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 feel— our mood
  ◦ Our body temperatures
  ◦ Our energy level
  ◦ Our stress level
  ◦ It can even affect your eye sight

Color

YELLOW BLUE ORANGE
BLACK RED GREEN
PURPLE YELLOW RED
ORANGE GREEN BLACK
BLUE RED PURPLE
GREEN
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

RED

- 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.

BLUE

- 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.

YELLOW

- Green has a calming effect, like nature.
- It enlarges a space and is a popular choice for bedrooms and rooms that adjoin outdoor areas.
- Color of success (dollar bills)
- Soothes pain
- Everyone mellows out around the color green

GREEN

- 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

BROWN
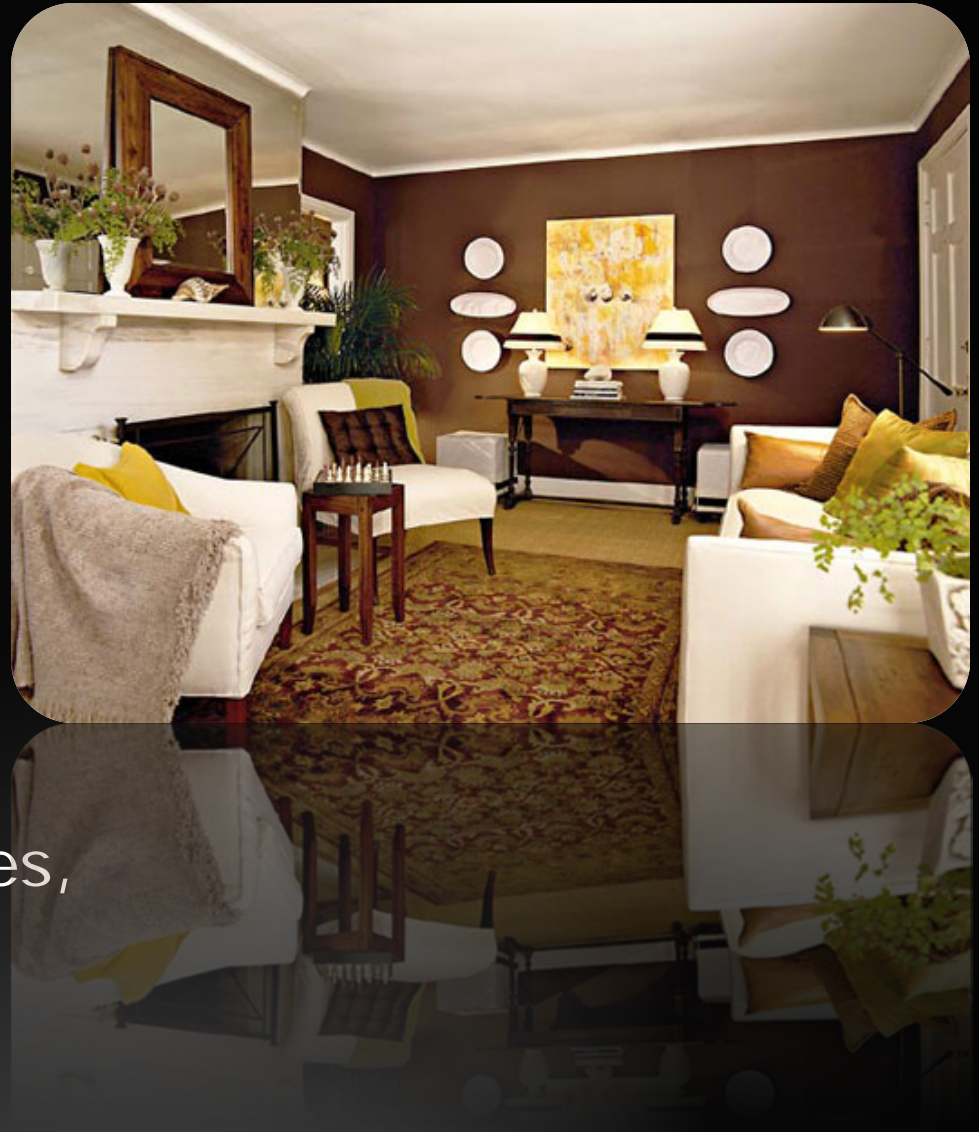
- Sophisticated, mysterious, dramatic
- Mourning, sorrow, depression
- Power and strong authority
- Good accent color
- Most slimming color
- Men who wear black are considered arrogant
- People who wear black tend to have more complex personalities

BLACK

- 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 room—choosing 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

VIOLET

- 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 food—makes you hungry quickly
- A majority of people only like orange in the fall
- Least favorite m & m color

ORANGE

Color Wheel

YELLOW (PRIMARY)

YELLOW ORANGE (TERTIARY)

YELLOW GREEN (TERTIARY)

ORANGE (SECONDARY)

GREEN (SECONDARY)

ORANGE RED (TERTIARY)

BLUE GREEN (TERTIARY)

RED (PRIMARY)

BLUE (PRIMARY)

RED PURPLE (TERTIARY)

BLUE PURPLE (TERTIARY)

