

RENÉE CHIO

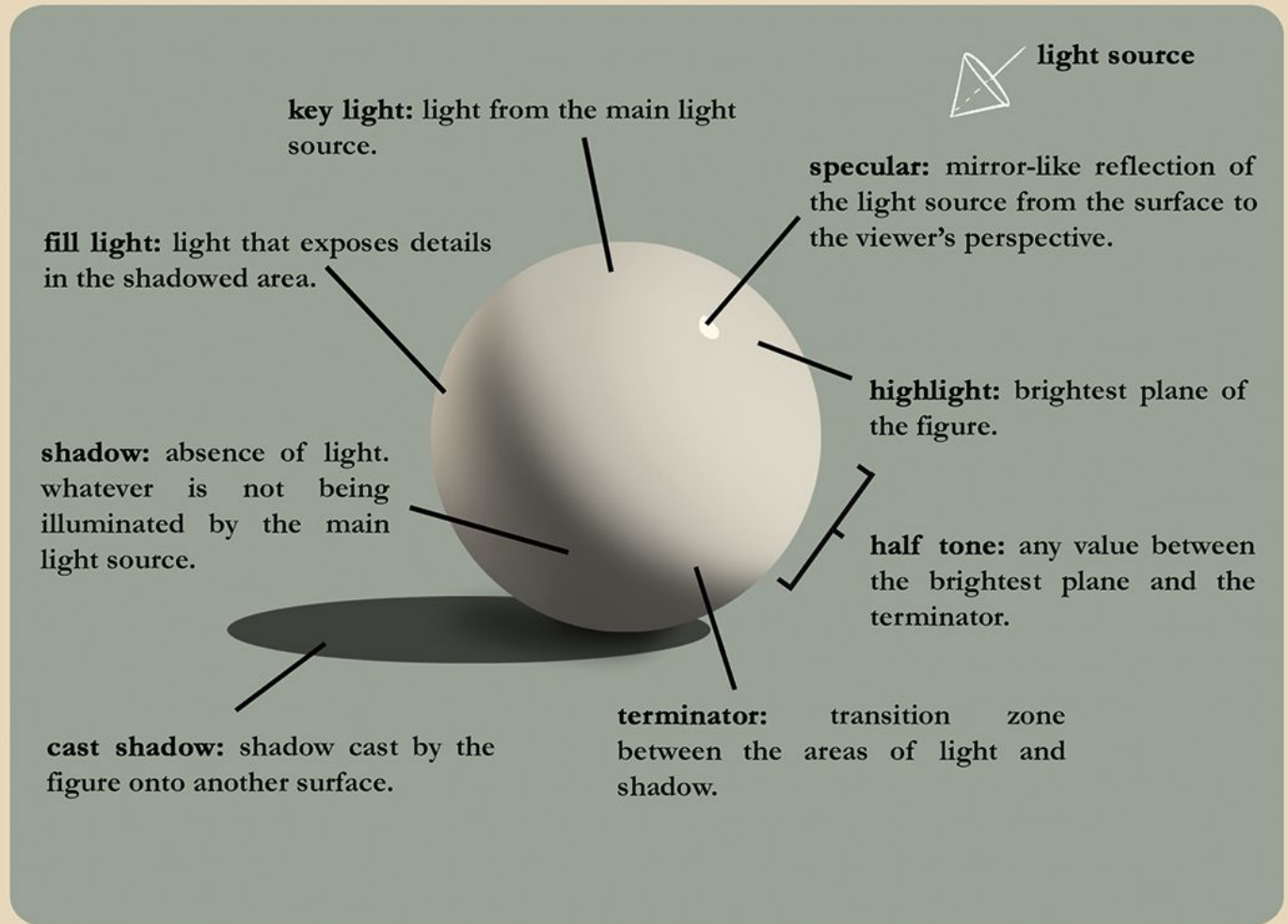


LIGHTOBER:

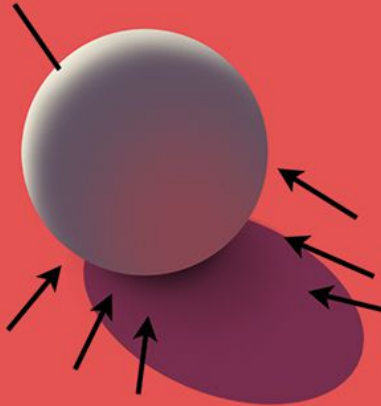
A 31-DAY LIGHTING CHALLENGE

PRINCIPLES OF LIGHT

This classic shading sphere is essential to any lighting study. It's the foundation of all types of lighting. I broke it down into different spheres so each light and shadow is easier to identify and comprehend.

