis.* The axis can be vertical or horizontal. It may be a real

part of the design, or it may be an imaginary line, as in Figures 9.3 and 9.4. Formal balance is the easiest type of balance to recognize and to create (Figure 9.5). After you find the axis, all you have to do is place similar objects on each side, equally distant from the center.



Symmetry

Symmetry is a special type of formal balance in which two halves of a balanced composition are identical, mirror images of each other. Another term for this is bilateral symmetry (**Figure 9.6**).

Symmetry appeals strongly to us, probably because of the bilateral symmetry of the human body. Objects closely associated with our bodies, such as clothing and furniture, are usually symmetrical. Most traditional architecture, especially public architecture, is symmetrical (**Figure 9.7**).

→ FIGURE 9.6 This urn shows a young man wearing a headdress depicting his guardian spirit, the goddess Quetzal, an unforgettably beautiful bird. The artist who created this urn used symmetry to emphasize the seriousness of this work.

Mexican, Zapotec (from Monte Alban). Figural Urn. A.D. 500–700. Painted earthenware. $63.5\times63.5\times31.8$ cm ($25\times25\times12^{1/2}$ "). Nelson-Atkins Museum of Art, Kansas City, Missouri. Purchase: Nelson Trust 61-16.



▲ FIGURE 9.7 This view of the White House expresses the dignity and importance of the home of the president of the United States. The use of symmetry makes the building appear secure and stable.

James H. Cromartie. View of the White House, South Portico. 1980. Acrylic on canvas. 50.8×76.2 cm (20×30 "). Private Collection.

Activity

Using Symmetry

Creating Visual Solutions Using Direct Observation.

Arrange a symmetrical still life.
Carefully observe the arrangement before making a pencil drawing on a small sheet of paper. Then rearrange or change the objects slightly to create approximate symmetry. Make a drawing of the second arrangement. Mount the drawings side by side on a sheet of construction paper and label each drawing. Which one do you prefer? Survey your friends to find out their preferences.

Computer Option. If available, use the Symmetry menu and Brush or Pencil tool to create a symmetrical landscape. Vary the Brush shape, thickness, pattern, and color. If the Symmetry menu is not available, determine the central axis or line of symmetry. Draw half of the scene. Use the Select tool and Copy, Paste, and Flip commands to make the matching second half. Title and save the work. Try rearranging the shapes in your scene so that it is not perfectly symmetrical. Compare the two drawings. Which do you prefer?



▲ FIGURE 9.8 Van Eyck used approximate symmetry to depict this wedding portrait. The halves of the picture are not quite the same. However, the work still has the dignity of perfect symmetry, only the composition is more interesting and less monotonous than if he had used perfect symmetry.

Jan van Eyck. *The Arnolfini Wedding.* 1434. Oil on panel. 83.8×57.2 cm ($33 \times 22.5''$). National Gallery, London, England.

Symmetry can be very stiff and formal. Artists use it to express dignity, endurance, and stability. Because formal balance is so predictable, however, it can be dull. Many artists avoid boring the viewer by using approximate symmetry, which is *almost* symmetrical.

Approximate symmetry has the stability of formal balance (Figure 9.8). Some small differences make it more interesting than perfect symmetry. If you look carefully in a mirror, you may discover that your face has approximate symmetry. The two sides do not match perfectly.



▲ FIGURE 9.9 The use of radial balance adds to the decorative quality of this design. This print is based on the stained-glass dome found in the main synagogue of Szeged, Hungary.

N. Anderson, Israel. *Blue Dome–House Blessing*. 1995. Etching. $43.2 \times 43.2 \text{ cm} (17 \times 17'')$. Private Collection.

Radial Balance

Radial balance occurs when the forces or elements of a design come out (radiate) from a central point. The axis in a radial design is the center point. In almost all cases, the elements are spaced evenly around the axis to form circular patterns (**Figure 9.9**).

Radial balance is a complex variation of symmetry. While symmetry requires only two matching units, designs with radial balance usually involve four or more matching units. In **Figure 9.10**, notice that the center of the design is the family shield surrounded by a blue circle of zigzag lines. Four petal-like shapes and four bars radiate from the center of the bowl to its rim. On the rim, wide blue and thin gold lines continue to form a circular design. Notice how all the blue line designs resemble Arabic writing but do not form any real letters.

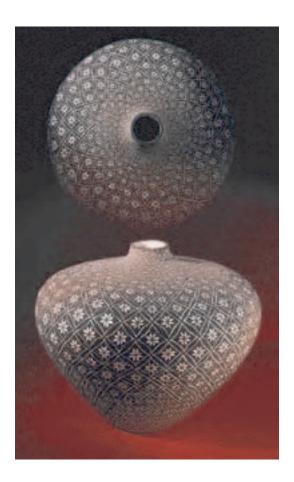


► FIGURE 9.10 This dish was once used as a serving bowl. The center of the design is a replica of the family coat of arms. Notice how the thin gold lines decorate the empty spaces between the thick blue lines.

