

ART ASSIGNMENT #11

Form, Value and Light

Leonardo da Vinci, *Head of a Young Woman*, (1483-85)

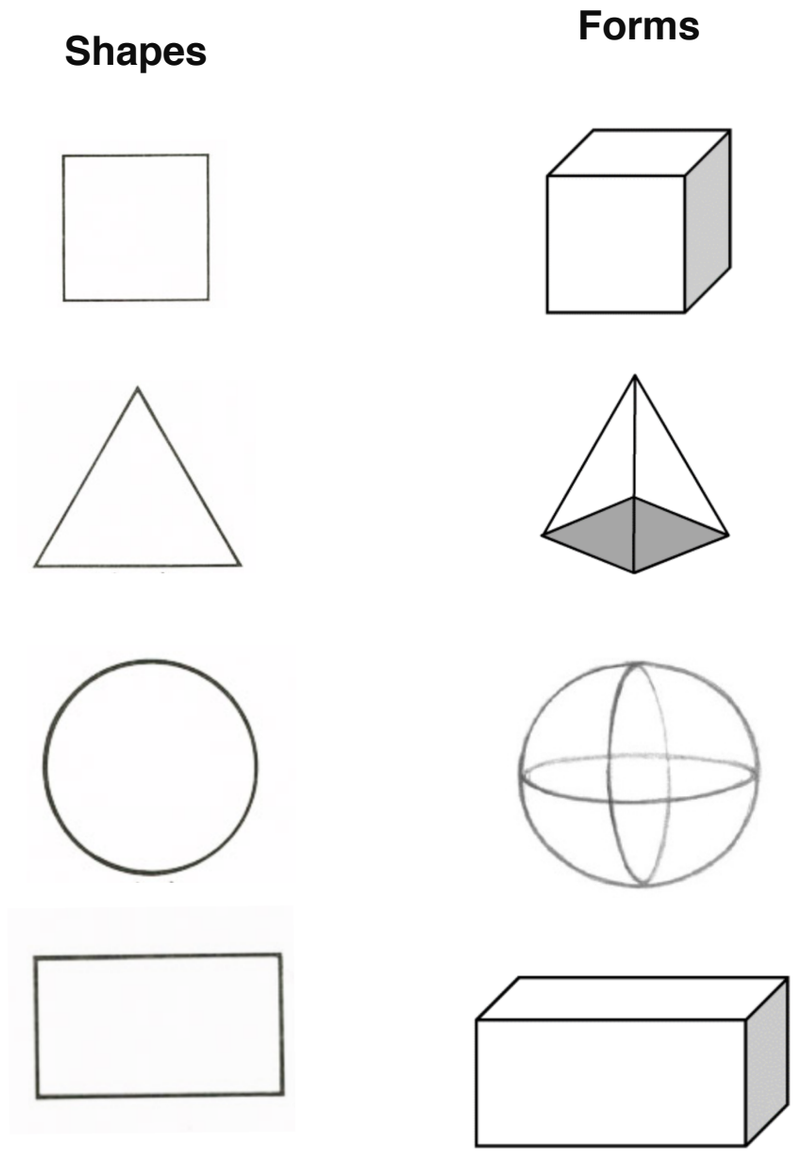
HOW ARE FORM, VALUE AND LIGHT CONNECTED?

- In one of our first classes we went over the difference between shape and form:

  Shapes are flat and two-dimensional (square, rectangle, circle), while forms are three-dimensional and have volume we feel we can reach out and grab (cube, rectangular prism, sphere).

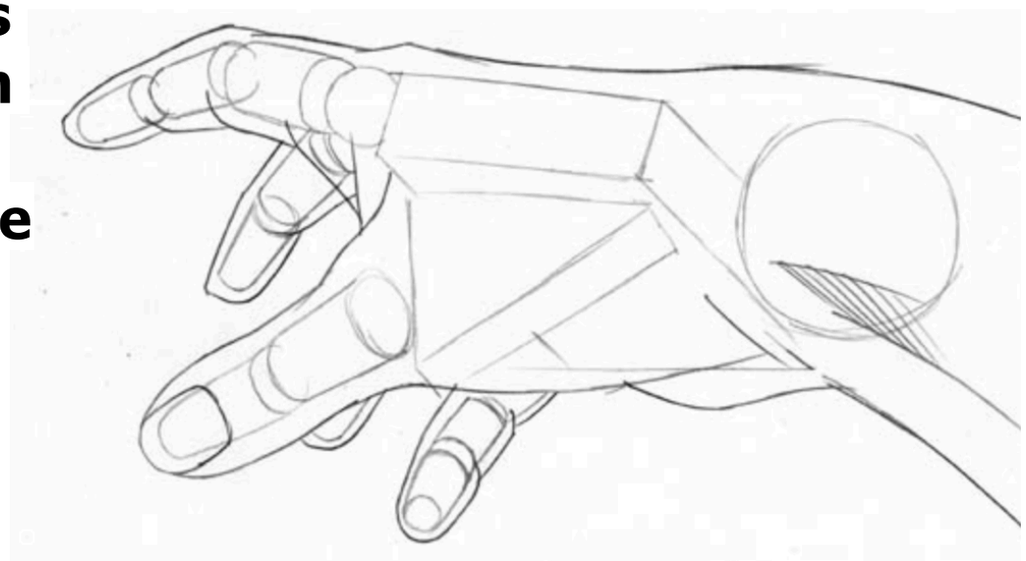
- When we're looking to create a sense of realism in a drawing or painting, we're looking to create an illusion of three-dimensionality, which means we're looking to ultimately create form, not shape.

