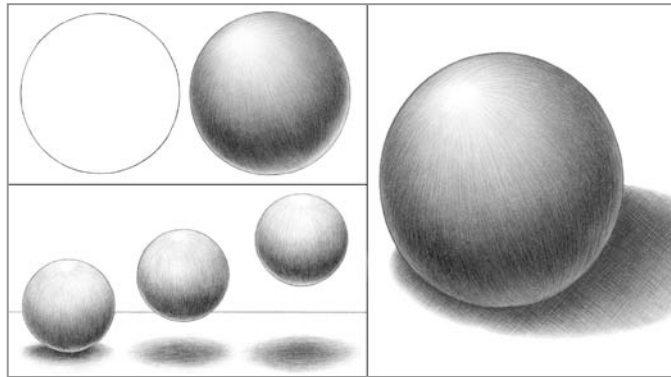


SEEING *LIGHT AND SHADOW*

Brenda Hoddinott



B11 BEGINNER: LEARN TO SEE

Knowing where to draw light and shadows can turn shapes into forms, such as a circle into a sphere. In this article, you examine four aspects of light and shadow created by a dominant light source, which show artists where to draw light, medium, and dark values.

The four most important components of light and shadows are discussed and illustrated including:

- ☀ **Highlight** identifies the brightest area of a form where light bounces off its surface; usually the section closest to the light source.
- ☀ **Shadows** are the sections of objects or living beings that receive little or no light.
- ☀ **Reflected light** is a faint light reflected or bounced back on an object from those surfaces that are close to and around it.
- ☀ **Cast shadow** is a dark section, usually on an adjacent surface of an object that receives little or no light.

7 PAGES – 17 ILLUSTRATIONS

This article is recommended for artists of all levels, as well as students of home schooling, academic and recreational fine art educators.



INTRODUCTION

A light source identifies the light and shadow areas of a drawing subject, so you know where to add light or dark shading.

In Figure 1101, a circle is changed into both a sphere and a planet.

Light shading and shadows are added with a full range of values according to a light source from the upper left.

FIGURE 1101



ARTSPEAK

Light source is the direction from which a dominant light originates. A light source identifies the light and shadow areas of a drawing subject, so artists know where to add different values.

Shadows are the sections of objects or living beings that receive little or no light. Shadows are shaded with medium and dark values.

Shape refers to the outward outline of a form. Basic shapes include circles, squares and triangles.

Forms are the three-dimensional structures of shapes. In drawings, shading and perspective are used to transform a shape into a three-dimensional structure, such as a circle becoming a sphere or a square becoming a cube.

Shading (noun) refers to the various values in a drawing that make images appear three-dimensional; (verb) the process of adding values to a drawing so as to create the illusion of texture, form and/or three-dimensional space.

Perspective is a visual illusion in a drawing in which objects appear to become smaller, and recede into distant space, the farther away they are from the viewer.

Values are different shades of gray, created in a drawing by various means, which come together as shading to transform shapes into forms.

Cast shadow is a dark section on an adjacent surface of an object that receives little or no light. The values of a cast shadow are darkest next to the object and become gradually lighter farther away.

Reflected light is a faint light reflected or bounced back on an object from those surfaces that are close to and around it.

Highlight identifies the brightest area of a form where light bounces off its surface; usually the section closest to the light source.

HIGHLIGHTING THE HIGHLIGHT

You can add one or more strategically placed highlights to drawings of most objects and living beings, to make them appear more three dimensional.

For example, in Figures 1102 and 1103, a sphere helps illustrate a single highlight. Examine the white circular shape in the center of the lightest shading. Take note that the light source is from the upper left; hence the highlight needs to also be in the upper left.

Highlights can be any size and do not have to be circular. As a matter of fact, their sizes and shapes vary considerably, based on the type of light source, and the forms of the object on which they appear.