Valencia, Spain. Dish c. 1430. Tin-glazed earthenware painted in cobalt blue and lustre. Height: 6.7 cm ($2^5/s''$); diameter of mouth: 48.2 cm (19''). Hispanic Society of America, New York, New York.

Radial balance occurs frequently in nature. Most flower petals are arranged around a central axis and radiate outward. Many plants follow radial patterns of growth. For instance, if you cut an apple in half horizontally, you will see a radial star design. Cut an orange the same way and you will notice the radial pattern of segments.

You can find many examples of radial balance in architecture. Domes are designed on the principle of radial balance. Manufactured items such as gears, wheels, tires, dials, and clocks are also radial in structure. Radial designs are used by many potters to decorate the surfaces of their work because they adapt well to the rounded forms of pottery (Figure 9.11).



Activity

Creating Radial Balance

Creating Visual Solutions Using Imagination. Draw on your creativity to design five objects that exhibit radial balance. Make a drawing of each imaginary object, using pen or pencil. Emphasize the radial balance of each object, using line, form, and color.

Computer Option. Choose from a variety of Shape tools. Determine the center of the computer page. Use a dot, an X, an addition sign (+), or other shape to mark this spot. Copy and Paste a shape four times around the center point. Continue to add and arrange shapes to maintain radial balance. Try a variety of sizes to add interest but make sure each set of four shapes is identical. Title and save your work. Now explore a more complex radial design. Combine lines and shapes and use more than four repeated combinations to complete the design.

Y

Check Your Understanding

- **1.** What is a central axis?
- **2.** What is the easiest type of balance to recognize and create?
- **3.** Which type of balance can be found frequently in nature and in architecture?
- **4.** Compare and contrast the use of balance in Figure 9.6 on page 230 and Figure 9.10 on page 232.

► FIGURE 9.11 Torivio, a Native American potter, has developed her own style for decorating her pots. She repeats the designs in radial patterns. The motif starts out small at the top rim and then expands to the widest part of the vessel.

Dorothy Torivio. Vase. c. 1984. Clay. Height about 20.3 cm (8"). Heard Museum Collection, Phoenix, Arizona.

Vocabulary

informal balance

Informal Balance

Informal balance gives the viewer the same comfortable feeling as formal balance, but in a much more subtle way. **Informal balance**, or asymmetry, involves *a balance of unlike objects*. While informal balance can express dignity, endurance, and stability, these qualities are less pronounced. Informal balance seems more realistic because it is closer to what appears in your everyday environment. It does not consist of two equal or nearly equal halves or sides. Instead, it relies on the artistic arrangement of objects to *appear* balanced.

Using Informal Balance in Art

Informal balance creates a casual effect (**Figure 9.12**). Although it seems less planned than formal balance, it is not. What appears to be an accidental arrangement of elements can be quite complicated. Symmetry merely requires that elements be repeated in a mirror image. Informal balance is more complex. Artists must consider all the visual weight factors and put them together correctly. Many factors influence the visual weight, or the attraction, that elements in a work of art have to the viewer's eyes.



▲ FIGURE 9.12 Pippin balanced the large, simple form of the log cabin near the center of the work with a complex shape formed by two trees and a shed near the edge of the work.

Horace Pippin. Cabin in the Cotton. Mid-1930s. Oil on panel. 46×84.1 cm $(18^1/s \times 33^1/s'')$. The Art Institute of Chicago, Chicago, Illinois. In memoriam: Frances W. Pick from her children Thomas F. Pick and Mary P. Hines, 1996.417.



▲ FIGURE 9.13 The objects in this painting appear balanced because the complex shape of the creature on the right is counteracted by the large, thin spiral shape on the left. Also, the background space is informally balanced by the areas of orange and brown.

Joan Miró. *Landscape (The Hare)*. Autumn 1927. Oil on canvas. 129.5 \times 194 cm (51 \times 76 3 /s"). The Solomon R. Guggenheim Museum, New York, New York. © 2003 Artists Rights Society (ARS), New York, ADAGP/Paris.

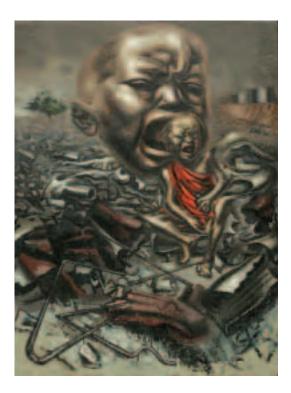
Size and Contour

A large shape or form appears to be heavier than a small shape. Several small shapes or forms can balance one large shape.

An object with a complicated contour is more interesting and appears to be heavier than one with a simple contour. A small, complex object can balance a large, simple object (Figure 9.13).

Color

A high-intensity color has more visual weight than a low-intensity color. The viewer's eyes are drawn to the area of bright color. What does this mean in terms of balance? It means that a small area of bright color is able to balance a larger area of a dull, neutral color (Figure 9.14).

