Light and Shadow

? What are we covering today?

Yesterday, we were properly introduced to value, the element of art that deals with the darkness or lightness of a color.

Today, we'll see how important value is to our success in capturing the light within a drawing.

We know that light is key to seeing. Without light, we see nothing. It is light and its behavior on subjects that we must capture in a drawing.

This may seem complex on the surface, but it is simplified when we understand that light is captured through our use of value.

We simply need to match the values that we see on a subject in order to effectively capture the light on that subject and within the scene.

The Nature of Light

Light is emitted as waves. These waves bounce and reflect off of the subjects that we draw. We see the reflected light as specific values and tones. The strength and location of the light affects the value that we see.
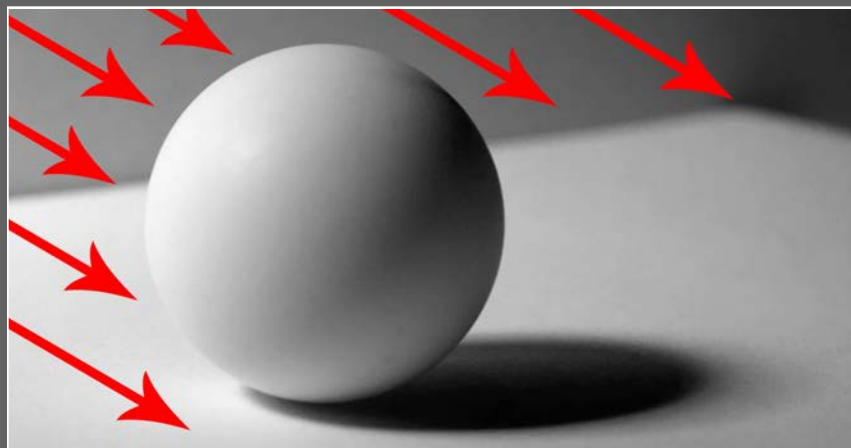
Locations from which the light is emitted are called **light sources**. Light sources can be simple, such as a single lamp. Or, they can be complex, consisting of several different lights, the sun, etc. with different intensities and color temperatures.

We shouldn't overthink things when it comes to light. Remember, we simply must match values, no matter how complex the light source or sources are within the scene.

We understand the locations of light sources based on the locations of value on our subject. Fortunately, these locations of value have specific names and are, in most circumstances, easy to recognize.
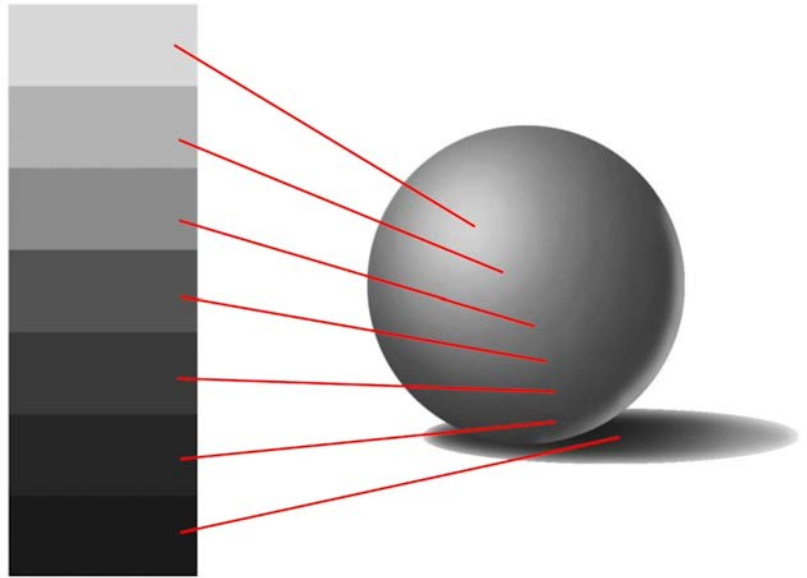
Locations on the subject where light hits directly and with the most intensity are called highlights.

On the value scale, highlights are described in a drawing by using tints.

