

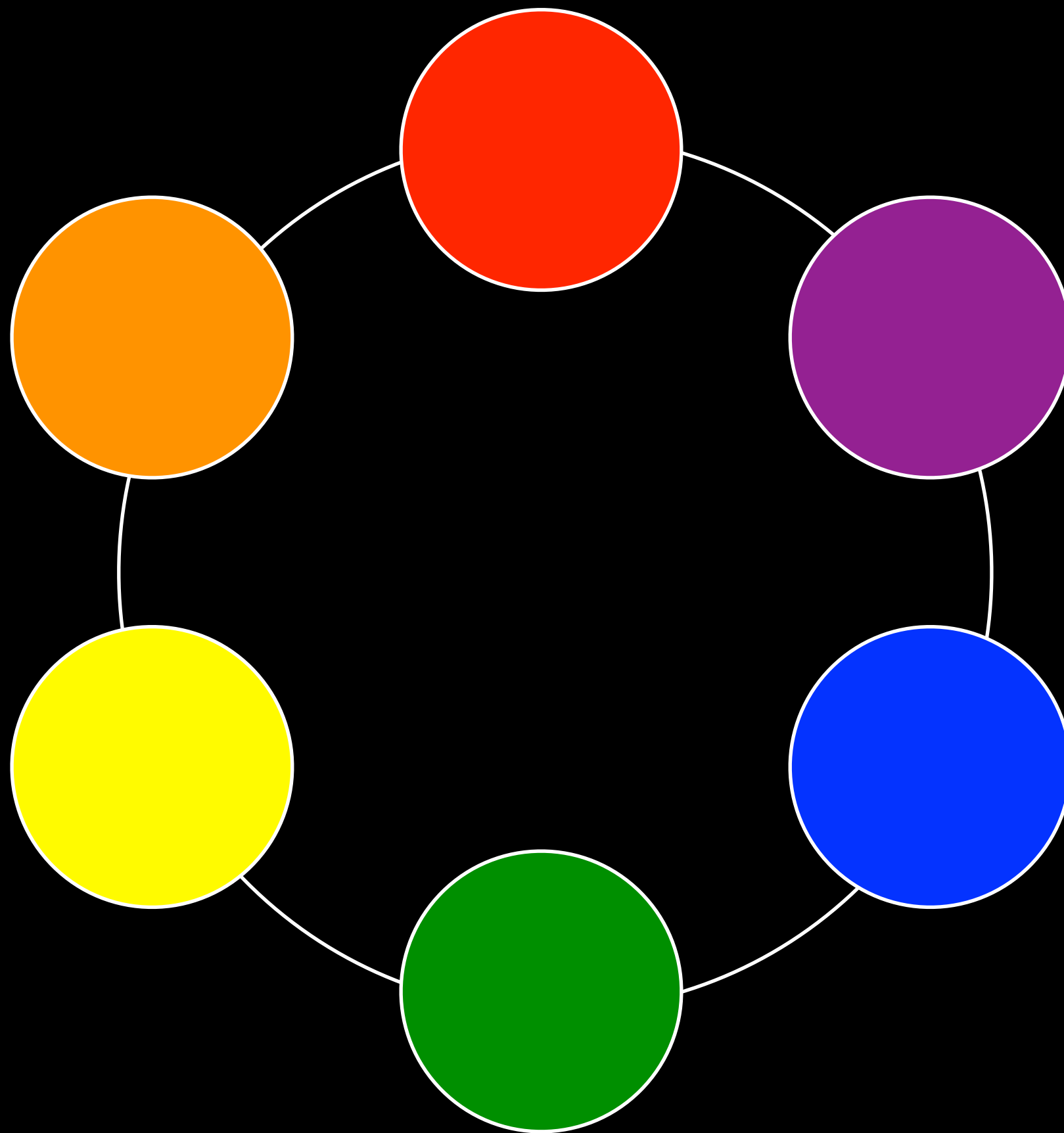
# Simple Color Theory

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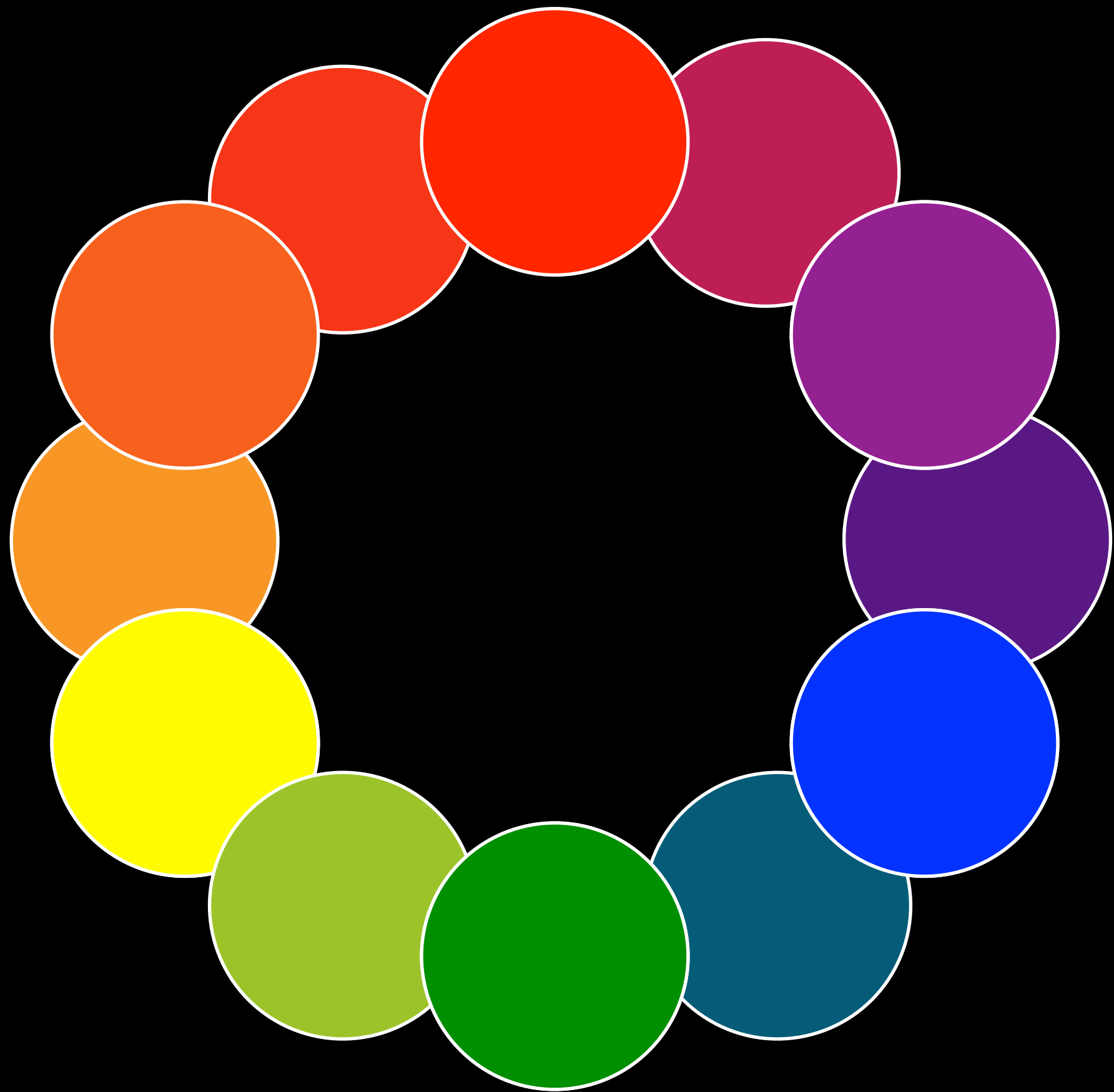
Flores

# The Color Wheel

A color circle, based on red, yellow and blue, is traditional in the field of art. Sir Isaac Newton developed the first circular diagram of colors in 1666. Since then, scientists and artists have studied and designed numerous variations of this concept.



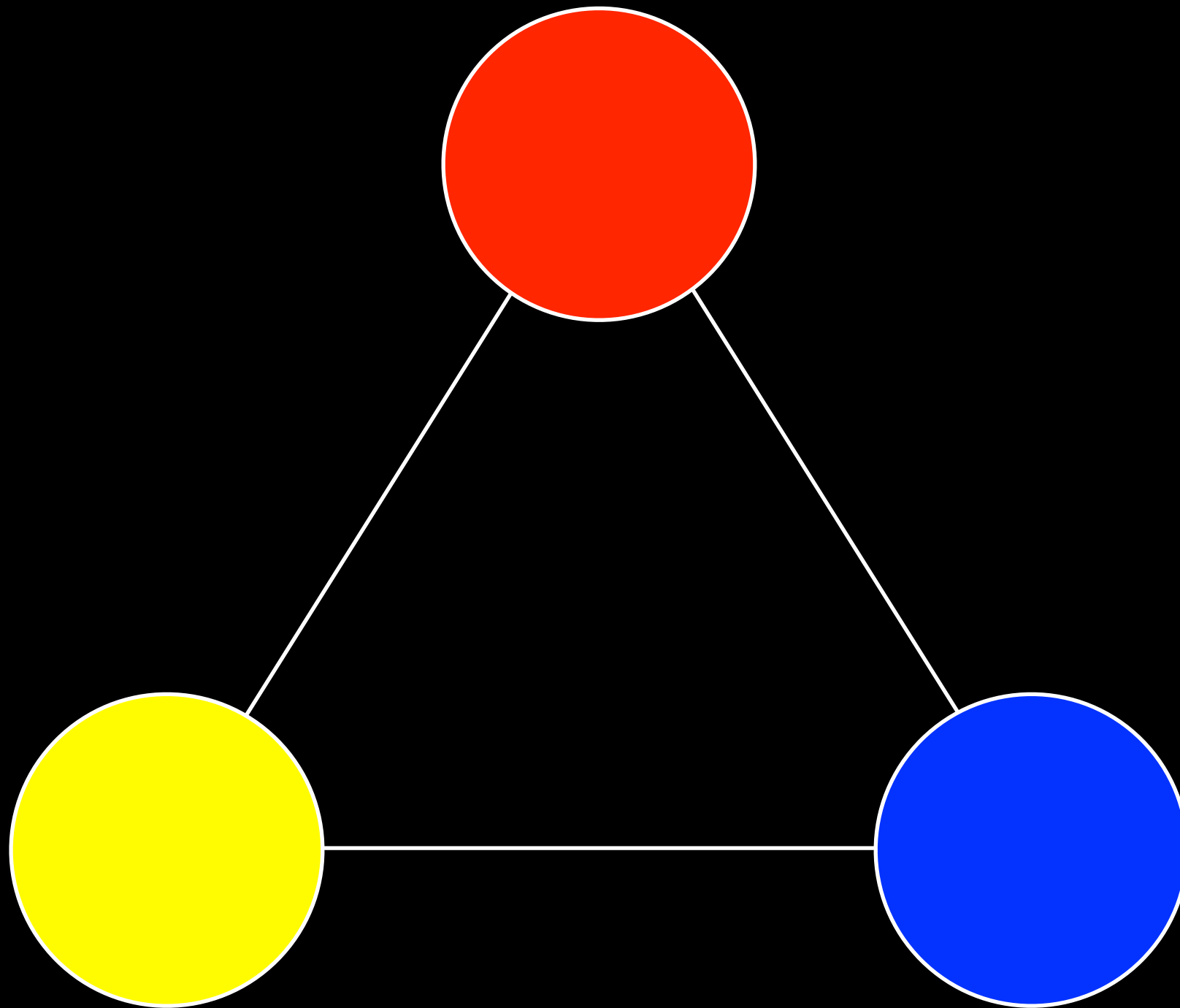
The basic color wheel



The 12 part color wheel

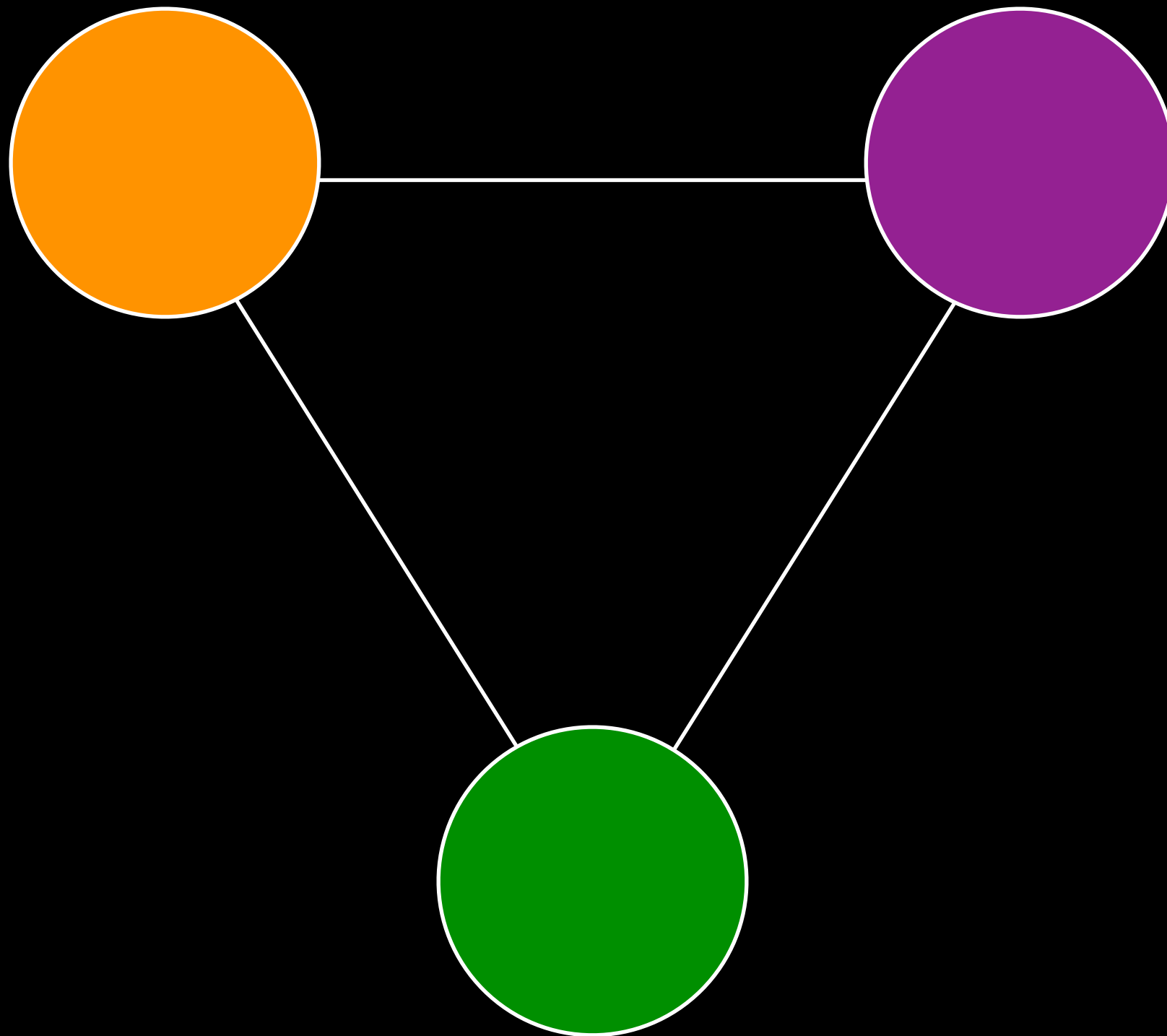
# Primary Colors?

