

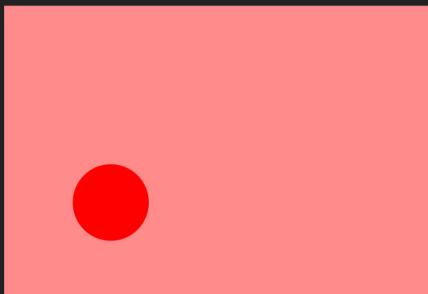


COLOR & LIGHT

# CONTRAST

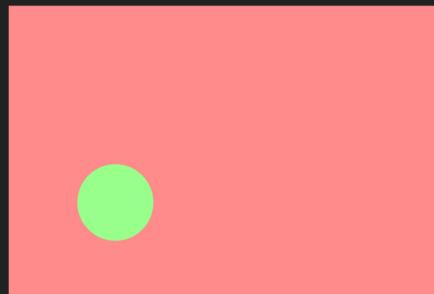
## The 3 types

SATURATION



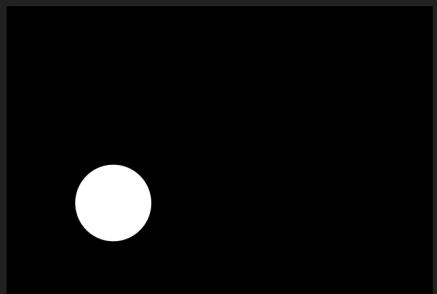
\*The Intensity of a Color

HUE

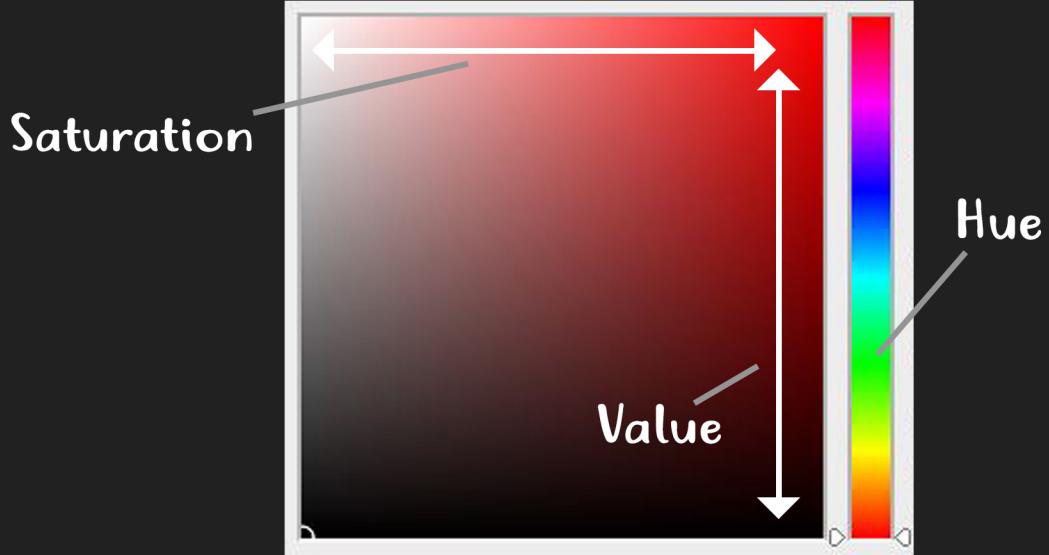


\*The Shade of a Color

VALUE



\*The Brightness of a Color



## RULE OF CONTRAST

The 90-10 Rule

- Your eyes will always go to highest contrast/most different.
- Meaning 90% of your visual should have lower contrast and 10 percent should be held for the highest contrast and the most important part of your piece.
- Applies to HUE and SATURATION as well. So keep your color schemes SELECTIVE!

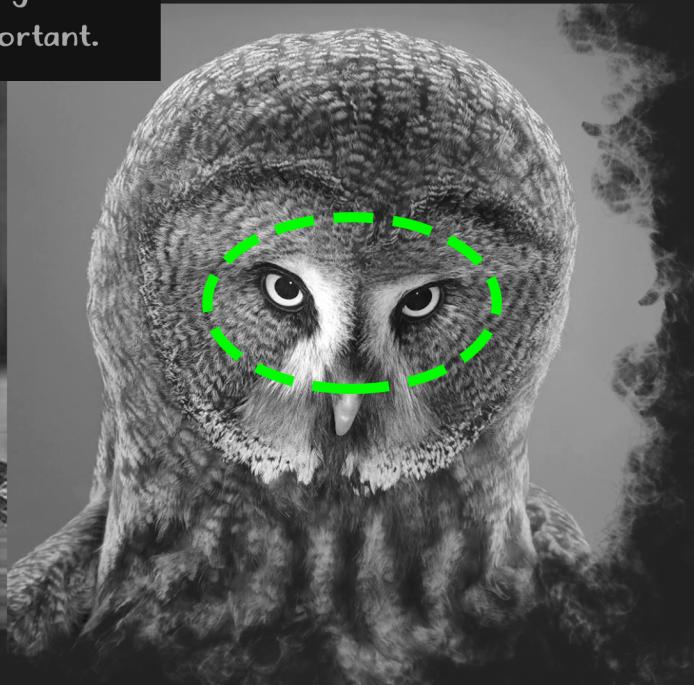
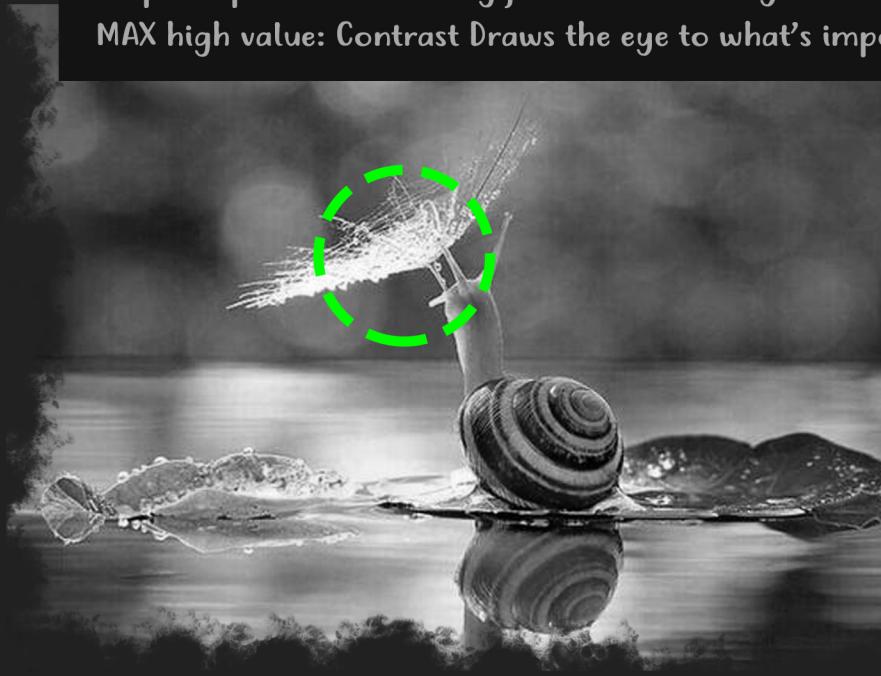
# RULE OF CONTRAST

