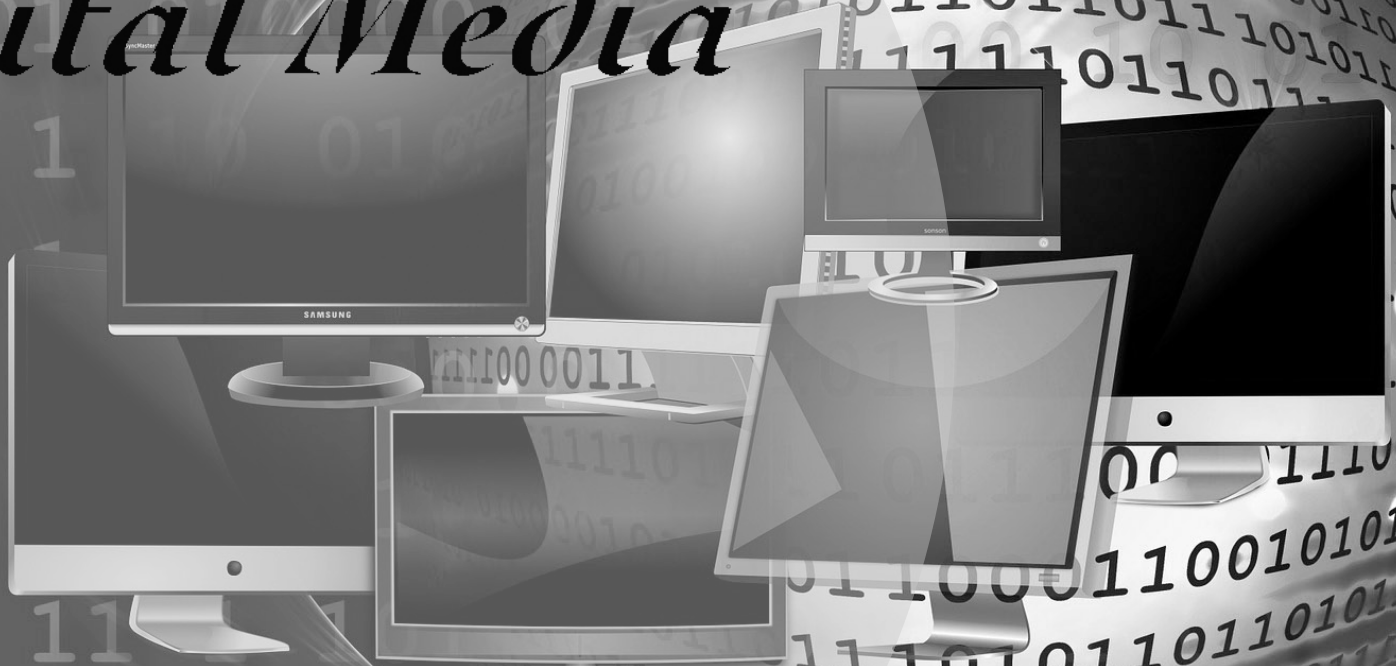




ExplorNet's

Digital Media



Objective 102.01

Explain design concepts used to create digital graphics.



PART 1: ELEMENTS OF DESIGN

- Color
- Line
- Shape
- Texture
- Watch this video on [Fundamentals of Design.](#)



- Helps identify objects in a design.
- Creates visual flow in a design.
- Communicates feelings and moods to the audience or viewer.
- Consists of hue, saturation, and brightness.
- Watch this video on [Color Basics](#).





DM **COLOR THEORY**

- Particular colors in a design can communicate certain moods and feelings to the audience.
- Watch this video on [Color Theory](#).

