## RELATED SHAPES

Below is a group of related shapes to which more related shapes have been added in such a way that the pattern is not broken. The shapes remain within the same size range. They are similarly spaced. They are oriented in the same manner (they are not drawn on an angle, for example).

## SKETCHBOOK ASSIGNMENT 1-8

Please complete the following assignment in your sketchbook. You will have to re-draw the original shapes and add no less than four new shapes to each group of shapes making certain that the original pattern is not broken.

Example:


Original group of shapes


Original group with new shapes added

Exercises:


## TEXTURE AND PATTERN

Texture is one of the principle surface qualities of forms. It denotes a material's characteristic structure. For example: glass is smooth and slick while sand is rough and gritty. Textures can be real, such as those we actually see and touch in our environment (wood, brick, stucco, glass and so forth). Textures can also be implied either as simulations of real textures or inventions by the artist.

## SKETCHBOOK ASSIGNMENT 1-9

In your sketchbook create 10 (1.5"X1.5") boxes. Use the side of a pencil or dark coloured crayon to make 10 natural rubbings by placing the paper over a textured surface and rubbing to fill the square completely and neatly with an impression of the actual texture of the surface.


## SKETCHBOOK ASSIGNMENT 1-10

In your sketchbook create 10 ( 1.5 "X1.5") boxes. Use the side of a pencil or dark coloured crayon to make 10 man-made rubbings by placing the paper over a textured surface and rubbing to fill the square completely and neatly with an impression of the actual texture of the surface.


In your sketchbook and using a fine tip black felt pen create 10 implied textures. Attempt to create textures that create a half-tone or 50\% grey.


## SKETCHBOOK ASSIGNMENT 1-12

In your sketchbook and using a fine tip black felt pen use implied texture to draw an animal of your choice.


## UNIT 1: CHAPTER 2

## The Principles of Design

If you want to use a language, knowing the vocabulary is not enough. You must also know how the words go together. You must know the rules of grammar for that language. The same is true of art. Instead of rules of grammar, the language of art has art principles. These principles, or guidelines, govern how artists organize the visual elements to create a work of art. The principles of design include balance, variety, harmony, emphasis, proportion, movement, and rhythm.


FIGURE 1-7 This picture combines familiar images from our modern rock culture. What are some of the images? What do you think the artist is trying to say about this culture?

Richard Lindner. Rock-Rock. 1966. Oil on canvas. $177.8 \times 152.4 \mathrm{~cm}$ ( $70 \times 60$ "). Dallas Museum of Art, Dallas, Texas. Gift of Mr. \& Mrs. James H. Clark.

## BALANCE

If you have ever carried a stack of dishes or books, you know the importance of balance. In art, balance is also important. Balance is a principle of design concerned with arranging elements so no one part of a work overpowers, or seems heavier than, any other part. In art, balance is seen or felt by the viewer.

In works of art, three kinds of balance are possible. They are formal balance, informal balance, and radial balance. In works of art with formal, or symmetrical balance the two halves are mirror images. In works with informal, or asymmetrical balance two unlike elements seem to carry equal weight, for example, a small shape painted bright red will balance several larger items painted in duller reds.

Radial balance occurs when elements or objects in an art work are positioned around a central point. Study the art works in Figures 1-7, 1-8, and 1-9. Which uses formal balance? Which uses informal balance? Which uses radial balance?


FIGURE 1-8 This painting creates a certain mood or feeling about the girl playing the guitar. How has Renoir combined the element of colour and the principle of balance to create a pleasing portrait?


FIGURE 1-9 Van Gogh has blended many elements and principles of design in this work. Notice how he has used the elements of colour and line to create a feeling of movement. How has he created balance?

Vincent van Gogh. The Starry Night. 1889. Oil on canvas. $73.7 \times 92.1 \mathrm{~cm}$ ( $29 \times 361 / 4$ "). Collection, The Museum of Modern Art, New York, New York. Acquired through the Lillie P. Bliss bequest.