PURPLE (SECONDARY)
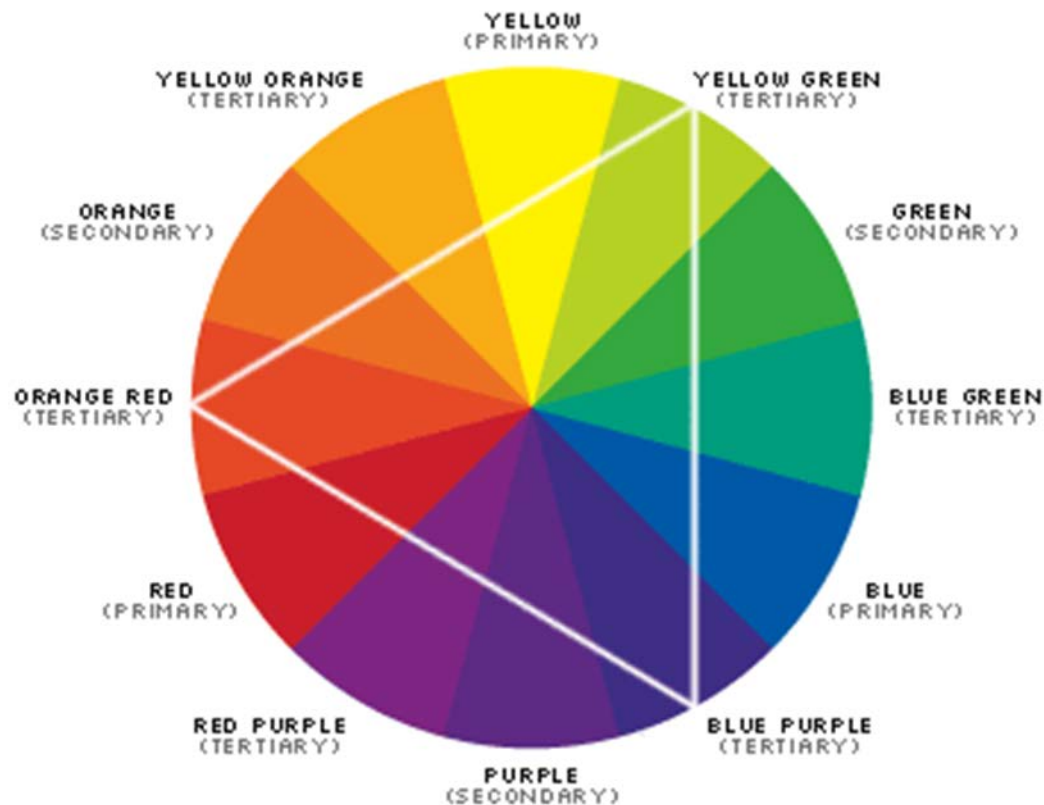
- The color wheel is made up of twelve colors
- It is used to organize colors.
- To visualize color relationships.
- You can identify colors that go well together.
- The first color wheel was developed by Sir Isaac Newton in 1666

Using colored pencils color in the colors of the color wheel.

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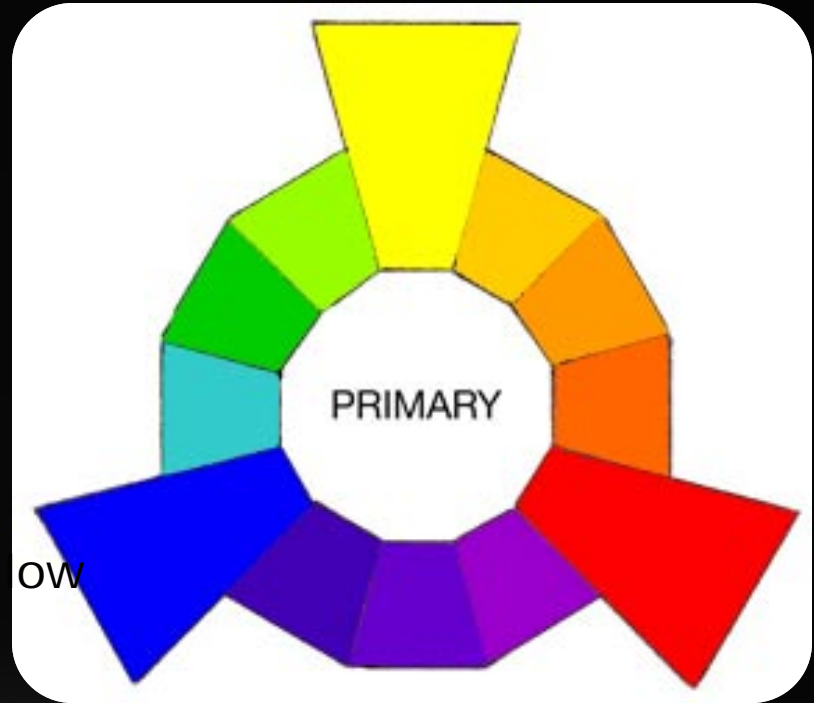
Yellow
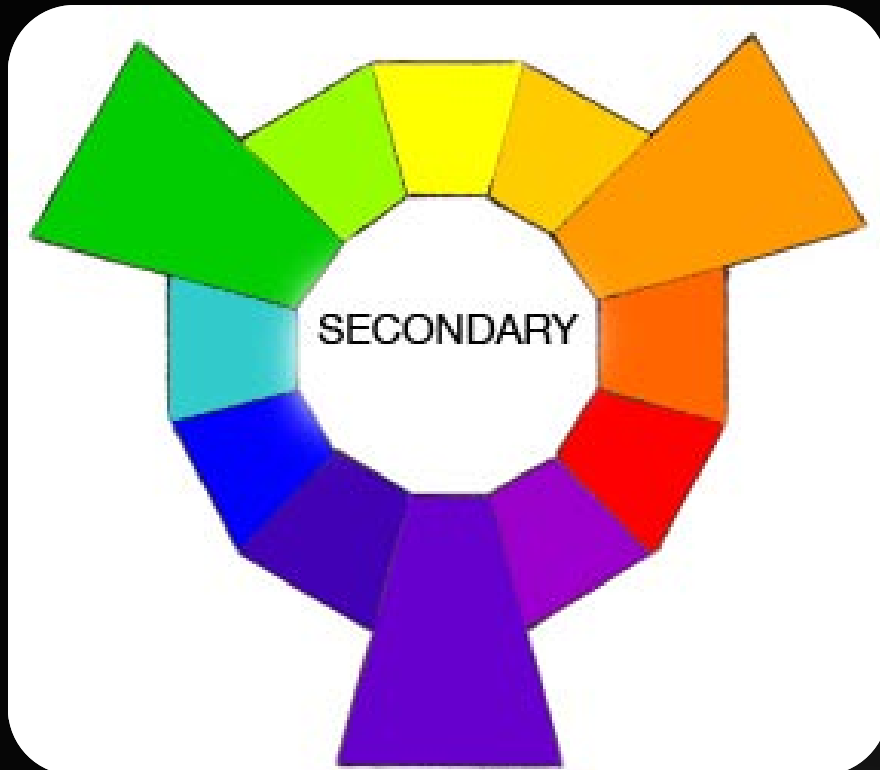
PRIMARY COLORS