The 90-10 Rule



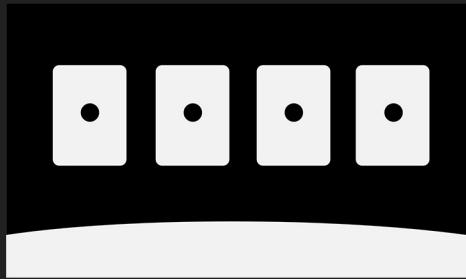
## How it Applies to Photography

Proper exposure is allowing just a fraction of your image to hit MAX high value: Contrast Draws the eye to what's important.

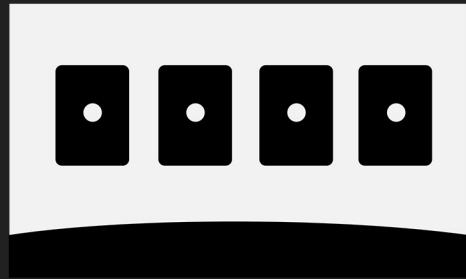


# COMPOSITING VALUES

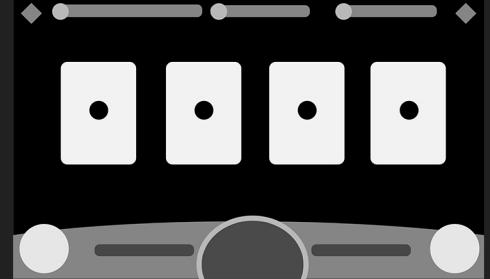
Using the Full Range of Values to Prioritize Elements (CASINO LOBBY)



\*High Over Low



\*Low Over High



\*Full Range of Values



Before



After



w/ Color

# THE BASIC SPHERE

## Terms of Shading

Key Light



Ambient light

Highlight

Core

Fill Light

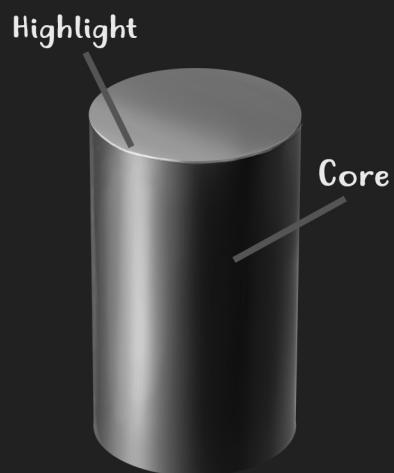
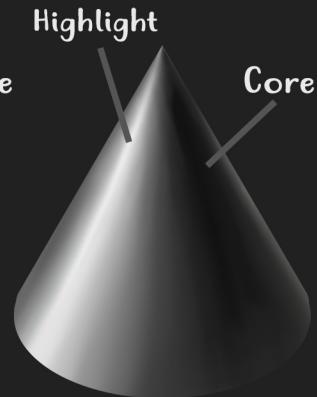
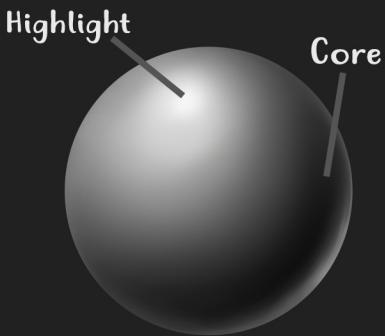


Bounce Light

Cast Shadow  
(Follow Perspective)

Reflection  
(Follow Perspective)

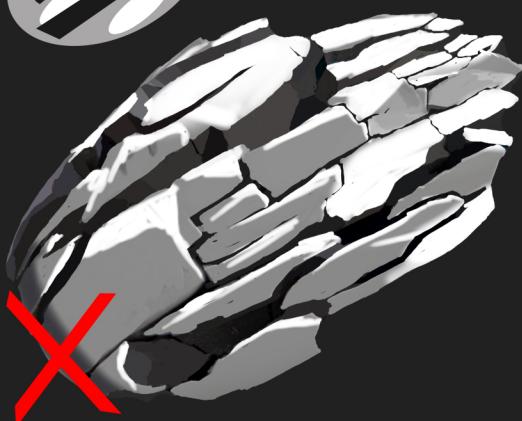
Contact Shadow



## Shading Volumes

# CONTROL YOUR VALUES

Keep your absolute Highs and Lows minimal (90-10 Rule)



Too Many Highs



Better Values



Too Many Highs



Better Values

# CONTROL YOUR VALUES

Keep your absolute Highs and Lows minimal (90-10 Rule)



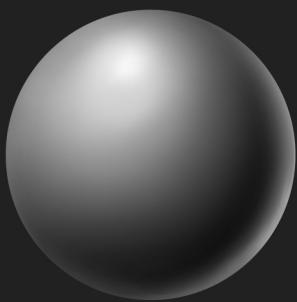
Too Many Highs



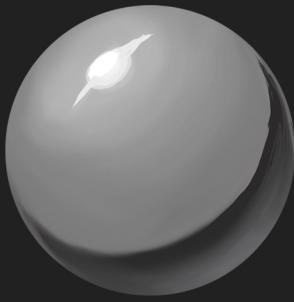
Better Values

## VALUES & MATERIAL

Values can dictate what material your object is made of.