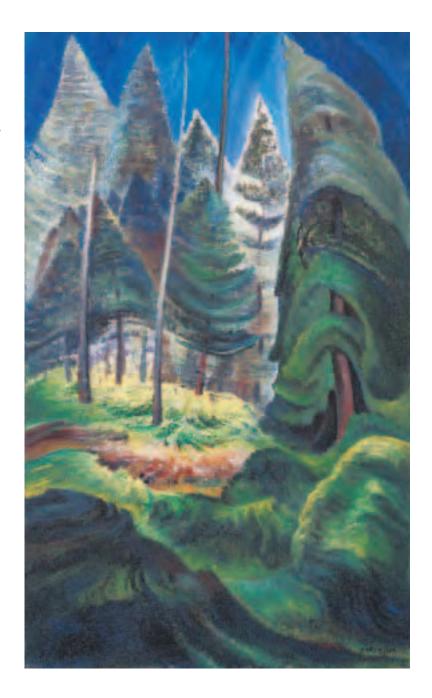


▲ FIGURE 9.14 The bright red color of the cloth wrapped around the child helps it stand out against the larger, low-intensity color of the enlarged head and the neutral colors of the forms on the ground.

David Alfaro Siqueiros. *Echo of a Scream*. 1937. Enamel on wood. 121.9 × 91.4 cm (48 × 36"). Museum of Modern Art, New York, New York. Gift of Edward M. M. Warburg (633.193a). © Estate of David Alfaro Siqueiros/Licensed by VAGA, New York, NY/SOMAAP, Mexico City.

FIGURE 9.15 Notice how the artist used small areas of bright, warm yellow and orange to balance cool greens and blues as well as neutral and low-intensity colors.

Emily Carr. *A Rushing Sea of Undergrowth*. 1932–35. Oil on canvas. 112.8 x 69 cm (44³/s × 27¹/s"). Vancouver Art Gallery, Vancouver, British Columbia, Canada. Emily Carr Trust, VAG 42.3.17.



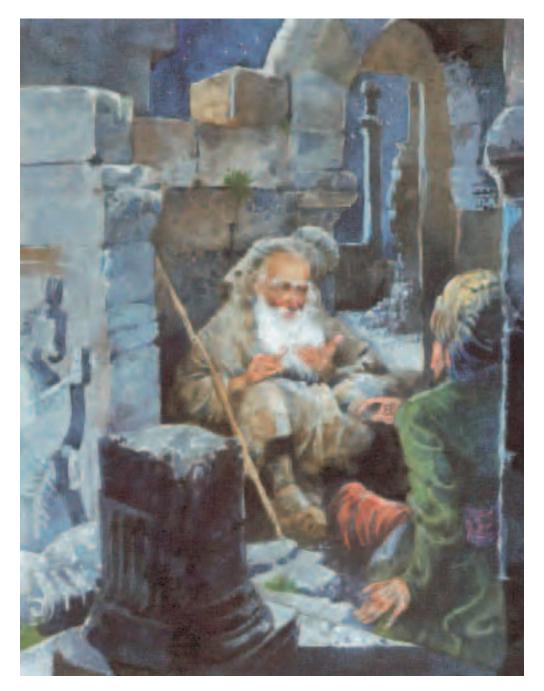
Warm colors carry more visual weight than cool colors. Red appears heavier than blue, and yellow/orange appears heavier than green (Figure 9.15).

Value

The stronger the contrast in value between an object and the background, the more visual weight the object has **(Figure 9.16).** Black against white has more weight than gray against white. Dark values appear heavier than light values. A dark red seems heavier than a light red.

Texture

A rough texture, with its uneven pattern of light highlights and dark, irregular shadows, attracts the viewer's eye more easily than a smooth, even surface does. This means that a small, roughtextured area can balance a large, smooth surface. In a poster or advertisement, a block of printed words has the quality of rough texture because of the irregular pattern of light and dark. Graphic designers must keep this in mind when balancing words with other visual elements.

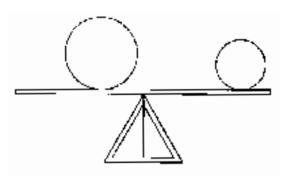


▼FIGURE 9.16 Elijah's white beard is the lightest area in the illustration. The use of this bright, light color emphasizes Elijah, who otherwise might blend in with the neutral, dull colors of the background. Compare and contrast this use of color and balance with Figure 9.15 on page 236.

Jerry Pinkney. Illustration from Journeys with Elijah.

Position

Children playing on a seesaw quickly discover that two friends of unequal weight can balance the seesaw by adjusting their positions. The heavier child moves toward the center; the lighter child slides toward the end. The board is then in balance (Figure 9.17).



▲ FIGURE 9.17 Does the seesaw look balanced?



▲ FIGURE 9.18 In the foreground, two dancers placed side by side create a busy, large shape that draws the viewer's attention. How do the four small dancers in the distance create balance with the dancers in the foreground?

Edgar Degas. Before the Ballet. 1890/1892. Oil on canvas. 40×88.9 cm $(15^3/4 \times 35'')$. National Gallery, Washington, D.C. Widener Collection.

Activity

Using Informal Balance

Demonstrating Effective Use of Art Media in Design. Create small designs using cut paper and/or fabric shapes to illustrate five weight arrangements that create informal balance. In each design keep all of the elements as alike as possible. Vary only the weight factors. For example, to illustrate differences in size, a large red circle could be balanced by several small red circles.