- 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, red-orange, red-violet, blue-violet, blue-green, and yellow-green
- Also known as intermediate colors
- Created by combining a primary color with a neighboring secondary color
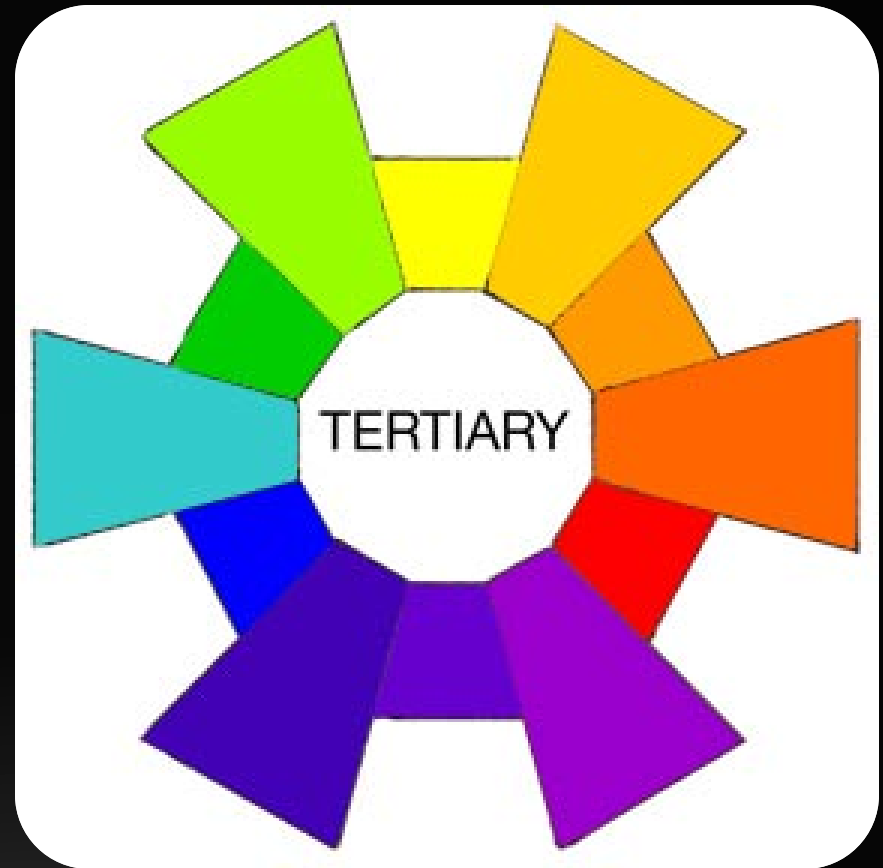
TERTIARY COLORS