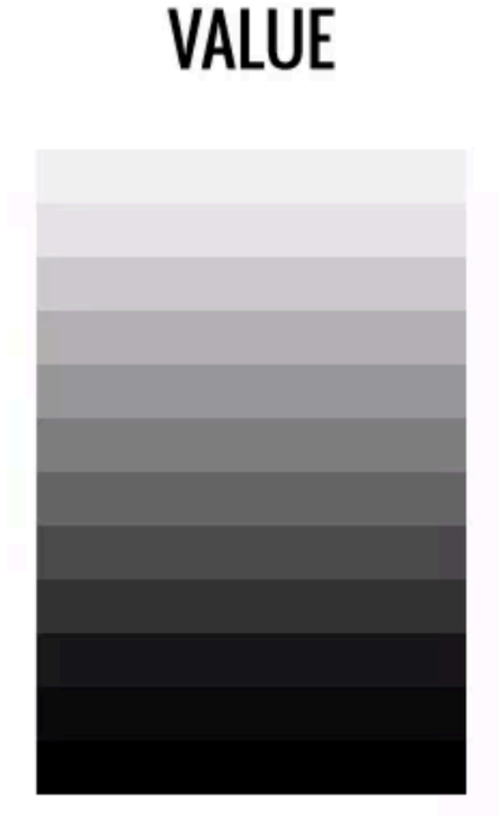
- **But how do we create the illusion of a realistic form on a flat, 2d surface like paper or canvas?**



HOW ARE FORM, VALUE AND LIGHT CONNECTED?

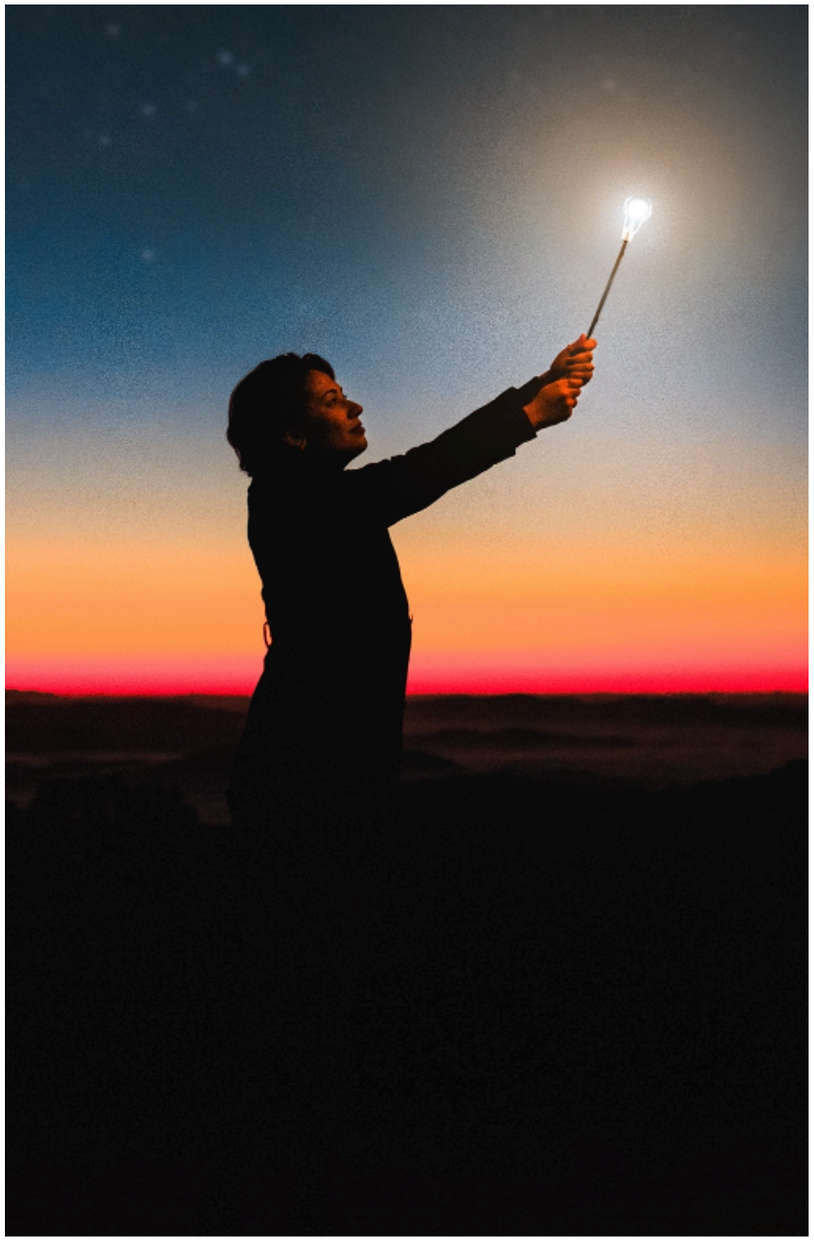
- **By rendering different values (lights, midtones and darks) after the preliminary outline sketch is created, and further capturing subtle nuances we're able to perceive in our reference pictures or objects we have in front of us.**
- **To do this, we must be able to pinpoint different areas of light and shadow.**
- When we're just starting out with drawing, it's essential to practice drawing basic 3D forms in their outline form at different angles and perspectives.
- It's also vital to start visualizing everything we see combinations of simple forms. Ex. How can I simplify this flower vase into simple geometric forms? What different basic 3D forms make up this coffee table?
- After we're able to successfully create an outline drawing that shows effective proportions, it's all a matter of shading, which is basically developing different values.
- *No lines in realism!





