

# Lights and shadows



## CHAPTER 2

*Light and shadows visually define objects. Before you can draw the light and shadows you see, you need to train your eyes to see like an artist.*



# Understanding values



- Values are the different shades of gray between white and black. Artists use values to translate the light and shadows they see into shading, thus creating the illusion of a third dimension.
- Hatching and crosshatching are simple and fun techniques for drawing shading.
- A full range of values is the basic ingredient for shading. When you can draw lots of different values, you can begin to add shading, and therefore depth, to your drawings.

With shading, the magical illusion of three-dimensional reality appears on your drawing paper.

*Figure 1 demonstrates how to take a simple line drawing of a circle and add shading to transform it into the planet Earth.*

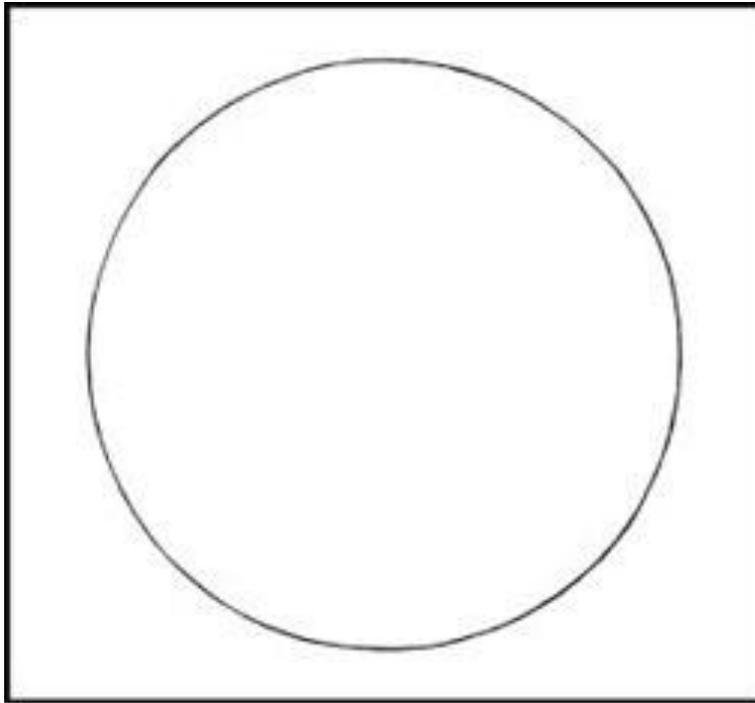
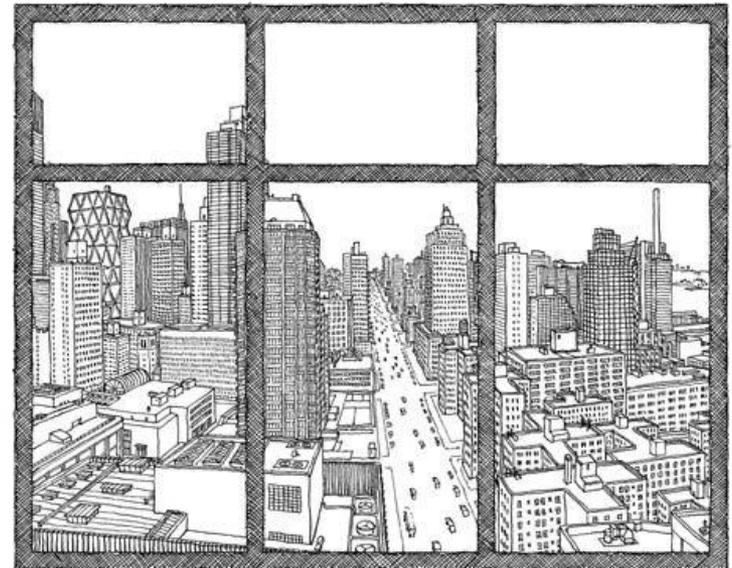
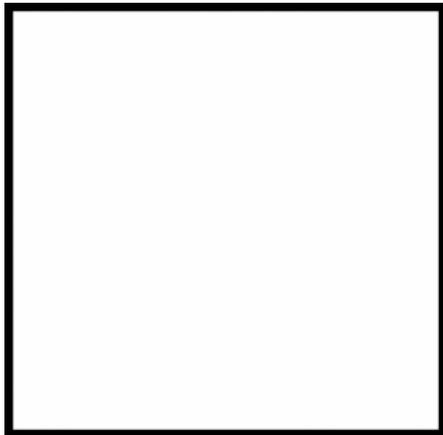