Highlight

Tints
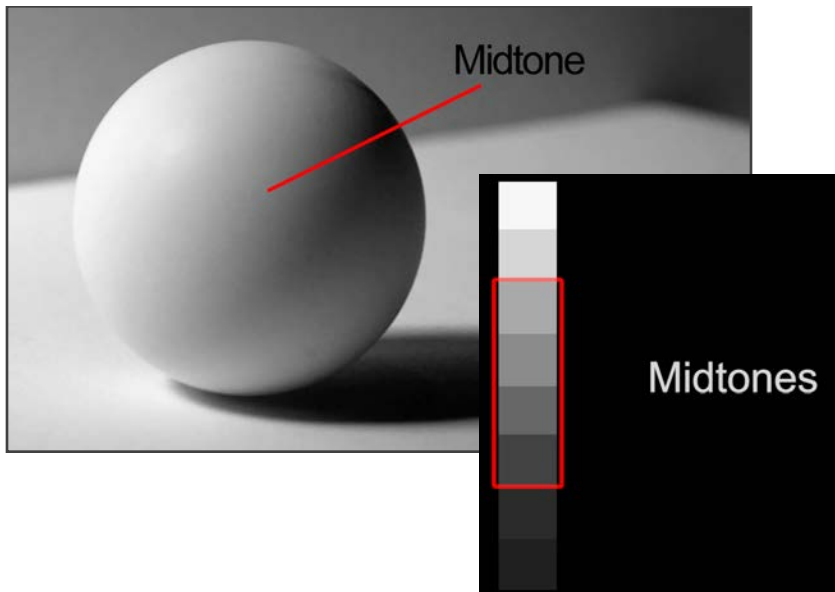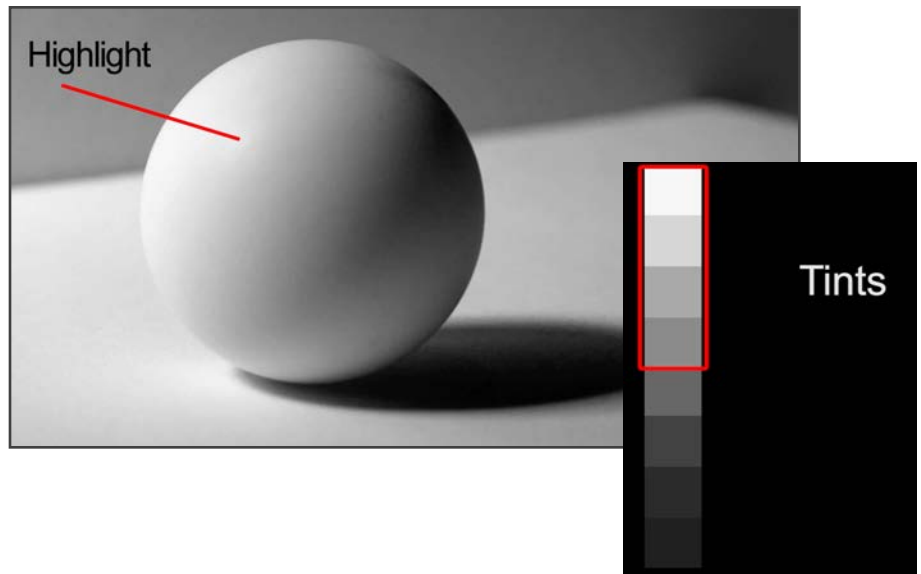
Midtone

Midtones

A transition location of middle value exists and is referred to as the midtone.

Midtones are communicated using the middle values on the value scale.