HOW ARE FORM, VALUE AND LIGHT CONNECTED?

- **Without light, we wouldn't be able to see color, form, or anything else!**
- **Light hits our objects or subjects, and we're able to perceive our lights, midtones and darks (our values), because of it. *Light reveals form.**
- **Different types of light also greatly affect how we see the objects and subjects around us (natural vs. artificial, temperature of the light- cool vs. warm, location of the light in regards to the subject).**
- We could take the same subject, in the exact same placement, and if the light changes, it could look totally different.
- As you can see, these three are all related in art. **Understanding value is synonymous with understanding light and form, because one cannot exist without the other two. The combination of light and shadow creates a range of values, which in turn, creates the illusion of form.**
- It can be said that realist artists are basically capturing light and detail.
- Because depicting value and form depends so much on light, we need to understand light behavior as it illuminates forms.



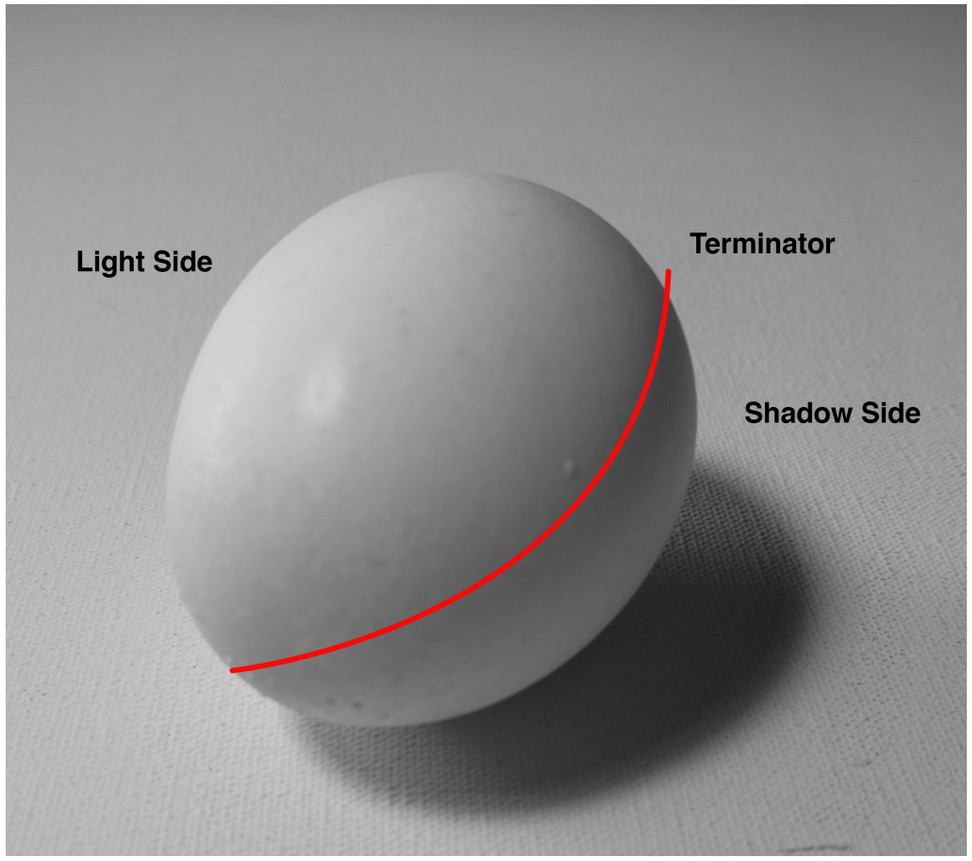
LIGHT & SHADOW VOCABULARY

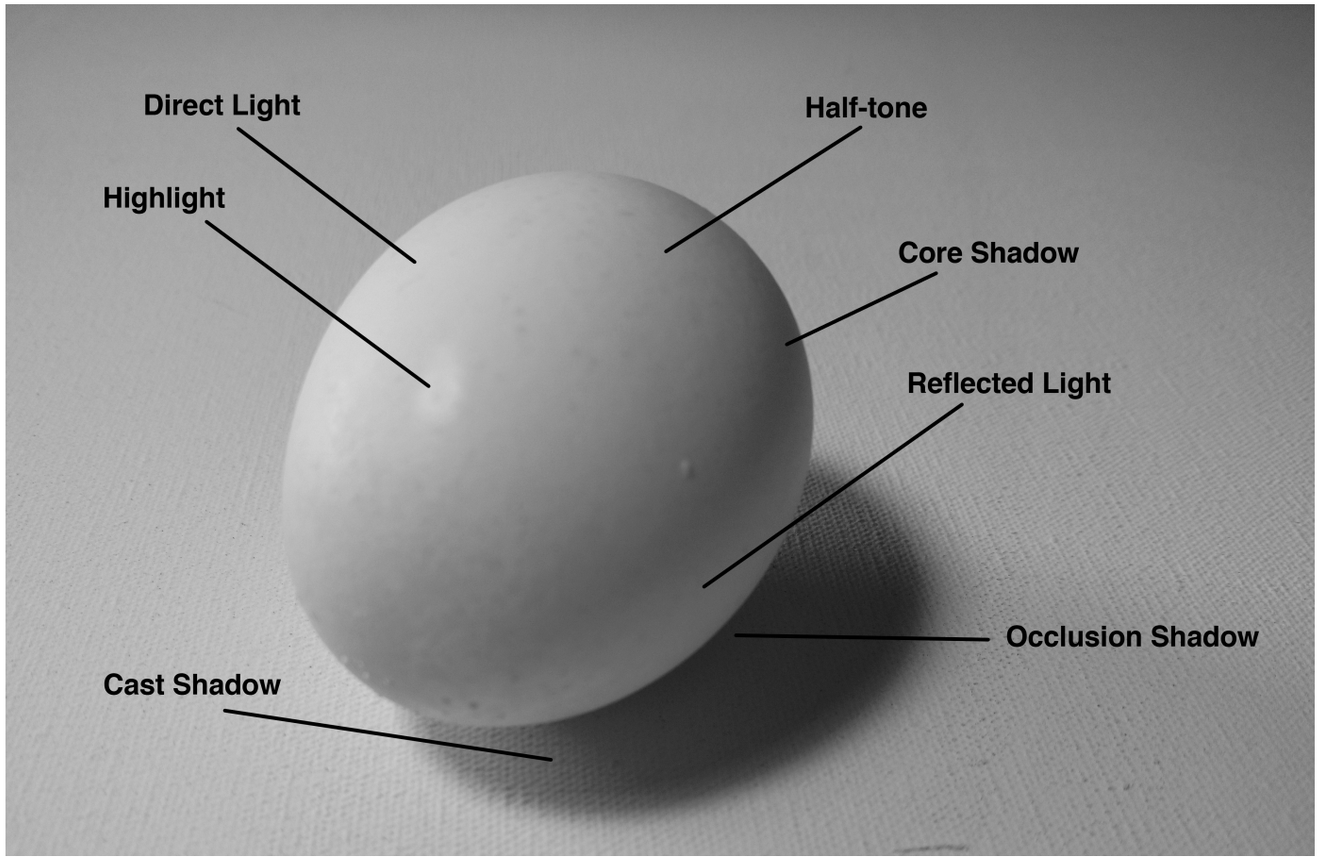
- **Terminator:** Separates the two general light and shadow zones. It's located just before the planes of the object start to face away from the light.

- **Center light:** Also called 'direct light', this is the area of the form that faces the light source and receives the most direct light.