## VARIETY

The same routine day after day can become dull. The same colour or shape repeated over and over in an art work can become equally dull. To avoid dullness, artists use the principle of variety in their works. Variety is a principle of art concerned with combining one or more elements to create interest by adding slight changes. By giving a work variety, the artist heightens the visual appeal of the work. Look again at the picture in Figure 1-7. How does the artist's use of color add variety to the work? Which other elements are used to add variety?

## HARMONY

If too little variety can become boring, too much variety can create chaos. Artists avoid chaos in their works by using the principle of harmony. Harmony is a principle of design concerned with blending elements to create a more calm, restful appearance. Of the two paintings in Figures 1-7 and 1-8, which has greater harmony? Which elements does the artist use to introduce harmony to the work?

## EMPHASIS

To attract a viewer's attention to important parts of a work, artists use the principle of emphasis. Emphasis is making an element in a work stand out. Emphasis can be created by contrast or by extreme changes in an element. Look once more at Figure 1-8. What has been done to emphasize the face of the young woman?

## PROPORTION

Have you ever tasted a food that was so salty you couldn't eat it? The problem was one of proportion. Proportion is the principle of art concerned with the relationship of one part to another and to the whole. The principle of proportion is not limited to size. Elements such as color can be used in differing proportions to create emphasis. It is used this way in figure 1-7. Which color is used in greatest proportion?

## MOVEMENT

You may not have realized it, but when you look at a work of art your eye moves from part to part. Artists use the principle of movement to lead the viewer's eyes throughout the work. Movement is the principle of art used to create the look and feeling of action and to guide a viewer's eye throughout the work of art. Study yet again the paintings in Figures 1-7, 1-8, and 1-9. How have the artists used line and shape to move your eyes throughout the works?

## RHYTHM

Often artists seek to make their works seem active. When they do, they call upon the principle of rhythm. Rhythm is the prin-ciple of art concerned with repeating an element to make a work seem active or to suggest vibration. Sometimes to create rhythm, an artist will repeat not just elements but also the same exact objects over and over. When this is done, a pattern is formed. Compare the works in Figures 1-7, 1-8, and 1-9. Which uses the principle of rhythm? What element is repeated?

## UNITY IN ART

When you look at works of art, it may be difficult to determine where one part ends and the other begins. Instead, the piece of art works together as a whole. It has unity. Unity is the arrangement of elements and principles with media to create a feeling of completeness or whole-ness. You will sense this unity as you look at works of art in which artists use the elements and. principles with skill, imagination, and sensitivity.

## SKETCHBOOK ASSIGNMENT 1-28

CHECK YOUR UNDERSTANDING: What are principles of design? Name three kinds of balance. Describe each kind. What principles do artists use to prevent works from being static? How can emphasis be created in a work of art? Define Movement

## Using the Principles of Art

## BALANCE

Just as nature seeks to create and maintain a sense of balance, so also artist must create a sense of balance in their works by making sure that all parts of a composition are treated equally. No one area should attract too much attention.

There are several ways to create a sense of balance. The simplest is symmetrical or formal balance where both parts are exactly the same. Symmetry is one of nature principles ways of creating balance. The human body viewed from the front or rear is a good example of symmetry. The opposite sides are roughly the same. Symmetrical balance can often feel static and sometimes boring.

A more dynamic sense of balance can be created through informal or asymmetrical balance. A large object on one side of a picture may be balanced by two smaller objects on the other side. Many modern artists explore the principle of balance in abstract compositions. Areas of colour o shapes are balanced against others in order to obtain visual interest without any immediately recognisable subject matter.


A less frequently used way of creating balance is through radial balance which revolves around a real or imaginary central point. A section through an orange, a hubcap or gears may provide an opportunity to employ redial balance.

Regardless of the method used, an artist will always keep in mind the need to obtain sa sense of balance in a work of art.