Figure 1: Turning a simple line drawing into planet Earth.

# EXERCISE 1



**CONVERT THE FOLLOWING SHAPES IN TO ANY 3  
DIMENSIONAL EVERYDAY OBJECT.THE FIRST ONE  
IS DONE FOR YOU.**



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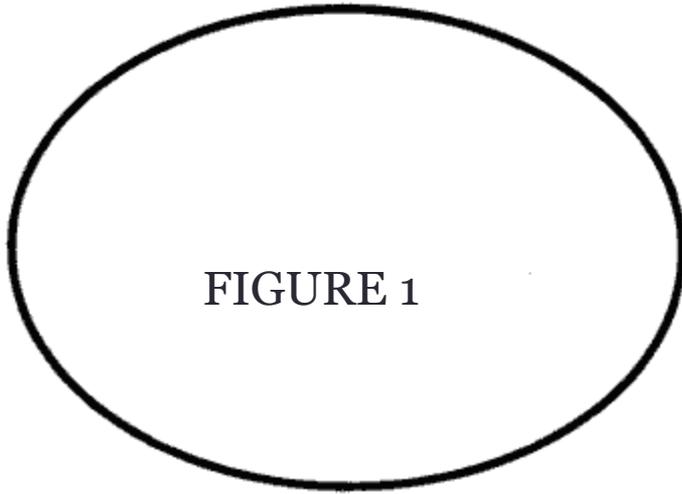