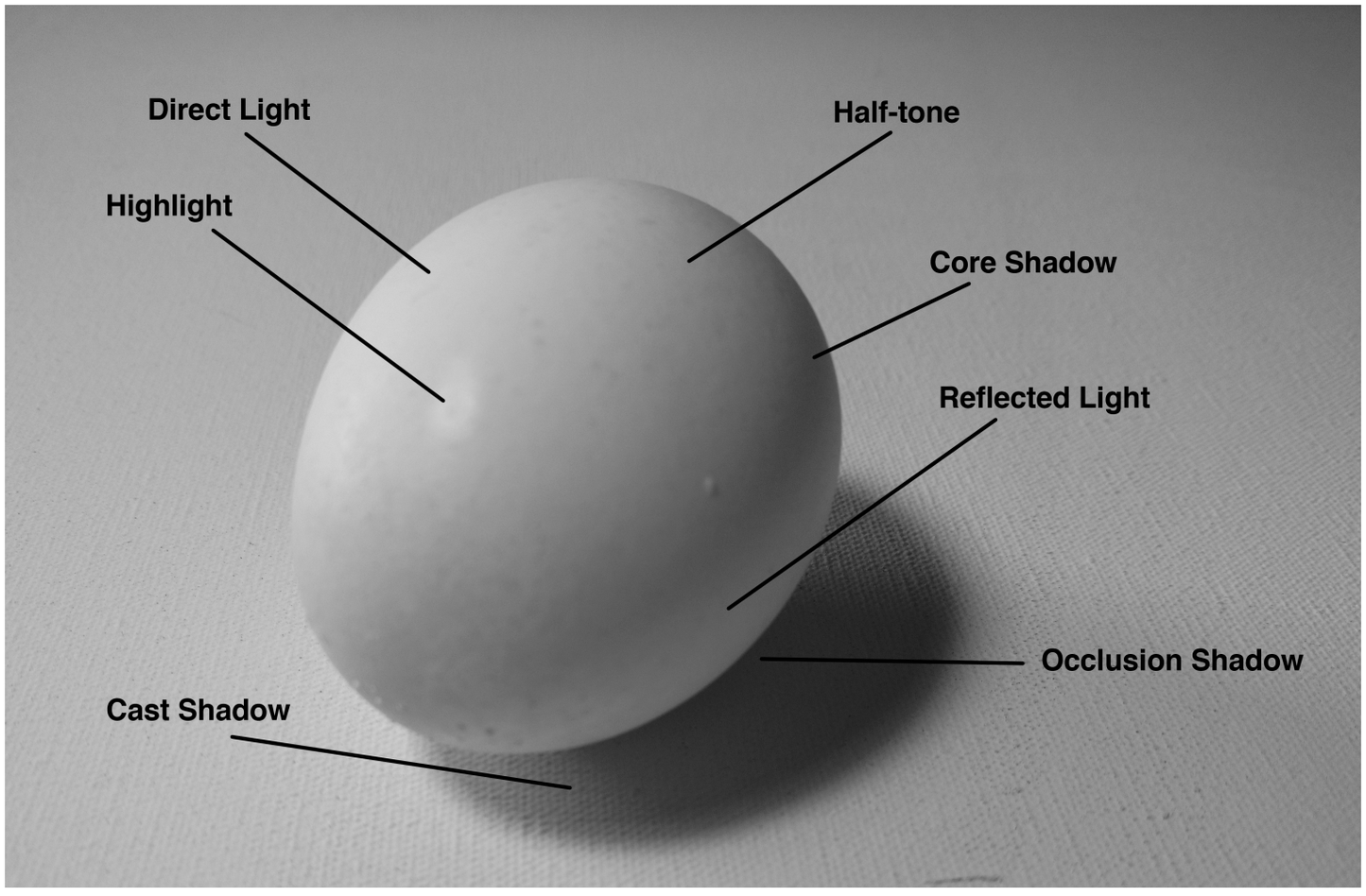
- **Highlight:** The very lightest area on the form. What we perceive as highlight(s) is/are actually reflections of the light source, so it'll move depending on where we are located to the object.

- **Half-tone:** The half-tone is the gradation between the center light and the core shadow.