## SKETCHBOOK ASSIGNMENT 1-29

Indicate which type of balance has been used in the simple compositions on this page.


## SKETCHBOOK ASSIGNMENT 1-30

Look through magazines and find pictures that provide examples of each type of balance. Each type of balance must be shown and labelled.

## PERSPECTIVE AND SPACE

Perspective creates the illusion of 3 dimensions on a two-dimensional surface.
According to the way our eyes perceive the world; objects close to us appear larger than objects farther away. If you stand in the middle of straight railroad tracks on a flat surface, the rails appear to come together at the point where the land meets the sky. This point is referred to as the vanishing point. Using one-point perspective, you would draw the scene as you actually see it. To draw a house where you can see two sides of a building, you would use two-point perspective.

Horizon line and vanishing point are terms you should know. The horizon line is the line where the land meets the sky on a flat surface. The horizon line is easy to recognize on the ocean or the prairies. A vanishing point is the spot where all real-world, parallel lines meet. Lines that are parallel to the horizon will meet at a vanishing point on the horizon line. Vanishing points can exist off the horizon line.

It is possible to have drawings with three or more vanishing points, but two vanishing points are usually all that is needed.

## SKETCHBOOK ASSIGNMENT 1-31

## One Point Perspective

Replicate and complete the boxes using the vanishing point provided based on the example.


## One Point Perspective- Block Letters Sequence Steps

Print your name on the grid using block letters. Copy your letters from the page of sample letters. You may use a shortened version of your name if it is unusually long.


## Vanishing Point

Complete the first letter ignoring the second letter but remaining aware that those parts of the first letter which are behind the second letter will have to be erased.


Erase parts of the first letter which are hidden behind the second letter and complete the second letter as you did the first.


Add value to make your letters appear
Vanishing Point more three dimendional.


## SKETCHBOOK ASSIGNMENT 1-33

Create the alphabets Block Letters in your sketchbook.


## SKETCHBOOK ASSIGNMENT 1-34

## Two Point Perspective- Step by Step Instruction

Draw three boxes (one above, one on and one below the horizon line) and a wall with a "doorway" through it. Example of completed drawing:



Step 1: Draw three sets of vertical lines. Draw lines back to both vanishing point from the center lines. Where the lines intersect the outside lines determines the height of the outside lines.


Step 3: The center box is complete. The top box needs a bottom and the bottom box needs a top. Draw lines to the vanishing points from the outside bottom edges and the outside to edges.


Step 2: Solidify the lines representing the top and bottom edges of the boxes.


Step 4: Solidify the lines representing the back bottom and top edges of the boxes. The boxes are now complete. Erase all guide lines.


Step 5: To draw the wall, first draw a vertical line representing the nearest corner. Draw lines back to both vanishing points.


Step 7: Solidify the lines representing the top and bottom edges of the wall. Draw vertical lines on the wall to represent the outside edges of a doorway. The top of the doorway is shown by the line tracing to the VP R.


Step 9: Draw a line from point A to VP R. Where this line intersects the line leading to the vanishing point on the left from the bottom of the right side of the doorway determines the width of the wall at the opening (point B). Draw a vertical line from point B to where it intersects the line leading to VP L from the top of the right side of the doorway (point C).


Step 11: Solidify the lines representing the edges of the doorway.


Step 6: To determine the thickness of the all, draw a vertical line to the left of the first vertical line. This line should be fairly close to the first line. To determine the length of the wall, draw a vertical line to the right of the first line. This line should be much further away from the first line than the line showing the thickness. The tops and bottoms of the lines end where they intersect the lines leading to the VPs.


Step 8: Solidify the lines representing the doorway. To show the thickness of the wall at the doorway, draw lines leading to the VP L from the top and bottom of the line on the right of the doorway.


Step 10: Draw a line from the vanishing point on the right through point $C$ to where it intersects the left side of the doorway.