FLAT  
(Low-Reflective)



SEMI-GLOSS  
(Semi-Reflective)



CHROME  
(Reflective)



GLASS  
(Translucent)

\*Tip- The tighter the transition between light and dark the more reflective the material is.

# VALUES & FORM

Values can easily take you towards or away from the form you were hoping for. Use reference to keep the look you want.

A big nose?



A thin nose?

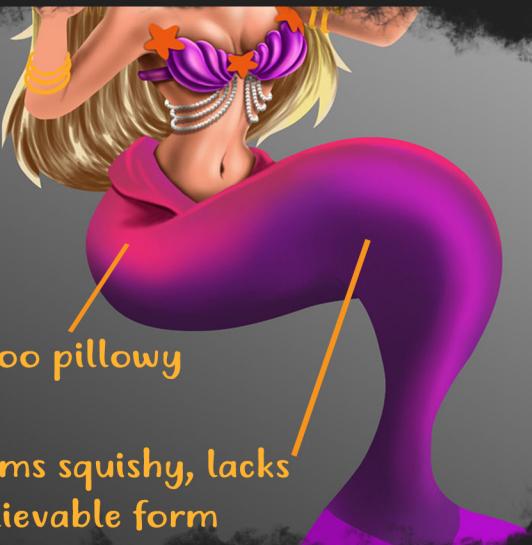


25,500,400

\$49.99

All UI should obey Global Light

BEFORE



AFTER



"Too Fat"?

Hips are too pillow-y

Tail seems squishy, lacks  
believable form

BEFORE

"Too Skinny"?

AFTER



# VALUES & MOOD

Adjusting Light Intensity & Key light-to-Fill Light Ratio



Soft Light

\*Mellow

Blurry Transition from  
light to Dark

Soft Shadows

Overall Brighter & Softer  
Visual

Hard Light

\*Dramatic

Tight Transition from  
light to Dark

Crisp Shadows

High Contrast Visual

## KEY/FILL LIGHT RATIO

The Level of Contrast between the **Key light** and the **Fill light**.

Key light

Main Light Source- Determines Value of Highlights

Fill light

Secondary Source- Determines Value of Core Shadow



Low K.F



High K.F

\*Mellow

\*Dramatic

# RIM & BOUNCE

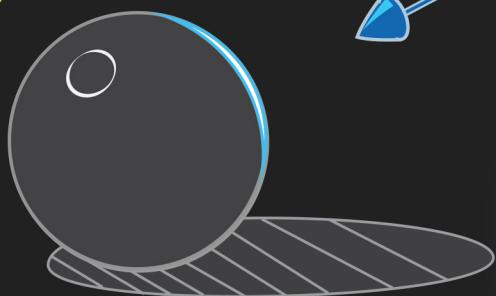
Using Values to Help Give Your Visuals Volume & Form

Key Light



Rim

2nd Light Source  
(Back light)



Rim Lighting



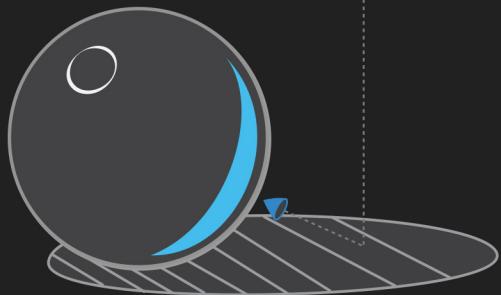
## RIM LIGHTING

Strong 2nd Light Source that sits behind the object. Produces rim highlights (Bright Edges) illuminated by the back light. Defines Silhouettes and Form.

Key Light



Fill Light



Bounce light



## BOUNCE LIGHTING

light that comes from another surface or object, illuminated by any of the light sources.