VOCABULARY TO KNOW



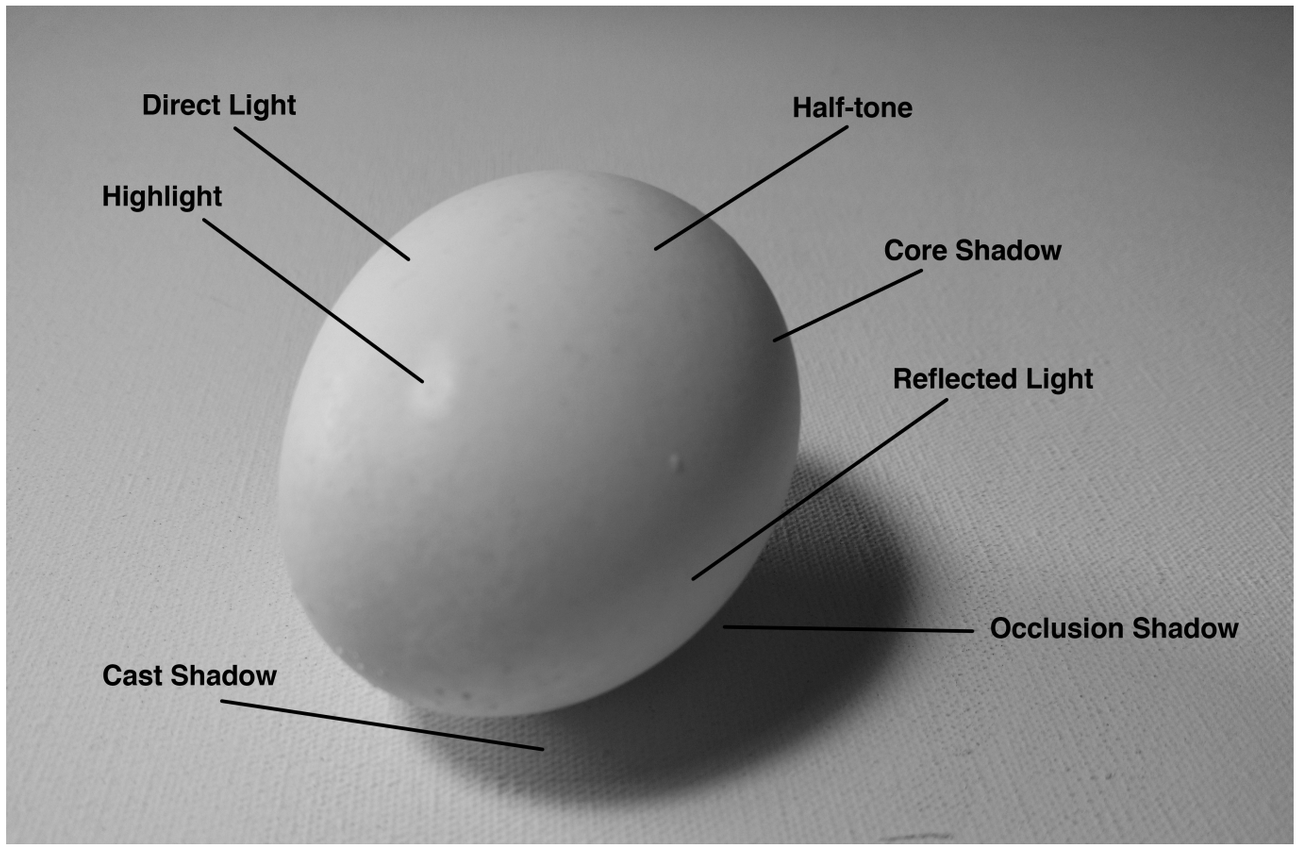
- **Core shadow:** The core shadow is the darkest section visible where light and shadow areas meet. It is the point at which direct light can no longer reach the form to illuminate it. It’s also the darkest area in the shadow section because no reflected light illuminates it either.
- **Reflected light:** Light hitting objects is absorbed or reflected. Usually a bit of both happens. Even though direct light from the light source cannot reach the planes facing away from it, it can reach the surface the object rests on, as well as other surfaces around it, and can bounce back onto the object.

VOCABULARY TO KNOW

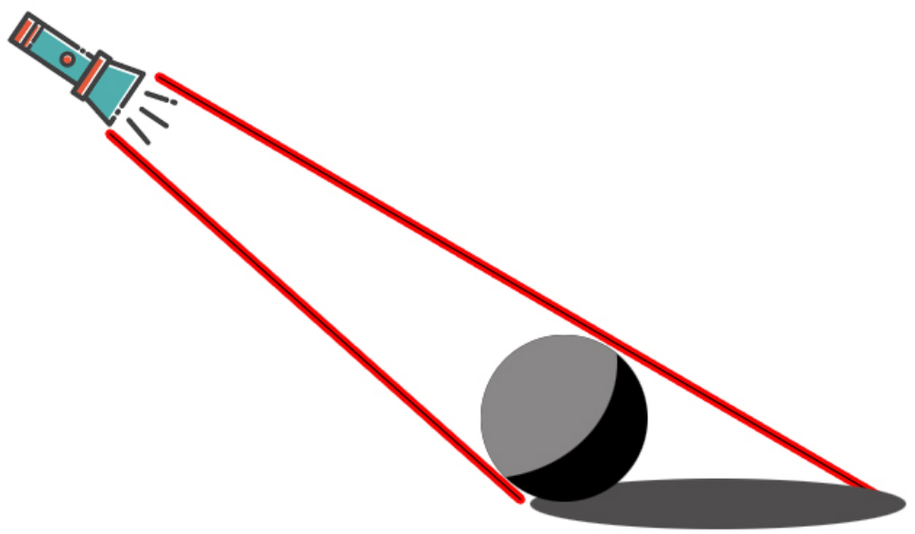
- **Cast shadow:** The cast shadow is the shadow that the object creates on the surface it's on. It's created by the object itself, blocking the light from the light source.