The Beauty Of Night

Please 'click" to add color and again to advance slides at your leisure.
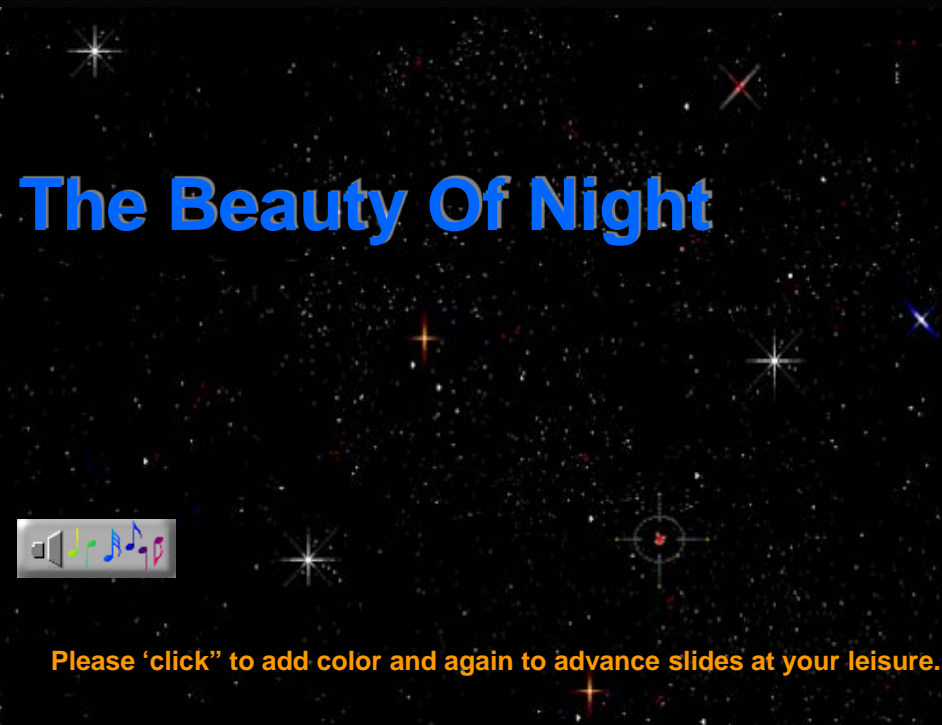
The Beauty of Night
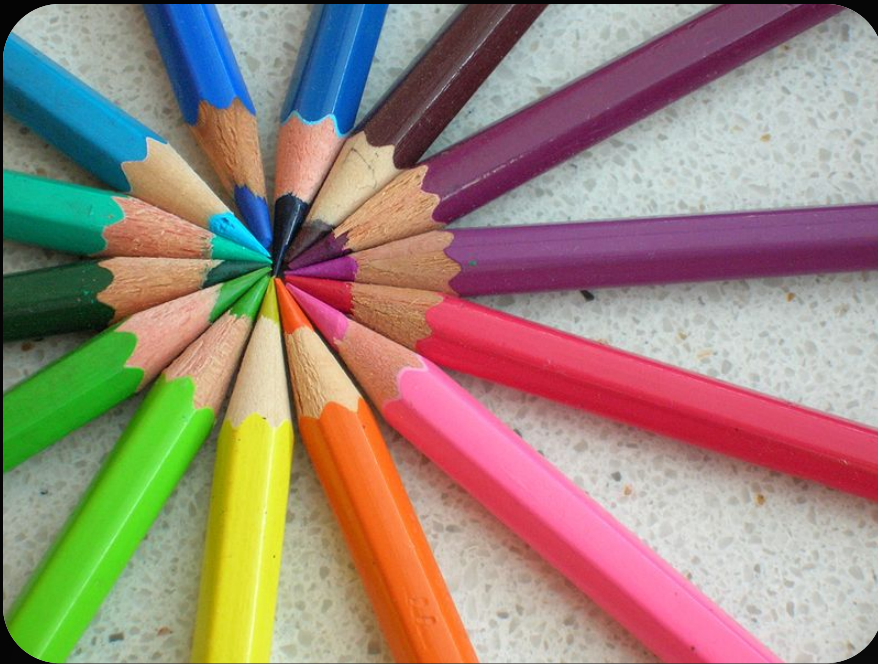
- The specific name of a color is its **hue**
- Hue is the feature of color that makes one color different from others
- Each color on the color wheel is a hue
- Black, white, and gray don't appear on the color wheel because they have no hue—technically they are not colors at all