The colors from which all other colors may be derived



# Secondary Colors?

A color resulting from the mixing of two primary colors.



Orange, Purple, and Green



What about  
Black and White?

- When dealing with light, Black is the absence of color  
- When dealing with paint, black is all the colors combined

- When dealing with light, White is the blending of all colors  
- When dealing with paint, white is the absence of pigment

Black is not a color– Black objects absorb all the colors of the visible spectrum and reflect none of them to our eyes.

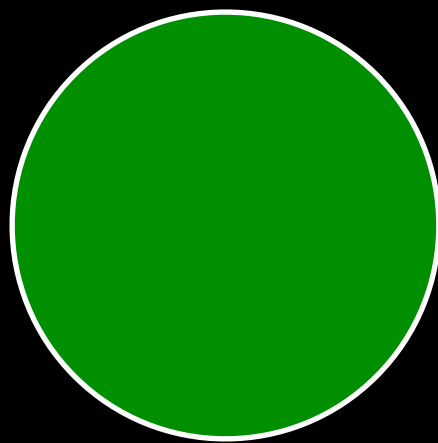
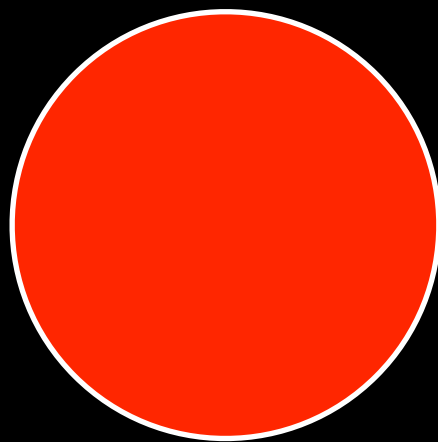
White is a color– It reflects all the colors of the visible light spectrum to our eyes.

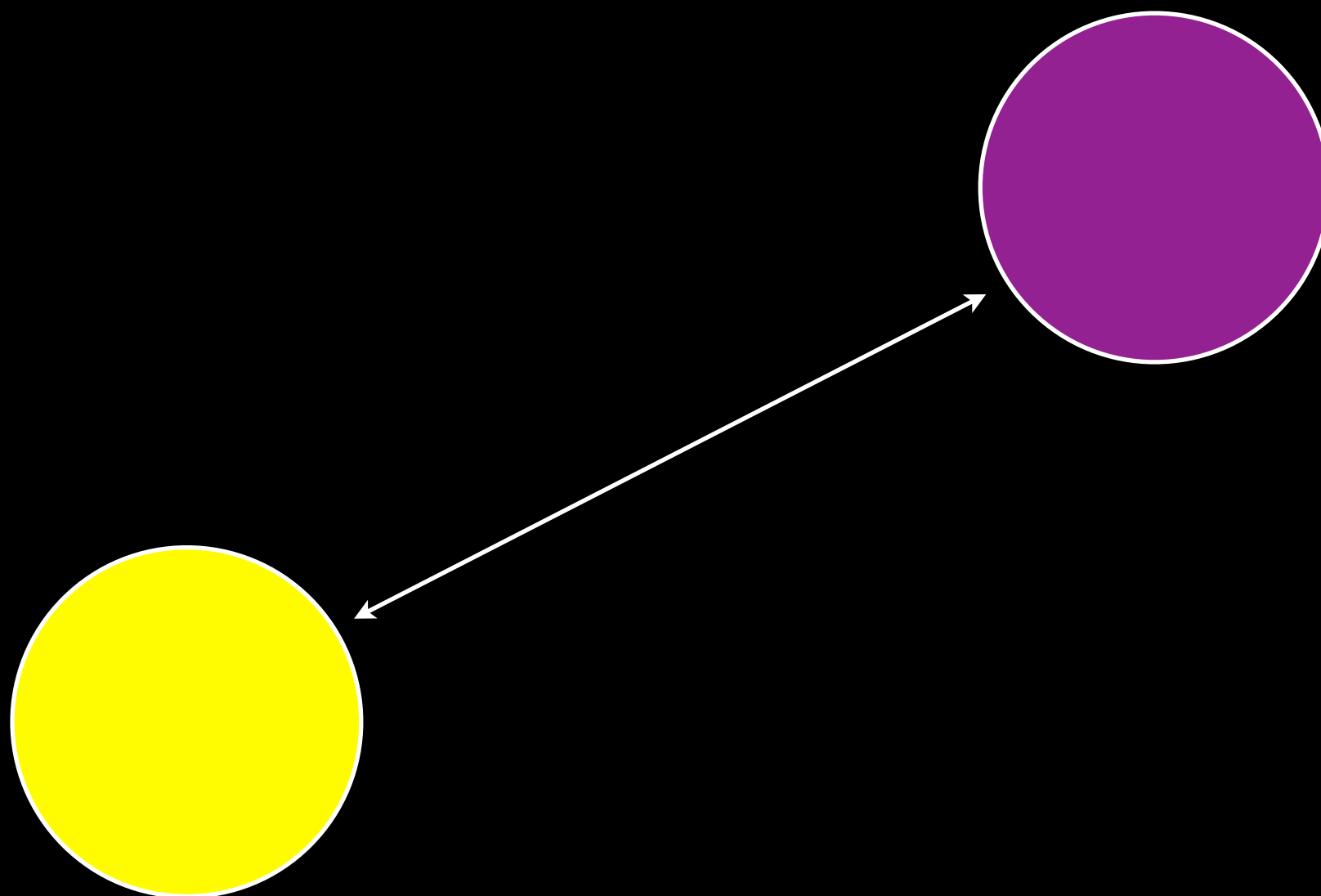
# Color Harmony

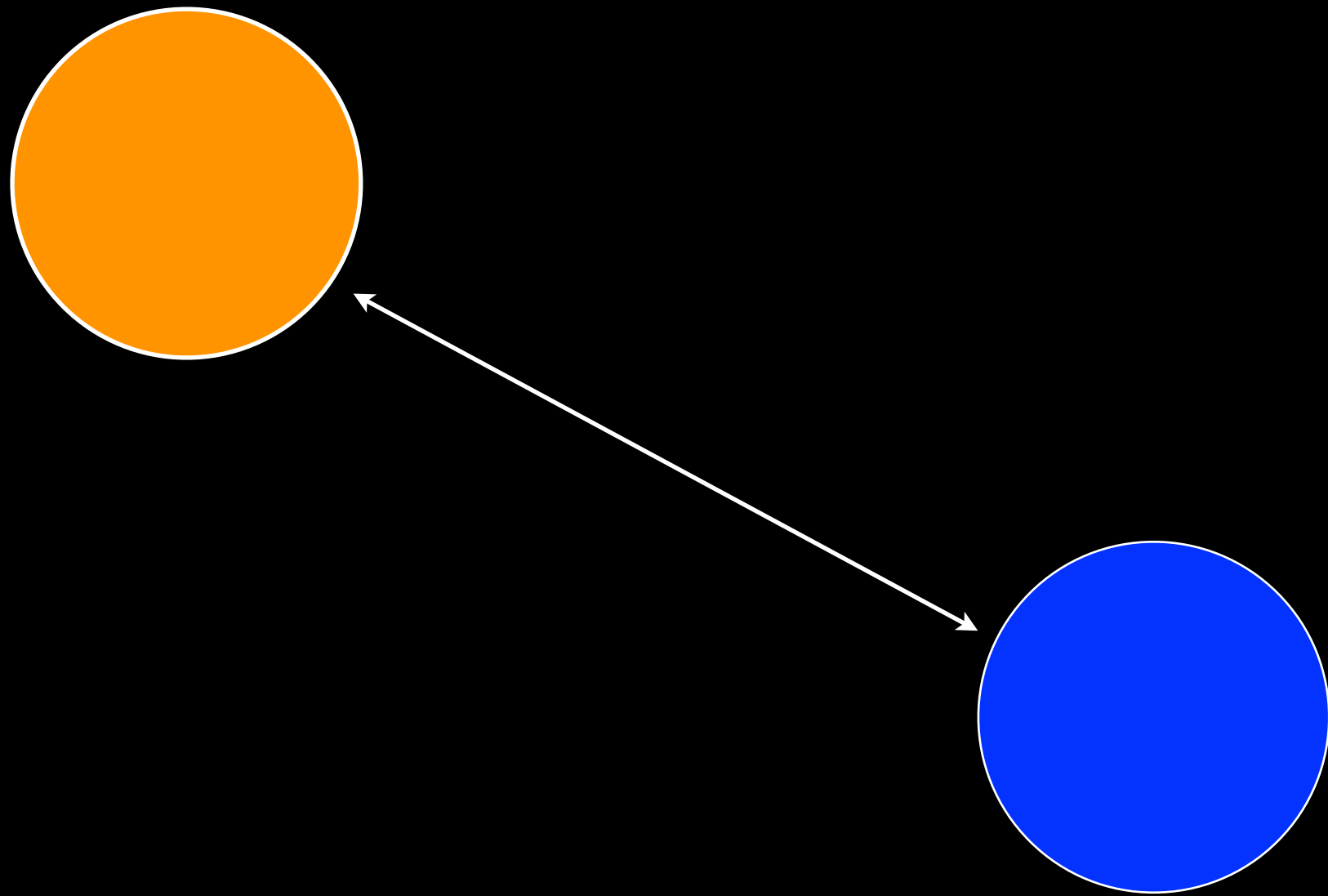
*What we find pleasing to the eye*

# Complementary Colors?

Complementary colors are any two colors which are directly opposite each other on the color wheel.



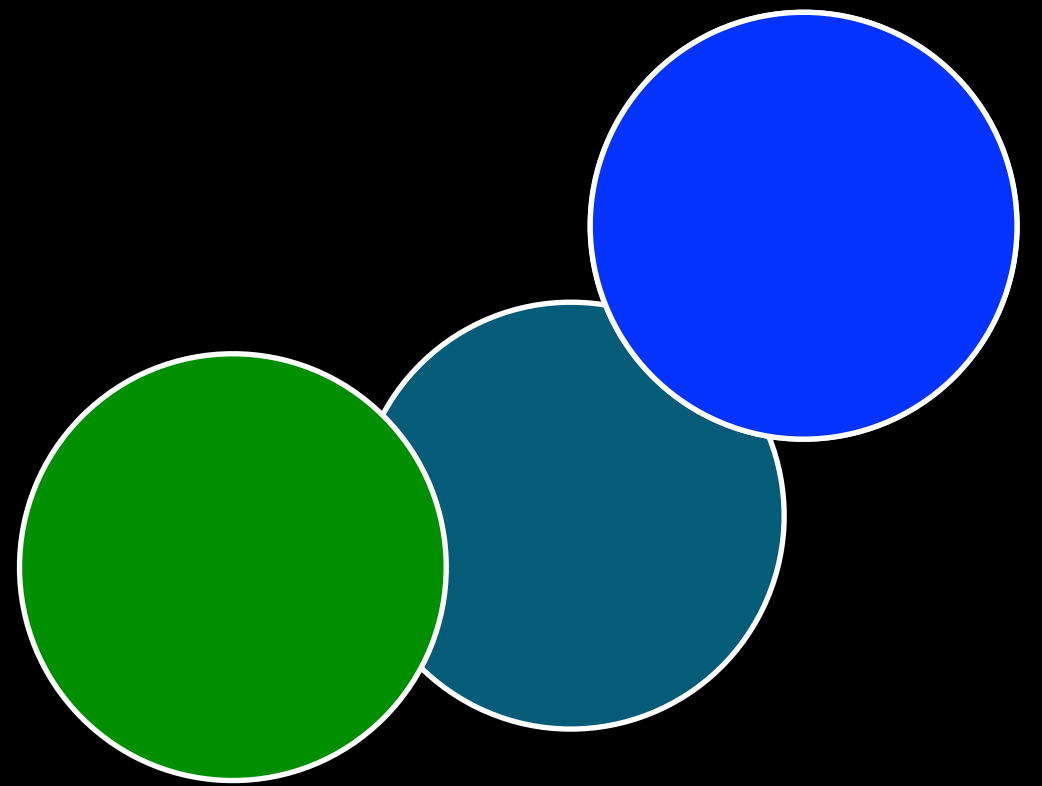
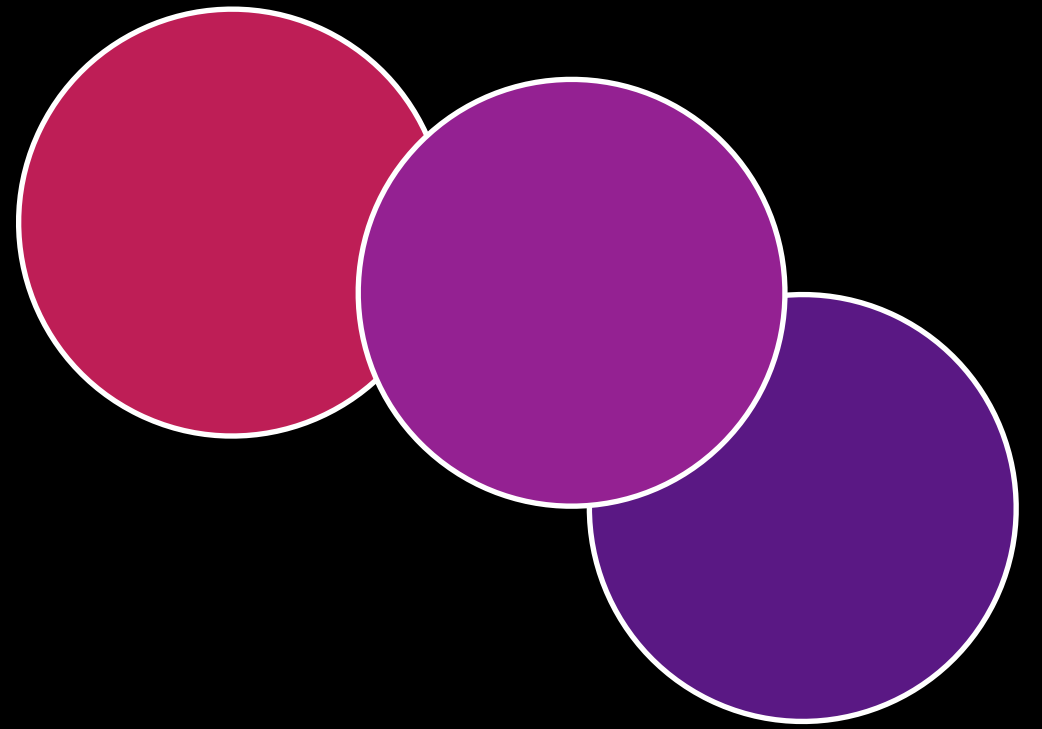
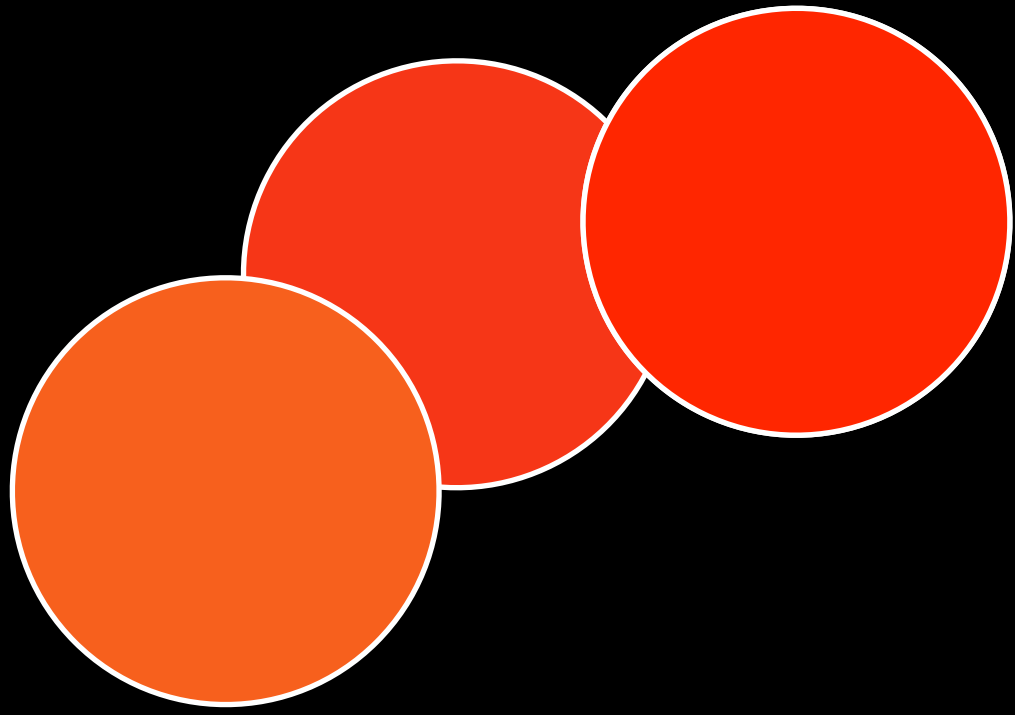




# Analogous Colors?

Analogous colors are any three colors which are next to each other on the color wheel.