Computer Option. Use the drawing tools of your choice to make a series of small compositions that show informal balance. Use both lines and shapes. Explore changes in size, color, texture, value, contour, and position to create these asymmetrical compositions. Make several of each kind. Title, save, and print your best examples. Display them and compare with your classmates.

In visual art, a large object close to the dominant area of the work can be balanced by a smaller object placed farther away from the dominant area (Figure 9.18). In this way, a large, positive shape and a small, negative space can be balanced against a small, positive shape and a large, negative space.



- 1. What is the effect of informal balance?
- **2.** Name the six factors that influence the visual weight of an object.
- **3.** Which has a heavier visual weight, an object with a simple contour or one with a complicated contour?

The Expressive Qualities of Balance

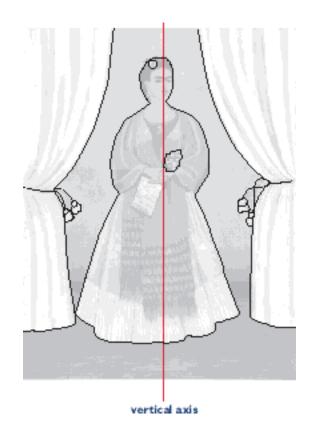
The type of balance an artist uses to organize a work of art affects the feeling expressed by that work. Artists choose balance based on the feeling they wish to convey. An artist who wants to present a calm arrangement will use formal balance. Formal balance can be used to present a person in a dignified portrait (Figure 9.19).

LOOKING

Using Formal Balance To Organize A Composition

Frida Kahlo has used formal balance to organize this painting to give it a sense of dignity and importance. In the diagram you can see that if the painting were folded in half along the vertical axis the shapes would match. Notice, however, that there are a few small variations. They would not match perfectly because she has used approximate symmetry. Can you find any matching shapes that were not included in the diagram?





◀ FIGURE 9.19

Frida Kahlo. *Self-Portrait Dedicated to Leon Trotsky.* 1937. Oil on Masonite. 76.2×61 cm (30×24 "). National Museum of Women in the Arts, Washington, D.C. Gift of the Honorable Clare Boothe Luce.





▼FIGURE 9.20 Ferdinand Hodler used formal balance to create a stiff, stable portrait of his friend. The line from the sculptor's nose through the line in his shirt divides the portrait vertically into almost perfectly matching halves.

Ferdinand Hodler. *James Vilbert, Sculptor.* 1907. Oil on canvas. 65.4×66.4 cm $(25^3/4 \times 26^1/s'')$. The Art Institute of Chicago, Chicago, Illinois. Helen Birch Bartlett Memorial Collection, 1926.212

Formal balance can also be used in religious paintings to evoke feelings of dignity and endurance. In the past, paintings used as altarpieces in churches were designed to fit in with the formal balance of the church altar. The artist Ferdinand Hodler developed a personal aesthetic theory called Parallelism that relied on symmetry and repetition to create images that expressed stability (Figure 9.20).

Many government buildings, hospitals, and office buildings are designed using formal balance. One purpose of this type of balance is to imply that the business conducted in these buildings is serious and solemn.

With approximate symmetry, artists express the same sense of calm stability, but they avoid the rigid formality of pure symmetry. Georgia O'Keeffe used approximate symmetry in her paintings of large close-ups of flowers. This impresses the viewer with feelings about the importance of the natural world. The use of approximate symmetry lends dignity to the flowing curves and alternating pastel colors of her painting, *White Rose with Larkspur*, *No. 2* (Figure 9.21).

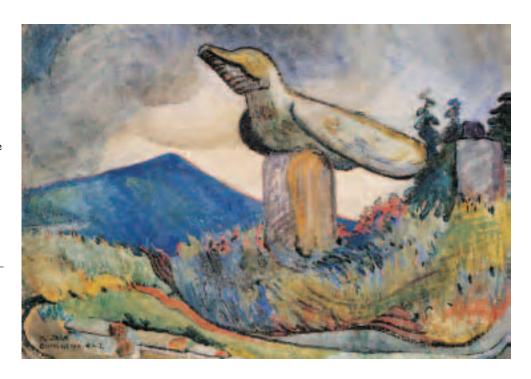
Radial design, on the other hand, is almost purely decorative. It appears in architecture, jewelry, pottery, weaving,

▼FIGURE 9.21 How has O'Keeffe arranged the shapes in this painting to create approximate, not absolute, symmetry? Would you like the painting more if it were perfectly symmetrical? Why or why not?

Georgia O'Keeffe. White Rose with Larkspur, No. 2. 1927. Oil on canvas. 101.6×76.2 cm $(40 \times 30'')$. Museum of Fine Arts, Boston, Massachusetts. Henry H. and Zoe Oliver Sherman Fund, 1980.207. © 2003 The Georgia O'Keeffe Foundation/Artists Rights Society (ARS), New York.