Core Shadow

# SHADOWS

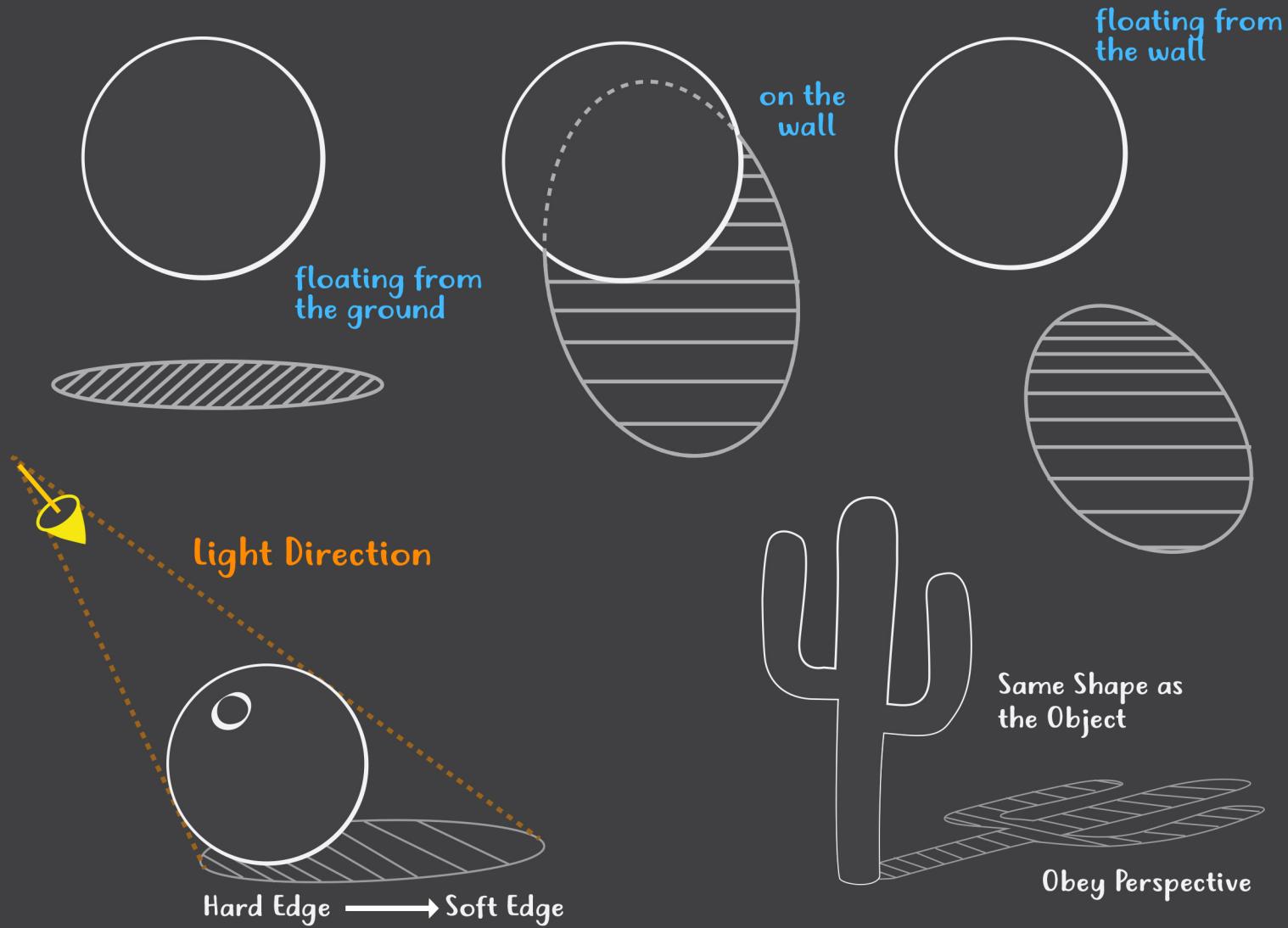
## A Closer Look at the 3 Main Shadows

### 1. CAST SHADOW

Shadow Cast by An Object or Figure



- Will have the same shape as the object / figure.
- Indicates where the object is in the environment
- Follow light source & perspective
- Shadow edge (Hard/Soft) depends on light intensity
- Edge is hard near object and gets softer as you move away



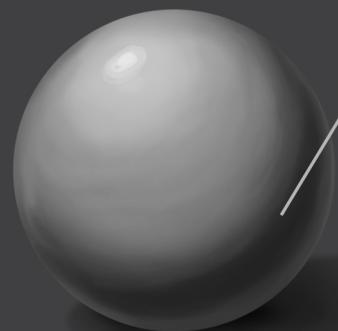
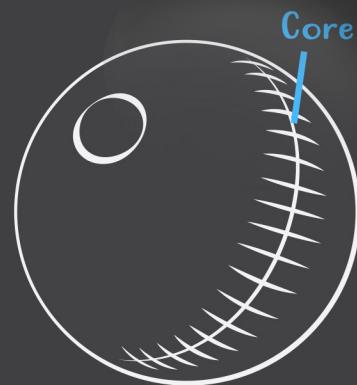
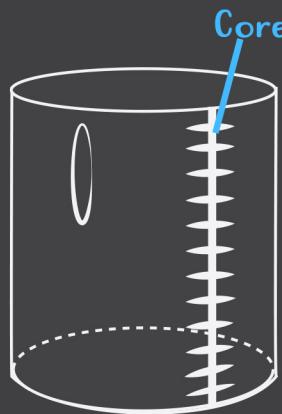
# SHADOWS

A Closer Look at the 3 Main Shadows

## 2. CORE SHADOW

Where light area turns into shadow area within an object.

- A great way to indicate form



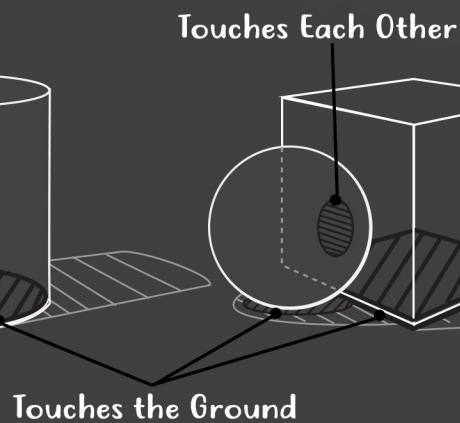
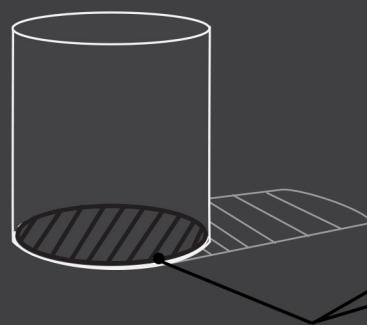
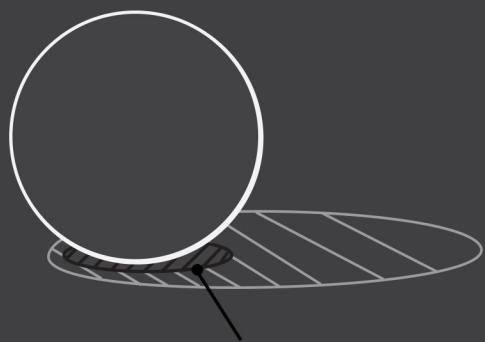
## 3. CONTACT SHADOW