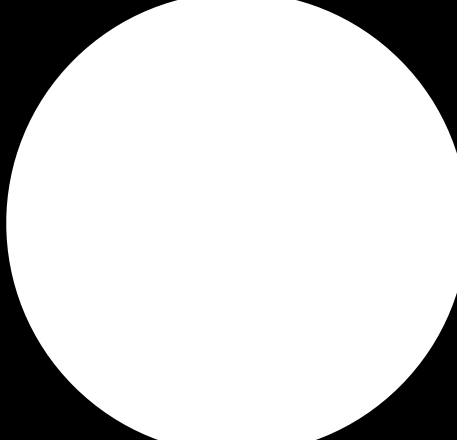
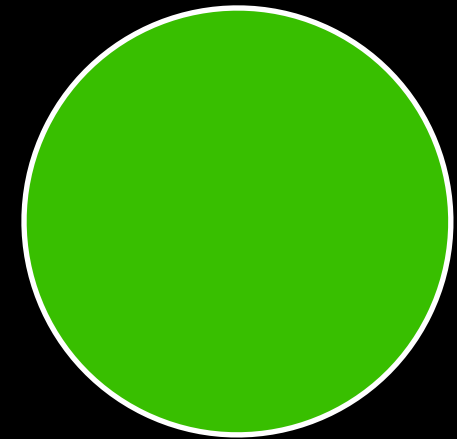
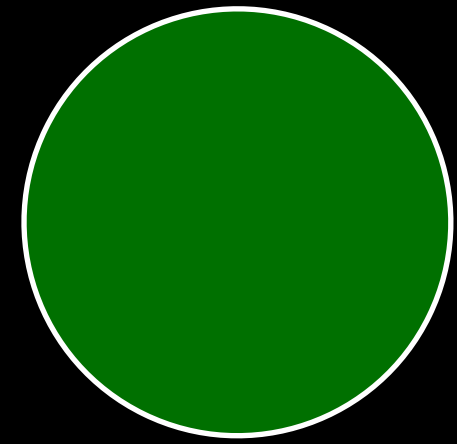
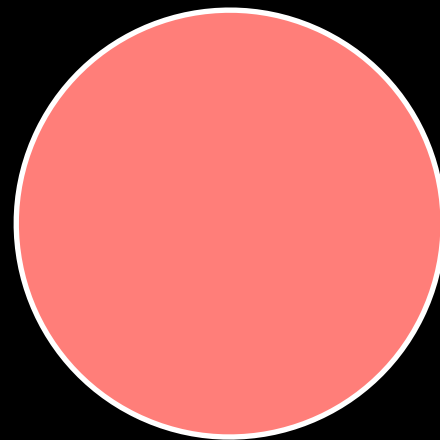
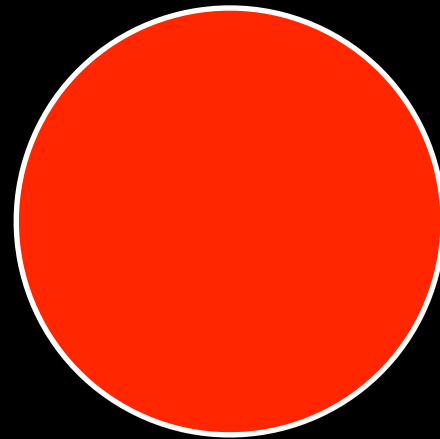
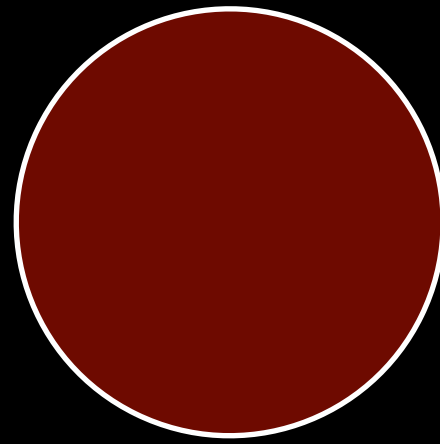
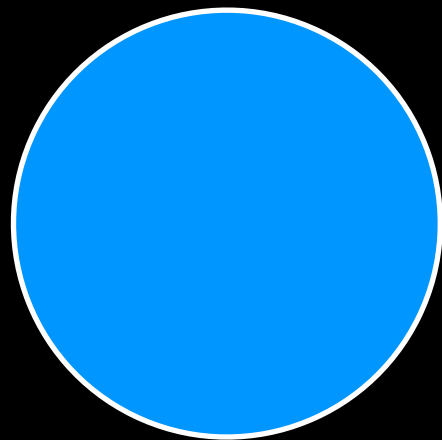
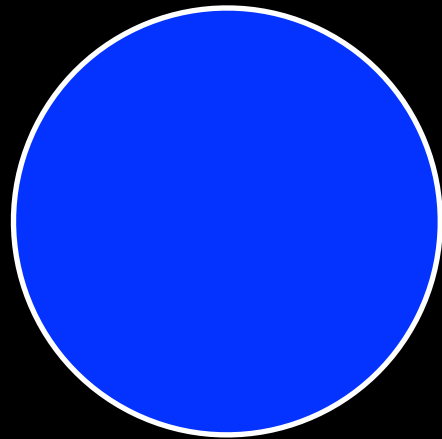
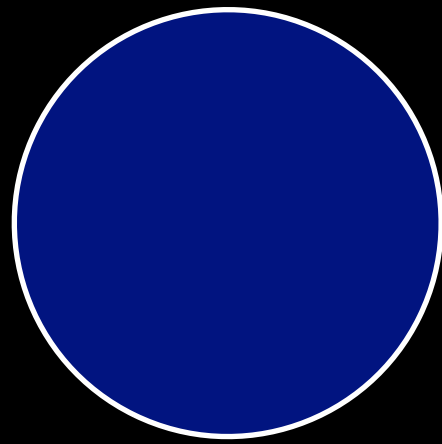




# Monochromatic Colors?

A monochromatic color scheme uses variations in lightness and saturation of a single color.

**HINT:** Mono = ONE , Chroma = COLOR



A monochromatic color scheme uses variations in lightness and saturation of a single color.

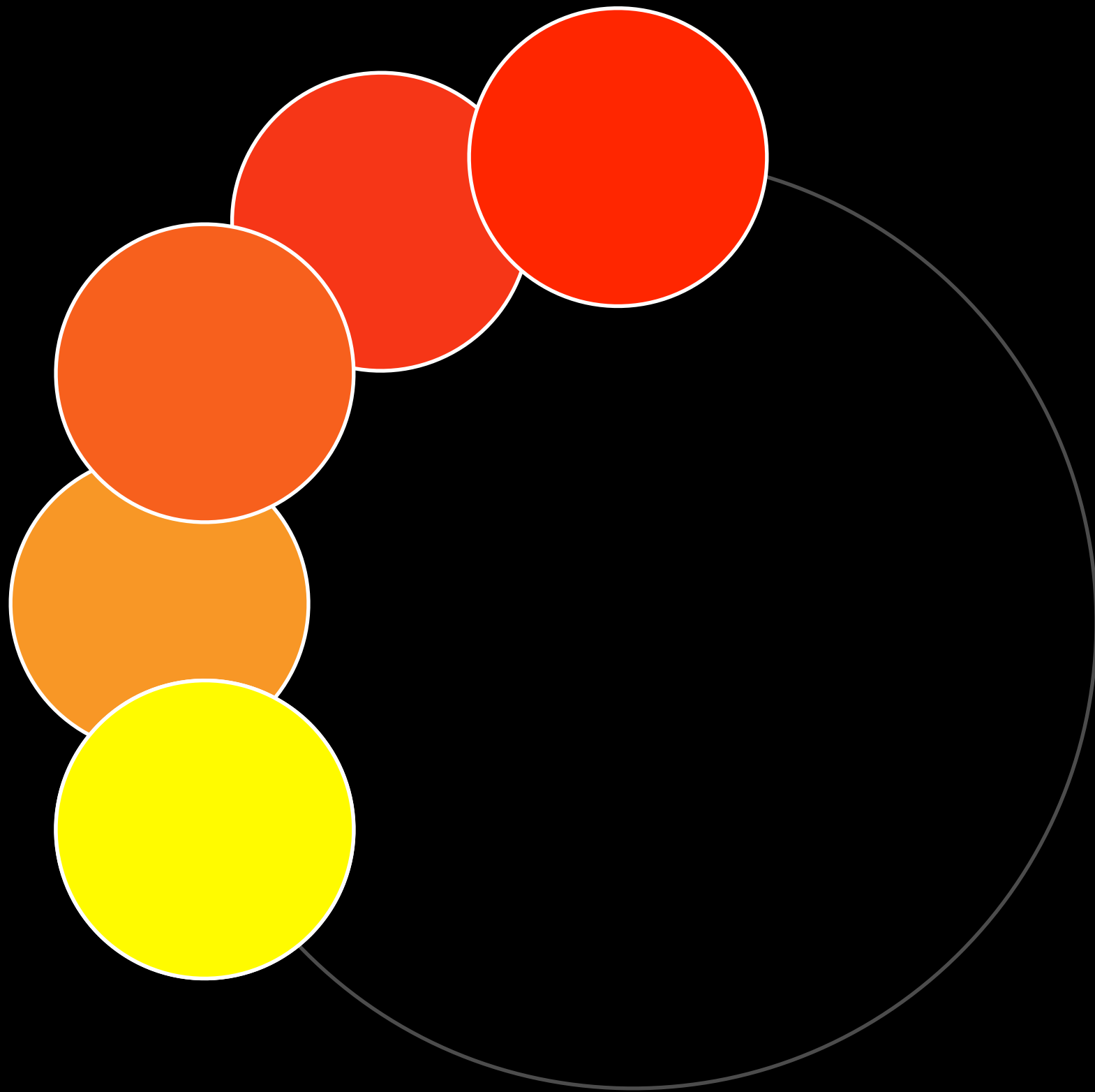
# Color affects Mood

Color has a physical effect on the human body and can directly effect our moods. As artist we use this tool to elicit a response from the viewer.

# Warm | Active Colors?

Active colors will appear to advance when placed against passive hues.

Most often warm, saturated, light value hues are "active" and visually advance.



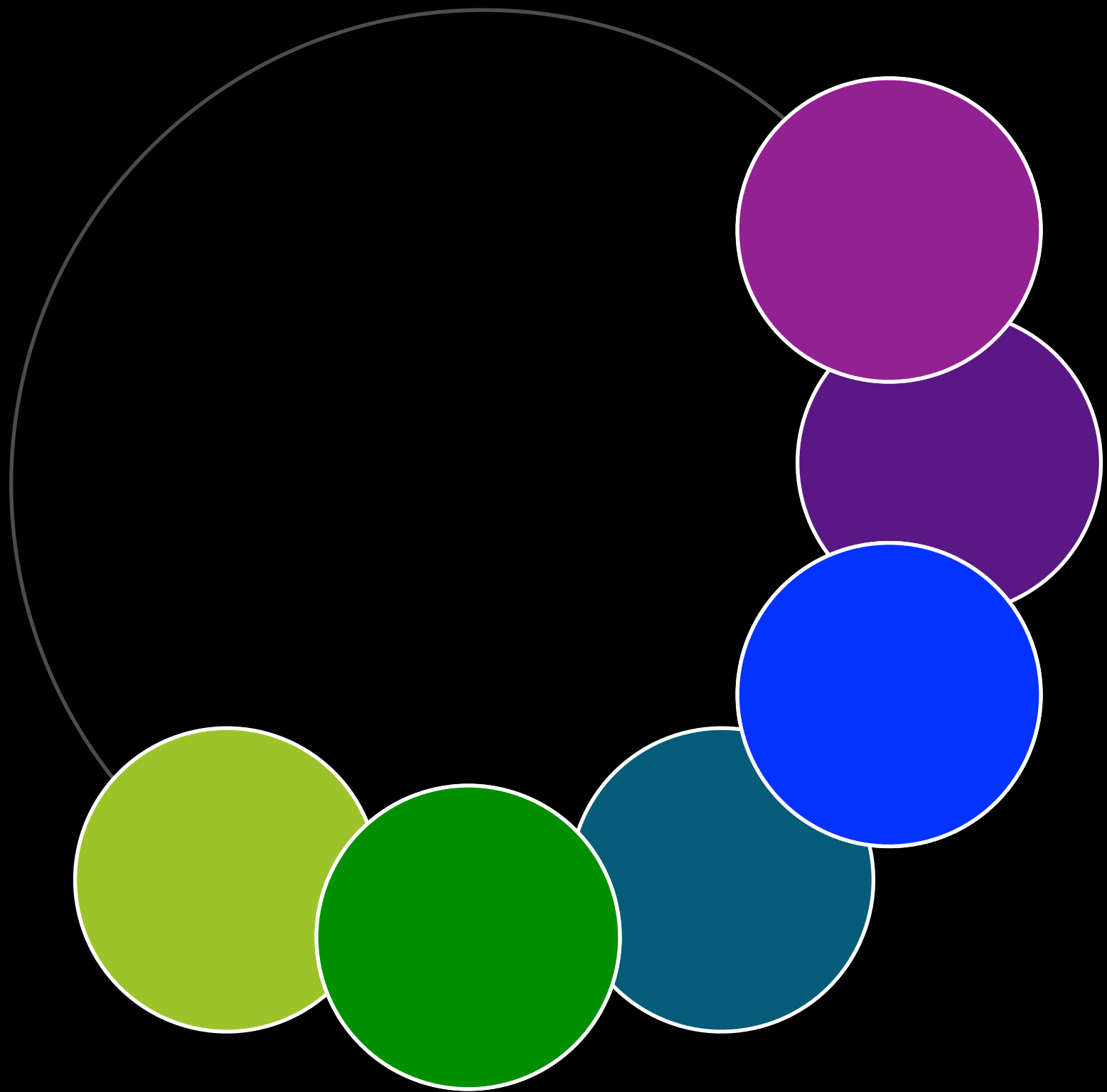
Active colors will appear to advance when placed against passive hues.