If we look closely, we can see the transition from light to dark on a subject. On some subjects, this may create a blurred line, depending on the intensity of the light. This location is called the terminator.
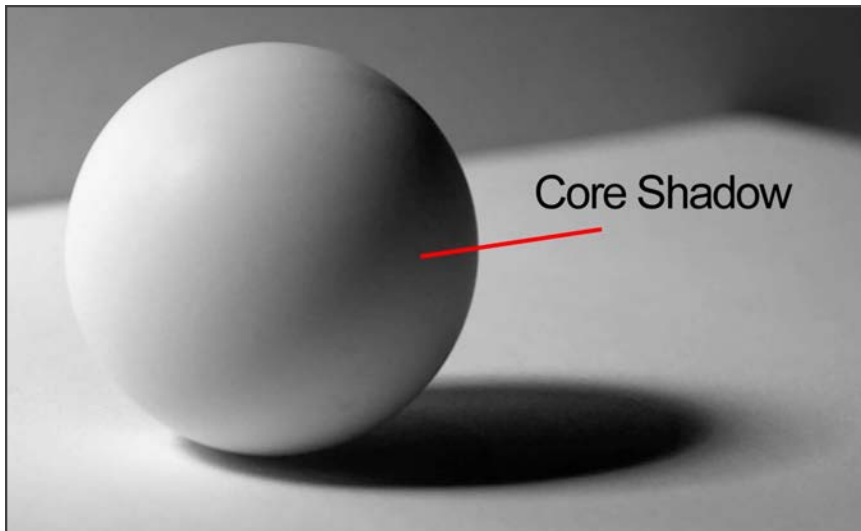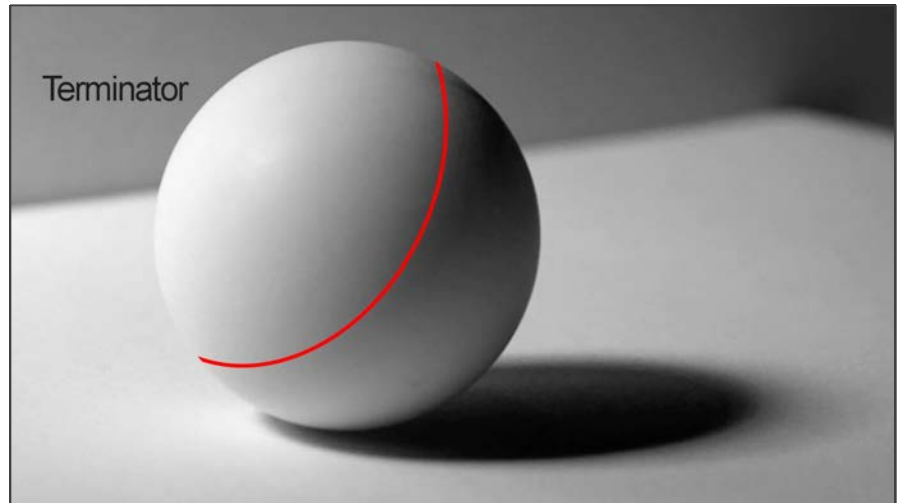

Areas on the subject where light is prevented from hitting are called core shadows. Core shadows typically exist on the opposite side from the light source on the subject.


Behind and underneath the subject, we typically find the cast shadows. Cast shadows are the result of light being prevented from hitting adjacent surfaces and objects.
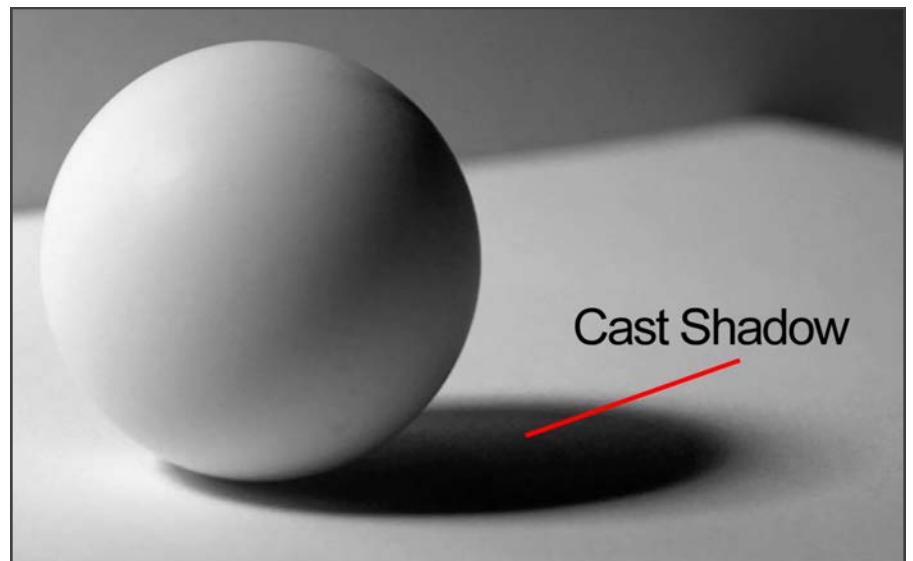
Occlusion Shadow