  To find the size of the cast shadow, imagine two lines projecting from the light source just past the edges of the object and onto the surface. The lines will show the boundaries of the cast shadow.

  *Light always travels in a straight line.



- **Occlusion shadow:** Even within the cast shadow there are darker and lighter areas. The occlusion shadow is the darkest area of the cast shadow and lies immediately beneath the form. It's darkest because the form is blocking the light almost entirely and is not affected by any reflected light.

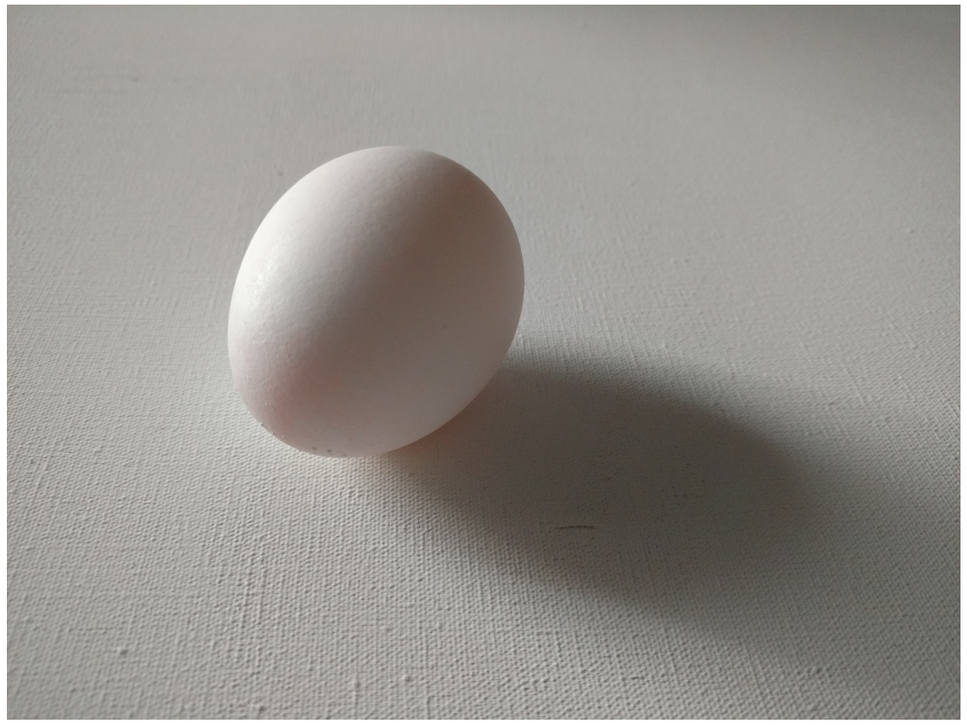


*IMPORTANT NOTES TO CONSIDER

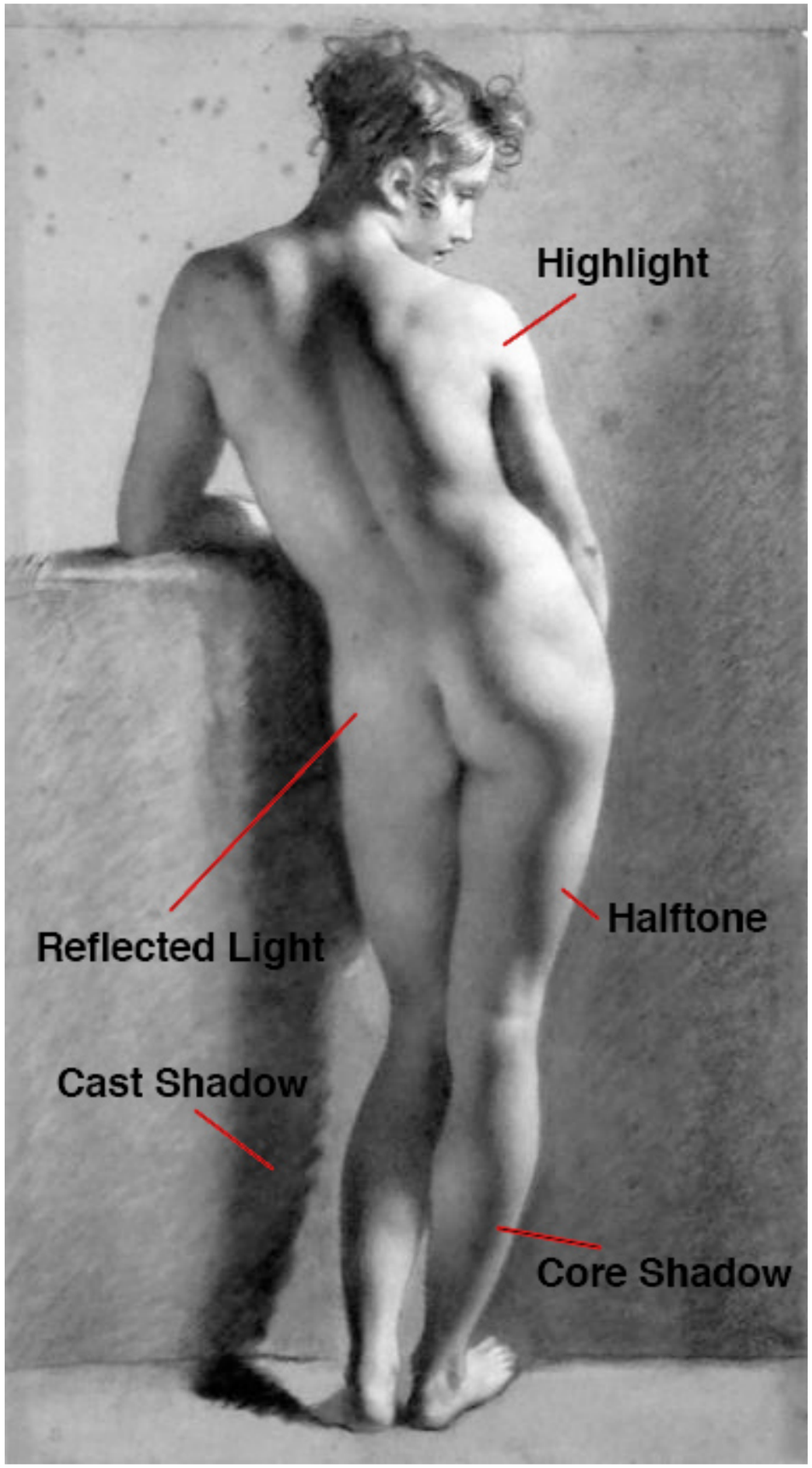
- **The size and softness these different areas of light and shadow can vary depending on the angle (and intensity) of the light source, location of reflective surface(s) around the object (if any), the sharpness/angle of the edges of the object's planes, and other factors.**
- This said, these light/shadow areas apply to all subjects, not only simple forms!
- **Once we've fully grasped how light works, we can apply our artistic license to heighten levels of contrast and the appearance of 3D form.**



Egg lit by artificial light hitting it from a much closer distance.



Egg lit by natural light coming in from the window. Notice the diffused effect in the cast shadow.



Pierre-Paul Prud'hon,
Standing Female Nude (1810)

*TIPS FOR BEGINNERS

- **Always think of complex forms as combinations of simple forms.**
- **It's a lot easier to understand simple geometric shapes as opposed to complex forms.**
- **Always start from general and work your way towards specifics. *Make sure your outline sketch is effective before moving on to shading and detail.**
- **Work from grayscale images! Color is a huge topic in and of itself, and adds a lot of complexity to the image. It can be difficult to tell different values of different colors and relate them to each other. By pinpointing values in black and white images, you're developing your eye and it'll be much easier to jump to color.**