Most often warm, saturated, light value hues are "active" and visually advance.

# Cool | Passive Colors?

Passive colors appear to recede when positioned against active hues.

Cool, low saturated, dark value hues are "passive" and visually recede.



Active colors will appear to advance when placed against passive hues.

Most often warm, saturated, light value hues are "active" and visually advance.



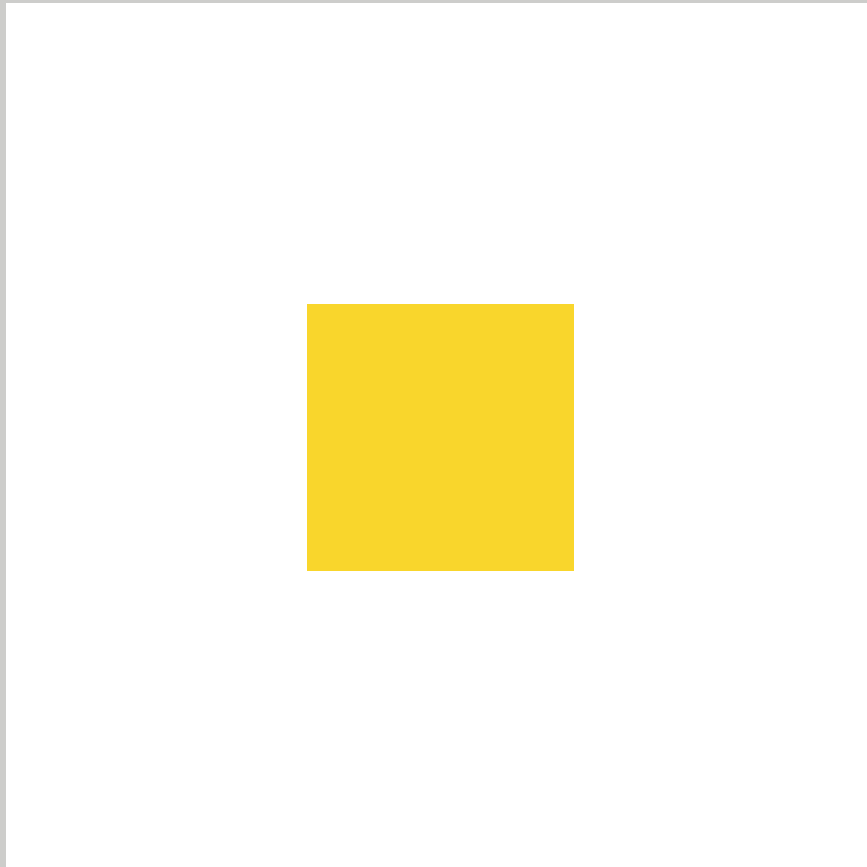
# Colors from Nature

The natural environment is a great place to find color combinations!



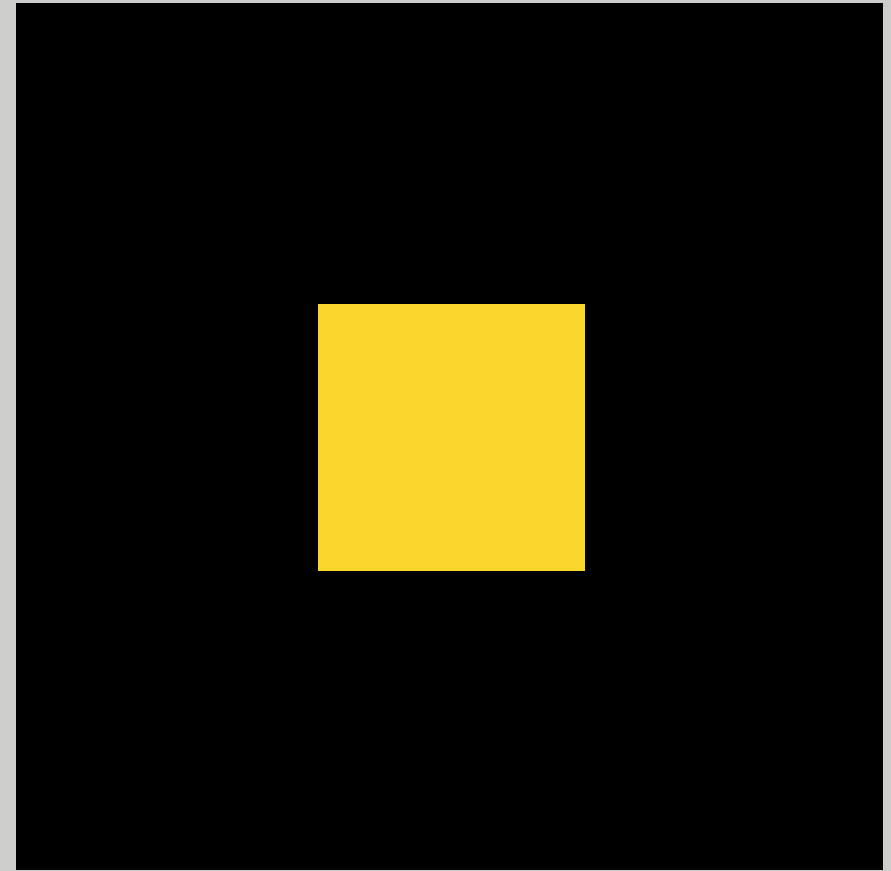
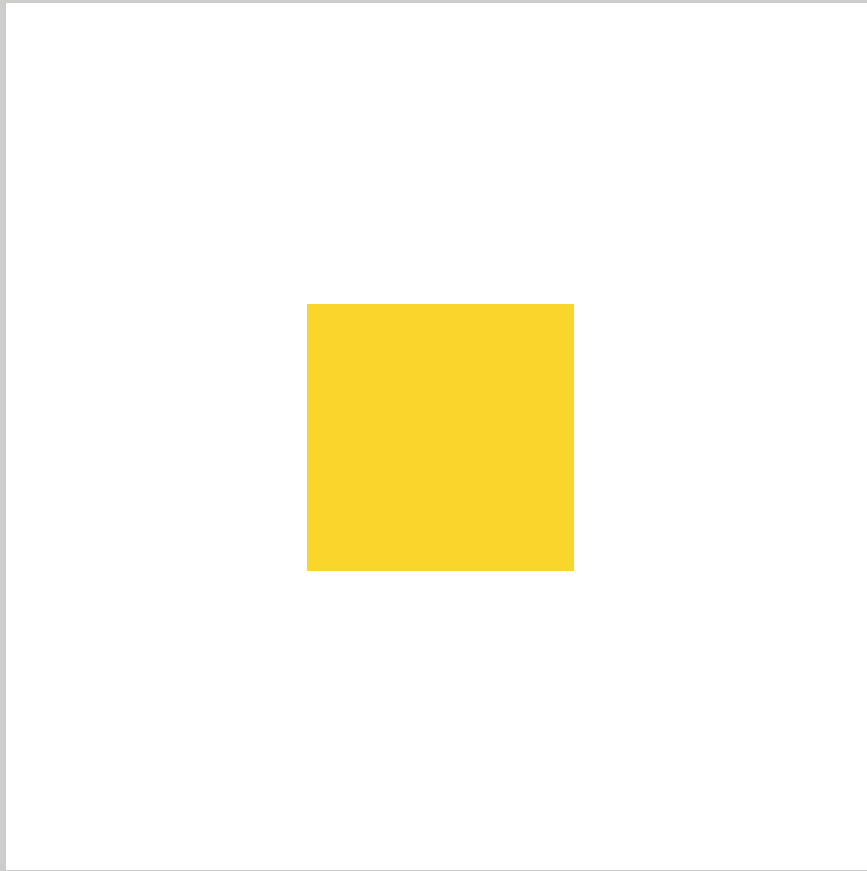
# Color Effects

Color is effected by its environment or by colors it is next to.



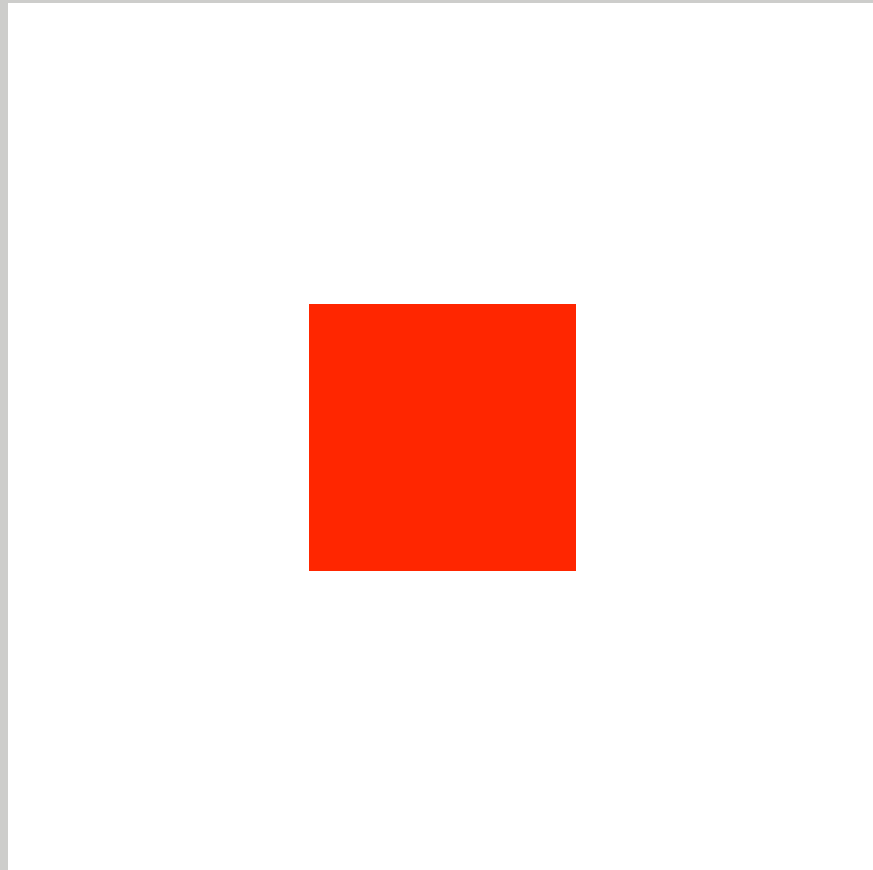
The yellow square looks darker and warmer with a white background and more brilliant and colder with a black background.

Additionally, black backgrounds are considered more formal / white backgrounds tend to be informal.