Step 12: Erase the line representing the bottom edge of the wall between the bottom edges of the doorway.

Two Point Perspective- Step by Step Instruction. Draw a simple building with a pitched roof.


Step 1: Draw a simple box using two-point perspective.


Step 3: Find the center of the left face of the box by drawing lines from the opposite corners. Draw a vertical line through the point where they intersect. Extend this line above the top edge of the box. From a point on the center vertical line above the top edge draw lines back to the top outside edges.


Step 5: Draw a line from the back top corner of the building to the third VP.


Step 2: Solidify the lines of your box.


Step 4: Solidify the pitched roof lines. From the peak draw a line representing the ridge of the roof to VP R. Find a third vanishing point for the back pitch line by expanding line A to a point directly above VP L.


Step 6: Solidify the lines and erase the line on the left face of the building.

Two Point Perspective- Step by Step Instruction. Create an intersection with sidewalks and a crosswalk.



Step 1: Begin with a box representing a building in the two point perspective.


Step 3: Solidify the lines outside the intersection area. These represent the top edges of curbs. Draw
two more lines slightly below the lines closest to the area. These represent the top edges of curbs. Draw
two more lines slightly below the lines closest to the building. These will represent the level of the street. Draw vertical lines at the three visible corners.


Step 2: Draw lanes from the vanishing points through points A and B.


Step 4: Solidify the lines and erase all working guide lines. This is the intersection without crosswalks.


Step 5: A crosswalk is the extension of the sidewalk across the street. Draw lines from VP L through the lines representing the street level. To find the far edge of the crosswalk, draw a line from VP L along the bottom edge of the building to where it intersects the top edge of the curb. Draw a vertical line down through this intersection to where it intersects the street level line. Draw a line from the vanishing point on the left though this point to the opposite side of the street.


Step 7: Use the same steps to create the sidewalks going the other direction.


Step 9: Complete the sidewalks by drawing lines representing the painted lines on the street surface. Draw lines from the vanishing points close to outside edge lines. The painted lines closest to the observer (lower down in the drawing) should be slightly thicker than those farther back. Draw crosswalk lines A and B.


Step 6: Solidify the lines representing the outside edges of the crosswalk.


Step 8: Solidify the lines.


Step 10: Solidify the crosswalk lines.

## SKETCHBOOK ASSIGNMENT 1-37

Two Point Perspective- Step by Step Instruction. Use a third vanishing point to create the effect of expansion cracks in the sidewalk.


Step 1: Begin with a drawing showing a building form on a street intersection.

Step 3: Draw a line from point A1 to the third vanishing point. Where it intersects the bottom edge of the building (far edge of the sidewalk) creates point A2. Draw a line from VP L through point A2 to where it intersects the curb height line. This creates the first expansion crack line.



Step 2: Draw lines along the bottom edges of the building to the top edges of the curbs. From the street corner to the corner of the building draw a line to where it intersects the horizon line. This establishes a varnishing point for all lines drawn from one corner to the opposite corner of sections of the sidewalk that are exactly the same size and shape.


Step 4: Repeat the steps now using point B1 and B2 to create the second expansion crack line.


Step 5: Continue the process of creating expansion crack lines down the sidewalk by tracing lines from the curb edge of the sidewalk back to the third vanishing point and drawing lines from VP L through the bottom edge of the building to the curb edge of the sidewalk. The same steps can be repeated for expansion cracks down the sidewalk towards the left edge of the drawing. In this case lines will be drawn from VP R through the intersection point at the bottom edge of the building to the curb edge of the sidewalk.


Step 6: The same concept can be used to control the width of doors and windows on buildings to make them become progressively narrower as they appear farther back in the drawing. (1) Extend lines from appropriate vanishing points through the points where the door width lines intersect the building bottom edge line to the curb edge lines. (2) Draw a line from the nearest curb edge intersection point through the point where the more distant line intersects the building edges to create a third vanishing point. (3) Draw a vertical line from a door farther back on the building. (4) Draw a line from the appropriate vanishing point though the point where the door line intersects the buildings bottom edge to the curb. (5) Draw a line from the curb edge to the third vanishing point. Where this line intersects the building bottom edge establishes the width of the second door.