FIGURE 1

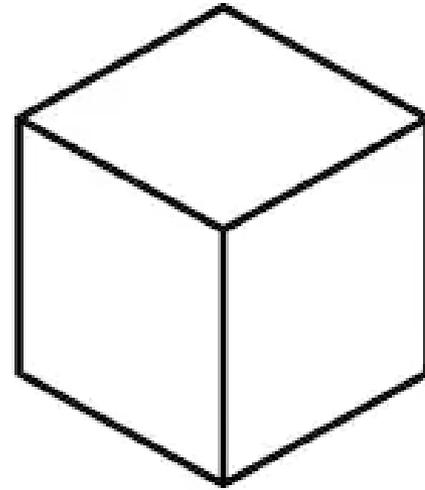


FIGURE 4

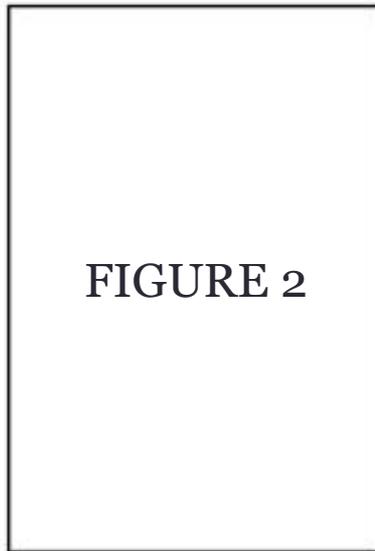


FIGURE 2

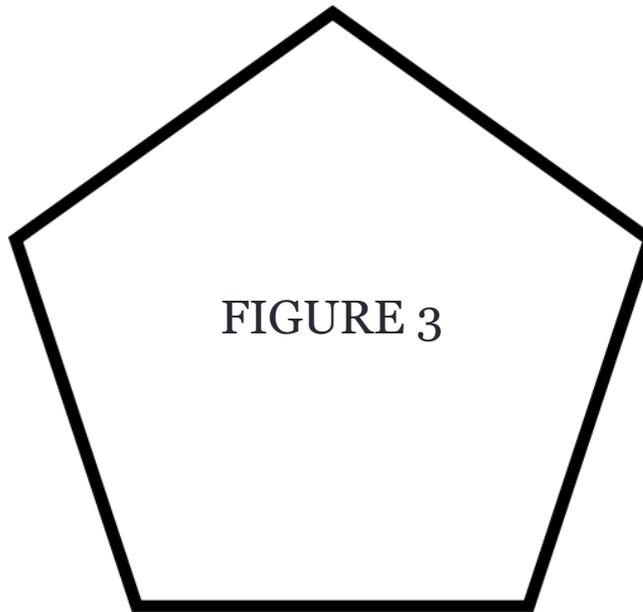


FIGURE 3

# TAKING A CLOSER LOOK AT LIGHT AND SHADOW



- Before you can draw the appropriate values that illustrate light and shadows correctly, you need to be able to visually identify the following:
- **Light source:** The direction from which a dominant light originates. The