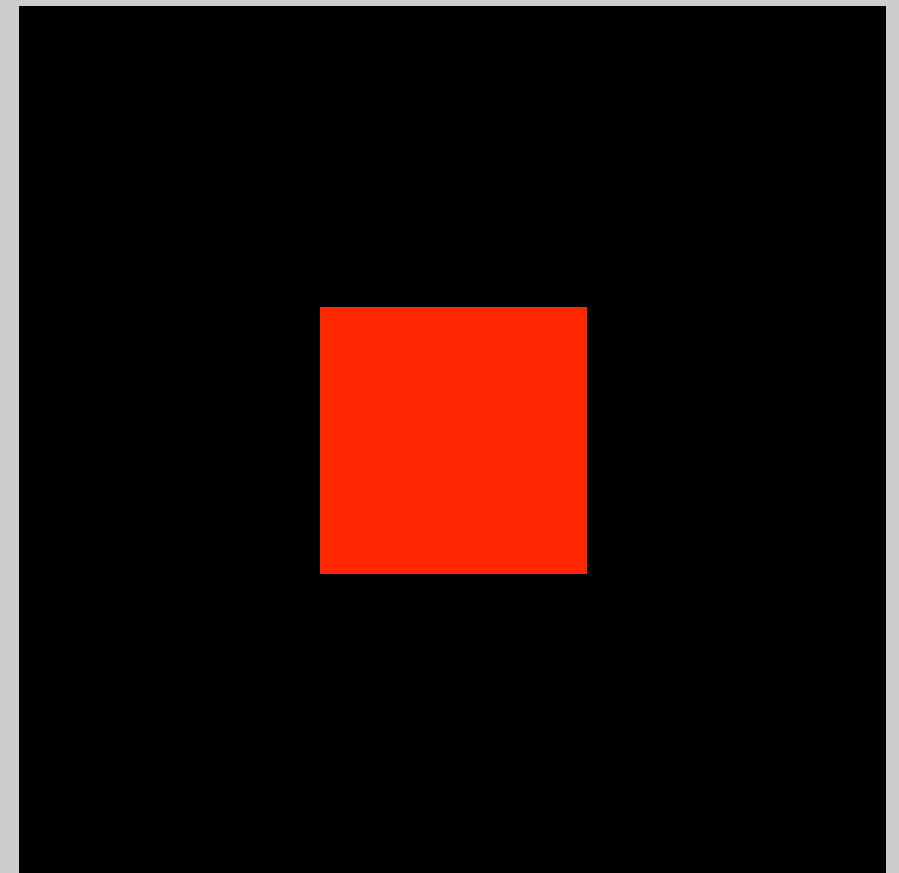
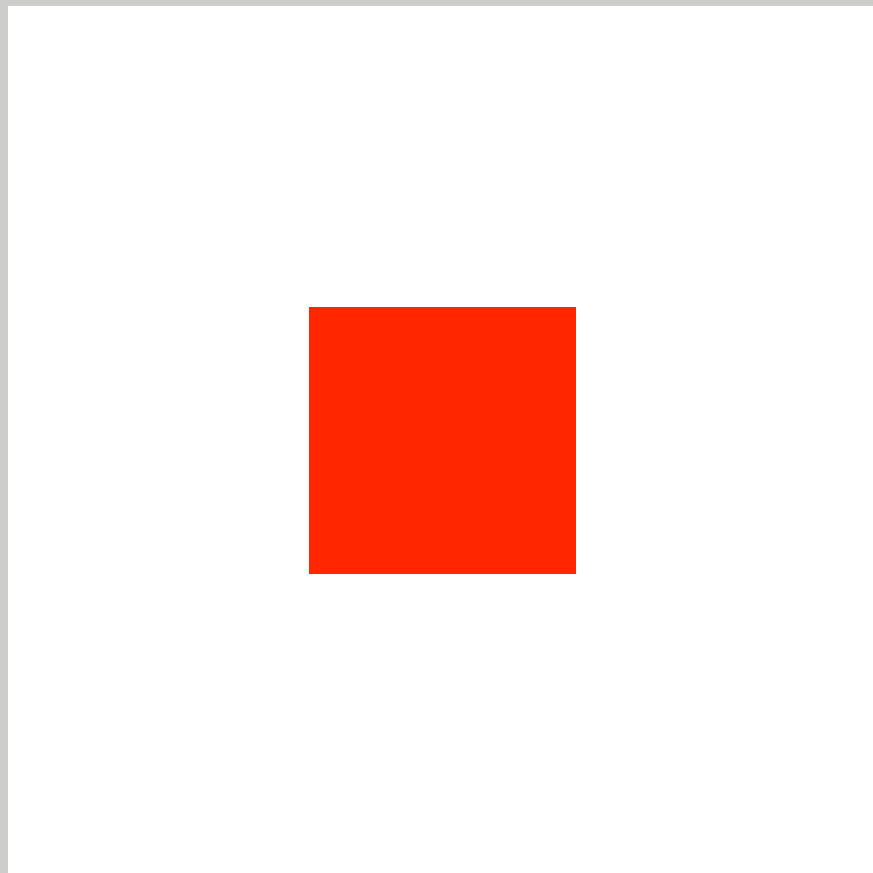
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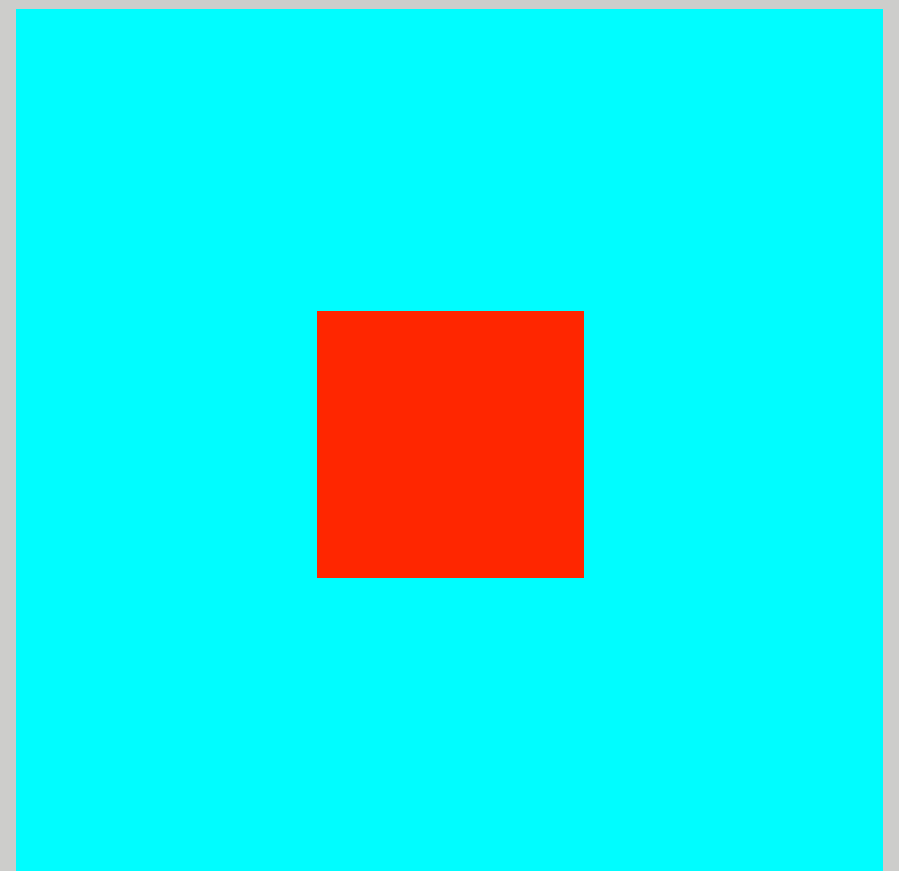
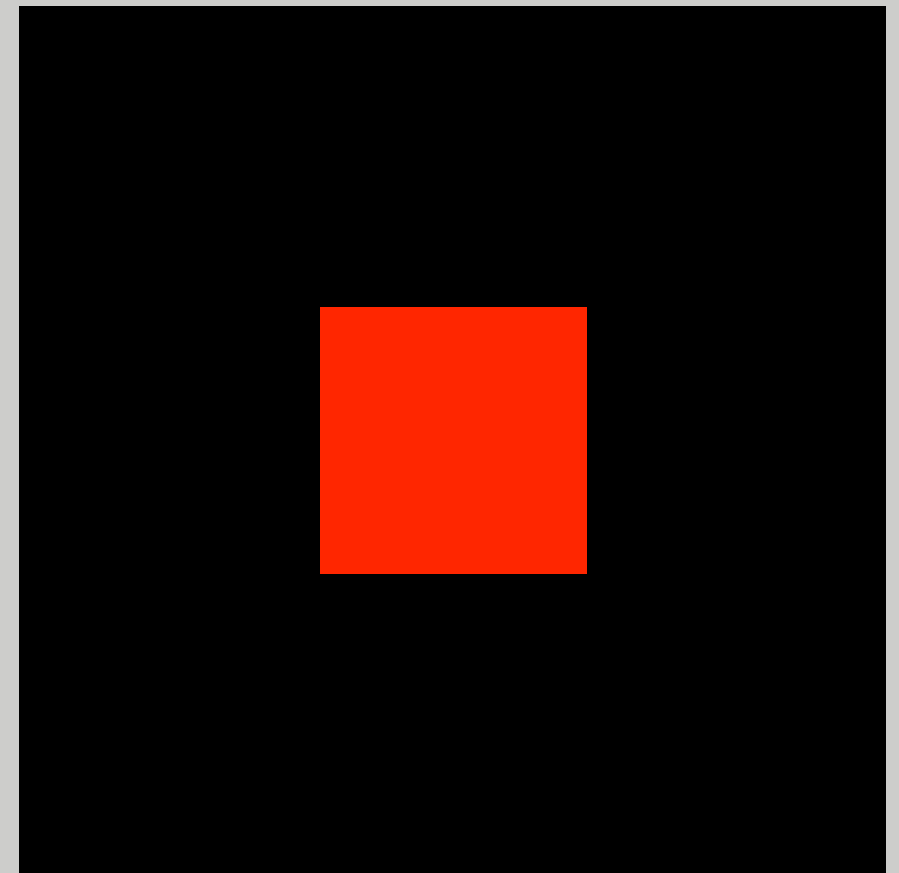
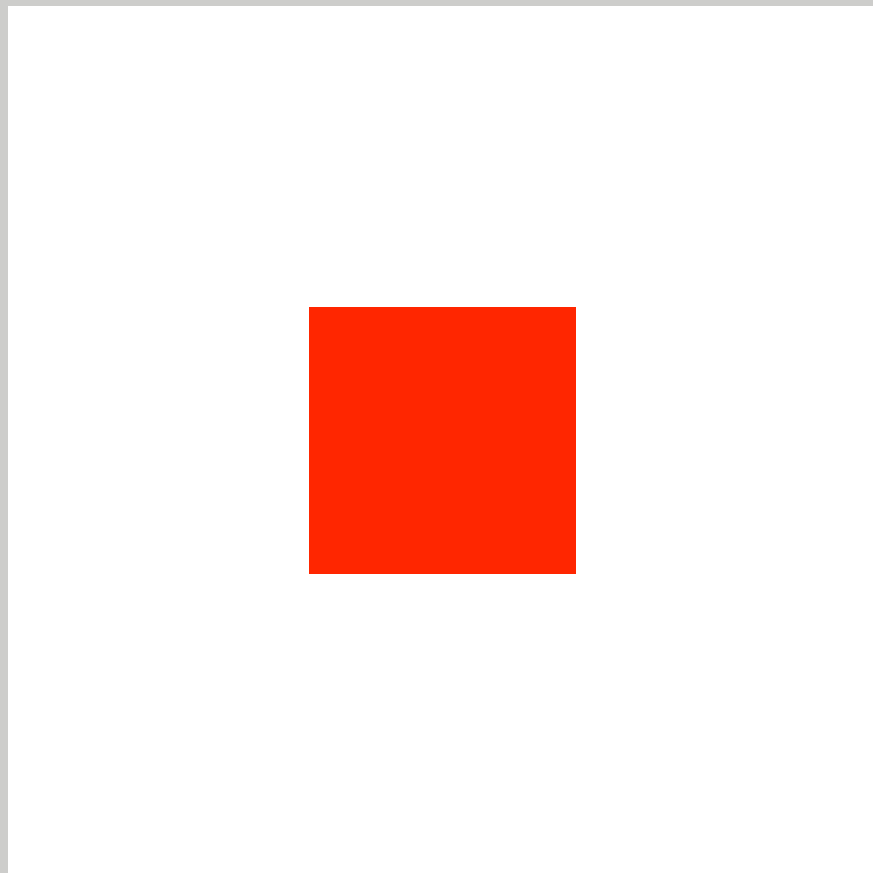
**Red** appears more brilliant against a black background and somewhat duller against the white background. In contrast with orange, the red appears lifeless; in contrast with blue-green, it exhibits brilliance.

Notice that the red square appears **larger on black** than on other background colors.