FIGURE 1102

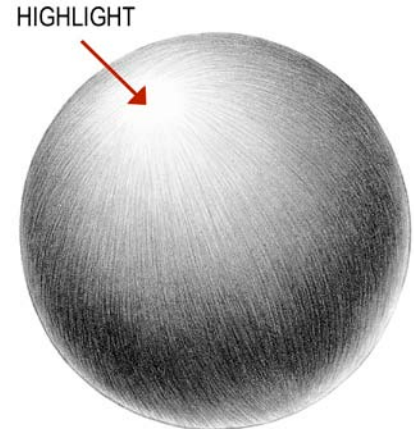


FIGURE 1103

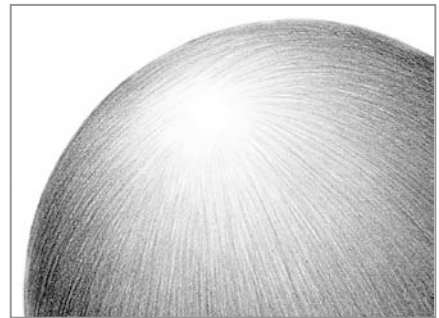
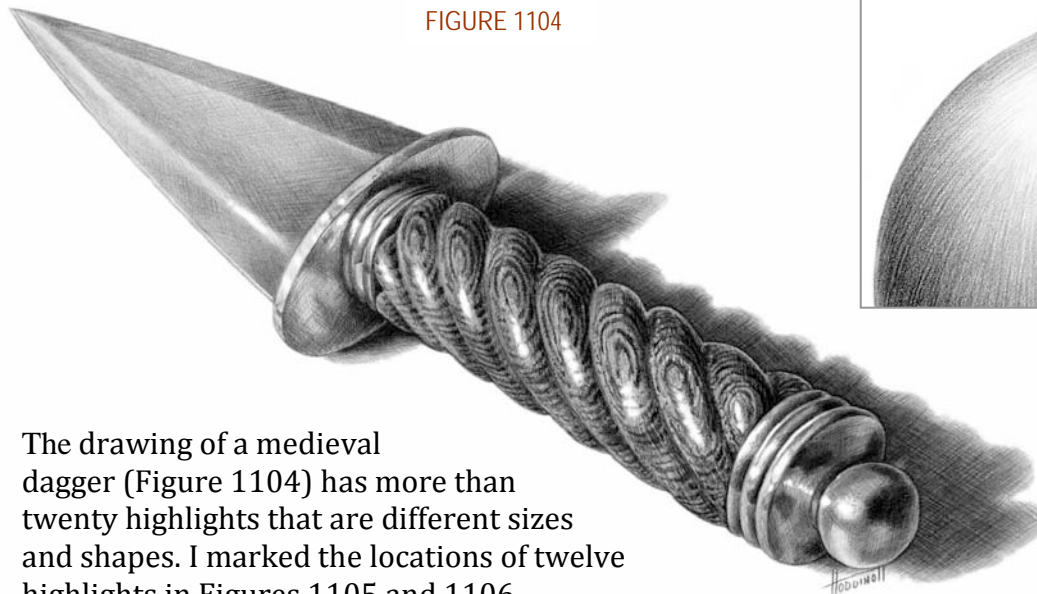


FIGURE 1104



The drawing of a medieval dagger (Figure 1104) has more than twenty highlights that are different sizes and shapes. I marked the locations of twelve highlights in Figures 1105 and 1106.

FIGURE 1105

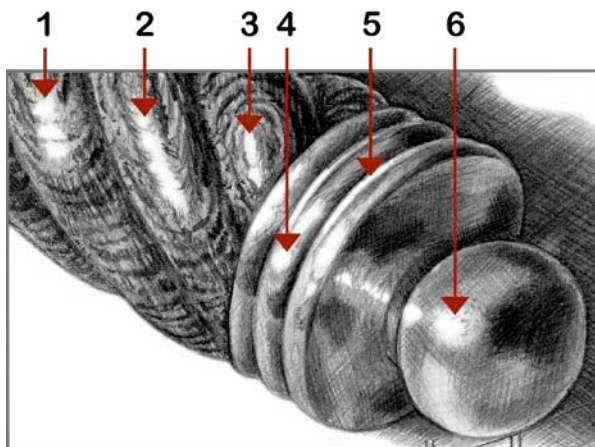
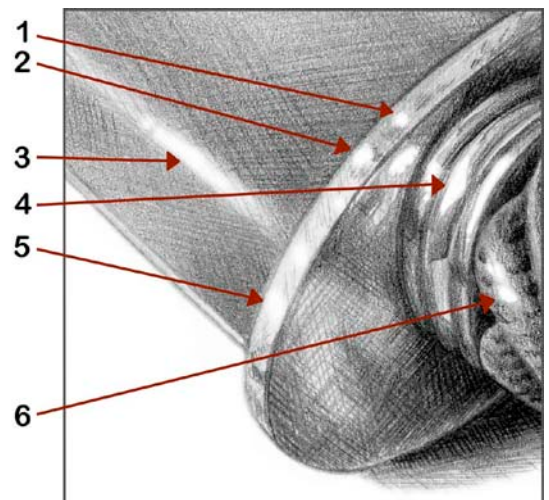