Where 2 objects/planes touch

- Also known as OCCLUSION!!
- The darkest part of the shadow
- Helps sharpen details
- Can be done both painterly and as vector



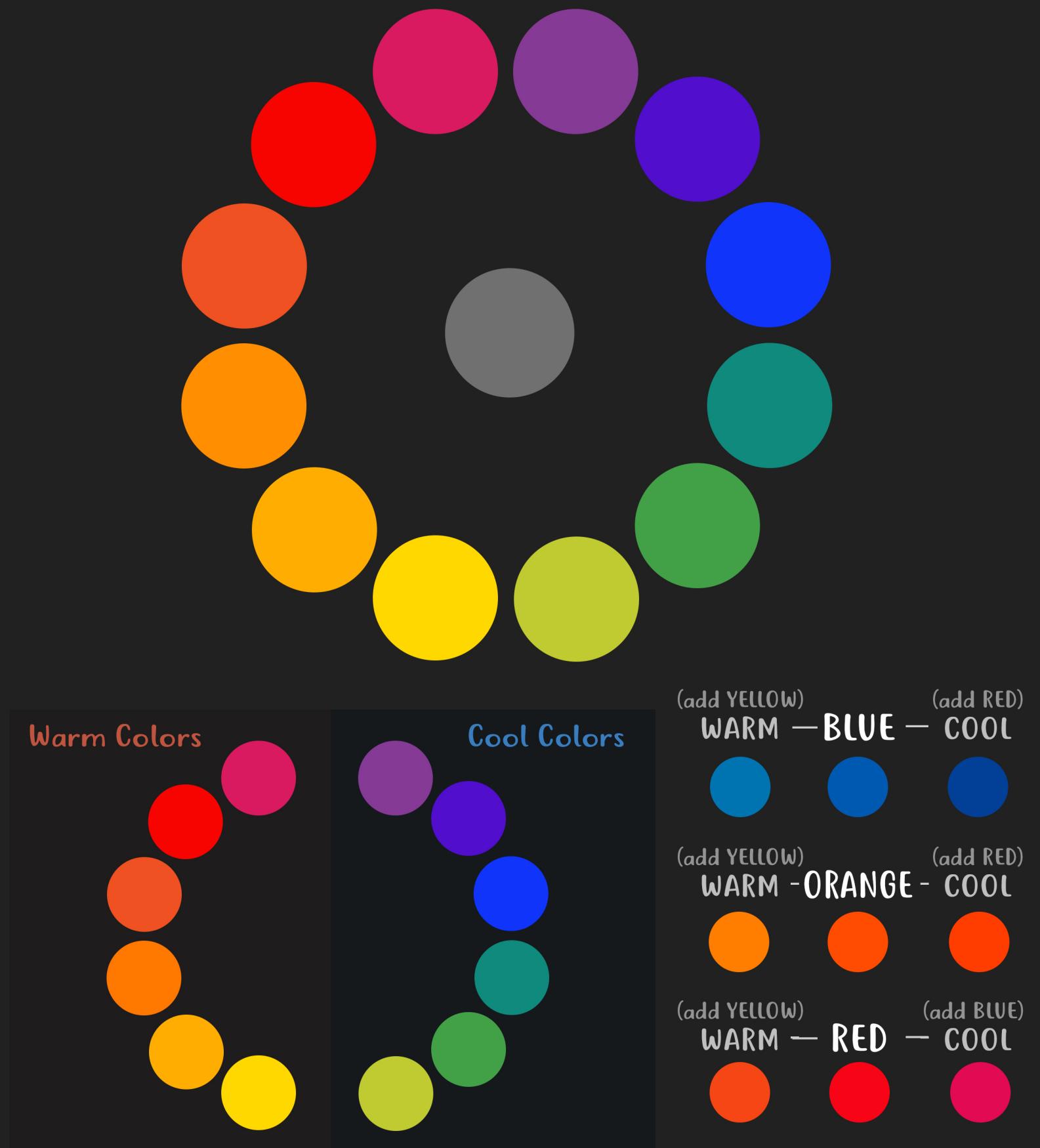
CONTACT SHADOW



Touches the Ground

# COLOR WHEEL

## Understanding Color Contrast



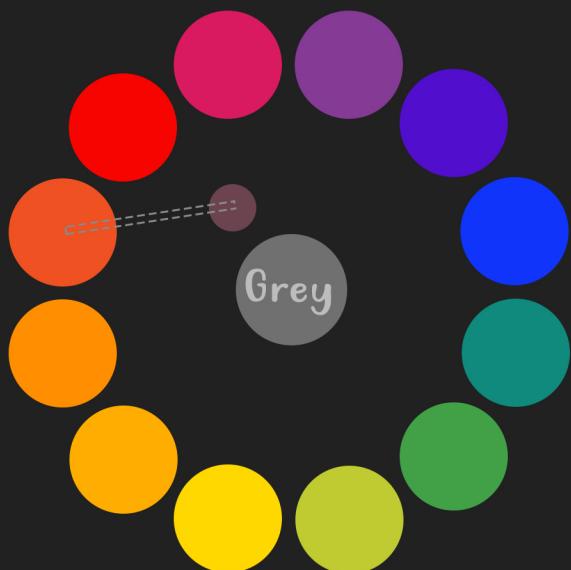
