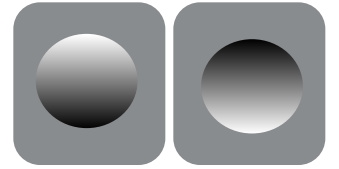


Light



*Concave or Convex?
Since most forms are lit from above, we are conditioned to perceive them accordingly.*

1. Its Function

We see form, values and color only because of

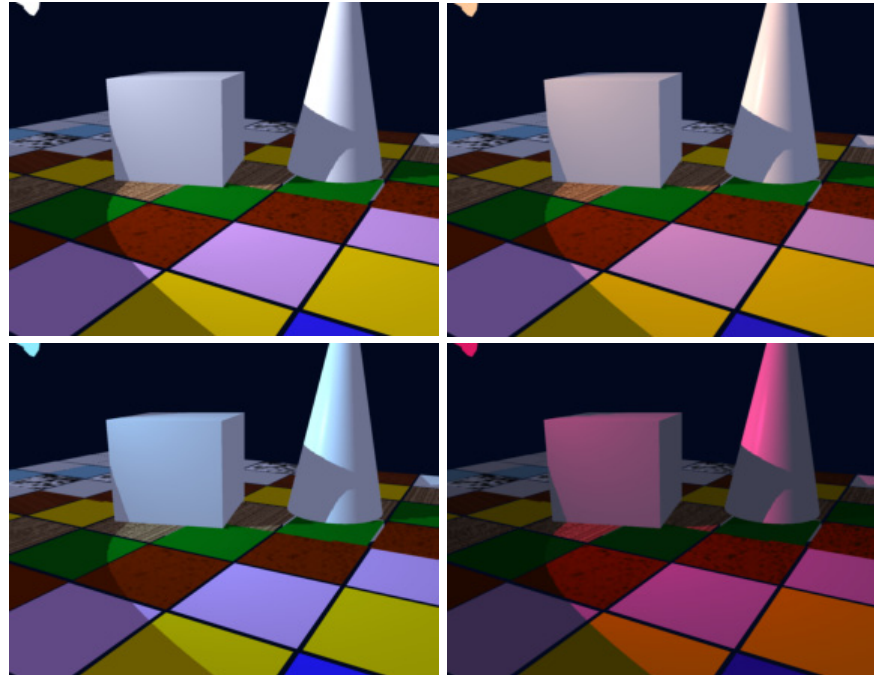
- a. It illuminates form and surfaces.
- b. It defines form and surfaces.
- c. It modifies form and surfaces.

2. Its Properties: Light is additive. The more light you mix, the brighter or whiter the illumination. In Light, the Primary colors are the secondary colors of pigment. They are: Red-orange, green and blue-violet. As with pigments, secondary colors in light are produced by mixing two primaries. For example, red-orange and green produce yellow. Blue-violet mixed with red produces magenta. Blue is the mixture of blue-violet and green.

Pigment, on the other hand is subtractive. The more colors you mix, the darker or blacker the mixture. The Primary colors of pigment are yellow, cyan and magenta.

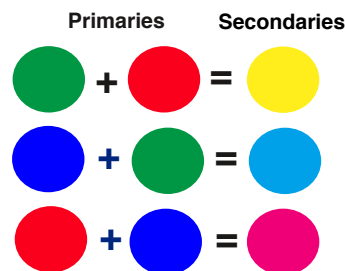
3. Its Variables:

- a. Intensity: The brighter the light, the greater the contrasts between highlights and shadows.
- b. Source: The direction from which the light comes, determines the shapes of an object's lights and shadows. Primary light sources can also produce secondary, or reflected lights, depending on the environment in which an illuminated form exists. Light rays radiate from the source in an infinite number of straight lines. The brightest point on an illuminated form is where a ray of light strikes it at a 90 degree angle.
- c. Color: Most natural light is white, or a mixture of all colors. Atmosphere will change this white light to warmer hues as the sun moves closer to the horizon. Early morning or evening light will vary from reds to yellows of varying color saturation. Since the color of shadows are the complementary color of the light, an orange light, for example, will generate a blue shadow. At high noon, such cool shadows can also be attributed to ambient or reflected light generated by a bright blue sky.



*These geometric forms and colors are illuminated by the light, a portion of which is visible in the upper left corner. Note how each light color modifies both the object and shadow colors. White light casts a black or gray shadow. Colored lights create shadows which are their complement (Red light creates a greenish shadow). These shadows are further modified by the ambient or surrounding light color. Although the cube and cone illuminated by a blue light appear blue, we perceive them as white. Why? Because every color in the scene has been modified by the blue, creating a **color constancy**.*

Color Mixing Light



Color Mixing Pigment