Hue—another name for color

- All objects contain pigments—substances 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
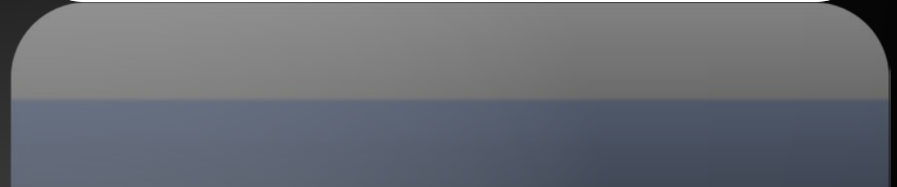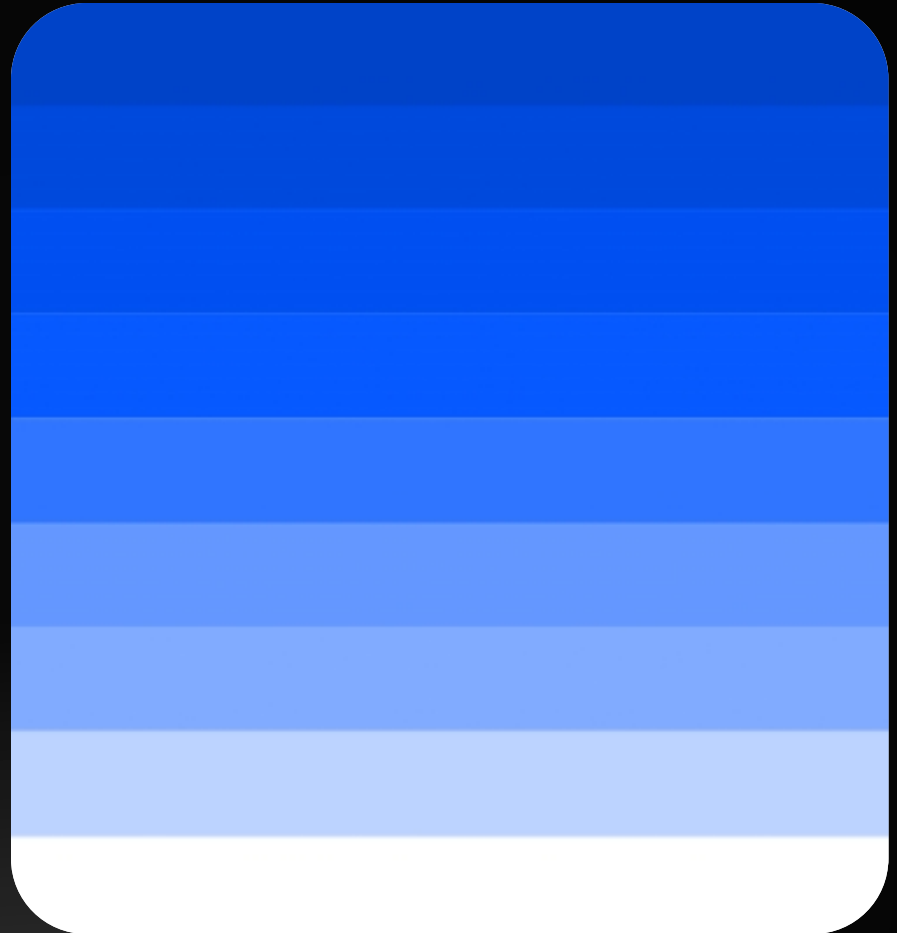
VALUE
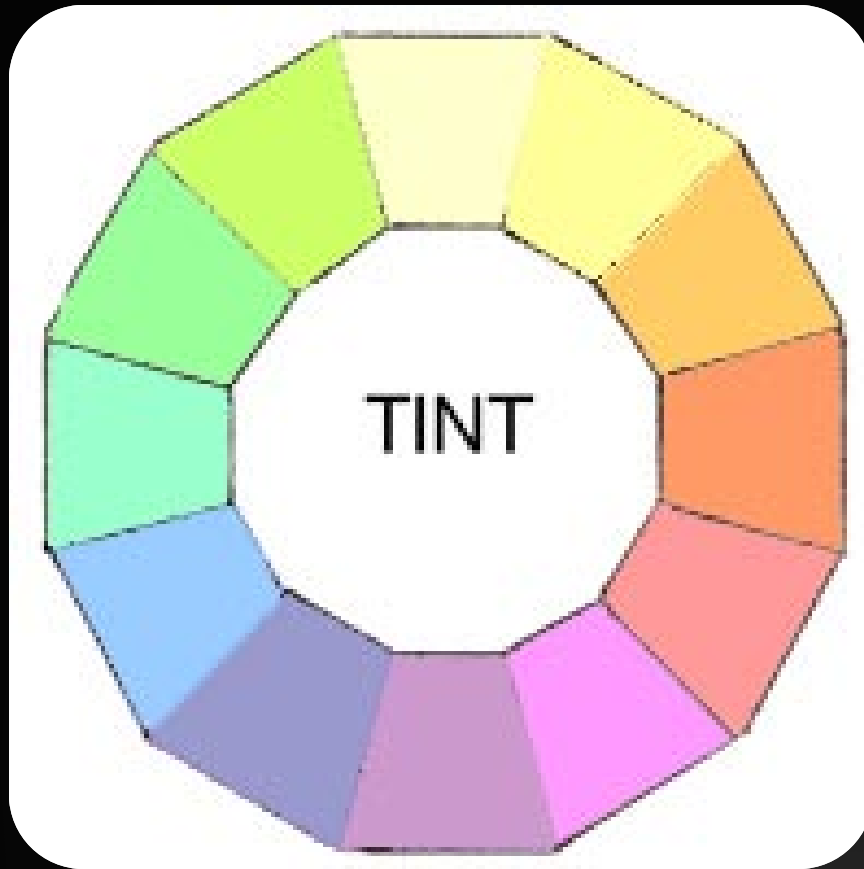
- A hue that is lighter than its normal value
- Has white added to it
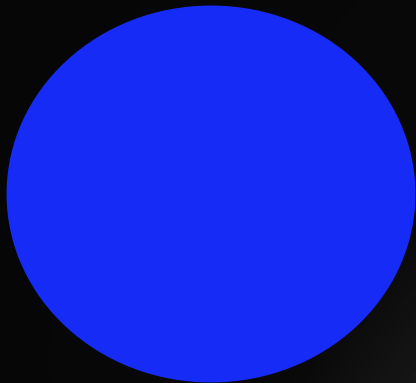- Examples: pink is a tint of red, peach is a tint of orange, lavender is a tint of violet

Tint

- 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

Shade

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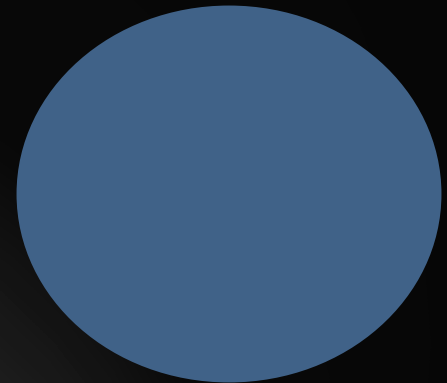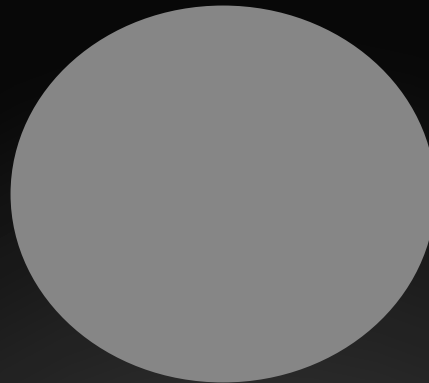
Tone