# COMPLIMENTARY COLORS

## Color Contrast At Its Finest!



### Relative Color (Illusion of the Opposites)

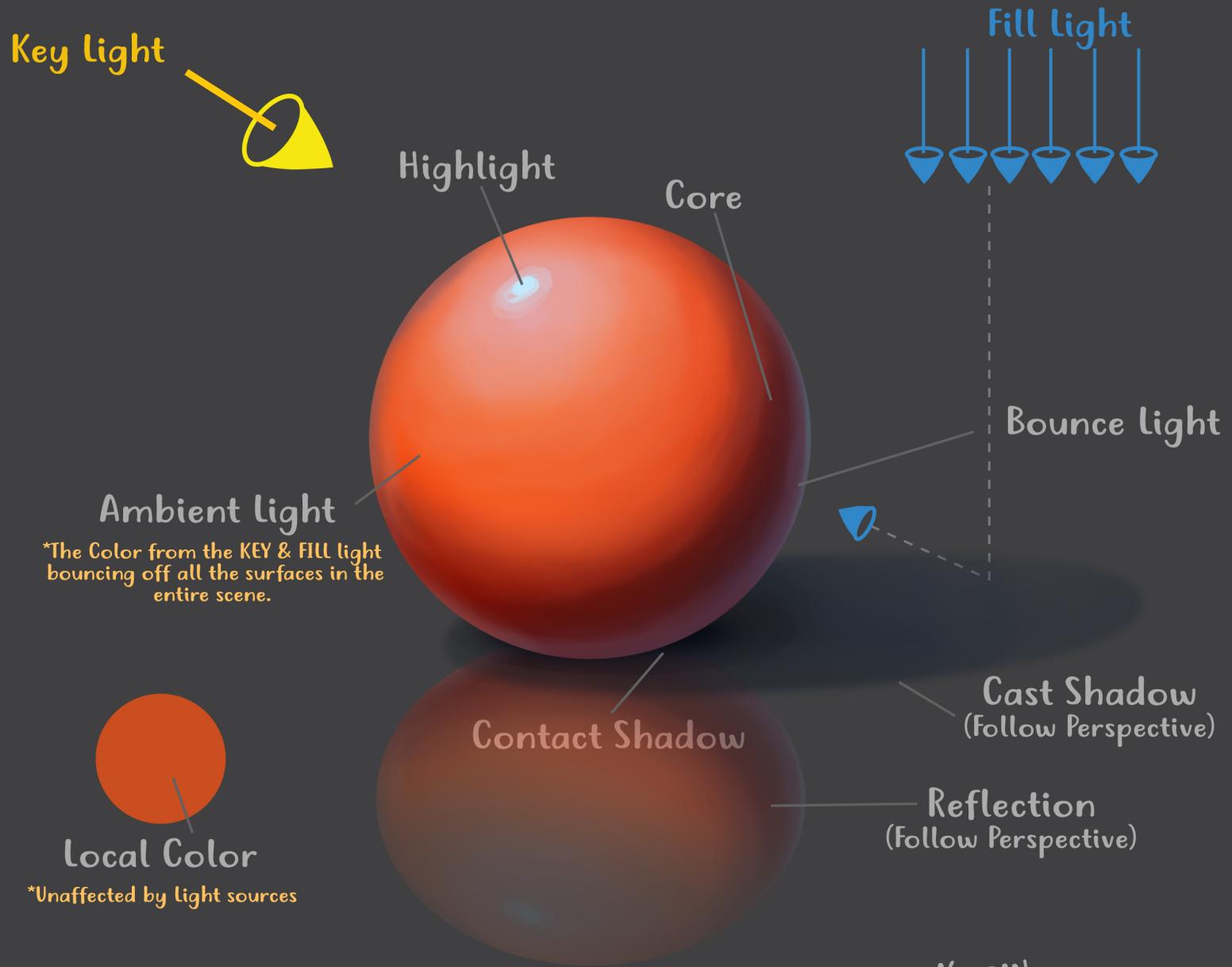
Seeing colors as they are compared to each other,  
not by what their actual values are.



\*Desaturating a Color will make a  
color feel cooler. COOL!