FIGURE 1106



NOTING THE DARK VALUES OF SHADOW SECTIONS

The surfaces of objects that are farther away from the light source gradually become darker and darker. The darkest shading on the surface of a form tends to be in areas where the light has been blocked by the form itself (or another object).

In Figure 1107, look for the dark crescent shaped shadow on the lower right of the sphere.

I enhanced the contrast in my Photoshop program (Figure 1108) to better demonstrate the crescent shape.

Realistic drawings of human facial forms are highly dependant on the accurate placement of shadows.

In Figure 1109, the light is partially blocked from reaching the six shadow sections marked with numbers.

Hence, they need to be rendered with darker shading than the sections that are lit up by the light source.

Thanks to Photoshop, Figure 1110 shows the shadow sections more clearly. As an aside, the irises, pupils, eyelashes and eyebrows are darker in color than the skin. Even though they are shaded with dark values, not all sections are in shadow.

FIGURE 1107



FIGURE 1108

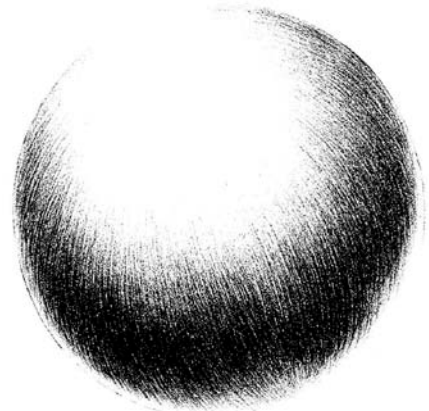


FIGURE 1111

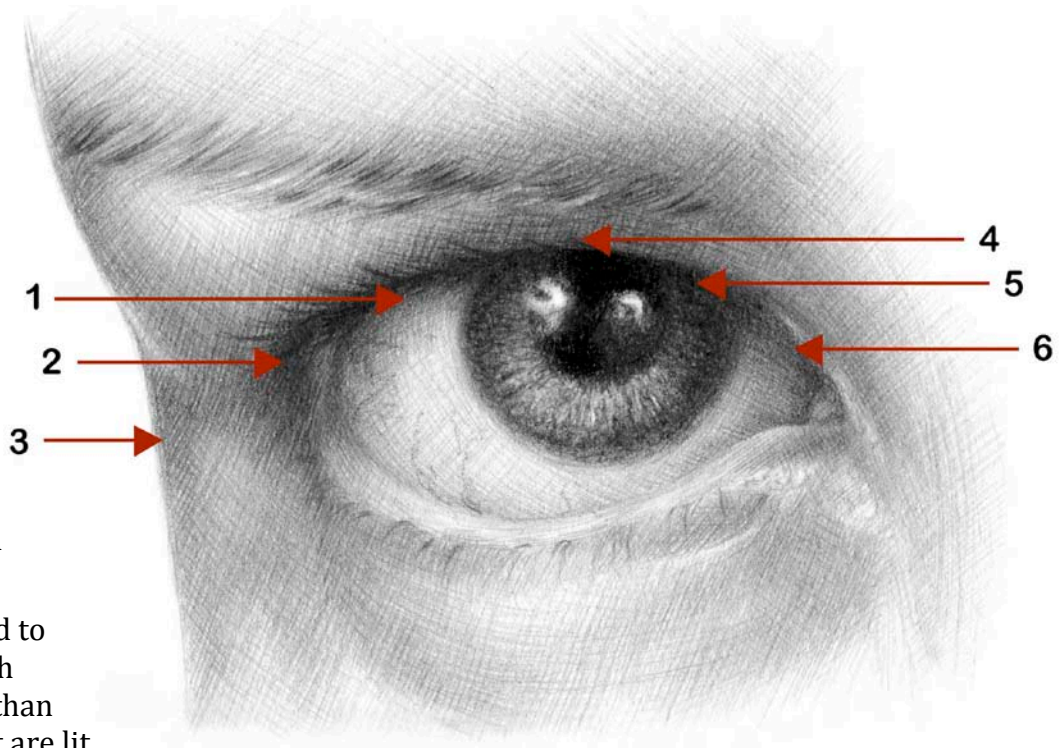
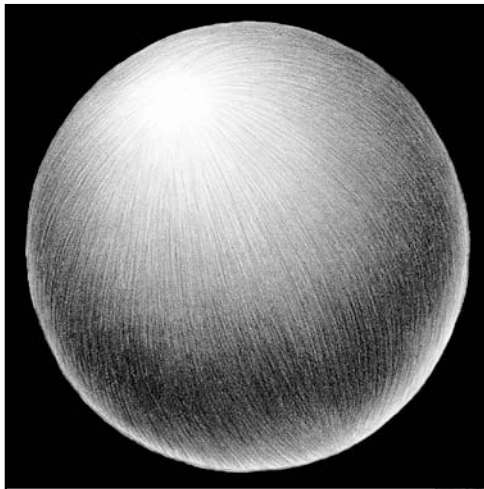