Within the cast shadow, we see an area of even darker tone. This location is referred to as the occlusion shadow.
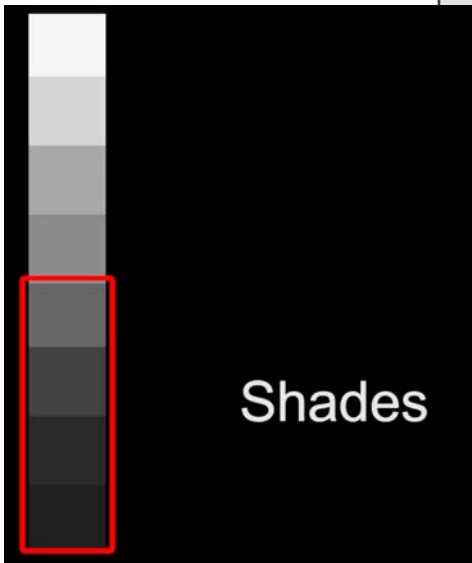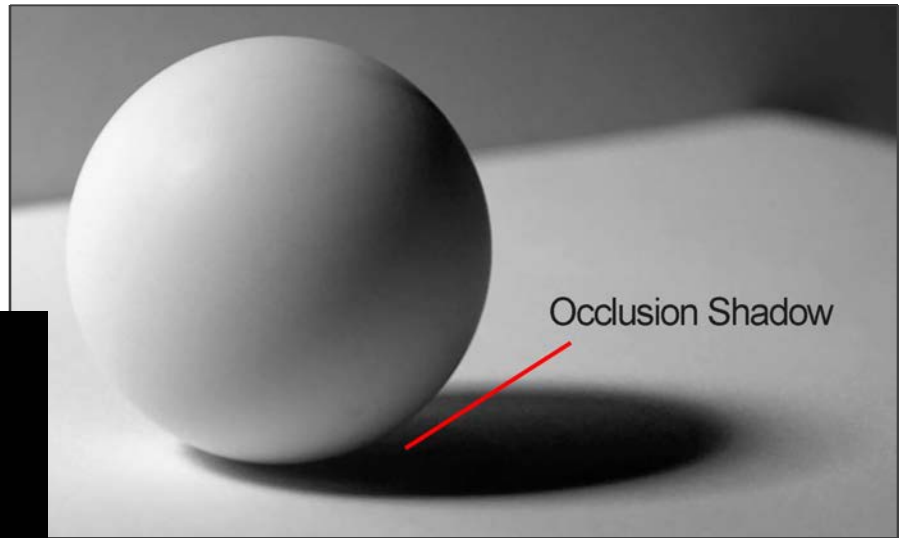
Shades

Core shadows and cast shadows are communicated in a drawing by using shades.