Tint
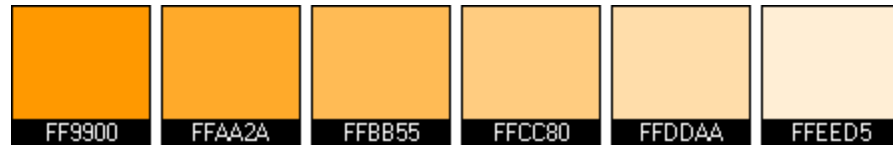
Shade

Tone

Tints - adding white to a pure hue:

FF9900 FFAA2A FFBB55 FFCC80 FFDDAA FFEED5

Shades - adding black to a pure hue:

FF9900 D58000 AA6600 804C00 553300 2A1900
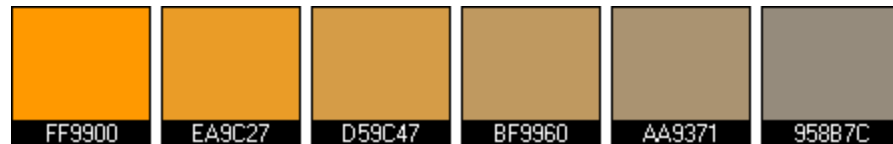
Tones - adding gray to a pure hue:

FF9900 EA9C27 D59C47 BF9960 AA9371 958B7C

Remember: all are values!

Warm Colors and Cool Colors
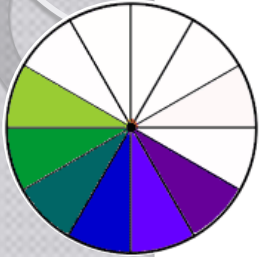
- Color has temperature and it can effect the way we feel in a room.
- **Cool Colors** recede away from us, make spaces feel larger and create cooler, calming and relaxing spaces.

- **Warm Colors** advance towards us, make spaces feel cozier, create feelings of warm, activity and excitement.
- The color used in a room can change the psychological temperature in a room up to 5 degrees.

- 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

Warm Colors

Warm Colors

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

Cool colors

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

Cool Colors

Create a Color Wheel.

- Using the color wheel provided
- Label each color around the outside of the color wheel.
- Then mix the primary colors to create each of the secondary and tertiary colors.
- Paint each of the colors in the appropriate space.
- Allow it to dry

- 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

- Uses tints and shades of a single hue.
- The main tint or shade should be easy to live with, and can be accented by more intense shades.

Monochromatic
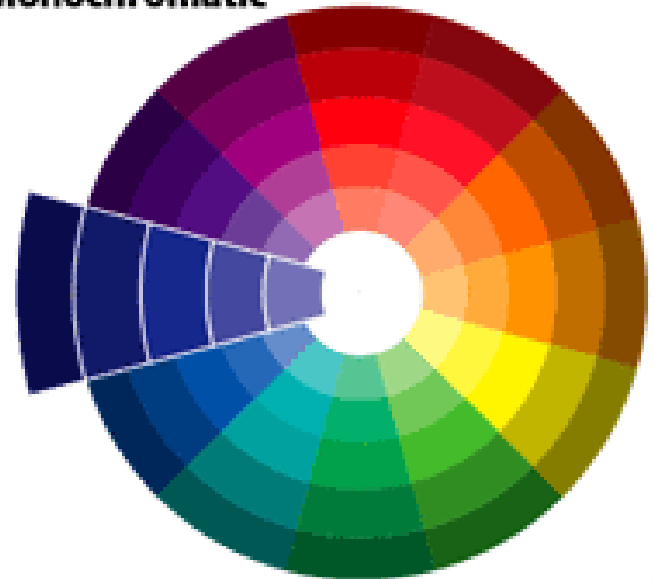
Monochromatic

Monochromatic

Monochromatic

- **<u>Uses 3-5 hues that are next to each other on the color wheel</u>.**

Analogous

Analogous

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

Complement

Use similar values and intensities when combining complementary hues

Has one dominant hue and one accent hue.

Complementary

Complimentary

Complimentary

- <u>Uses a primary color and the two intermediate colors on either side of its complement.</u>
- Often found in floral prints or plaids.
- Creates strong contrasts in colors

Split Complement

Split Complementary

Split Complement

- The primary color yellow with accents of blue-violet and red violet in the flower arrangement on the table.

Split Complement
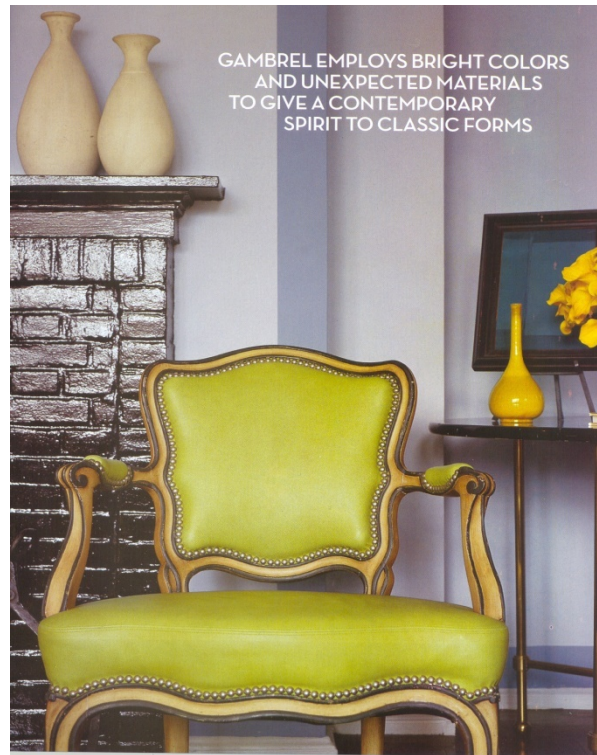
- The secondary hue, violet combined with yellow-green and yellow-orange.