FIGURE 1110



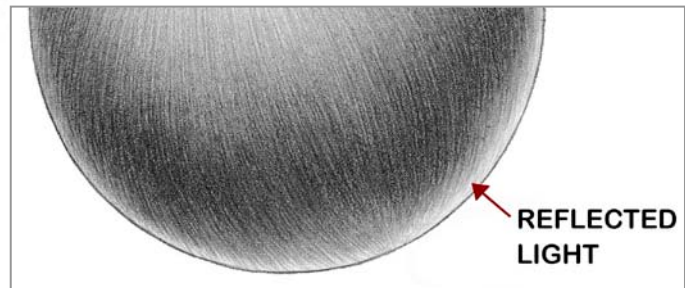
FIGURE 1112



REFLECTED LIGHT

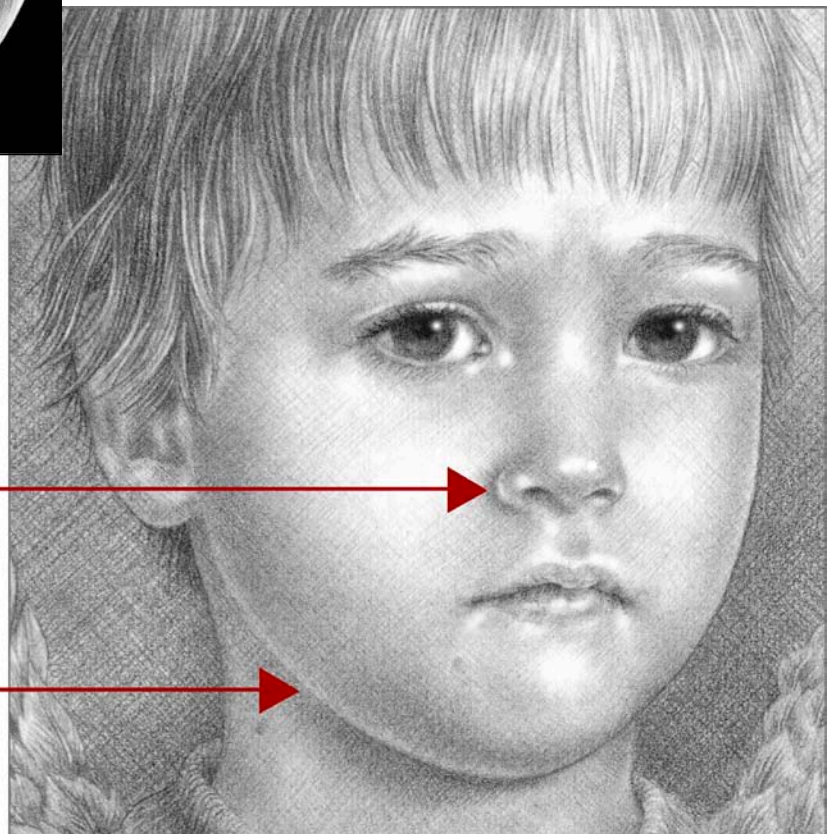
Reflected light is especially noticeable on a sphere. Check out Figure 1111, and observe the rim of light shading on the lower right. In this particular case, the reflected light is bouncing back from the light surface on which the sphere is sitting.