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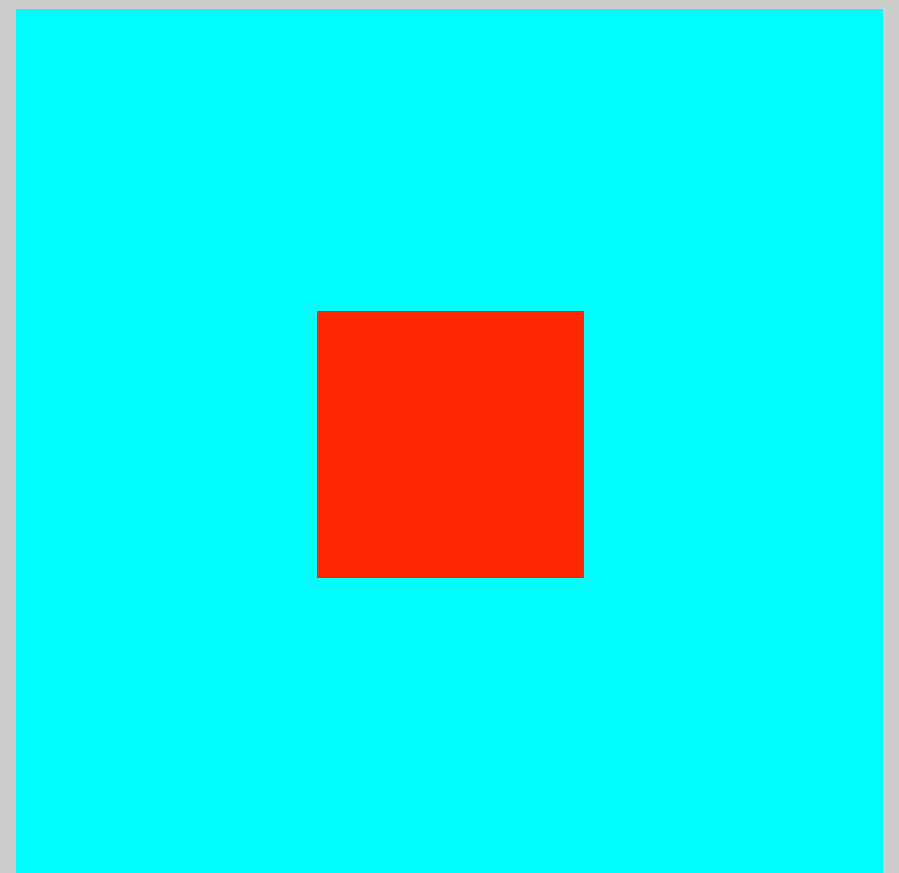
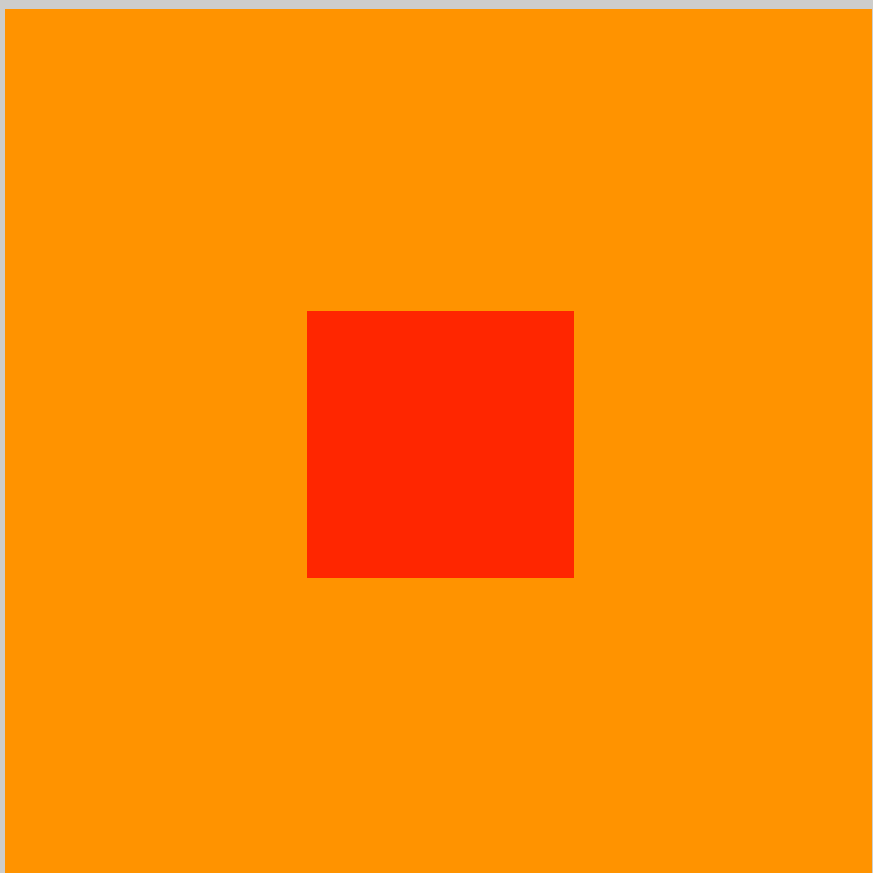
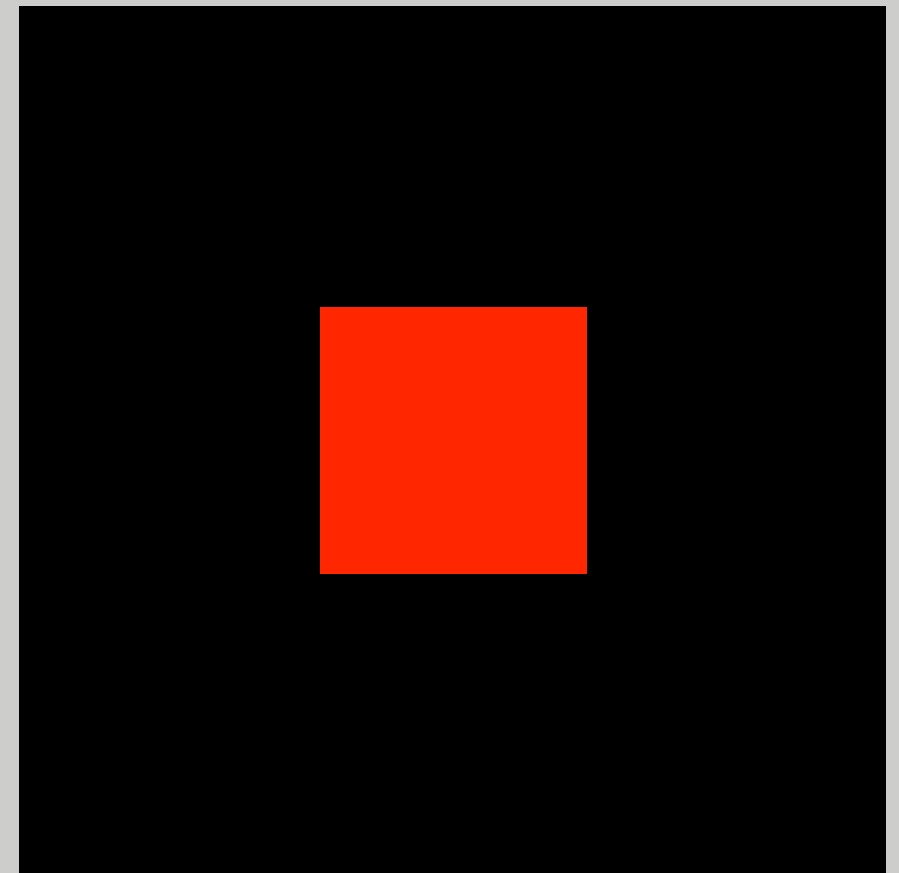
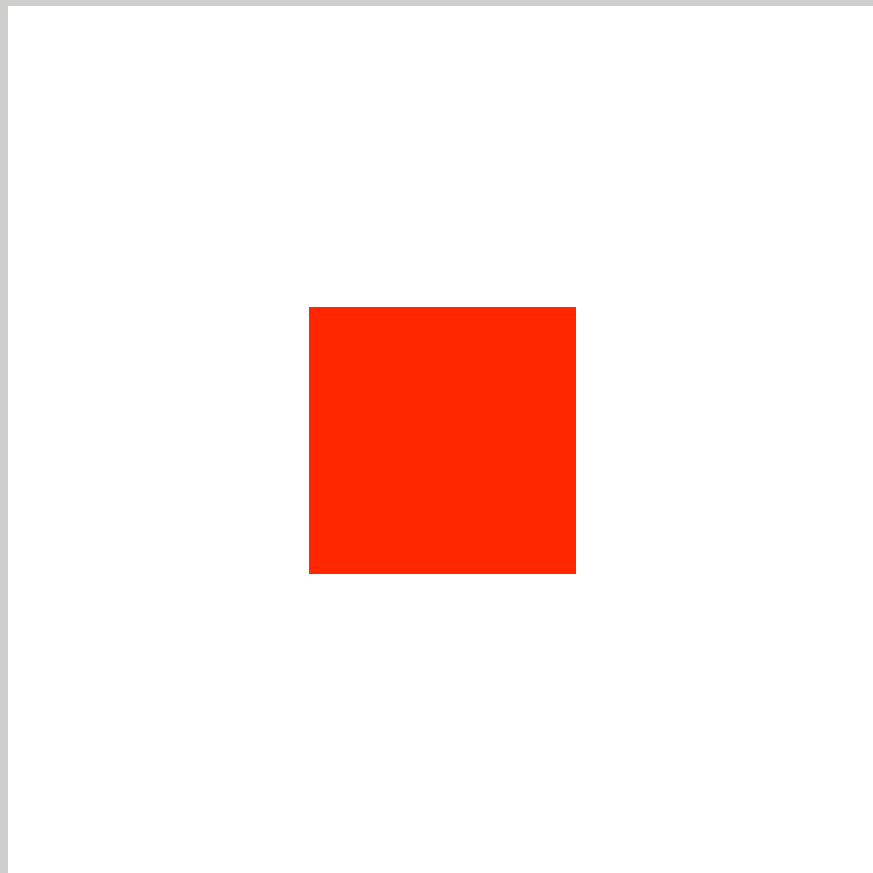
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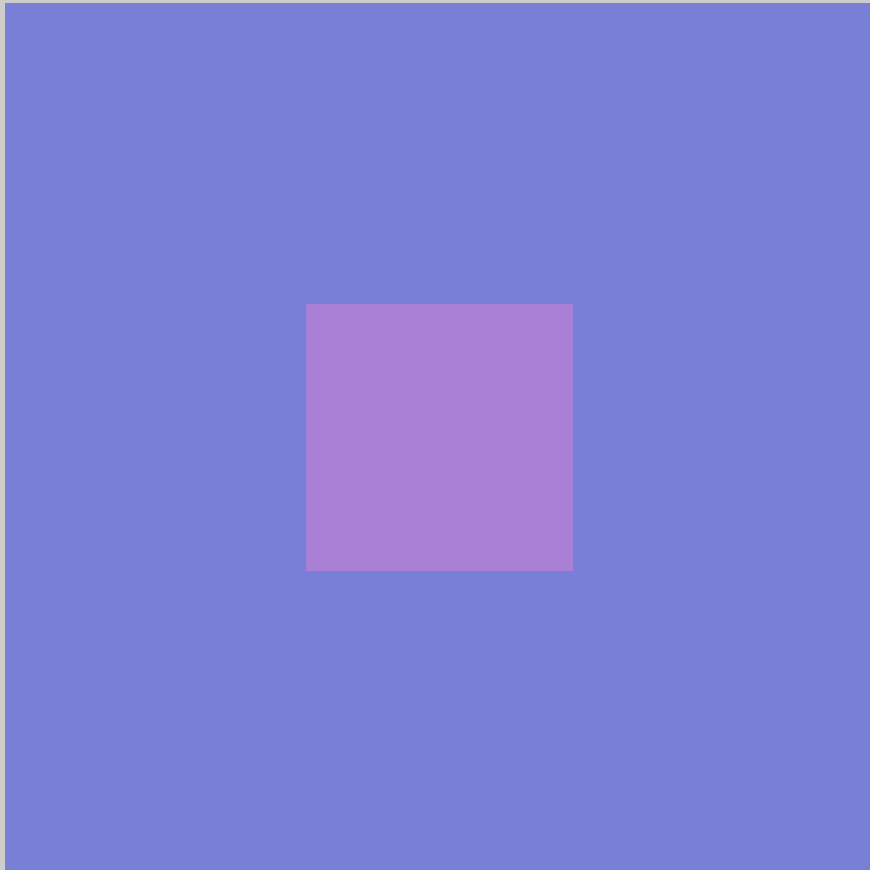
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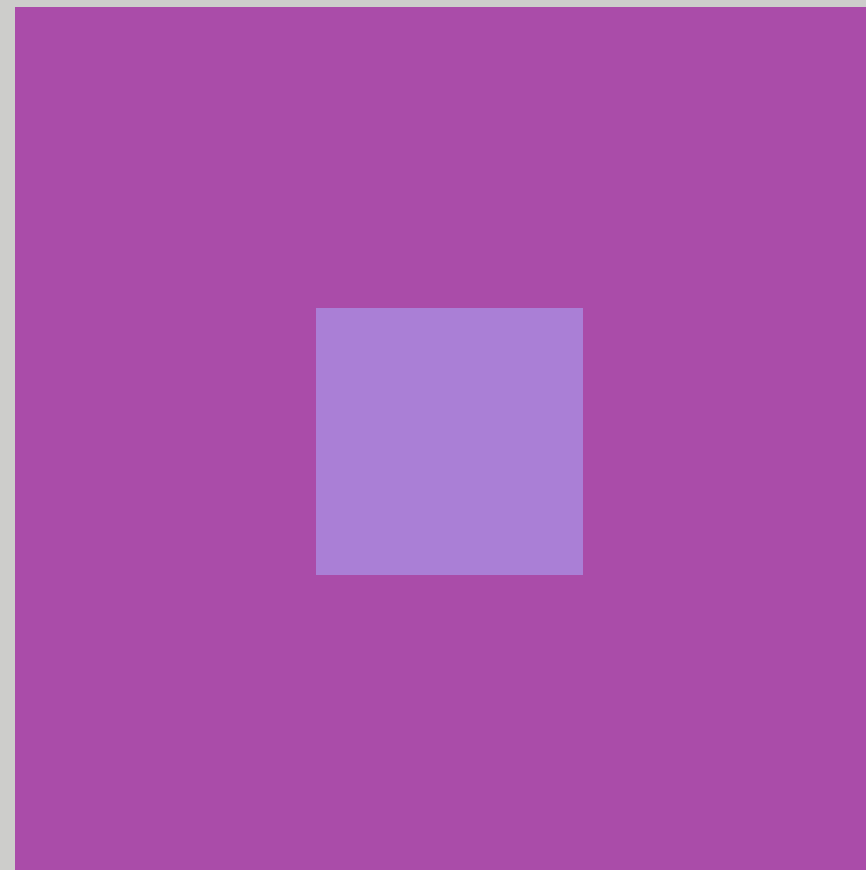
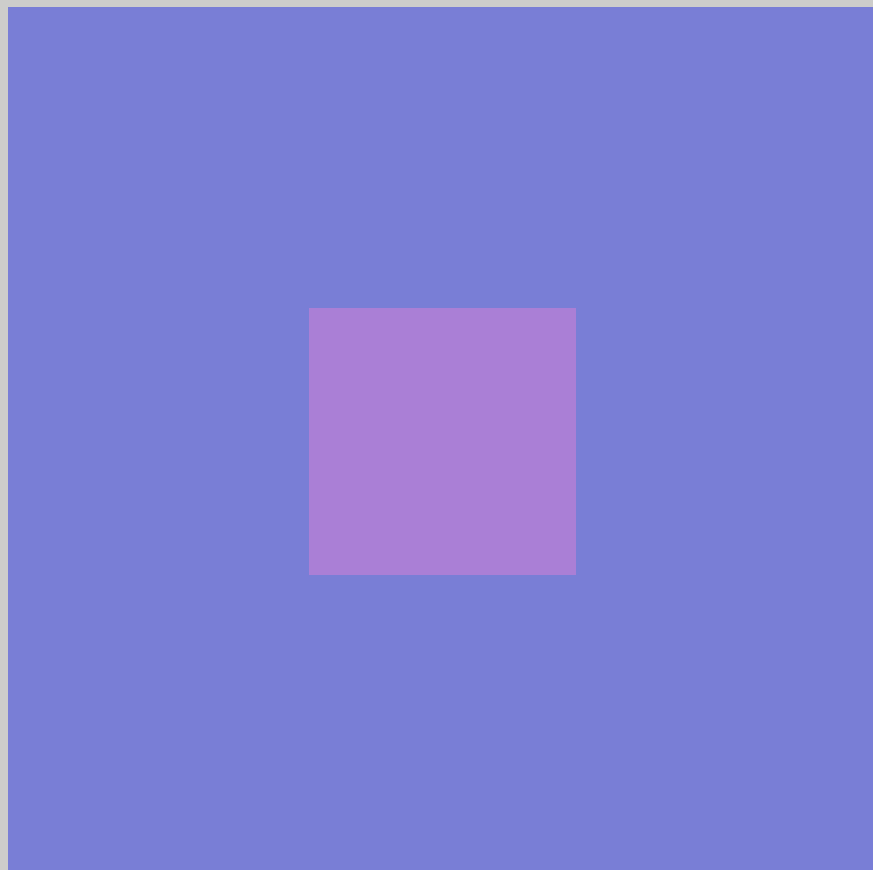
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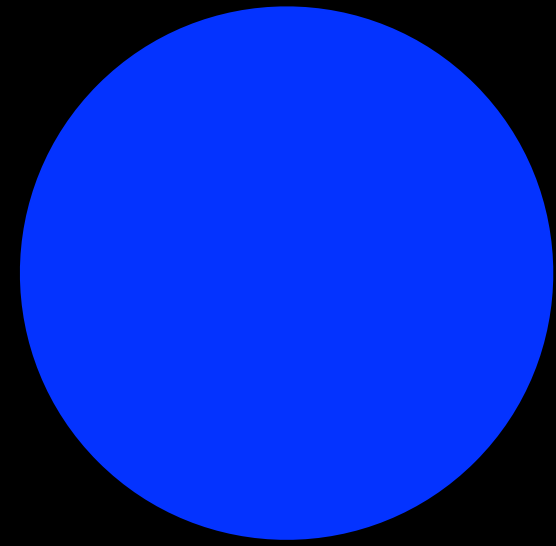
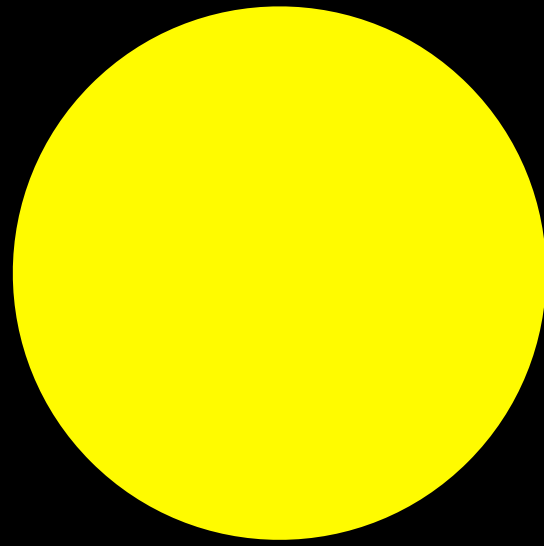
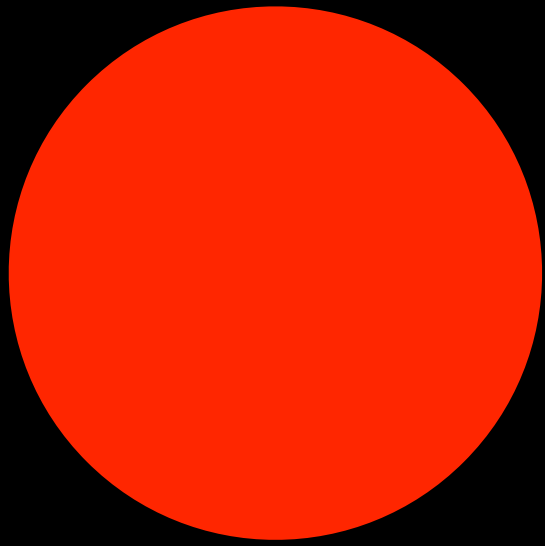
**What do you notice about the small square in the center?**

They are actually the same color, just effected by the field around it.

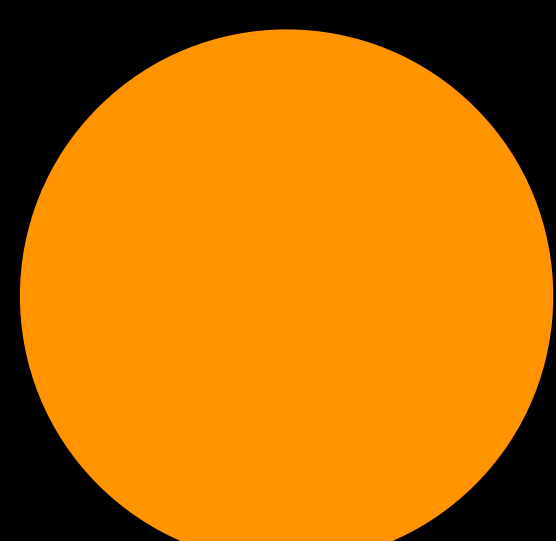
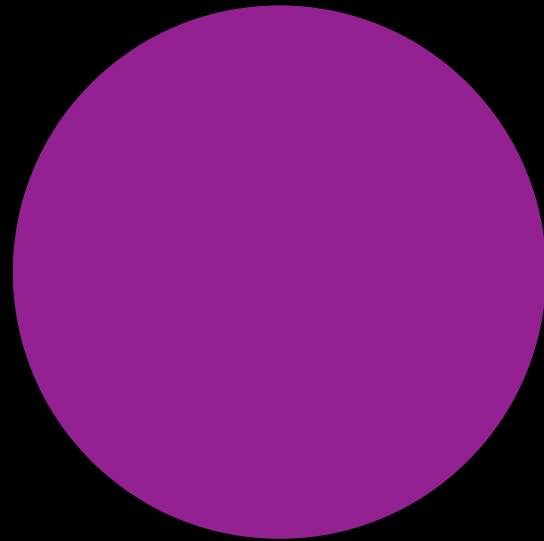
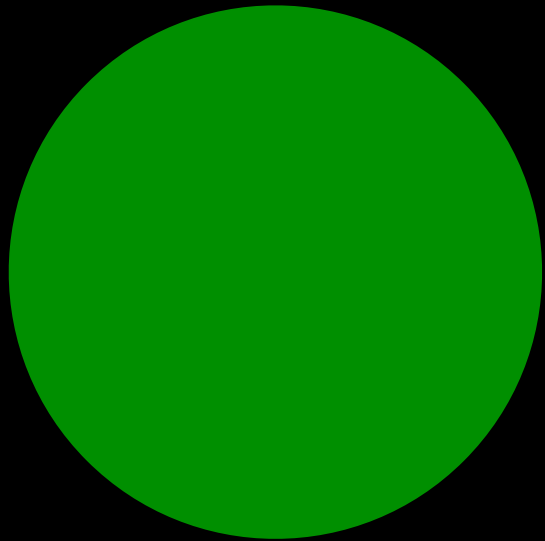