Reflected Highlight

Reflected Highlights
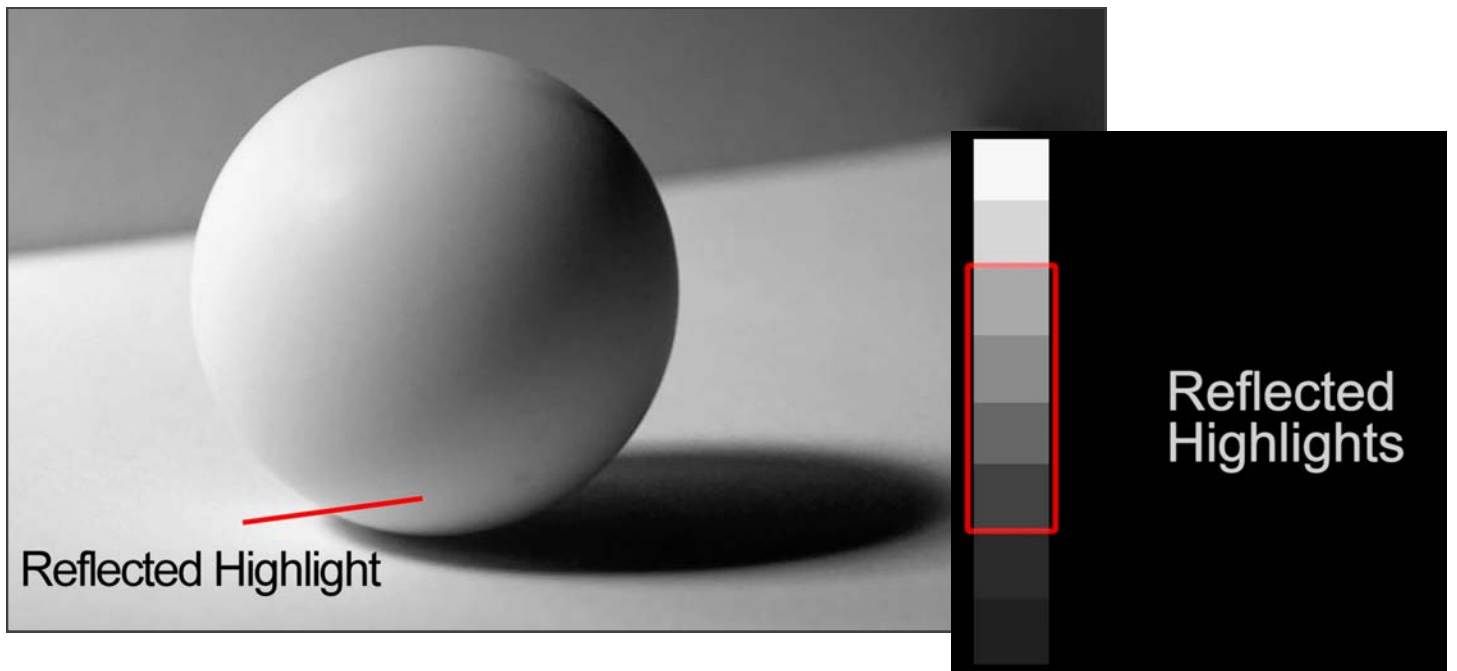
Often, light reflects back onto our subject from adjacent surfaces or objects producing a location of slightly lighter value, even in areas where we may expect a darker tone. This location is referred to as the reflected highlight.

Reflected highlights are communicated using the middle values.

We can see then that we must include a full range of value in order to communicate a subject in a drawing.

If you have trouble seeing these specific locations of value on a subject, you may consider squinting your eyes. This may make it easier to see the specific locations of value on the subject.