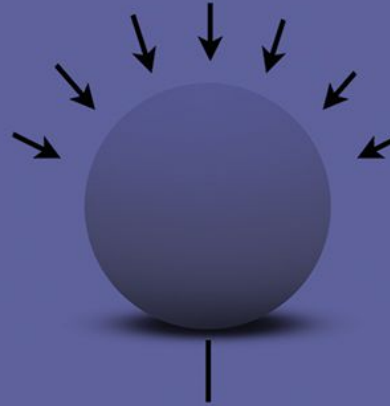


rim light: light placed behind a subject that exposes the outline or rim of the subject.

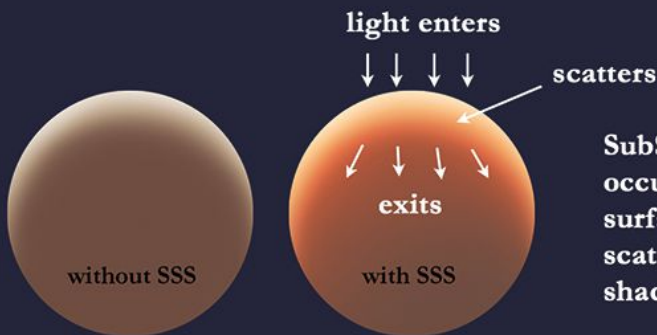


bounce light: light that bounces off surfaces and illuminates other nearby surfaces.

ambient light: omnipresent light in the environment.



occlusion shadow: soft shadow created by ambient light being occluded.



SubSurface Scattering (SSS): occurs when light penetrates the surface of a translucent object, scatters within, and exits on the shadowed side.

TYPES OF LIGHT

Knowing the type of light source you're dealing with is crucial for predicting where and how shadows will fall and determining the color of the overall scene.



NATURAL

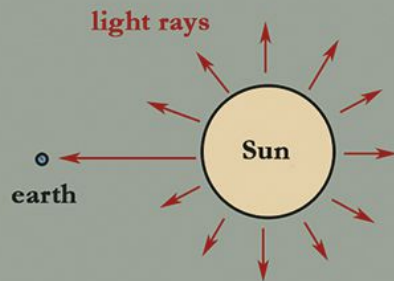
- It comes from the sun and the sky.
- Shadows typically have cool hues because the sky acts as a giant dome that casts ambient light, whereas sunlight tends to have warm hues.
- Sunlight has a consistent, high intensity which causes sharper shadows.



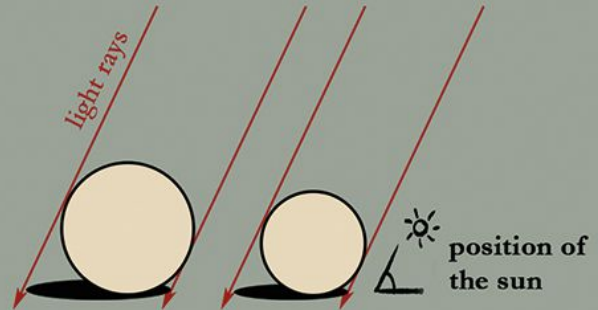
ARTIFICIAL

- Comes from any man-made source (even though fire is considered a natural light its type of lighting is very similar to that of artificial light)
- Lights and shadows share the same tone, unless there's an ambient light of a different color.
- The sharpness of shadows depends on the intensity of the light. Brighter lights will create harsher shadows, while dimmer ones will create softer shadows.

PROPERTIES OF NATURAL LIGHT

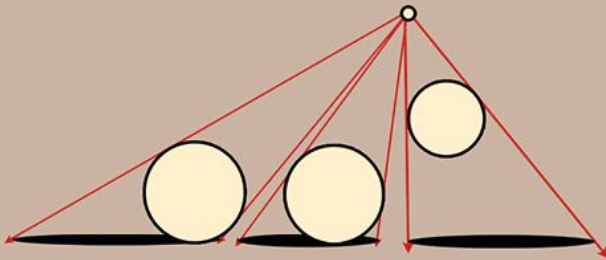


Sunlight actually scatters in all directions (similar to a lightbulb), but because the Earth is relatively small in comparison, it's as if only a single ray of light reaches us.