FIGURE 9.22 Notice how Carr has used informal balance by placing most of the raven to the right of center in this landscape. She made many trips to the Northwest Coast of Alaska to record images of the Native American villages. This work was made in her studio based on sketches she had done on her trip to Queen Charlotte Island. The Haida village had been deserted and the large carving of the raven remained. She has balanced the raven, flowers, and trees near the foreground against the blue mountain in the distance.

Emily Carr. Cumshewa. c. 1912. Watercolor over graphite on wove paper. 52×75.3 cm $(20^1/2 \times 29^5/s'')$. National Gallery of Canada, Ottawa, Ontario, Canada.



and textile design. It is not often used by painters in its pure form. You can, however, find loose arrangements of radiating lines in many paintings. Artists use this technique to focus attention on an important part of an artwork.

Informal balance has a more natural look. When you look around your natural environment, you seldom find objects arranged with formal balance. To capture this natural quality in their works, artists use informal balance in arranging landscapes or groups of people (Figure 9.22).

Architects are using informal balance in many modern structures (see Figure 14.16, page 399). Single-family suburban homes have become the symbol of casual living. These houses are often designed using informal balance.



- **1.** What feeling does formal balance convey?
- **2.** What kind of buildings use formal balance? Why?
- **3.** Why might an artist prefer approximate symmetry over pure symmetry?

Activity

Identifying **B**alance

Applying Your Skills. Look around your neighborhood for buildings that have been constructed using formal or informal balance. Make a rough sketch of one building and describe the feeling it gives you. If you live in a city and the buildings are too tall to sketch, look at the entrances to the buildings and sketch one of them. The entrance includes the door and all the decorative shapes around the doorway.

Computer Option. Use the tools of your choice to create a complex design illustrating one of the following: formal balance, informal balance, symmetry, approximate symmetry, radial balance. Save your work and then print it. If your printer is black and white, use colored pencils to add color. Evaluate your design. Does it meet the criteria for the kind of balance you chose to illustrate?

STUDIO PROJECT

Ceramic Mask



▲ FIGURE 9.23

Zaire, Kuba Culture. *Mukenga Mask.* Wood, animal fur, raffia cloth, cowrie shells, glass beads, string. $49.5 \times 43.2 \times 55.8$ cm $(19^{1/2} \times 17 \times 22'')$. Virginia Museum of Fine Arts, Richmond, Virginia. The Arthur and Margaret Glasgow Fund.

SUPPLIES

- Sketchbook and pencil
- Newspaper
- Clay (can be self-hardening)
- Clay modeling tools
- Acrylic paint and brushes
- Raffia
- Thin wire
- Beads
- Fabric scraps
- Glue

Historical and Cultural Context

Did you recognize the object in Figure 9.23 to be a mask? This mask is one of three that tells the story of the Kuba culture. The Kuba are an indigenous people of the Democratic Republic of Congo (formerly Zaire). According to Kuba legend, royalty descended from divine beings. The face on this object is meant to represent a king named Woot, who founded the kingdom. Different aspects of this mask are hints to the status of the figure depicted. The elephanttrunk shape with its patterns of beads and shells refers to a king's commanding power. The animal fur covering his face and the raffia encircling his neck signify a king's strength. The cowrie-shell collar signifies a king's wealth and power.

Notice that the mask is organized by means of symmetrical balance. The elements of color and visual texture are used to suggest this symmetry.

What You Will Learn

You will create a symmetrical ceramic mask representing a real or imaginary leader. You will add textures and patterns around the facial features, using clay. To add these facial features, you will demonstrate the effective use of sculpting media and tools. The mask is to be embellished, using paint and other decorative materials including raffia, wire, beads, and fabric.

Creating

List in your sketchbook the qualities you want your leader to show. Draw preliminary sketches that illustrate these qualities. Plan how you will use texture and color to organize your work according to the principle of symmetrical balance.

Step 1 Crumple newspaper into a tight ellipse (oval). Roll a slab of clay about 3/8-inch thick, and drape the clay over the newspaper bundle. Form a face by modeling the clay. Cut away unneeded clay from around the edges.

Step 2 Using your modeling tools, add clay and sculpt the features of the face. (See Technique Tips Handbook, pages 433–434.) Cut holes into the clay in order to attach the wire, beads, or other decorative materials later. Add textures to the face by adding small pieces of clay or by carving gently into the slab. (Remember to score and moisten the clay before joining two pieces.)

Step 3 Allow the clay to dry completely before it is fired in the kiln.

Step 4 Using a No. 2 pencil, lightly sketch your designs on the face, especially the forehead and cheeks. Create simple patterns of repeating shapes. Again, arrange these symmetrically to echo the overall symmetric organization of your object. Use acrylic paint to color the patterns. Allow the paint to dry.

Step 5 Attach the raffia, if desired, by tying it through the holes you cut in the clay. Using wire, string beads over and around the face. These may also be tied through the same holes. Additional beads can be glued on the surface. Fabric strips, which you could fringe, could also be glued along the underneath edge to add more layers of texture.