The locations of these specific values inform the viewer of the location and intensity of the light source within the scene.
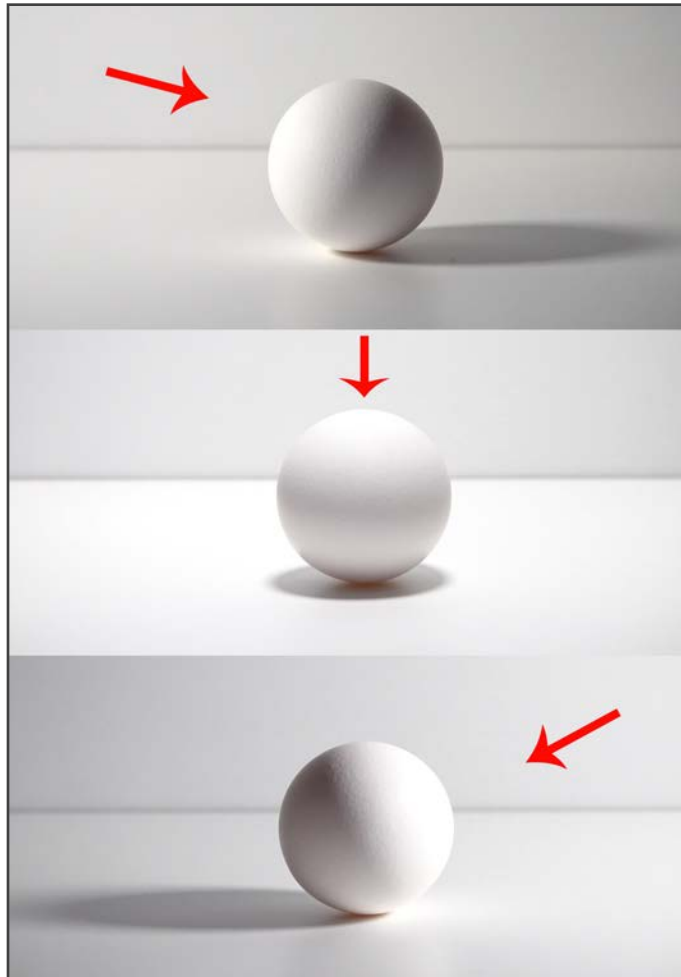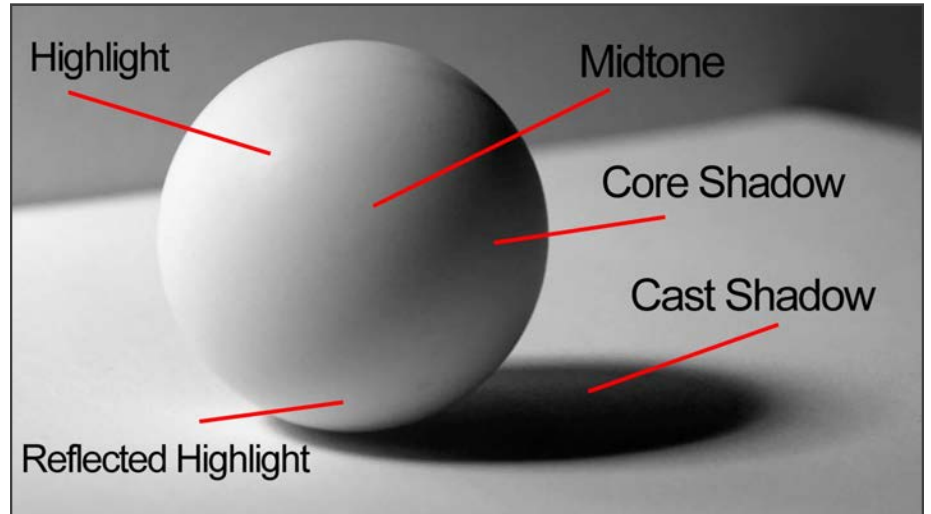
If we take a light and move it over a subject, we'll notice that the locations and shape of these specific values change.

! Today's Mindset

Today's mindset…

"Locations of values on a subject inform the viewer of the location and intensity of the light within a scene."

Today's Drawing Exercise

For today's drawing exercise, we'll put all of this information into practice and draw a fully rendered and blended sphere that communicates the light within the scene. If we get the values in the correct location, we should also clearly communicate the form of the sphere as well.

We'll begin by drawing a loose circle using our entire arm with loose marks with an H graphite pencil. We can refine the outer contour and then erase any stray marks.

We'll next begin adding darker values in the darkest locations with the H graphite pencil. We'll gradually build up darker applications so medium pressure is applied. Strokes are pulled in a consistent manner flowing around the form of the sphere.

Over the top of the H graphite applications, we'll next apply a slightly darker application using an HB pencil. This is followed by an application of the darker 2B pencil.