FIGURE 1111



In Figure 1112, I have made the background black so you can better see the reflected light.

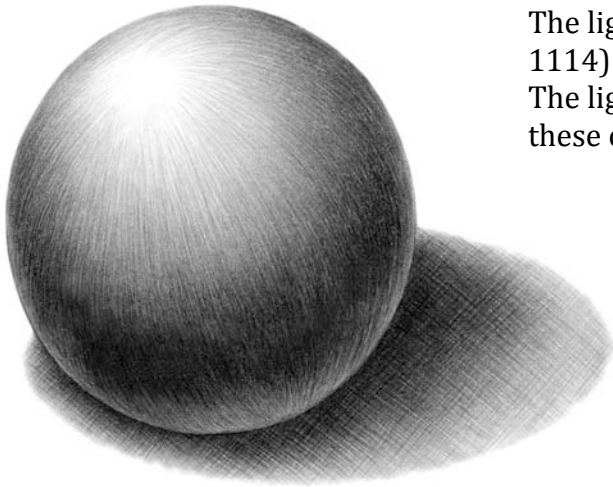
FIGURE 1113



When you know how to add reflected light to your drawings, many independent forms, such as faces, noses, and arms will look much more three-dimensional.

In the drawing of the child (Figure 1113) look for the tiny sections of reflected light on the edge of the nose (1) and along the jaw and chin (2).

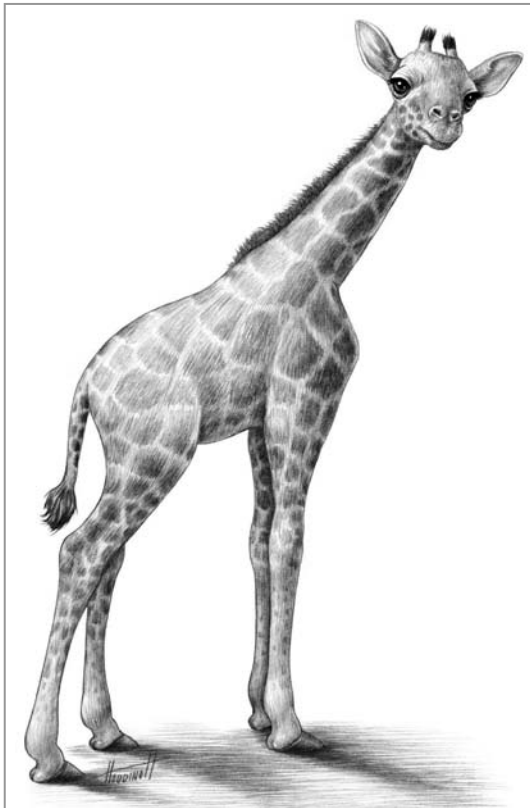
FIGURE 1114



When you draw cast shadows, keep in mind that they generally take on the shapes of the forms which are blocking the light.

Examine the shadow of the section of stem in the drawing of a grape in Figure 1115.