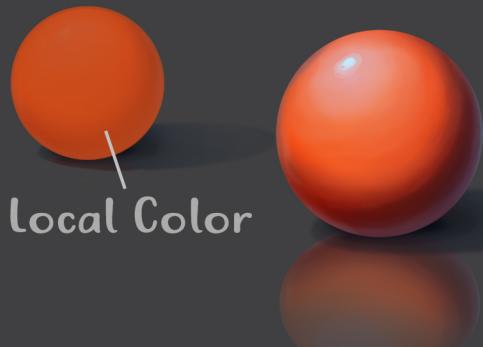
# REVISIT THE SPHERE

Applying Color to the Terms We Learned

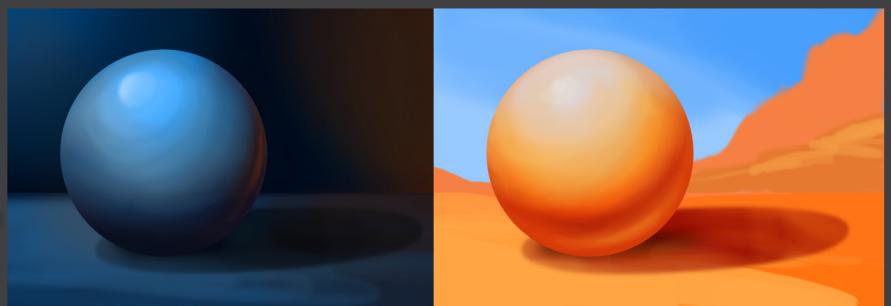


## LOCAL COLORS

How Light Sources Affect the Local Color

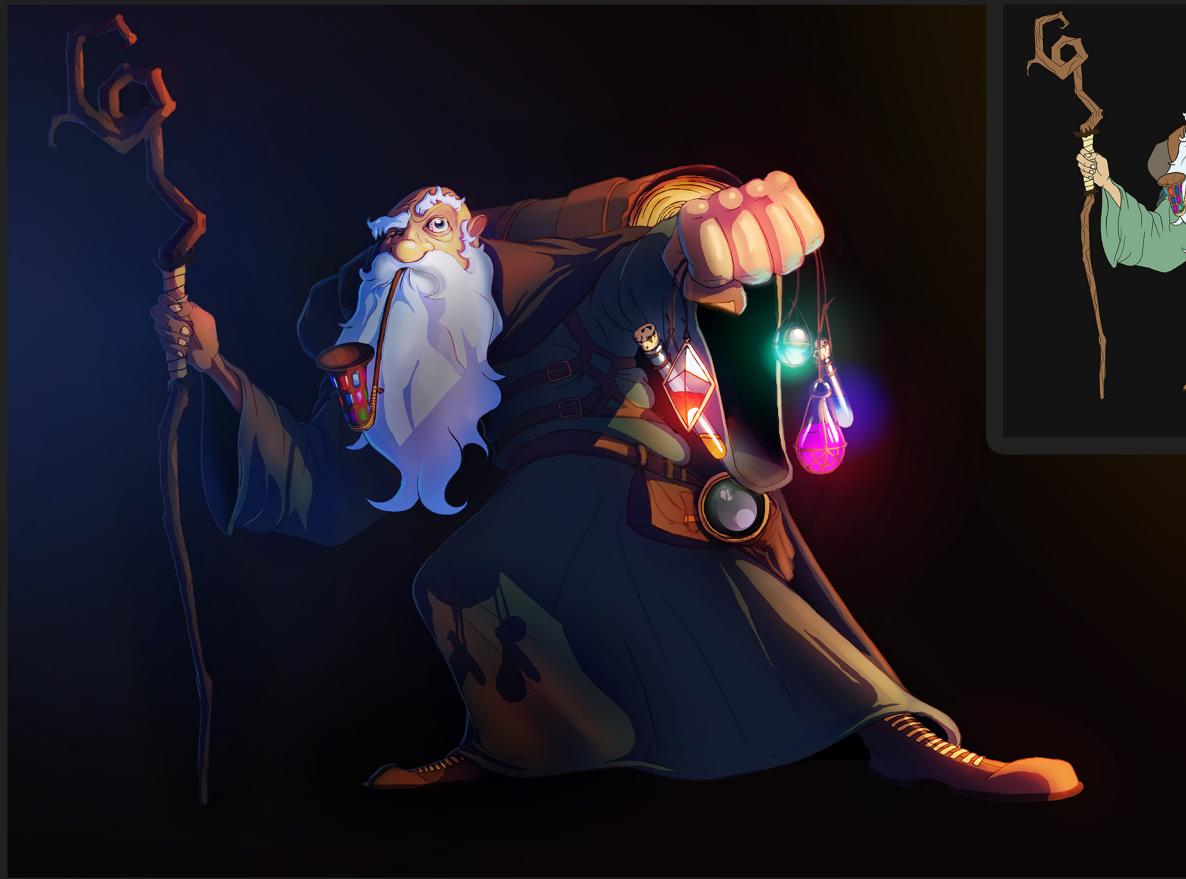


How Do We Know  
What Color to Use?  
**REFERENCE!!!**



# LOCAL COLORS

How Light Sources Affect the Local Color



LOCAL COLORS

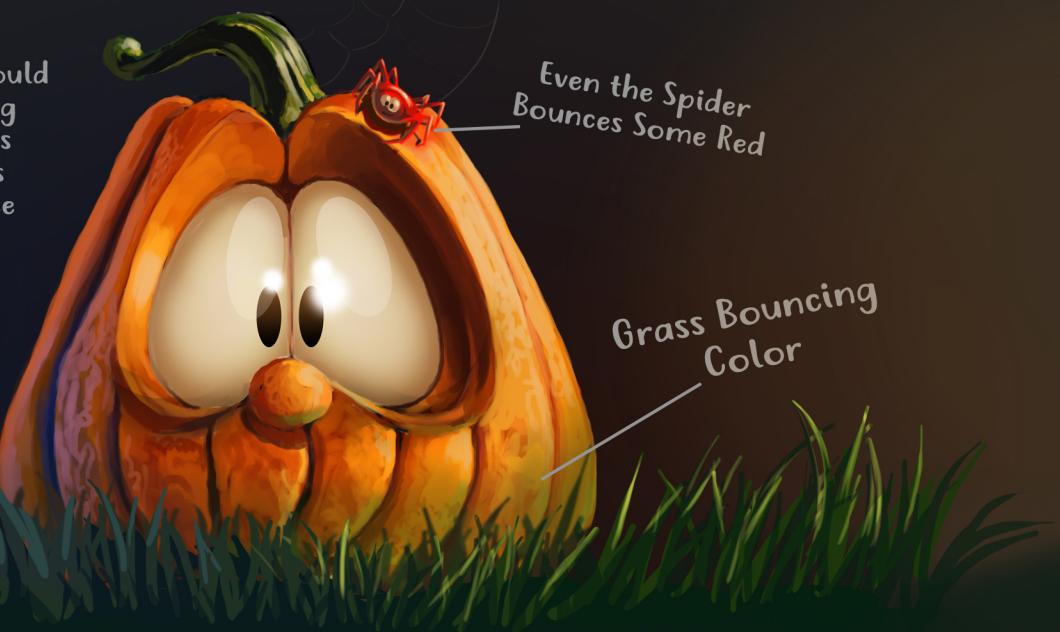


Applying Key, Fill, Rim, Bounce Light

# BOUNCING COLOR

Color Can Come From Everywhere!

Color from ANY object/surface could bounce onto your object affecting your local color. This all depends on the closeness of the surface as well as how intensely that surface is lit.

