## The Role of Color in Design

- Color is a property of light
- Light is made up of energy rays of different wavelengths
- Each wavelength is a separate color
- When sunlight passes through a prism, the rays are bent
- Each wavelength bends a different amount and the light is separated into colors-red, orange, yellow, green, blue, indigo, and violet


## Components of Color

- Color affects:
- How we feelour mood
- Our body temperatures
- Our energy level
- Our stress level
- It can even affect your eye sight

Color

# YELLOW BLUE 

## GREEN

## PURPLE YELLOW RED <br> ORANGE GREEN BLACK BLUE RED PURPLE

## BLUE ORANGE

Say the color of the word and not the name of the word

- Most emotional color
- Can make people feel bold, excited, or even nervous
- Raises blood pressure and heart rate
- People will pay more for an item if it has a red tag on it.
- The most powerful, dramatic, warm color. It makes rooms smaller, but is a good choice for large, high-activity areas such as recreational rooms

- Blue is generally subdued and is often used to create a calm feeling
- Good color for Dr. offices and dentists
- Best color to wear for job interviews
- Suggests respect, responsibility, authority
- Blue is the favorite $m \& m$
- Slows down time
- Blue is the favorite bedroom and bathroom color. It is soothing like the sky. Light blue opens spaces; dark blue closes them.
- Makes you cheerful and hopeful
- Yellow helps jog your memory (Use yellow paper to take notes, legal pads)
- 70\% of people will pick a yellow painted hall over a blue painted hallway
- Draws attention
- Yellow catches the eye more than any other color. It lights hallways and foyers and lifts moods in kitchens and hobby rooms.
YELLLOW

- Friendly color
- Warm, snug, secure
- Home-like
- If you wear brown people tend to think you are a better listener
- Brown is associated with good food
- Protective color
- Stable, self-disciplines, dependable


- Sweeter than any other color
- Can be calming (it has been suggested that all prisoners wear pink jumpsuits and paint walls pink)
- Feminine
- Laidback, carefree, innocent, romantic
- Good accent for clothing not recommended as overall in clothing
- Not a good color if you want to be taken serious


## PINK



- Most complex color
- Combines red and blue, creating mixed effects. Many people don't like this color in a roomchoosing red-violet or blue-violet instead
- Royalty, dignity
- Women all over the world accept purple as a color to wear
- We get sick of violet quicker than any other color
- More inventors favorite color was purple than any other color
- Seen as an artistic and expressive color
- Warms a room in a very welcoming way.
- Works well in family rooms, living rooms, and children's playrooms
- Informal
- Stimulation
- Considered a cheap, inexpensive color
- Good around fast foodmakes you hungry quickly
- A majority of people only like orange in the fall
- Least favorite m \& m color


## ORANGE

- The color wheel is circular arrangement of primary, secondary, and tertiary colors.
- The sequence of colors on the wheel is fixed.
- The first color wheel was developed by Sir Isaac Newton in 1666


## COLOR WHEEL

- Yellow, red, and blue
- These colors are basic-they cannot be created by mixing other colors.


PRTMARY COLORS


- Orange, violet, and green
- These colors are made by mixing equal parts of two primary colors
- Secondary colors appear on the color wheel halfway between the primary colors that make them

SECONDARY COLORS

- Yellow-orange, redorange, red-violet, blue-violet, bluegreen, and yellowgreen
- Also known as intermediate colors
- Created by combining a primary color with a neighboring secondary color


The Beauty of Night

- Color is a property of light
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## Components of Color

- The specific name of a color is its hue
- Hue is the feature of color that makes one color different from others
- Each color on the color wheel is a hue
- Black, white, and gray don't appear on the color wheel because they have no huetechnically they are not colors at all


## Hue-another name for color

- All objects contain pigmentssubstances that absorb some light rays and reflect others.
- The colors that you see are the reflected light rays
- For example, when light strikes a red chair, all the rays in the light are absorbed except the red rays)

Pigments

- The brightness or dullness of a color
- High intensity—objects seem larger and closer
- Low intensity-muted and generally create a calmer effect than intense or pure colors


Intensity

- Lightness and darkness of a color
- The basic hues in the color wheel are considered middle or normal values

VALUE

- A hue that is lighter than its normal value
- Has white added to it
- Examples: pink is a tint of red, peach is a tint of orange, lavender is a tint of violet
- A color that is darker than its normal value
- Has black added to a hue
- Examples: navy is a shade of blue, rust is a shade of orange, maroon is a shade of red

Shade

- Color that has gray added to it
- Duller than its normal value, but not as dark as a shade

Tone

## Tint



Tints - adding white to a pure hue:
Shade


Shades - adding black to a pure hue:

Tone


Tones - adding gray to a pure hue:

## Remember: all are values!

- A color scheme is the choice of colors used in design in order to create a mood or set a tone
- Color schemes are used to create style and appeal.


## Color Schemes



- A monochromatic color scheme uses tints and shades of one color on the color wheel

Monochromatic

Monochromatic

- Two or more colors that are next to each other on the color wheel

Analogous




- Two colors that are directly across from each other on the color wheel.

Complement

Complementary

- A color scheme that uses three colors. It combines one color with the two colors on each side of its compliment



## Spliticomplementariy

- Three colors that are equally spaced on the color wheel.


- Consider the following factors before choosing colors for a color scheme:
- Mood
- People
- Style (Greece)
- Time spent in a room
- Existing colors
- Adjacent rooms
- Lighting-different kinds of light change the way color appears (natural vs. artificial)
Planning Color Schemes






What kind of color scheme?



- Take out your notes and a piece of scratch paper.
- Imagine sitting in a yellow kitchen with afternoon sunlight streaming through the window. Describe your feelings about this room.

Bellwork

- You can also divide the color wheel in half


Warm and cool Colors


- Warm colors make a room appear smaller
- Red-orange conveys the most warmth of any color
- Warm colors are especially suitable in areas of high activity, such as the kitchen and family room
- In general, colors associated with the sun-red, orange, and yellow-are considered warm colors


- Blues and greenscolors that capture the essence of the ocean-are considered cool colors

- Cool colors make a room appear larger
- Cool colors are popular in bedrooms, bathrooms, and home offices because of their relaxing effect