Evaluating Your Work

- ▶ **DESCRIBE** List and describe the characteristics of the leader portrayed in your mask. How did you symbolize these characteristics? What materials did you use to embellish the mask?
- ▶ **ANALYZE** Explain how you used symmetry in creating the form of the face. Compare and contrast how you used texture and color to reinforce the symmetrical balance of the design.
- ▶ **INTERPRET** What does your mask say about the person represented? Give your mask a title. Interpret your artistic decisions.
- ▶ **JUDGE** Did you demonstrate the effective use of clay and clay modeling tools in sculpting the face? Which aesthetic theories would you use to judge this work? Are there any improvements you would make to your design?



FIGURE 9.23A

Student work.

STUDIO PROJECT

9-2

Radial Balance Mandala



▲ FIGURE 9.24

Himachal Pradesh. *Chamba Rumal*. India. Early nineteenth century. Cotton with colored embroidery (silk). 66 cm (26") diameter. Philadelphia Museum of Art, Philadelphia, Pennsylvania.

SUPPLIES

- Sketchbook and pencil
- Vellum finish bristol paper or heavy white drawing paper
- Compass
- Protractor
- Colored pencils
- Clean scrap paper
- Fixative (optional)

Historical and Cultural Context

The Himalayas in Asia are known as home to the planet's highest mountain, Mount Everest. To the people of India, however, the range holds an additional significance. Deep within the mountains is the village of Chamba, which for the past thousand years has been turning out exquisite examples of a native art form known as the *rumal* (roo-**mall**). Created by the women of the village, rumals are richly intricate paintings embroidered with fine needlework. Traditionally, they were used as ceremonial handkerchiefs or scarves.

The rumal in **Figure 9.24** is typical. Note that this object exhibits radial balance. The design begins with the small red circle at the center. A pattern of flower petals radiates out from this central point, each petal pointing to a circle of male and female figures that are notable in Hindu tradition. An interlacing pattern of flower petals continues the design along the outer border.

What You Will Learn

You will illustrate ideas for a mandala design from personal experiences. In Hindu writing, mandala is the word for circle. The basic pattern of a mandala is a circle with a center. Like the rumal in Figure 9.24, the mandala will exhibit radial balance. Your mandala will use three symbols. One should be a symbol of your personal heritage—something with special meaning to your family or cultural group. A second should be a

personal symbol of your everyday life (for example, a schoolbook or symbol of a sport or activity you enjoy). The third should be a symbol of art, such a paintbrush. You will layer and blend colors in your work to create gradual changes in value.

Creating

Think about the three symbols you will use. You may want to talk with family members about the cultural symbol. Make visual and verbal notes in your sketchbook. Produce several thumbnail sketches. Select your best sketches.

Step 1 On a sheet of drawing paper, draw a circle approximately 9 inches in diameter, using a compass. Line up a protractor over the center point, and divide the circle into three equal wedges. In each third, enlarge one of your three symbol sketches.

Step 2 Decide on a color scheme. For each color moving outward from the center, select a color that is one step warmer or lighter or one step cooler or darker. The object ultimately is to layer and blend these colors together to create gradual changes in value. Choose colored pencils to match each color you will use in your design.

Step 3 Begin coloring your mandala. Keep a sheet of clean scrap paper beneath your hand as you work. This will prevent your hand from smearing your work.

Step 4 When you have finished your mandala, spray it with fixative—if your teacher provides it—to keep the colors from smearing. *Safety note:* Do the spraying outside or in a well-ventilated area.

Evaluating Your Work

- ▶ **DESCRIBE** Describe the three symbolic images you have chosen. Identify the meaning of each.
- ► **ANALYZE** Did you use radial balance? What color scheme did you use? Compare and contrast your use of value. Is there a gradual progression from the center out?
- ► **INTERPRET** What does your personal mandala express about you as a person? Write a brief paragraph or a poem expressing the meaning of your work.
- ▶ JUDGE Which aesthetic theory would you use to judge this work? If you were to do another mandala, what, if anything, would you change?



FIGURE 9.24A

Student work.

STUDIO PROJECT

Asymmetrical Balance Painting



▲ FIGURE 9.25

Katsushika Hokusai. *Shichiri Beach in Sagami Province* from *Thirty-Six Views of Mount Fuji*. 1823–31. Woodblock print. 26.4 x 38.4 cm $(10^3/s \times 15^1/s'')$. Honolulu Academy of Art, Honolulu, Hawaii. Gift of James A. Michener. 1985.

SUPPLIES

- Digital camera
- Image-editing or paint program
- Computer
- Printer
- Sketchbook and pencil
- Large sheets of heavy white paper
- Acrylic, tempera, or watercolor paints
- Brushes, water containers, and towels

Historical and Cultural Context

Figure 9.25 is a woodblock print created by nineteenth-century Japanese artist Katsushika Hokusai. The print is from one of Hokusai's best-known series, *Thirty-six Views of Mount Fuji*. In this asymmetrical composition, your eye is first drawn to one of the blue areas, perhaps in the lower right corner. From there, your gaze drifts diagonally to the snow-capped peak, Mount Fuji. You might expect a work so designed to be terribly lopsided, but this composition is not. The intense blue areas are neatly balanced by the large amount of water on the left.