After these initial applications of graphite have been applied, we'll blend them using a blending stump.
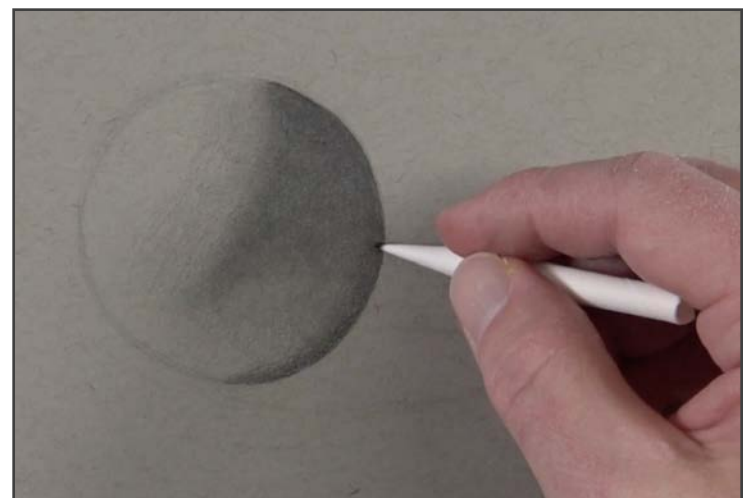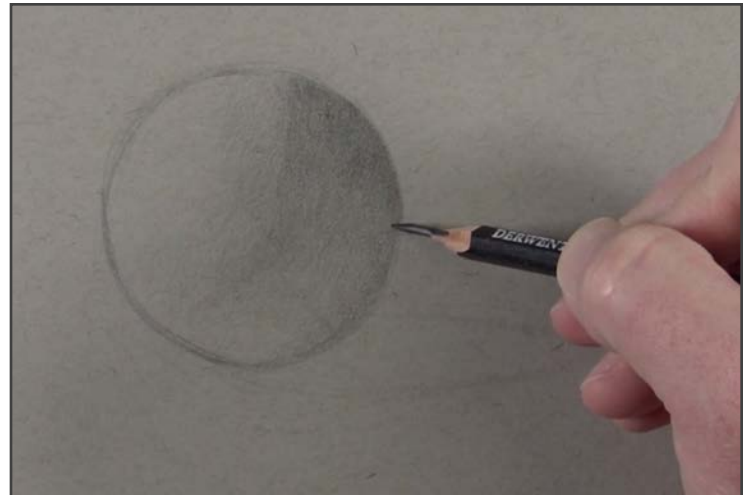
Now that we have the general shapes of the darker values in place, we'll begin developing the lighter values. Starting on the side of the sphere closest to the light source, we'll begin adding white charcoal. A medium pressure is used, allowing some of the gray of the paper to show through.

With the blending stump, we'll blend these applications and create a smooth transition from light to dark along the terminator line.
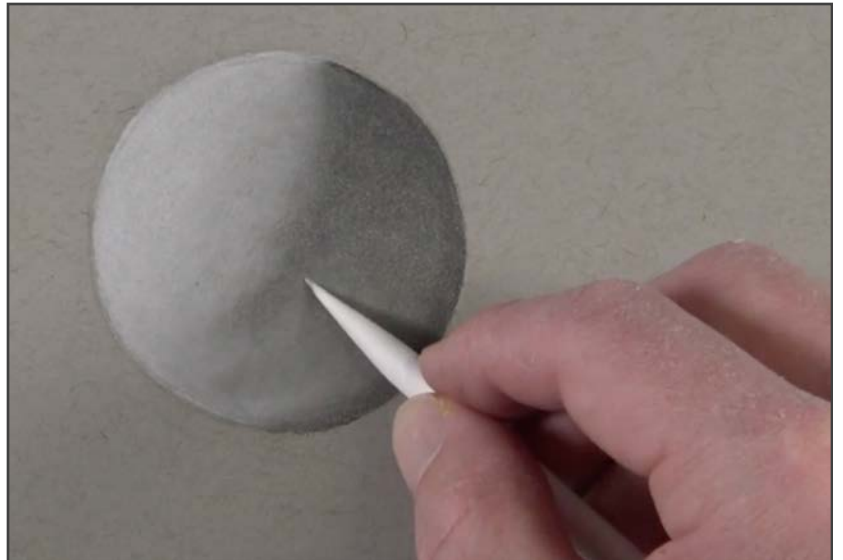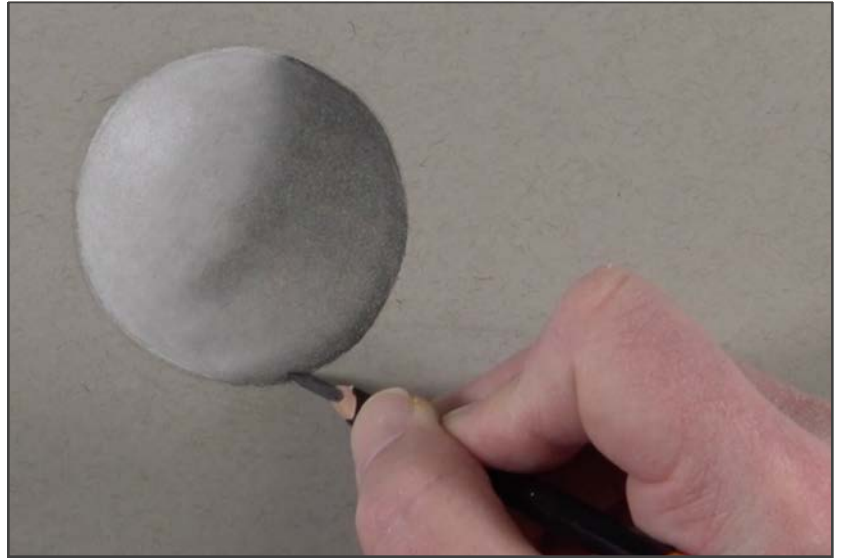