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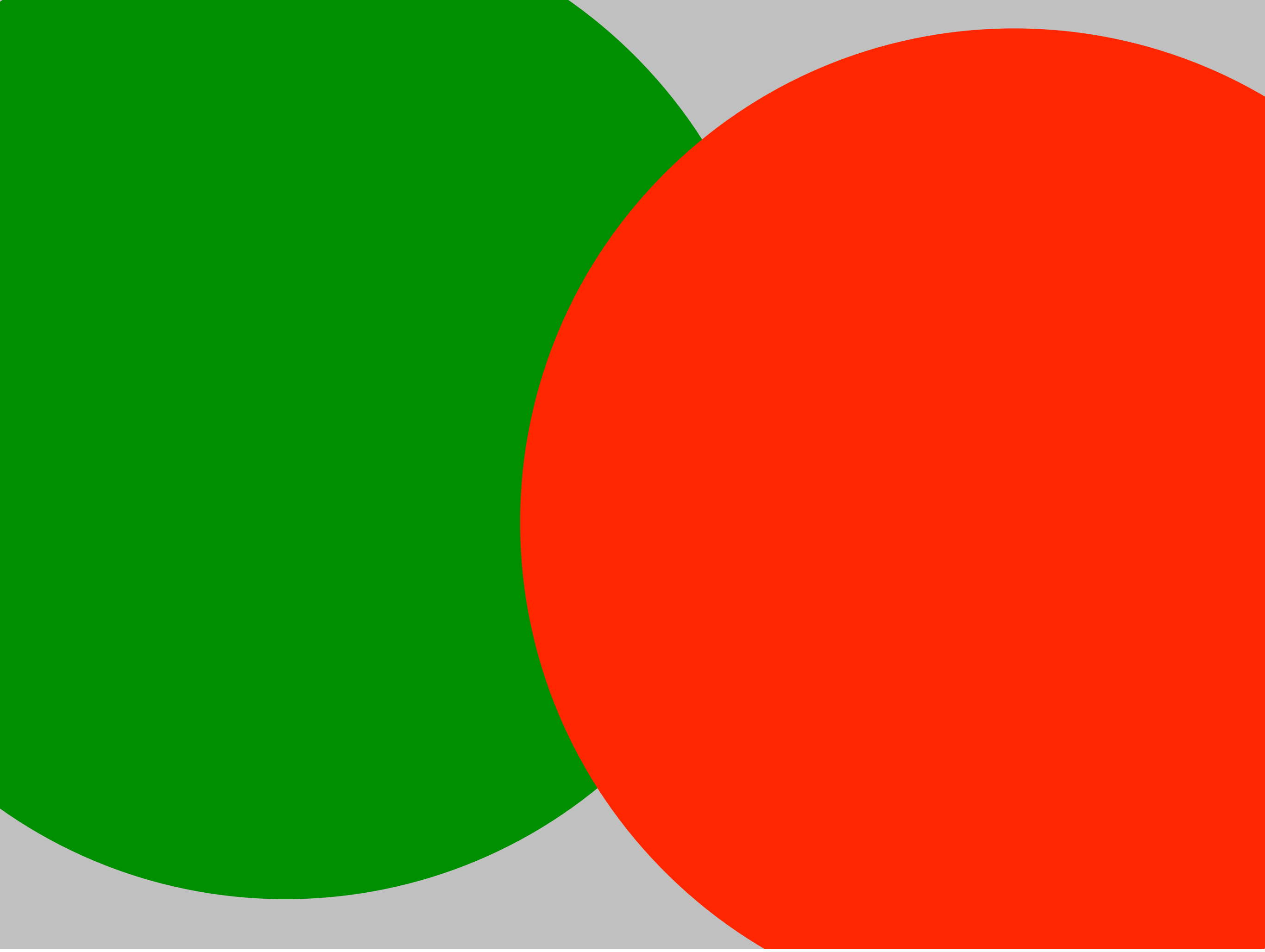
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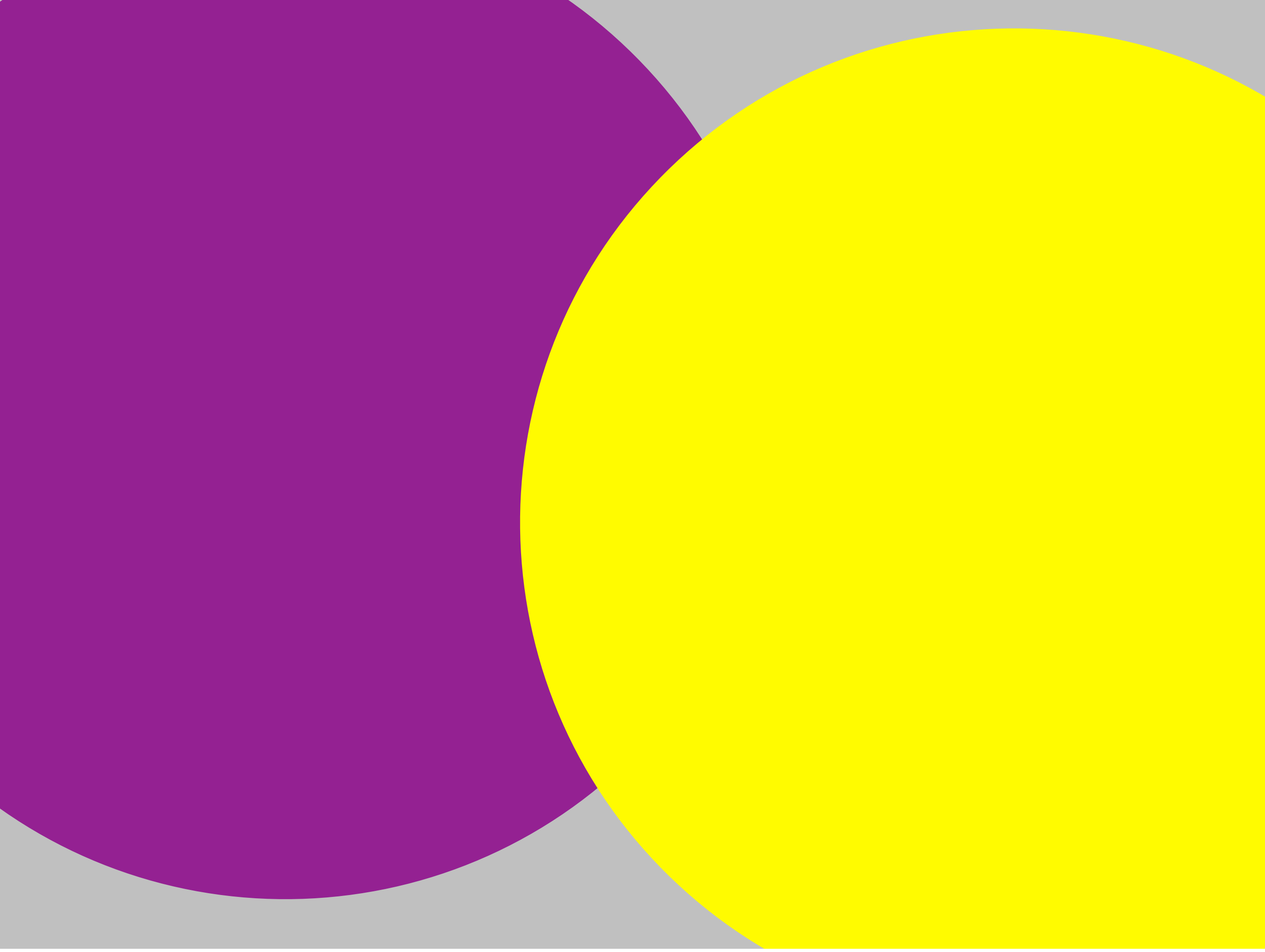


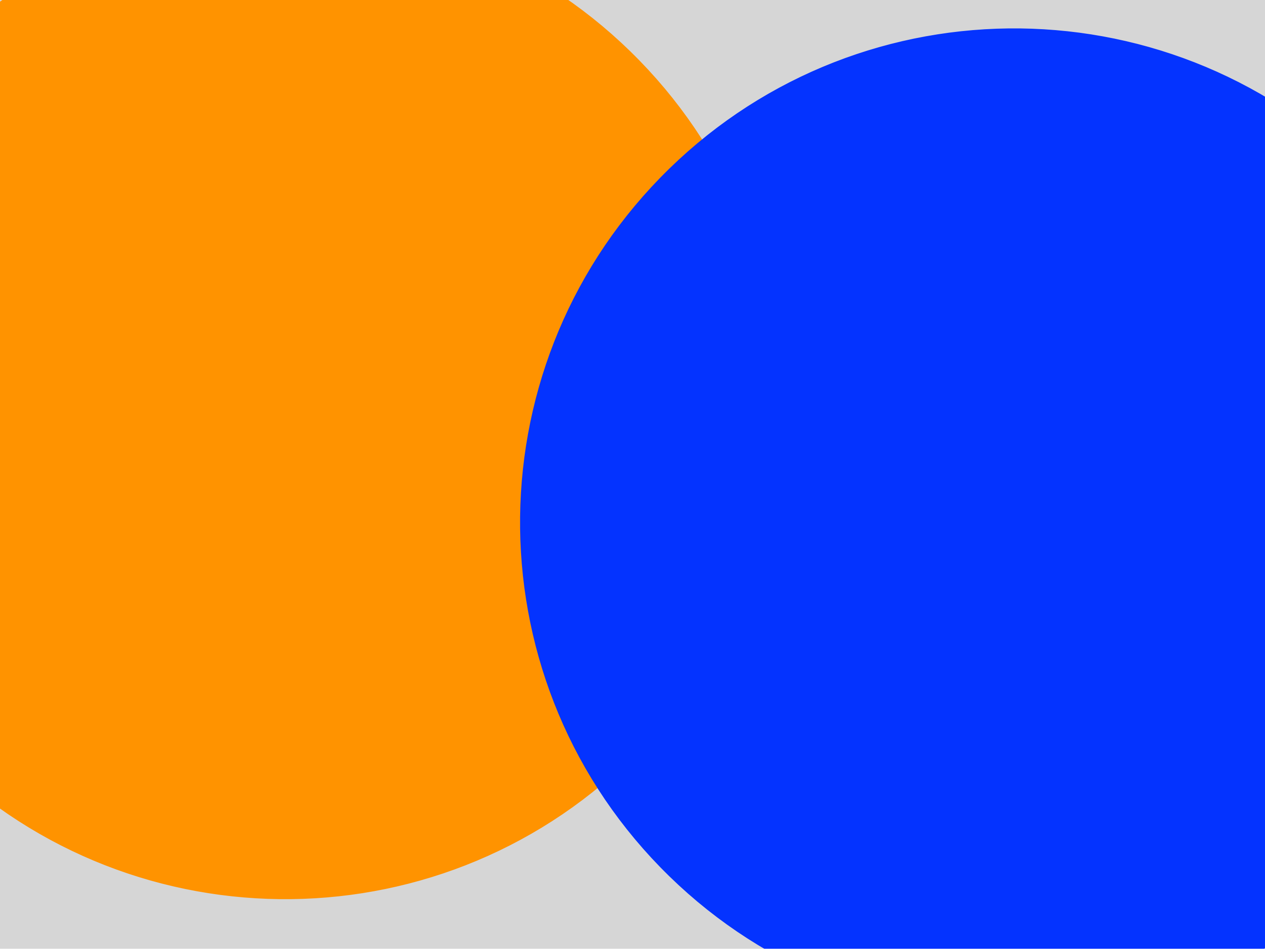
# Chromostereopsis?



Simultaneous contrast, or chromostereopsis, may occur when opposite colors are placed close to one another.







# Readability



Yellow text on a white background

**The more an object contrasts with its field, the more visible it becomes.**

When we create visuals that are intended to be read, offering the viewer enough contrast between the background (*paper or screen*) and the text is VERY important.

Yellow text on a white background

Blue text on a black background

**The more an object contrasts with its field, the more visible it becomes.**

When we create visuals that are intended to be read, offering the viewer enough contrast between the background (*paper or screen*) and the text is VERY important.

Yellow text on a white background

Blue text on a black background

Black text on a gray background

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Blue text on a black background

Red text on a blue background

Black text on a gray background

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White text on a black background

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Black text on a gray background

White text on a black background

Black text on a white background

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# Color Systems

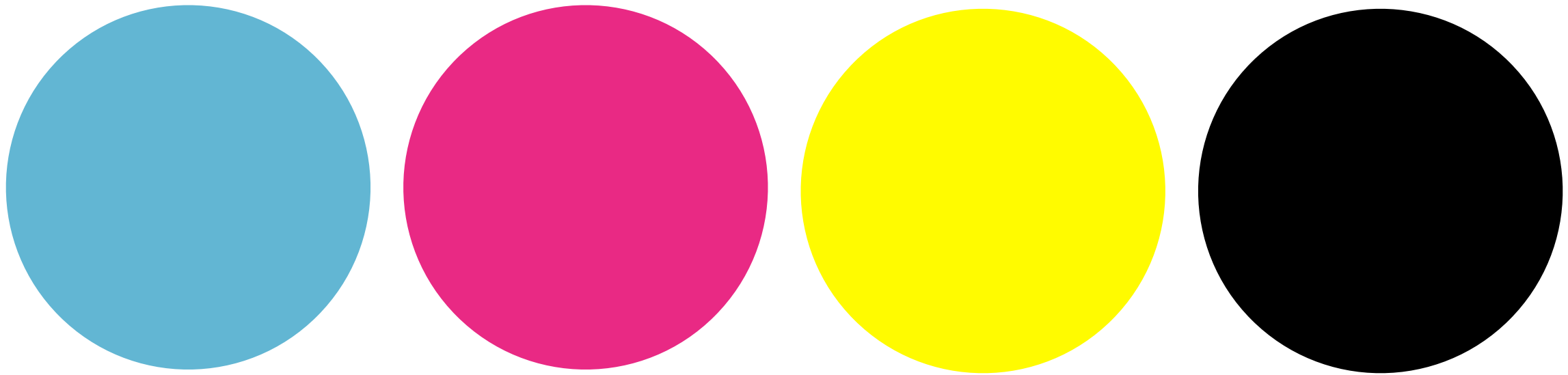
There is a slight difference when working with color **pigment** vs. **light**

# Subtractive Color

When we mix colors using **paint**, or through the **printing process**, we are using the **subtractive color method**.

Subtractive color mixing means that one **begins with white** and adds color.