placement of this light source affects every aspect of a drawing.
- **Shadows:** The areas on an object that receive little or no light.
- **Cast shadow:** The dark area on an adjacent surface where the light is blocked by the solid object.



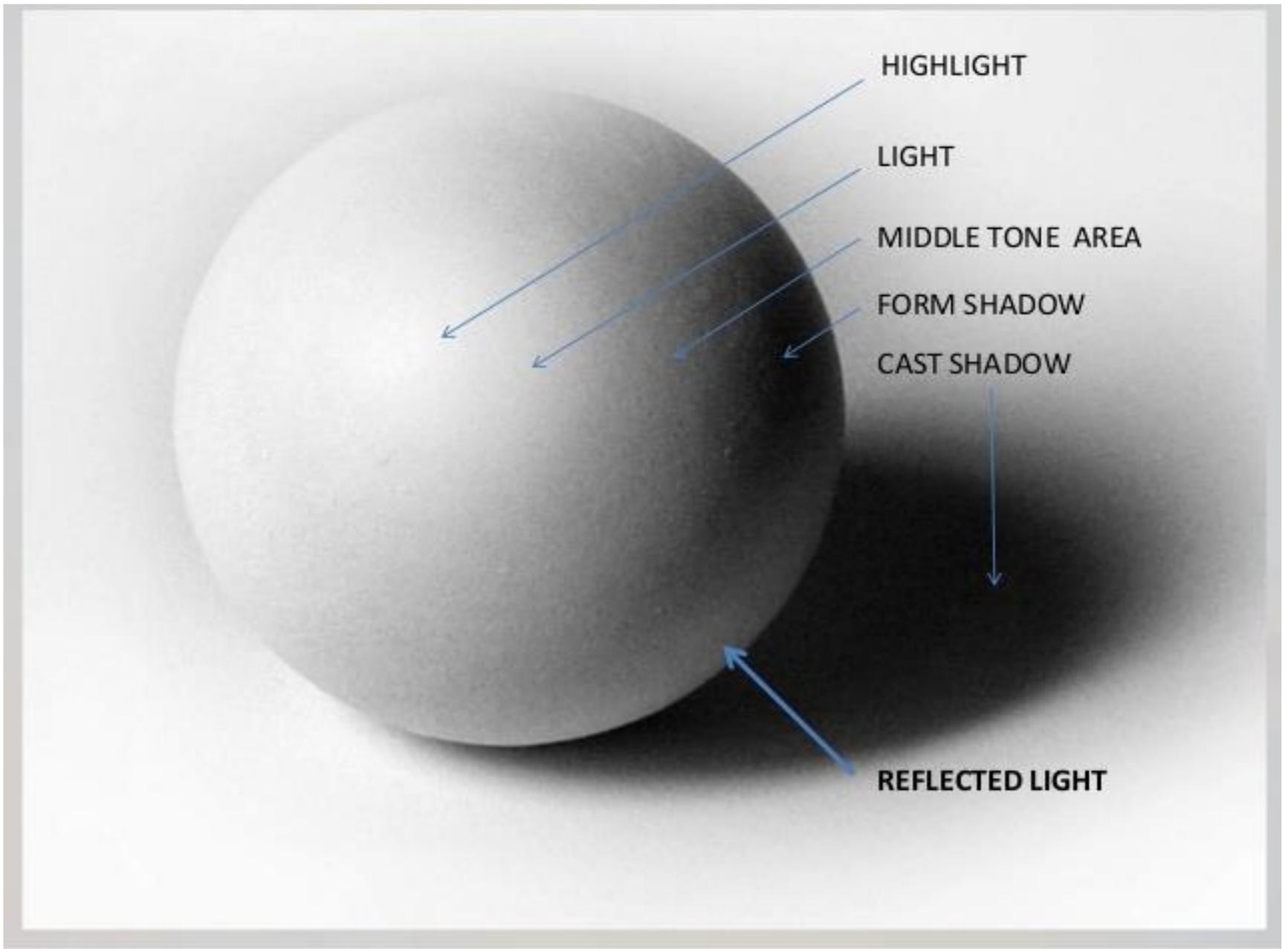
Figure 2 gives you some practice in locating the light source, shadows, and cast shadows around an object, which in this case is a sculpture.



