

# Performing Arts Virtual Learning 7 & 8 Stagecraft Lighting Design May 14, 2020



### 7 & 8 Stagecraft Lesson: May 14, 2020

#### **Objective/Learning Target:**

Understanding the basics of how color works and how to use it in lighting design



### WHAT DO YOU KNOW ABOUT PRIMARY COLORS?

1. How many primary colors are there?

- 2. Can you name them?
- 3. What is a secondary color?

4. Write down some names of the secondary colors and what colors are used to create them.





## Did you know???

# You most likely answered the questions on the last slide based on what you learned about color in art class. BUT...

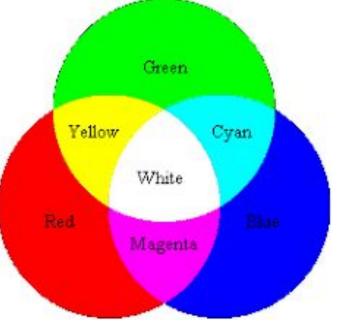
#### The PRIMARY COLORS OF LIGHT are different!!!





## **Primary Colors in Lighting**

## **Red**, green, and blue are the primary colors of light—they can be combined in different proportions to make all other colors. For example, red light and green light added together are seen as yellow light.





# Why are the primary colors of light and paint different?

#### Pigments versus Light in Color and Art

When it comes to color behavior, light behaves in opposing ways to pigments. The primary colors of light are the secondary colors of pigments. Mixing a given color pair together will bring different results in light and pigment. Adding more colors to the mix will sully or darken the color in paint, but will appear paler and brighter in light. The only thing they have in common is their complementary colors. But mixing complementary colors together will result in black in pigment; but white for light.



## **Color in lighting**

#### Secondary colors

- The secondary colors in lighting are magenta, amber (sometimes referred to as a yellow), and cyan.
- Red and blue make magenta. Red and green make amber. Blue and green make cyan.
- If shone together at the same intensity, the three create white light.
- Any primary put together with the secondary made from the other 2 primary colors produce white light. eg. Blue and amber produce white light.

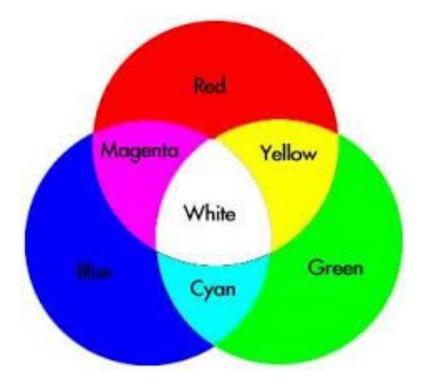


# **Assessment Activity**

Using whatever arts supplies you have (colored pencils, paint, markers, crayons..) and a piece of paper (unlined if you have it) or a paper plate, create a light color wheel showing primary and secondary colors.



# **Self Check**



This is what your color wheel should look like. The primary colors of light overlapping to create the secondary colors of light with all 3 combining to create white light.