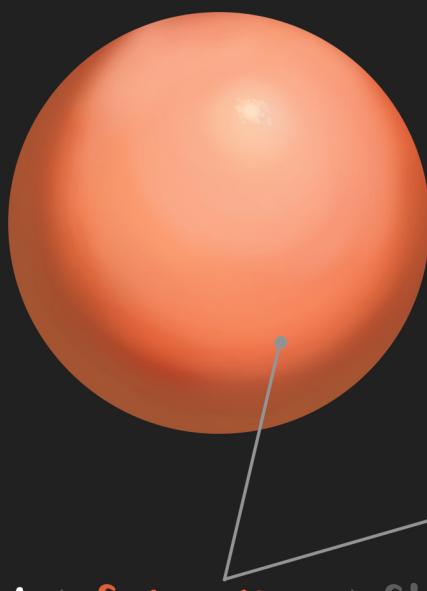
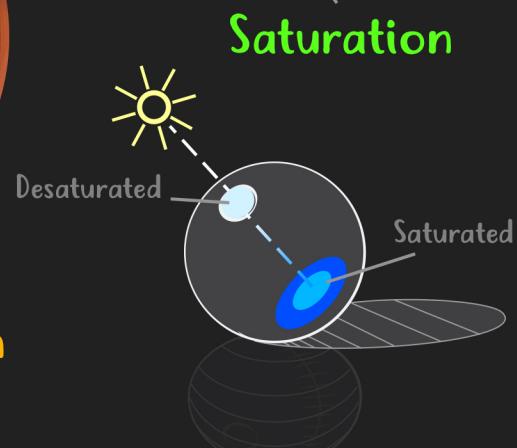
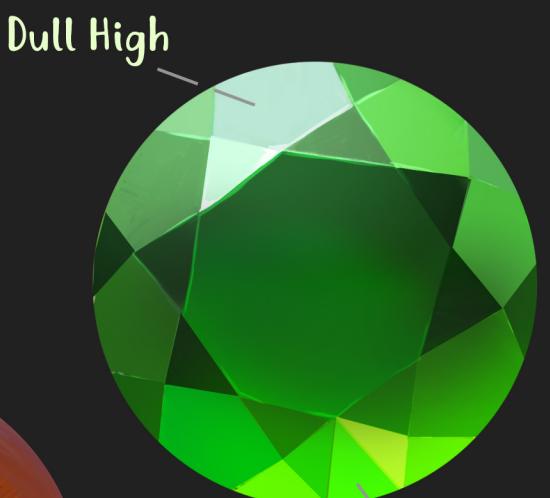


# MATERIALS & COLOR

## How a Color Obeys in Certain Materials

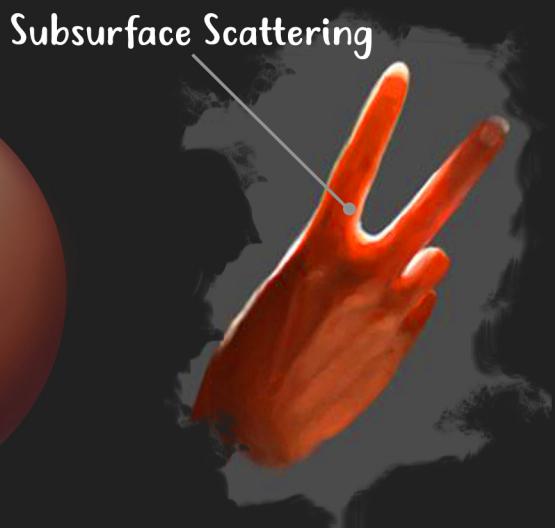
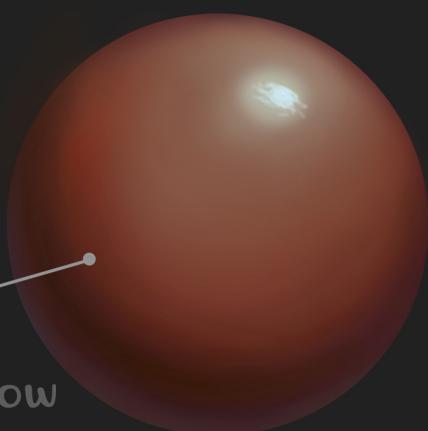
### GLASS/SEMI-TRANSLUCENT

Light hits the surface and travels to the opposite side, bounces within the material, and scatters more saturated color on the opposite end.



### SKIN TONES- SUBSURFACE SCATTERING

In a similar way, light hits the surface of the skin and travels into the material, bounces around, and scatters saturated color.

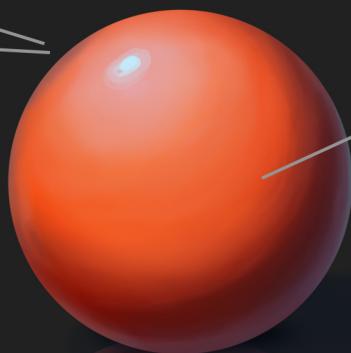


Light ← Saturation → Shadow  
(Found Between)

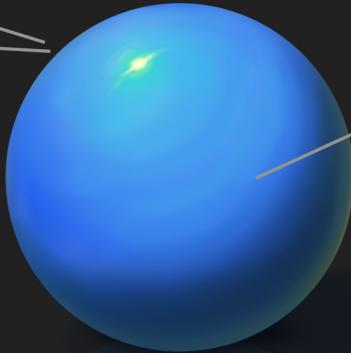
# HIGHLIGHTS

Interchanging Warm/Cool Highs to Add Contrast

Warm Object ► Cool Highlight



Cool Object ► Warm Highlight



# SHADOWS

All Shadows Have Color

Takes the LIFE  
Out of Your Colors



\*NEVER color  
your shadows  
with black!



Subtle Colors  
(Realistic)



Saturated Colors  
(Stylized)



Neutral Colors  
(Relative Color)

# ATMOSPHERE

Using Color and Values to Depict Distance

NEAR ← → FAR



Value



Saturation



Hue



\*TIP: As you move farther away,  
objects take on more 'fill light'.