RED - excitement, anger,
danger, love

BLUE - calm, sadness,
serenity

GREEN - envy, luck,
peacefulness

YELLOW - cowardice, sympathy
cheerfulness

ORANGE - liveliness, energy
warmth

PURPLE - royalty, dignity
mystery

BLACK - mourning, despair
sophistication

WHITE - innocence, purity,
faith

COLOR SCHEME

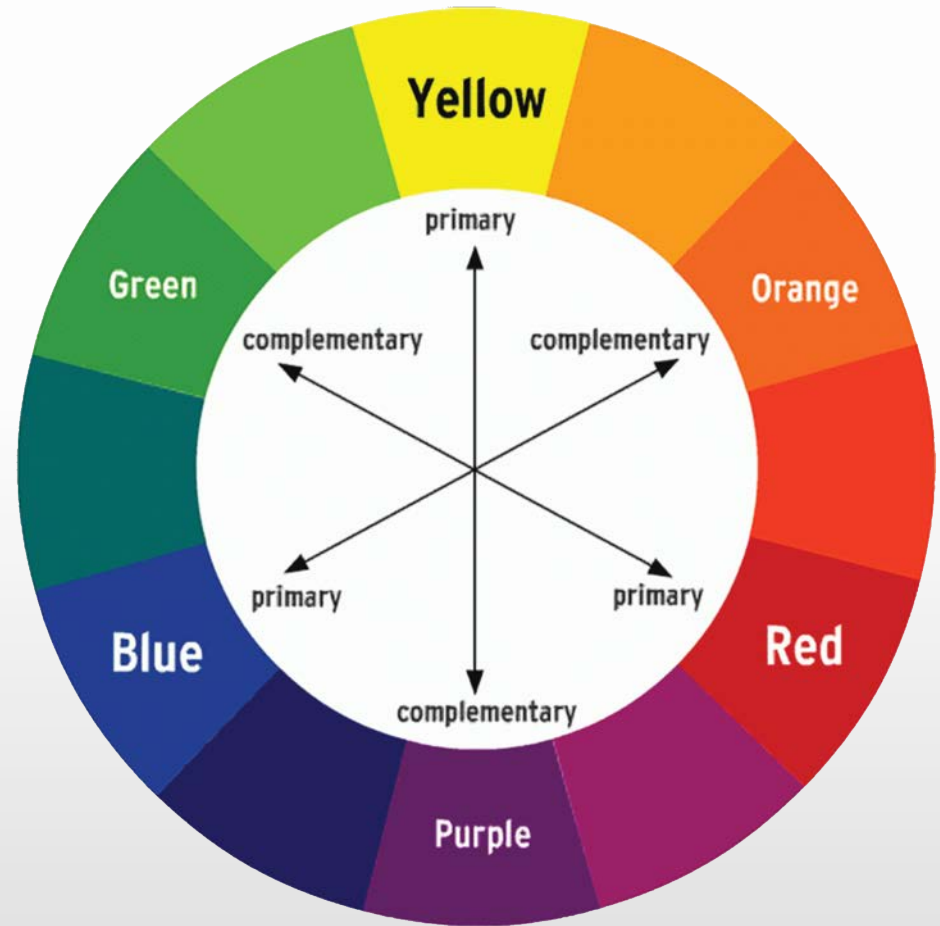
- The purposeful selection of colors for use in design.
- Sets a mood, attracts attention, or makes a statement.
- Color can be your most powerful design element if you learn to use it effectively.
- Color schemes usually are only 2 or 3 colors.



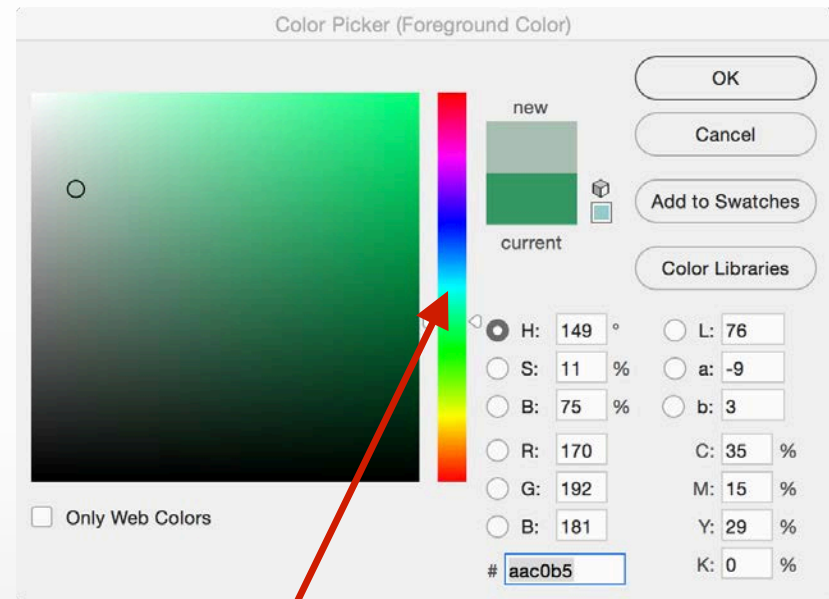


COMPLEMENTARY COLORS

- Colors across from each other on the color wheel work well together when used in a design.
- Examples:
 - Orange and Blue
 - Red and Green
 - Yellow and Purple



- The name given to a color.
- Within a particular hue, a variety of individual colors can be created by changing saturation and brightness.



Select Hue
on color
bar using
sliders.

SATURATION

The amount of hue used in a particular color.

○ Example:
PURPLE



Less saturated with the purple hue.

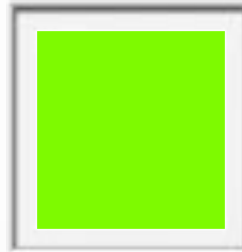


More saturated with the purple hue.

BRIGHTNESS

How light or dark a color appears; adding black or white changes a color's brightness.