## SKETCHBOOK ASSIGNMENT 1-38

Two Point Perspective- Step by Step Instruction. Draw five rectilinear forms in your sketchbook (refer to example below). Remember that all horizontal lines must meet at a point on the horizon line. Vertical lines must be straight up and down ( 90 degrees to the horizon line). Use only two vanishing points in this assignment. The light source should come from the top right-hand corner. Add value, using lines, to your forms to create a stronger sense of depth and three-dimensionality. When using lines to create value, be consistent: all parallel planes should be rendered in the same manner. Be careful when using lines that converged at vanishing points to create values: lines will be closer together, CREATING A DARKER VALUE, at the vanishing point. Use the example below as a guide. Do not copy it.


## PRINCIPLES AND DESIGN IN PRACTICE

Artists use the language of art in different and often highly imaginative ways. Figure 1-10 gives us painter Charles Demuth's view of a fire engine racing through a rain-swept city at night.


Notice that the artist has not attempted to create a true-to-life picture. There are no clear images of trucks, wet streets, or dark-ened buildings. Rather, Demuth has cap-tured the idea of those images. Look closely and you can almost hear the screaming of Engine Company S's siren. You can almost see the red truck's lights

FIGURE 1-10 Charles Demuth creates amazing impact by using simple images What do you notice first when you look at this picture?

Charles Henry Demuth. I Saw the Figure 5 in Gold, 1928. Oil on composition board. $914 \times 756 \mathrm{~cm}$ (36 x 293/4"). The Metropolitan Museum of Art, New York.

## SKETCHBOOK ASSIGNMENT 1-39

You will create the "idea of your name." You will do this through a design made up of the letters of your name or nickname. All the principles of art will be used in your design. You will use watercolour and acrylic paint in your work. (See Figure 1-11.)

## WHAT YOU WILL NEED

Sketchbook, pencil, ruler, and eraser, watercolour paint, brushes, acrylic paint and pallet.

## WHAT YOU WILL DO

1. In your sketchbook, practice making block letters of different sizes and shapes. Focus only on the letters in your name or nickname. Working lightly in pencil, create a design with the letters on a new page in your sketchbook. Arrange for some of the letters to overlap and some to go off the page. Fill the entire sheet of paper. (See Figure 1-12.)
2. Using the ruler, divide your paper into eight equal rectangles. Each should measure 6 $x 9$ inches. Number the eight boxed areas lightly in pencil in any order you like.
3. Using the pencil and eraser, draw in or erase lines to rearrange the shapes in Area 1 so they have formal balance. Fill in some of the shapes with pencil.
4. Using a variety of hues of acrylic, paint the shapes in Area 2.
5. Using no more than three hues, paint the shapes in Area 3. Repeat one of these colors over and over to add harmony.
6. Identify the most interesting shape in Area 4. Using the brightest hue, paint this area to give emphasis to this shape. Paint other shapes with dull hues.
7. Using the pencil and eraser, rearrange the shapes in Area 5 to create rhythm. Use watercolors to paint the shapes.
8. Using watercolours, paint the shapes in Area 6. Increase the proportion of one of the colours you use. Notice how doing this emphasizes that colour.
9. Using the pencil and eraser, rearrange the shapes in Area 7 to create a sense of movement in any direction. Use watercolours to paint the shapes. Pick colors that will add to the feeling of movement.
10.Rearrange similar shapes in Area 8 to create a pattern. Pick one colour of arylic to paint the shapes in Area 8. Paint the nearest shapes. Paint the other shapes, adding white to lighten the value of the hue. In this way the shapes will appear to create rhythm.
11.Display your design and identify the different principles of art found in each area.