What You Will Learn

In this lesson, you will create a digital image that has asymmetrical balance. The central figures in the work (the positive space) are to be a person and one or two pieces of furniture or objects from nature. There will be a large, open, negative space, as in Figure 9.25, that creates asymmetrical balance. Photograph the staged composition using a digital camera. After importing the images into a computer paint program, alter the work—selecting among the tools and menus. Print the image. Then create a painting based on the digital print. (See Digital Media Handbook, page 449.)

Creating

Using direct observation, sketch settings in and around your school that include one or two large objects, such as a bench, a tree, or a staircase. Use a classmate as a model. Have your model pose near—not necessarily in front of—the objects you have selected. Try to visualize a composition that includes just the person and the objects against a backdrop of negative space. Attempt to achieve asymmetrical balance.

Step 1 Place the model in the setting you have selected. Take several pictures of the scene from different angles and distances. Pick arrangements that emphasize asymmetrical balance.

Step 2 Import the digital images into a computer. Open the images in a paint program. Select and save the best composition.

Step 3 Use the paint program's tools and menus to improve the composition by selecting and moving the figure or objects. Crop the work, if needed, to emphasize asymmetrical balance.

Step 4 Explore and adjust the color settings. Increase color saturation; increase the contrast and change the settings to emphasize foreground images. Alter some colors. Although these changes will give the image a flatter appearance, like a woodcut, many striking, colorful, and unusual effects can be achieved on the computer that are otherwise not possible.

Step 5 Save and print your image.

Step 6 Select a paint medium. Make a freehand painting based on your digital image.

Step 7 When the paint is dry, mat and display both artworks.

Evaluating Your Work

- ▶ **DESCRIBE** What settings did you record in your sketchbook? What objects appear in your work? What software tools did you use to change your original digital image? What media did you choose to create your painting?
- ▶ ANALYZE How are objects arranged in the digital image and the painting to show asymmetrical balance? What contributes to the asymmetrical balance created between positive and negative space? Describe how camera angle, position of objects, and cropping support this kind of balance.
- ▶ **INTERPRET** What feelings does your finished work express? Give your painting a title that reflects these feelings.
- ▶ JUDGE Do both artworks show asymmetrical balance? If you were to redo any part of the work, what would you do differently to improve the work? How would a different color scheme affect the work? Evaluate and justify your artistic decisions.





Student work (photograph).



FIGURE 9.25B

Student work (painting).

STUDENT ART PORTFOLIO

Balance

Whether balance is symmetrical, radial, or informal, it is essential to an artwork's success. Formal balance can add dignity; informal balance, excitement. As you examine the student artworks on these pages:

- Compare and contrast them in terms of their use of the principle of balance.
- Analyze the works, forming precise conclusions about the type of balance used.



▲ FIGURE 9.26

Student work. *Untitled*. Copper wire, coiled copper, rubber, electronic armature.

Activity 9.26 Type of balance.

Analyze the balance used in this art object. Form a conclusion as to whether it is formal or informal. Does the object appear to have a practical use, or is it purely decorative?



▲ FIGURE 9.27

Student work. Untitled. Stoneware, beads, wire, raffia.

Activity 9.27 Expressive qualities of balance.

What feeling or idea does this mask communicate through its use of balance? Explain.



▲ FIGURE 9.28

Student work. Earth Wheel. Soil, flowers, sand.

Activity 9.29 Comparing balance.

Compare and contrast the use of balance in this student work with Figure 12.30 on page 343. What other differences and similarities can you detect?



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

For Your Portfolio

Analyzing Peer Artworks. Many art students nowadays maintain online or digital art portfolios. With your teacher's guidance, organize online exhibitions of student artworks. You may also research online exhibitions of student art at other high schools. Select and analyze these peer exhibitions to form conclusions about formal qualities, historical and cultural contexts, intents, and meanings. Compile your analysis into a four-part report that you can store in your portfolio.

Activity 9.28 Type of balance.

Describe the type of balance used in this earth artwork. How are textures and colors used to reinforce balance?



FIGURE 9.29

Student work. Bear. Acrylic.



One way to sharpen your skills at perceiving balance is to tour your city. Notice the buildings and type of balance used in their designs. Make notes and sketches about these and other objects. See whether you can find at least one example of each of the following types of balance: radial, symmetrical, approximate symmetrical, and informal.

Art Criticism in Action



▲ FIGURE 9.30

Arthur Shaughnessy, Native American, Dzawada'enuxw. Dla'ehl Interior House Post: Grizzly Bear Beneath Kolus. c. 1907. Red cedar, and paint. $457.2 \times 335.3 \times 86.4$ cm $(180 \times 132 \times 34")$. The Seattle Art Museum, Seattle, Washington. Gift of Mr. John H. Hausberg.