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

Primary
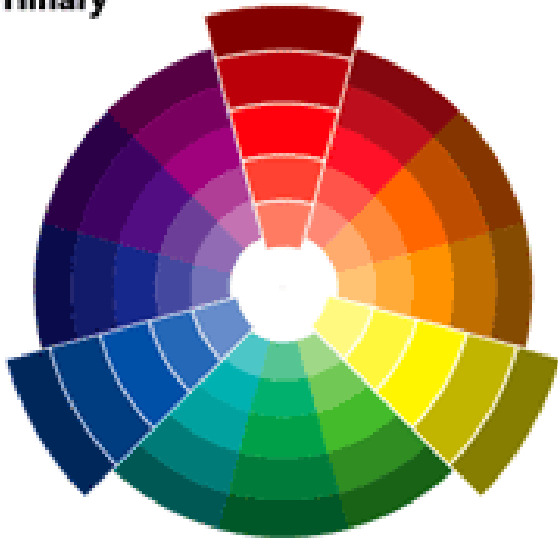
Triad

Triad

Triad

Neutral

- <u>A color scheme that uses browns or metallic colors.</u>
- Neutral color schemes can be easier to live with than with vibrant color schemes.
- To make this scheme look best, use a variety of textures and shapes to add interest.

Neutral

Neutral

- Neutral color scheme with a "splash" of color for interest & variety

Accented Neutral

Accented Neutral

Accented Neutral

Accented Neutral

Achromatic

- A color scheme using black, white, and/or gray

Achromatic

Achromatic

- 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?

What kind of color scheme?

What kind of color scheme?

What kind of color scheme?

What kind of color scheme?

What kind of color scheme?

Color scheme identification wheel

- Draw a small circle (about 2 inch diameter) with a compass in the center of a piece of card stock
- Use protractor to mark every 30 degrees all the way around the outside of the circle
- Number the marks 1-12
- Draw a line through the center from 1-7
- Draw a line from the center to number 5, 6, 8, and 9

- Label
  - "Complimentary" on line 7
  - "Split" on lines 6 and 8
  - "Triad" on lines 5 and 9
  - "Analogous" between 1 and 5
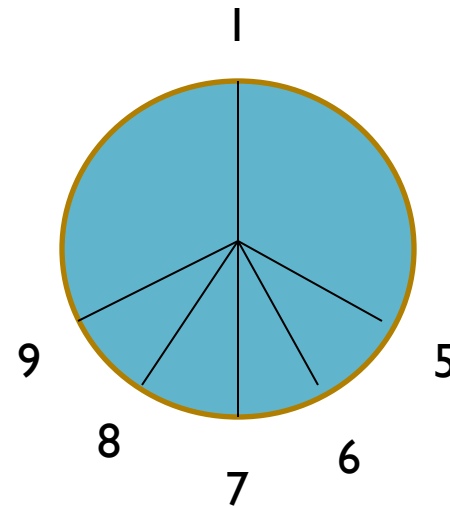
- Cut out your circle
- Use a brad to attach it to the center of your color wheel. Then glue only the outside of the circle into your notebook. The color scheme wheel should still move when it is glued into the notebook.