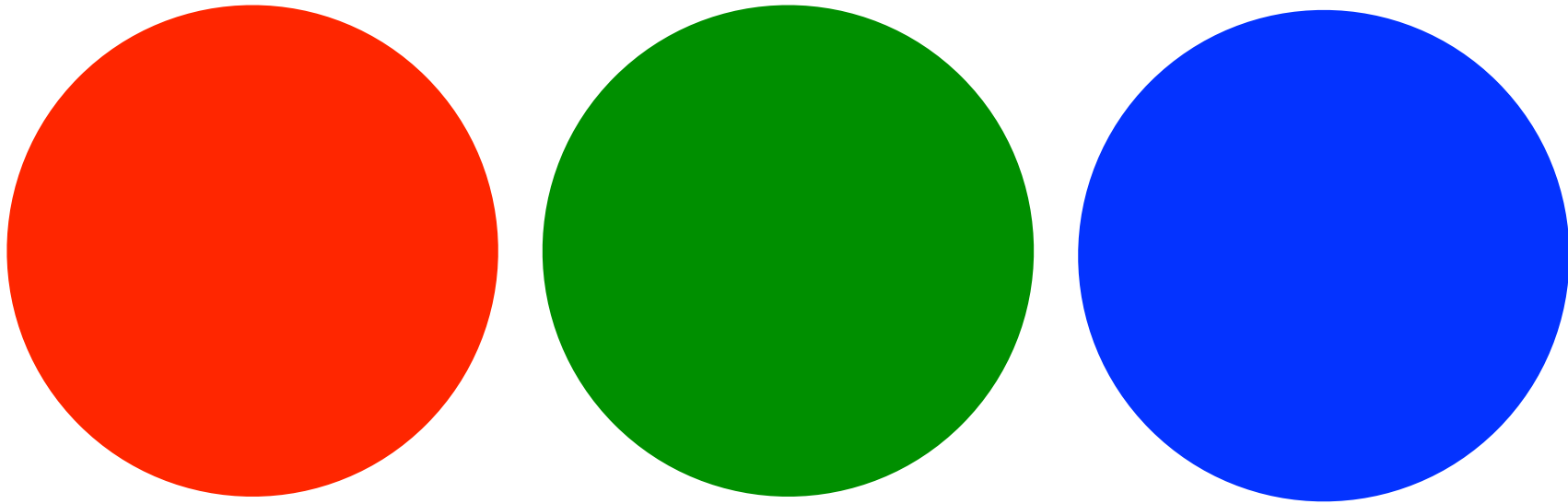




The **CMYK** color system is the color system used for printing.  
**Cyan, Magenta, Yellow, and Black**

# Additive Color

If we are working on a computer, the colors we see on the screen are **created with light** using the **additive color method**. Additive color mixing **begins with black** and ends with white; as more color is added.

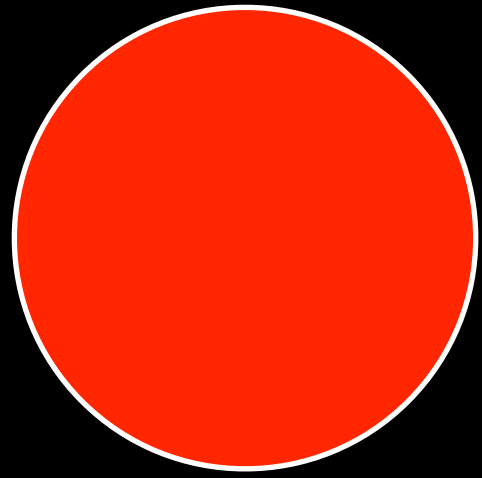


The RGB colors are light primaries and colors are created with light.

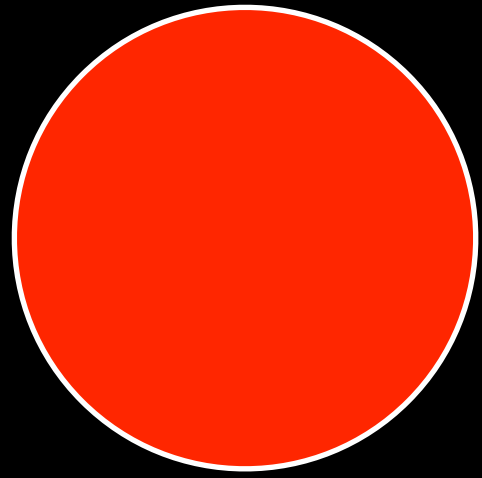
Red, Green, and Blue

# Color Meaning

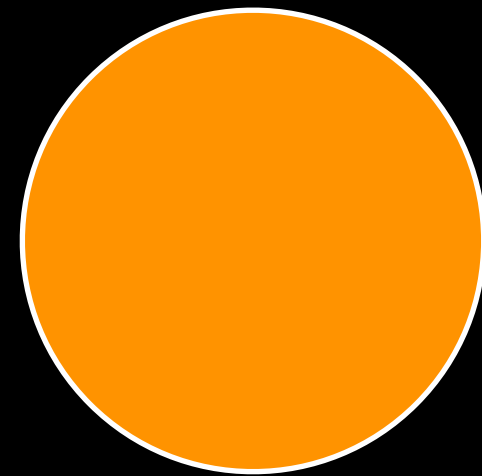




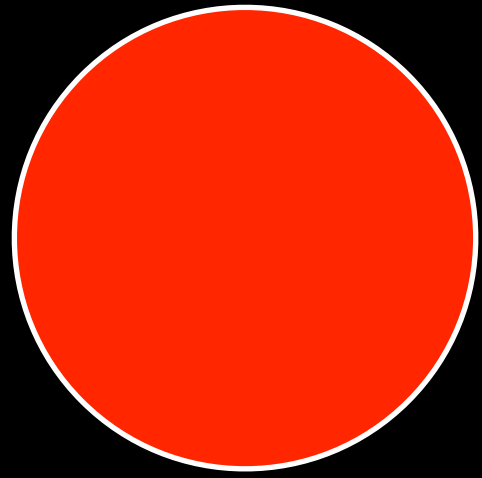
Energy, war, danger, strength, power,  
determination, passion, desire, and love



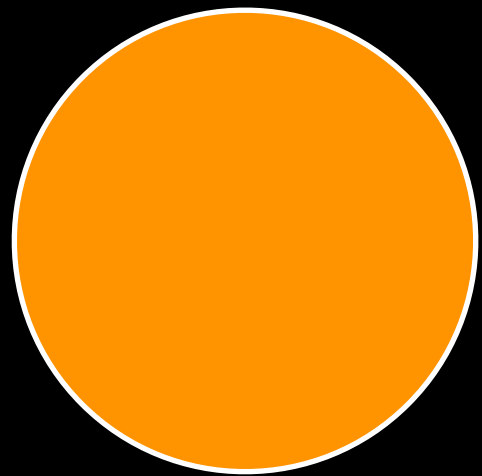
Energy, war, danger, strength, power,  
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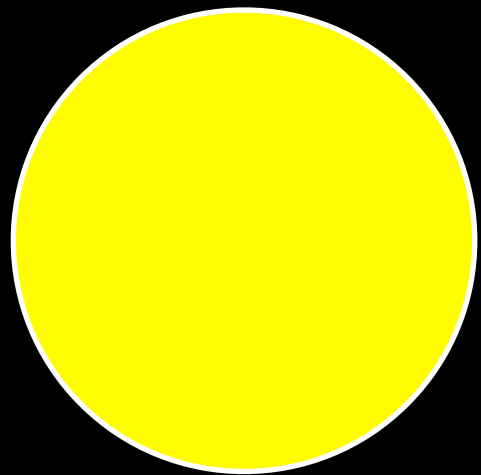
Joy, enthusiasm, fascination, creativity,  
attraction, success, & encouragement



Energy, war, danger, strength, power,  
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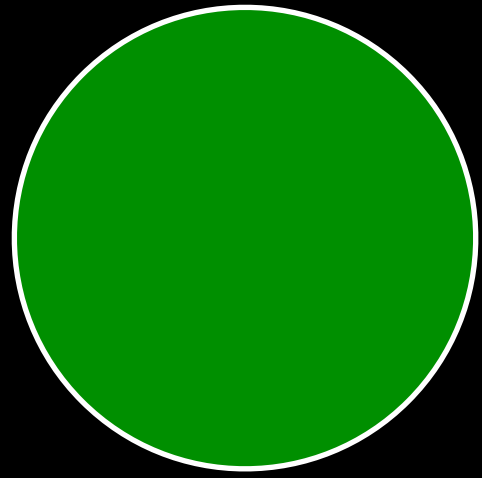


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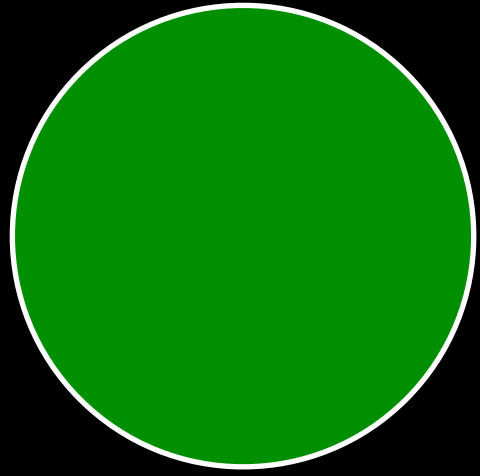


Intellect, cheerfulness, honor, & loyalty

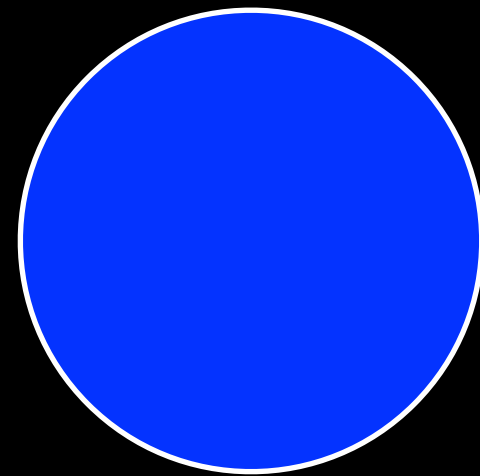




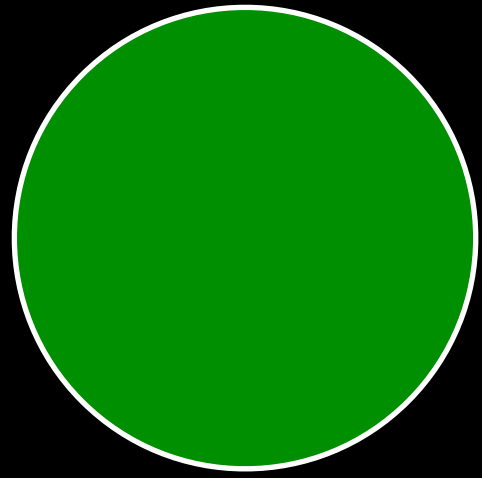
Nature, growth, harmony, freshness,  
fertility, healing, stability, & endurance



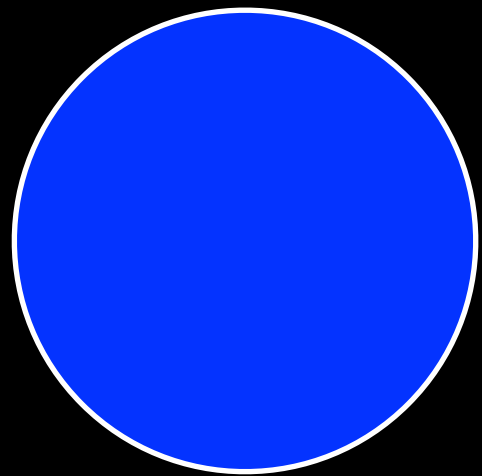
Nature, growth, harmony, freshness,  
fertility, healing, stability, & endurance



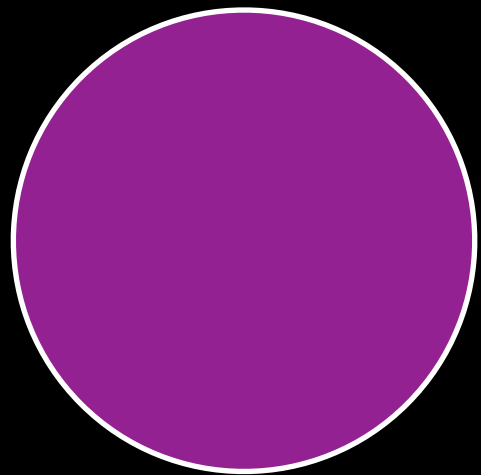
Depth, trust, loyalty, wisdom, confidence,  
faith, truth, corporate America



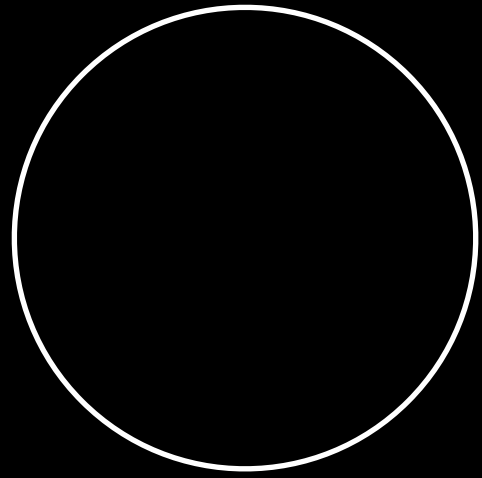
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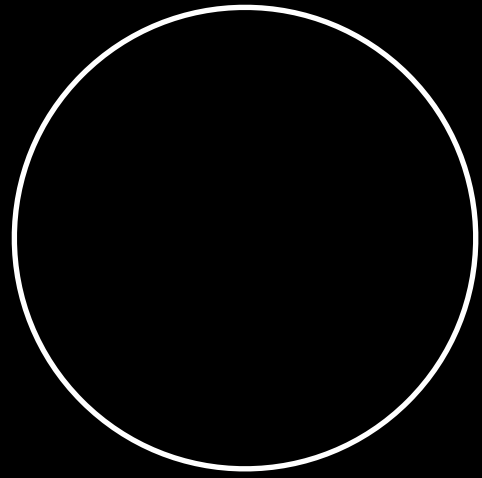
Depth, trust, loyalty, wisdom, confidence,  
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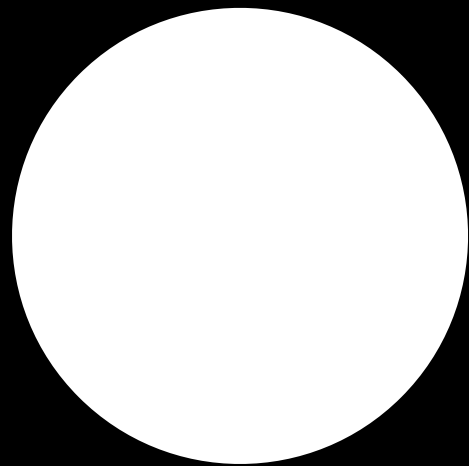
Royalty, power, luxury, ambition,  
dignity, independence, mystery, & magic



Power, elegance, formality, death, evil,  
strength, prestige, & sleekness



Power, elegance, formality, death, evil,  
strength, prestige, & sleekness



Goodness, innocence, purity, simplicity,  
sterility, charity, peace, & winter

# Fun Facts :)

The following facts are all known to be true and accurate  
(but you'll have to check for yourself)

● 7% of males are color deficient

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- Most color blindness is the inability to differentiate between reds and greens. The world is a blend of blues, yellows & grays



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- Blue is America's 1st choice of toothbrush
- Redheads need more anesthesia for surgery
- Ancient Aztecs valued red dye more than gold

- Nokia offered the 1st color cell phone in 1992

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- Hippopotamus milk is pink
- Red is always the highest arc on a rainbow
- The color of the universe is beige (Cosmic Latte)
- Nothing rhymes with Purple or Orange



Create your own Chromatic color wheel

**GOOD  
LUCK!**