As you look at the sculpture, ask yourself the following questions:



- Where are the light values? Look for the lightest areas on the object. The very brightest of the lightest values are called highlights.
- Where are the dark values? Dark values often reveal the sections of the object that are in shadow. By locating shadows, you can usually identify the light source.
- Where is the cast shadow? The section of the cast shadow closest to the object is usually the darkest value in a drawing. By locating an object's cast shadow, you can easily discover the direction from which the light source originates.



HIGHLIGHT

LIGHT

MIDDLE TONE AREA

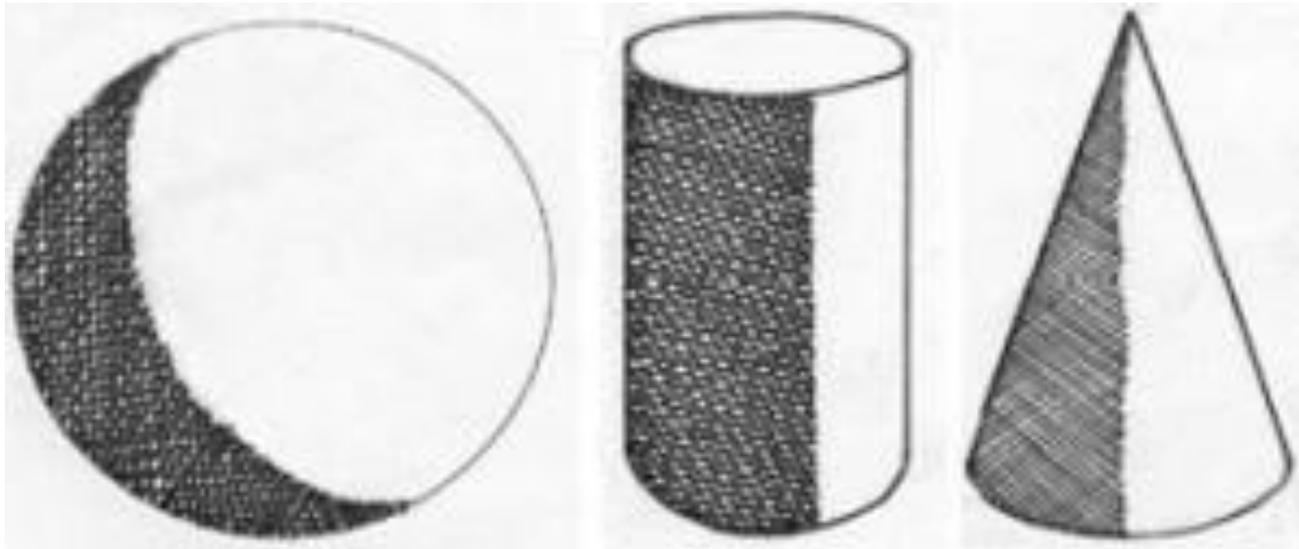
FORM SHADOW

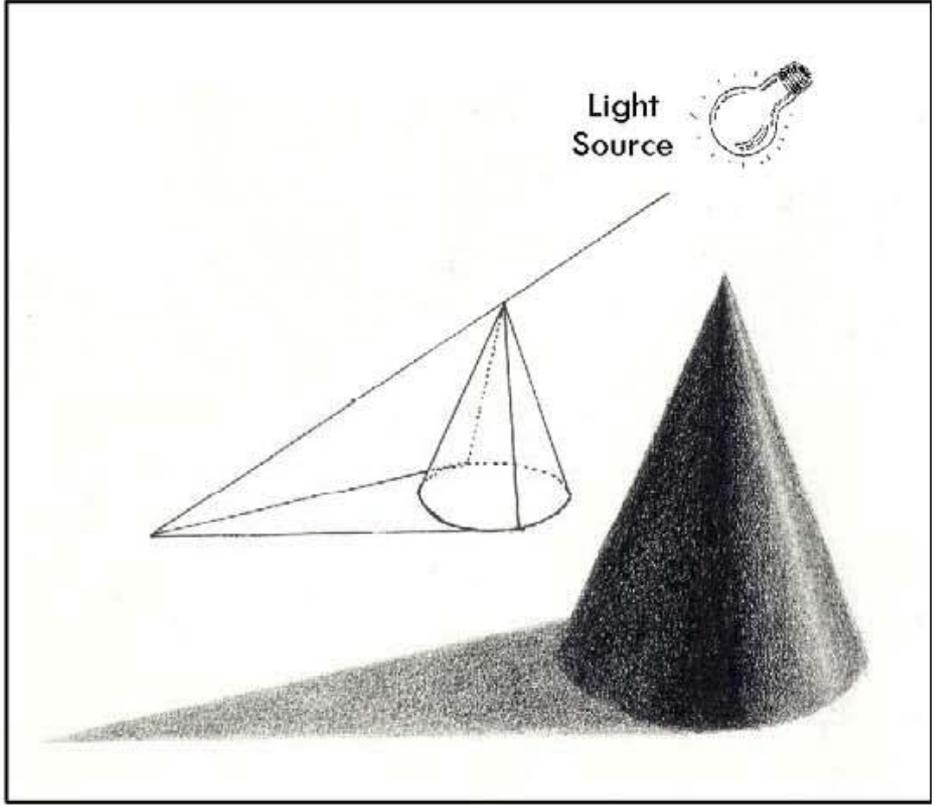
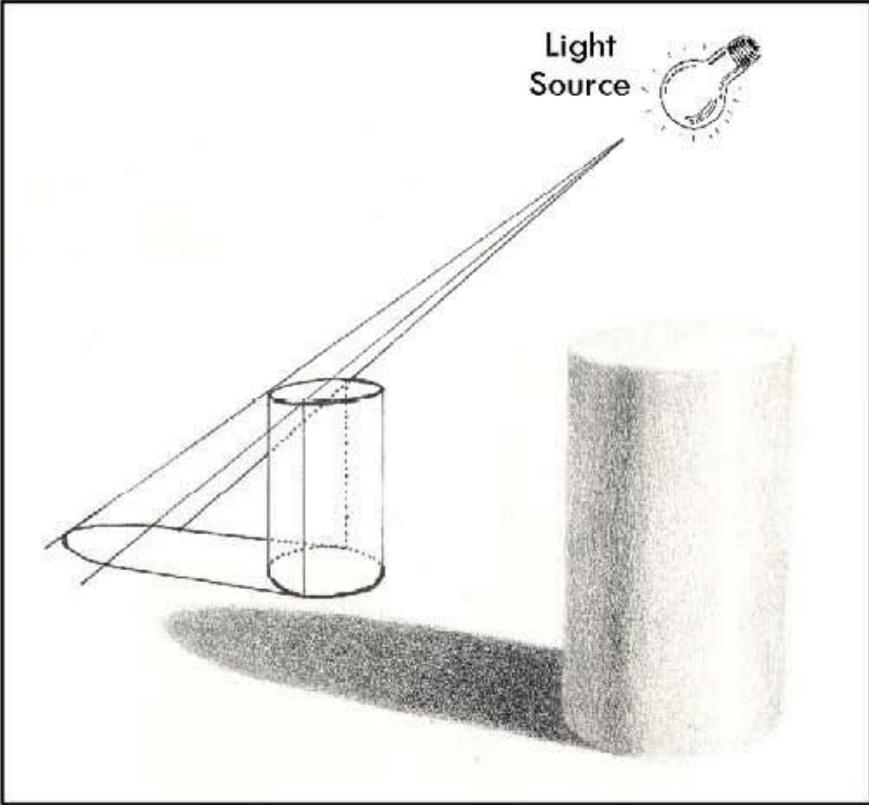
CAST SHADOW