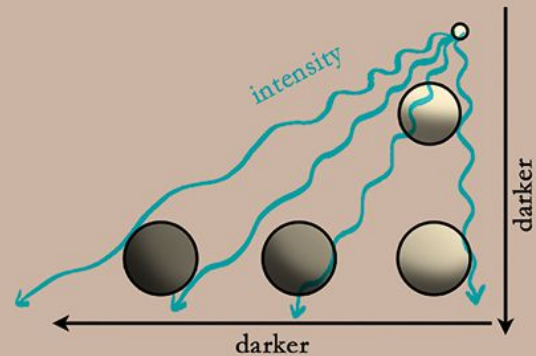


Therefore, on Earth, light rays follow the same direction.

PROPERTIES OF ARTIFICIAL LIGHT



Light rays are scattered angularly from the light source; thus, the size of cast shadows is directly related to the angle of the light rays and their proximity to the light source.



Artificial light is not nearly as intense as sunlight, so its intensity diminishes with distance (fall-off). The farther an object is from the source, the less light it receives.

VOLUME

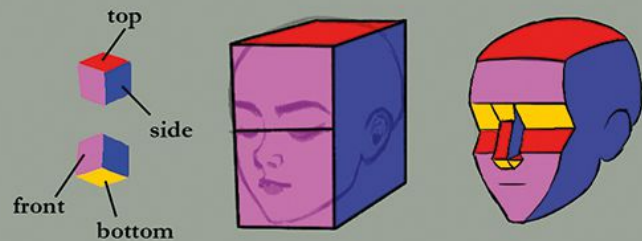
A *solid* understanding of volume is what makes a figure look three-dimensional. If you cannot visualize the structure, you'll struggle to determine the placement of shadows, resulting in figures that lack solidity.

The diagrams below illustrate how to begin to perceive volume in more complex shapes. This exercise was the most eye-opening for me when I was just starting to study this subject.

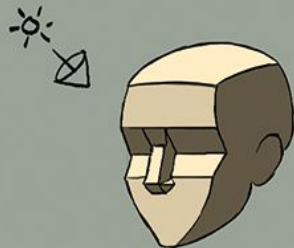
Determine the light direction.



Identify planes and break down the figure into simple shapes.



Those planes facing the light source will be lit; that's the basic principle of lighting.



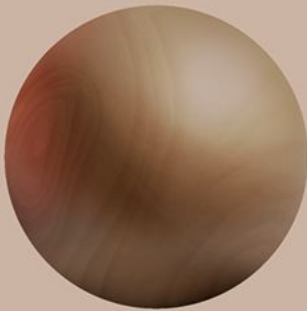
Once you get the hang of it, you can move on to a more complex structure.



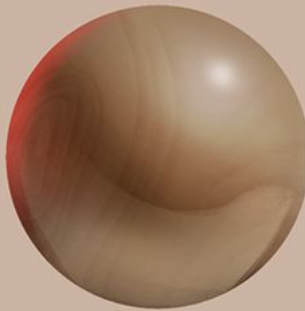
TEXTURE

Some materials absorb light while others reflect it – that's **specularity**. Different amounts of absorption and reflection will convey different materials.

a matte surface will absorb more light



whereas a glossy material will reflect more light



All three wooden spheres have the exact same base; the only thing that changed was the hardness and opacity of the light reflections, proving that textures are not so much about the pattern but about specularity.

Here are some more examples:



PROCESS

Preparing the base drawing: When working with lighting, it's better to start with muted colors as a base because it's easier to go more saturated than the opposite. And a well-balanced image in terms of temperature and saturation feels richer.

I usually include **occlusion shadows** in the base drawing because they're present under any light conditions; only depth changes depending on the intensity of the light.



Establishing the overall feel of the image: The first layer of light I add is the feeling I want the image to convey. Whether it's dark or bright, warm or cool, it should represent the general mood.





Adding the main light source:

This might be my favorite step of the process as it's what creates the volume, depth and determines the type of light source.

In tandem with occlusion shadows, it makes the lighting feel solid.

Adding secondary lights: These are any fill lights (in this case, the light from the moon), rim lights, and bounce light. They bring dynamism to the image.



Adding lighting effects: The finishing touches often include glows, darker areas, subsurface scattering, reflections, color adjustments, specular lights and textures.

Their purpose is to make the whole image more striking and polished while adding a cinematic feeling.





17. FILM NOIR



24. CHRISTMAS LIGHTS



26. LIGHT THROUGH CURTAIN



31. HALLOWEEN