COLOR WHEEL

RED/PURPLE

RED

PURPLE

RED/ORANGE

BLUE/PURPLE

ORANGE

BLUE

YELLOW/ORANGE

YELLOW

BLUE/GREEN

YELLOW/GREEN

GREEN
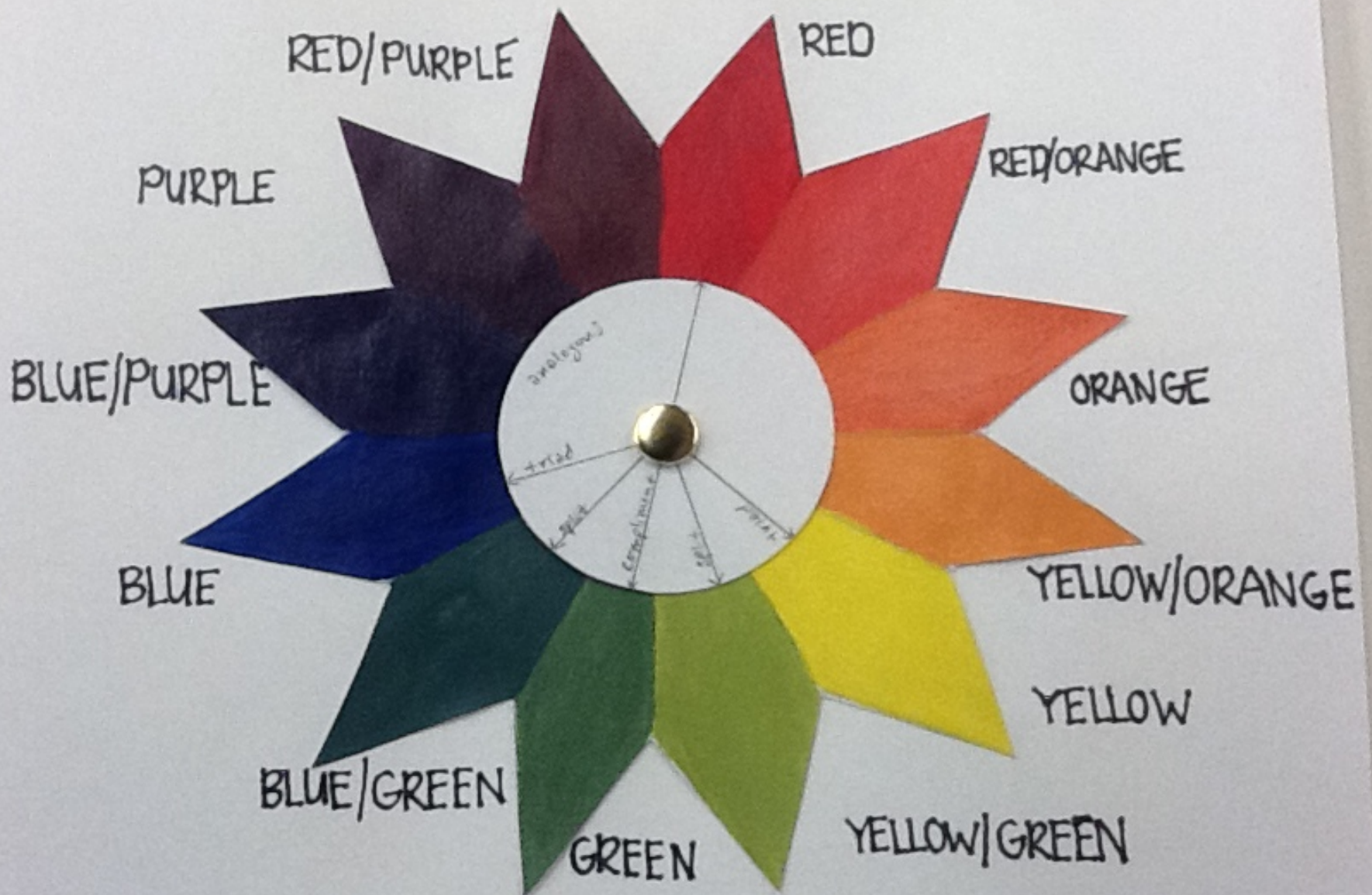
Create your own

- You will color 3 rooms in different color schemes from the 8 discussed in class. Follow the directions.
    - FIRST Identify the color scheme you will be using.
    - Draw in windows, furniture, and accessories. Design patterns and prints for the floors, rugs, walls, window coverings and furniture.
    - Decide what colors to use on the walls, furniture, floors, etc.
    - What feeling do you want this room to have?

Name_____ Total____/10

Draw in walls, ceiling, floor, furniture, and accessories. Design patterns and prints for the floors, walls, window coverings and furniture. What feeling do you want this room to have?

Color Scheme_____
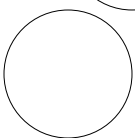Colors used_____
Feeling you want this room to have_____
_____
_____
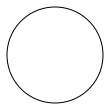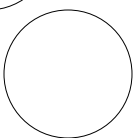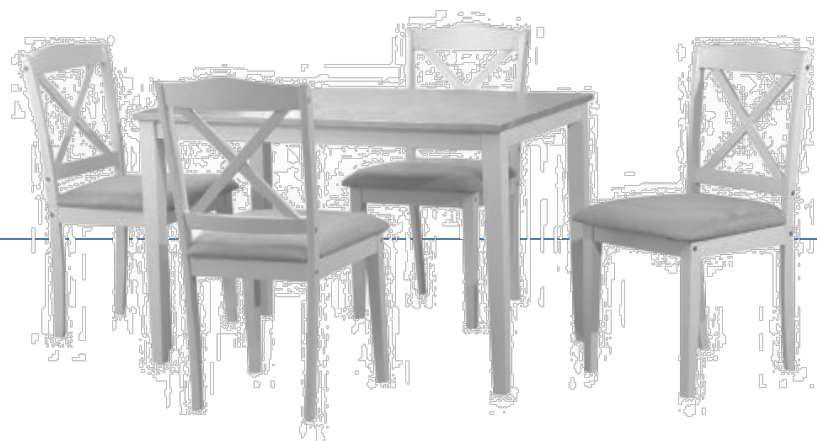
Ceiling

Accent

Wall
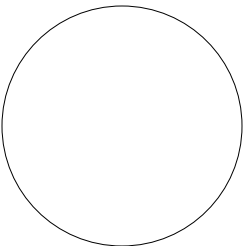
Furniture and accessories

Floor

Name_____ Total____/10

Draw in walls, ceiling, floor, furniture, and accessories. Design patterns and prints for the floors, walls, window coverings and furniture. What feeling do you want this room to have?
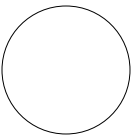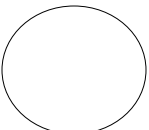
Color Scheme_____
Colors used_____

Feeling you want this room to have_____
_____
_____

Ceiling

Accent

Wall

Furniture and accessories

15 pts

Floor

Name_____ Total____/10

Draw in walls, ceiling, floor, furniture, and accessories. Design
patterns and prints for the floors, walls, window coverings and
furniture. What feeling do you want this room to have?

Color Scheme_____
Colors used_____

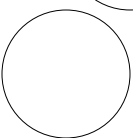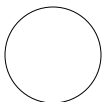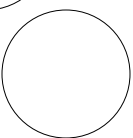Feeling you want this room to have_____
_____
_____

Ceiling

Accent

Wall

Furniture and
accessories

Floor