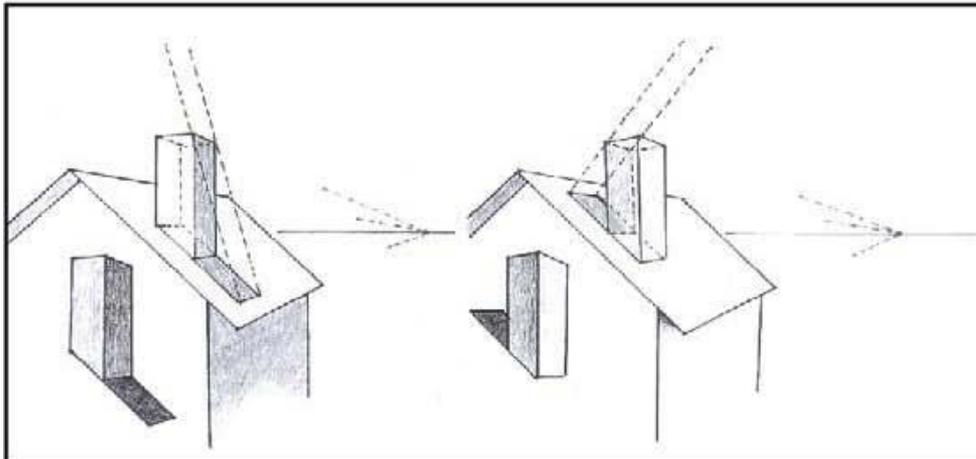
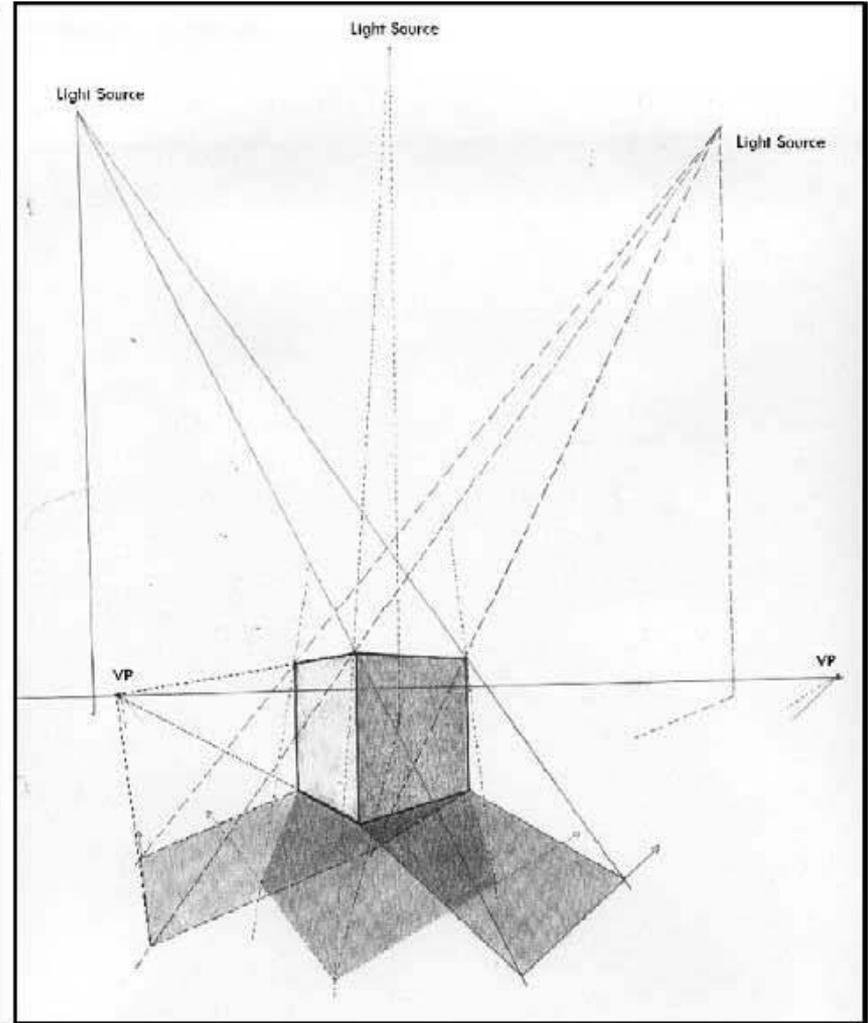
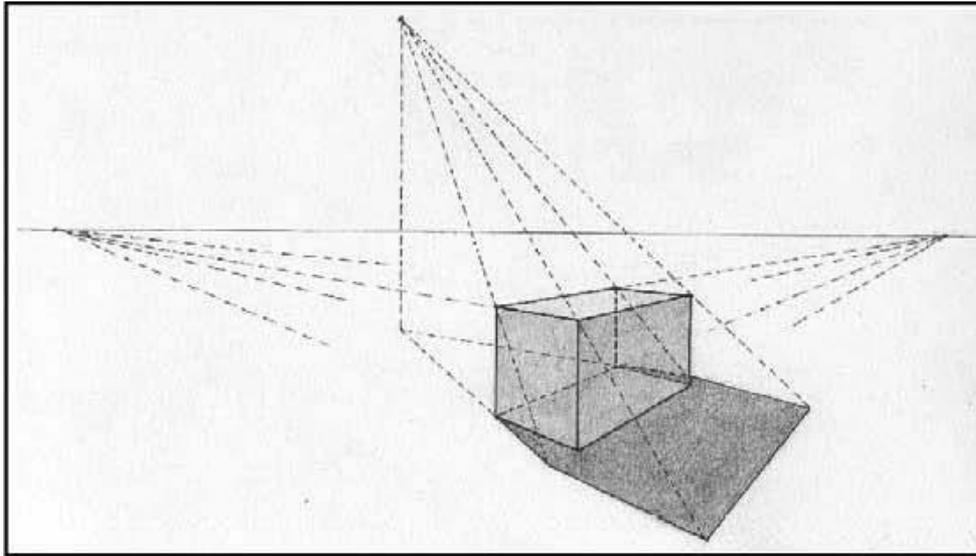
REFLECTED LIGHT

# A Light Side and a Dark Side on Round or Circular Surfaces

When one light source is present, I was taught the dark side is “always” darker than the light side of the object and the light side is “always” lighter than the dark side. Establishing a definite light side and dark side makes round objects appear round and defines the form of an object accurately. Use this simple trick to make your artwork more true to life, separate light tones avoiding figure-ground confusion.







# Exercise two

**CREATE 4 PATTERN IN A 5" \* 5" BOX, USING 2D GEOMETRIC FIGURES TO CREATE 3D ILLUSION. USE SHADOW AND SKETCHING TECHNIQUE TO ENHANCE THE 3D EFFECT. ONE EXAMPLE IS PROVIDED BELOW.**