FIGURE 1-11 Student work.


FIGURE 1-12

## EXAMINING YOUR WORK

- Describe: Tell where the different letters of your name or nickname are found in your design. Identify the art media you used to create the different areas.
- Analyze: Name the principle of art highlighted in each area of your design.
- Judge: Tell whether your design clearly highlights each principle of art. Tell which section of your design you think is the most successful. Explain your answer.


## OPTIONAL PRACTICE IDEAS

In your sketchbook, create a second design. This work should be based on your initials. Focus on the part of your first design that you found most interesting.

## REVIEW

## SKETCHBOOK ASSIGNMENT 1-40

Building your Vocabulary. Number in your sketchbook from 1 to 15 . After each number, write the term from the box that best matches each description below.

- balance
- color
- emphasis
- form
- harmony
- proportion
- rhythm
- shape
- space
- texture
- line
- movement
- non-objective art
- unity
- variety

1. What the eyes see when light is reflected off an object.
2. Path of a moving point through space.
3. The way things feel, or look as though they might feel, if touched.
4. An area clearly set off by one or more of the other elements of art.
5. An object with three dimensions.
6. Arranging elements so no one part of a work overpowers, or seems heavier than, any other part.
7. Combining one or more elements to cre-ate interest by adding slight changes.
8. Blending elements to create a more calm, restful appearance.
9. Making an element in a work stand out.
10. The repeating of an element to make a work seem active or to suggest vibration.
11. The relationship of one part to another and to the whole.
12. The arrangement of elements and principles with media to create a feeling of completeness or wholeness.
13. The principle of art used to create the look and feeling of action and to guide a viewer's eye throughout the work.
14. Art works in which no objects or sub-jects can be readily identified.
15. The distance between, around, above, below, and within things.

## SKETCHBOOK ASSIGNMENT 1-41

Reviewing Art Facts. Number in your sketchbook from 1 to 5 . Answer each question in a complete sentence.

1. What are the elements of art?
2. Which of the three properties of color refers to a color's name and place on a color wheel?
3. What are the two different kinds of shapes?
4. What is non-objective art?
5. What is symmetrical balance? What is asymmetrical balance?

## SKETCHBOOK ASSIGNMENT 1-42

Thinking About Art. In your sketchbook, answer each question in a sentence or two.

1. Extend. What kind of lines would you use in creating a picture of an action-packed horse race? What kind of lines would you use in creating a calm, peace-ful picture of a lake and trees? Explain your answers.
2. Analyze. Which type of shapes, geomet-ric or organic, are you more likely t9 find in nature? Why do you suppose this to be the case?
3. Compare and contrast. What do the ele-ments of shape and form have in com-mon? In what ways are the two different?

## SKETCHBOOK ASSIGNMENT 1-43

## Making Art Connections

1. Science. Make a list of the elements of art you have learned about in this chapter. Choose an object from nature that shows examples of these elements. Beside each art element listed, write a one- or two-word description of the natural object you chose.
2. Language Arts. Writers use words to ex-press ideas. Choose three words from the elements and principles of art and write a paragraph expressing these ideas.

## SKETCHBOOK ASSIGNMENT 1-44

Looking at the Details. The detail shown below is from, Gabrielle Miinter's Staffelsee in
Autumn. Study the detail and answer the questions below.

1. Give examples of types of shapes that you see in this work. Are they free-form or geometric shapes?
2. How is colour used to create unity?
3. Where is the emphasis in this detail? Look at the entire work. Has the emphasis changed? Explain your answer.
4. What does the artist's choice of colour communicate about this scene?

Gabriele Munter. Staffelsee in Autumn. 1923. Oil on board. (Detail.) $34.9 \times 48.9 \mathrm{~cm}$ (133/4x 191/4"). National Museum of Women in the Arts, Washington, D.C. Gift of Wallace and Wilhelmina Holladay.