- **Practice drawing simple geometric forms in different angles and perspectives and start with still life arrangements.**
- **Use one light source.**





USING LIGHT TO CONVEY MOOD IN ART

- **Lights and shadows rely on each other and work together in a work of art.**
- **When planning their compositions (frequently via quick thumbnail sketches), artists give thought to the play between light and dark values throughout the image.**
- **They give thought to overall mood, focal points, desired contrast, balance, and use their artistic license to increase lightness or darkness in order to create impact and more effectively transmit the message or story they're looking to transmit.**
- Sometimes light is used in more subtle ways (all-over and less defined), while other times artists use high levels of contrast, creating drama and intensity. Dark paintings can also be very beautiful and mysterious. It all depends on the story and mood the artist is trying to convey!



Johannes Vermeer, **A Woman Holding a Balance**
1662–1663

EXAMPLES OF INTERESTING USE OF LIGHT IN FAMOUS ART



Caravaggio, *The Calling of Saint Matthew,* 1599-1600

EXAMPLES OF INTERESTING USE OF LIGHT IN FAMOUS ART



Gerard van Honthorst, *The Adoration of the Child*, 1620

EXAMPLES OF INTERESTING USE OF LIGHT IN FAMOUS ART



Claude Monet,
Rouen Cathedral, 1894

CREATIVE ASSIGNMENT #11:

- **Create a drawing of a simple object that shows three-dimensional form. You can use direct observation or a reference photo. *Egg photos will be attached at the end of this Patreon post if you'd like to use them.**
- **Make sure you're including all of the different light and shadow areas we talked about.**
- **If you're more advanced, try drawing an arrangement of simple three-dimensional forms like this one:**