We'll then go back with the white charcoal pencil and strengthen the strongest highlight on the upper left quadrant of the sphere.

This application is gently blended with the blending stump.

We'll next increase the contrast and value range with 4B pencil. The darkest locations are addressed with this soft pencil and then blended with the blending stump.

We'll add a cast shadow by first drawing an ellipse for the shape. We'll darken the shadow by adding 2B graphite followed by an application of 4B.

The cast shadow is blended with the blending stump. Some of the graphite is pulled out with the blending stump to create an area that is slightly lighter. This leaves the darkest area within the cast shadow as the occlusion shadow.

25 Days to Better Drawings
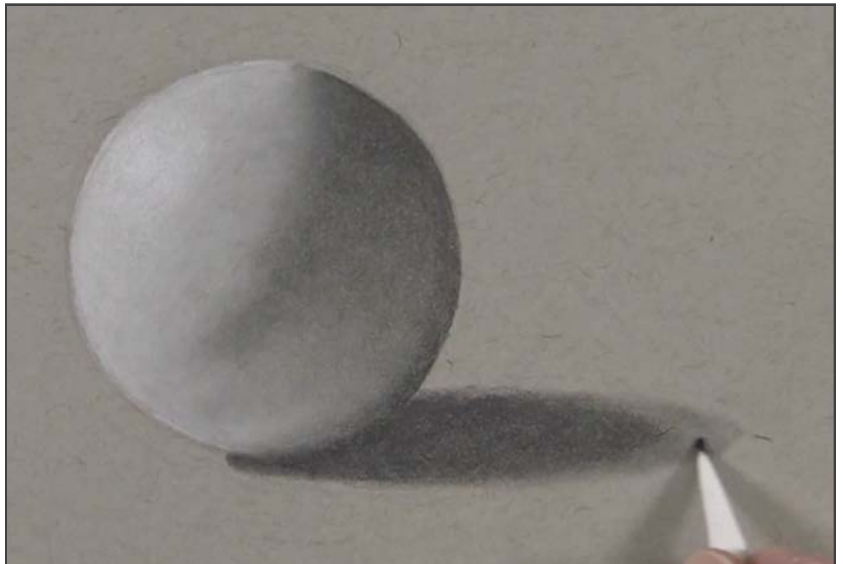
Our completed drawing of a sphere now communicates the light within the scene as well as the form of the sphere. This is accomplished through the positioning of specific values and the development of a full range of value.

Today we learned that the locations of specific values on a subject inform us of the location and intensity of the light source within a scene. We learned that by positioning these values and their corresponding shapes, we can communicate the light within the scene to our viewer in a drawing.

Tomorrow, we'll continue our look at value and practice creating the illusion of light on basic forms.