Critiquing the Artwork

- ▶ 1 **DESCRIBE** What do you see? List all the information found in the credit line.
 - Describe the general characteristics of this house post. Provide as many visual details as you can.
- During this step you will collect information about the way the elements of art are organized using the principle of balance. This is still a clue-collecting step, so do not make guesses.
 - Is this a two- or three-dimensional object? Explain.
 - What kind of balance has the artist used to organize this house post? Compare and contrast examples of how and where this balance is used.
 - Where do you see patterns? Where do you see visual movement caused by repeated rhythms?
- **3 INTERPRET** What message does this artwork communicate to you?

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

- How do the forms, shapes, and colors on this post make you feel? Explain your reaction.
- What do you think is the purpose of this post?
- Write an imaginary dialogue between these creatures that explains the legend of their creation.
- 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 balance to organize the elements of art to communicate a feeling or an idea? Explain.
 - Do you think this is a successful work of art? Why or why not? Use one or more of the aesthetic theories to defend your judgment.



The Dzawada'enuxw (duhzuh-wah-dah-ee-noocks-wa) are a native people of the Pacific Northwest. This totem pole was one of four decorative house posts carved by Arthur Shaughnessy around 1907. Such carvings were traditionally done to dedicate new homes built for families of stature. The posts, which carry the family's history, were viewed as spiritual in nature. In 1966, a collector purchased the weatherbeaten posts and had them restored. He donated them to the Seattle Art Museum. In 1992, the posts were rededicated in a ceremony led by the descendants of the original owners.

Tipping the BALANCE

Balance is more than an important characteristic in art. For a world-famous building, maintaining its balance means preserving the past.

n 1989, visitors climbed the 294 steps to the top of Italy's Leaning Tower of Pisa. They could look out from the famous tilting tower at the surrounding countryside that has inspired so many artists. Not all was well, though.

Experts warned that the off-balance tower, which began leaning soon after it was built in 1173, had leaned too far. The tower is built directly on an ancient riverbed of soft, sandy soil, and the foundation is too shallow for a structure that weighs 32 million pounds. By 2009, it could fall.

So engineers spent \$25 million—and took 12 years—setting the 192-foot tower a bit straighter. Not, of course, entirely in balance. That would have destroyed its appeal. It was made straight enough, however, to keep it stable for another 300 years.

Nearly 2 million pounds of lead weights were placed on one of the tower's sides. A giant belt was looped around the tower and connected to large weights a block away. These two steps stopped the tilting. Two million pounds of soil were removed from around part of the foundation. This created cavities into which the tower could settle. When it was all over, Pisa had gone from an angle of 5.5 degrees back to an even 5 degrees. That's where it was 200 years ago. By 2001, tourists were climbing to the top to enjoy the sight as well as the tilt.

TIME to Connect

The Leaning Tower of Pisa tilts because it was built on sandy soil. What other environmental factors can change a building over time? Using your school's media center or the Internet, investigate an engineering marvel—such as the pyramids of Egypt or Mexico, the Acropolis in Greece, or the Taj Mahal in India. Write a brief report, including the following data and information:

- What materials were used to build the structure?
- What natural and human-made factors—such as weather, geological events, and pollution—are affecting the structure? To what degree has the structure been damaged by these factors?
- What efforts, if any, are taking place to preserve the structure?

CHAPTER

9 REVIEW

Building Vocabulary

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

- 1. The principle of art concerned with equalizing visual forces, or elements, in a work of art.
- **2.** A dividing line that works like the point of balance in the balance scale.
- **3.** The type of balance that results when equal, or very similar, elements are placed on opposite sides of a central axis.
- **4.** A special type of formal balance in which two halves of a balanced composition are identical, mirror images of each other.
- **5.** When the forces or elements of a design come out (*radiate*) from a central point.
- **6.** A balance of unlike objects.

Reviewing Art Facts

Answer the following questions using complete sentences.

- **7.** Why is balance important to a work of art?
- **8.** What are the visual forces, or weights, in art?
- **9.** What is the difference between symmetry and approximate symmetry?
- **10.** What factors in a work of art influence the visual weight of the art elements?
- **11.** Which carry more weight, warm or cool colors?
- 12. How can value affect visual weight?
- **13.** What does a formally balanced building express?

Thinking Critically About Art

- 14. Research. The Zapotec people, a pre-Columbian civilization in Mexico, left behind some interesting artifacts, as shown in Figure 9.6 on page 230. Using online or print resources, write a one-page research report on whether or not the use of symmetry is common in Zapotec architecture and art.
- 15. Historical/Cultural Heritage. Analyze the painting of Mexican peasants in Figure 9.5 on page 229. After reading the Meet the Artist feature on Diego Rivera on the same page, identify the general theme of this artwork. Then compare and contrast Rivera's style with Figure 9.14 on page 235 by David Alfaro Siqueiros. Describe the differences between the works of the two Mexican contemporaries.



Like other fine artists, sculptors need to consider balance as they design their sculptures.

Try your hand at creating a balanced sculpture design at the education Web site of the Smithsonian Institution. Simply follow the **Web**Museum Tour link at art.glencoe.com.

Linking to the **Performing Arts**

Turn to the Performing Arts Handbook on page 421 to learn how Eth-Noh-Tec uses



a balance of music, movement, and words to present their unique style of theatre and storytelling.