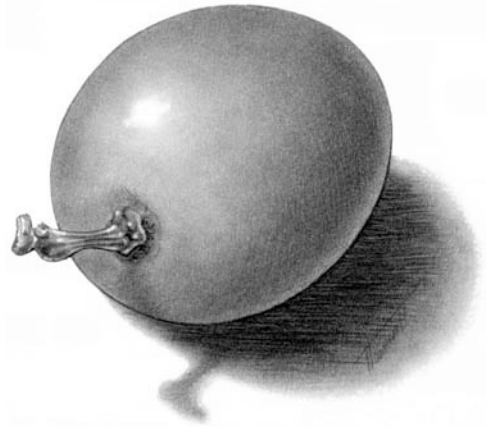
FIGURE 1116



VALUING CAST SHADOWS

The light source in the drawings of the sphere (Figure 1114) and grape (Figure 1115) is from the upper left. The light on the adjacent surfaces are blocked by these objects, resulting in cast shadows on the right.

FIGURE 1115



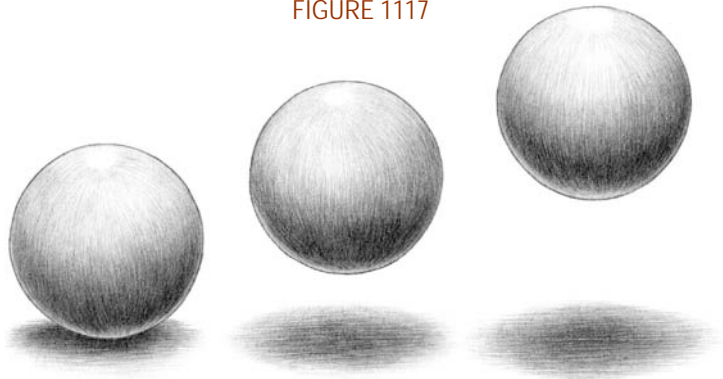
The light source in the giraffe drawing (Figure 1116) is slightly behind and to the left. The cast shadows are long and thin like his legs.

Take note that the values of cast shadows are darkest right next to the object's lower edge, and become gradually lighter farther away.

How and where you draw a cast shadow, can create the illusion that objects are either touching or separated from adjacent surfaces (or other objects).

The first sphere in Figure 1117, is sitting on the surface. The cast shadow is touching its lower edge. However, the other two seem to be floating, because the shadows are detached from the spheres.

FIGURE 1117



BRENDA HODDINOTT - BIOGRAPHY

As a self-educated teacher, visual artist, portraitist, forensic artist, and illustrator, Brenda Hoddinott utilizes diverse art media including graphite, technical pen, colored pencil, chalk pastel, charcoal, conté crayon, and oil paints.

My philosophy on teaching art is to focus primarily on the enjoyment aspects while gently introducing the technical and academic. Hence, in creating a passion for the subject matter, the quest for knowledge also becomes enjoyable.

>Brenda Hoddinott<

Born in St. John's, Newfoundland, Brenda grew up in the small town of Corner Brook. She developed strong technical competencies with a personal commitment to self directed learning, and the aid of assorted "Learn to Draw" books. During Brenda's twenty-five year career as a self-educated civilian forensic artist, numerous criminal investigation departments have employed Brenda's skills, including Royal Canadian Mounted Police and municipal police departments. In 1992, Brenda was honored with a commendation from the Royal Canadian Mounted Police, and in 1994, she was awarded a Certificate of Membership from "Forensic Artists International".

Her home-based art career included graphic design, and teaching recreational drawing and painting classes. As supervisor of her community's recreational art department, Brenda hired and trained teachers, and designed curriculum for several children's art programs. In 1998, Brenda chose to end her eighteen-year career as an art educator in order to devote more time to writing, drawing, painting, and developing her websites.

Drawspace <http://www.drawspace.com> incorporates her unique style and innovative approach to curriculum development. This site offers downloadable and printable drawing classes for students of all abilities from the age of eight through adult. Students of all ages, levels and abilities have praised the simple step-by-step instructional approach. This site is respected as a resource for fine art educators, home schooling programs, and educational facilities throughout the world.

LEARN-TO-DRAW BOOKS BY BRENDA HODDINOTT

- ☀ **Drawing for Dummies:** Wiley Publishing, Inc., New, York, NY, this 336 page book is available on various websites and in major bookstores internationally.
- ☀ **The Complete Idiot's Guide to Drawing People:** Winner of the Alpha-Penguin Book of the Year Award 2004, Alpha - Pearson Education – Macmillan, Indianapolis, IN, this 360 page book is available on various websites and in major bookstores internationally.