○ Example:
GREEN



Bright Green (white added to a green hue).



Dark Green (black added to green hue).



QUESTIONS TO CONSIDER

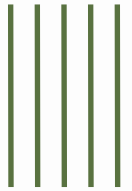
- Why would a designer want to use complimentary colors when creating a logo?
- Summarize the benefits of using color as a design element.
- Identify several ways a color scheme can impact a graphic.
- Contrast the color psychology of black and white and how this affects advertising choices.

- Give direction to a design.
- Create movement in a design.
- Thick lines show importance, thin lines demonstrate quick movement.





DM ***TYPES OF LINES***



VERTICAL LINES

- carry eye up and down
- convey a feeling of awe or challenge



HORIZONTAL LINES

- carry eye left and right
- convey a feeling of calm or peacefulness



DIAGONAL LINES

- slanted
- add interest to a design

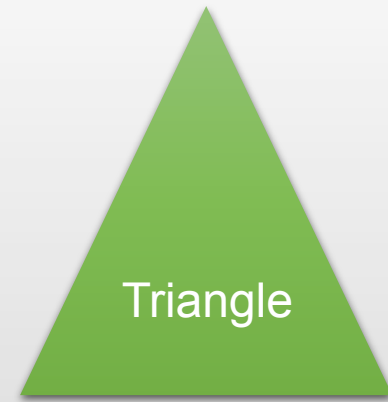
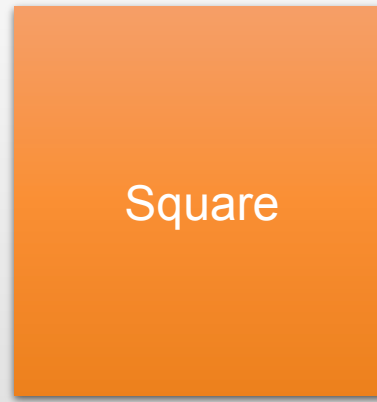


CURVED LINES

- gently bent
- give a soft, relaxed feel to a design

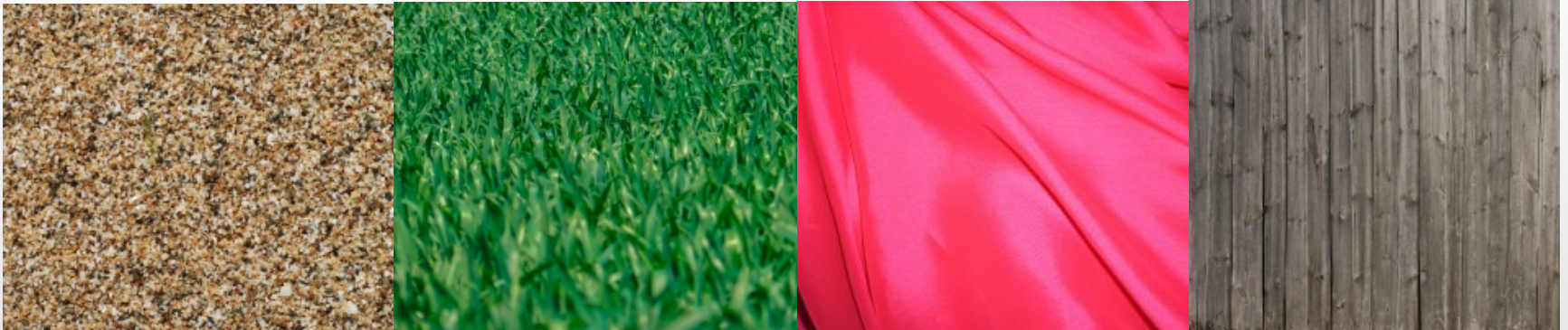
DM SHAPES

- The form of an object.
- When lines enclose a space.
- Can be used to help identify objects:
 - Example : circle = sun, oval = egg
- Three basic shape types:



DM TEXTURE

- Combination of dots, lines, and colors used create the illusion of a surface appearance.
- Adds depth and dimension to a design.
- Look and “feel” of a surface.





QUESTIONS TO CONSIDER

- Give 4 or 5 examples of textures found in nature a designer could use.
- When would a circle be a preferred shape to a square or triangle?
- How do lines differ from shapes in graphic design?



PART 2: PRINCIPLES OF DESIGN



- Proportion
- Balance
- Rhythm
- Emphasis
- Unity/Harmony



PROPORTION

- A size relationship between components of a design.

- Proportion can be:

- Between one component of a design and another component .

OR

- Between a component and the design as a whole.
- Good proportion adds harmony, symmetry, or balance among the parts of a design.

- How design elements are arranged either horizontally or vertically on the canvas.

FORMAL BALANCE

- Also known as symmetrical balance.
- Design is exactly equal on both sides.

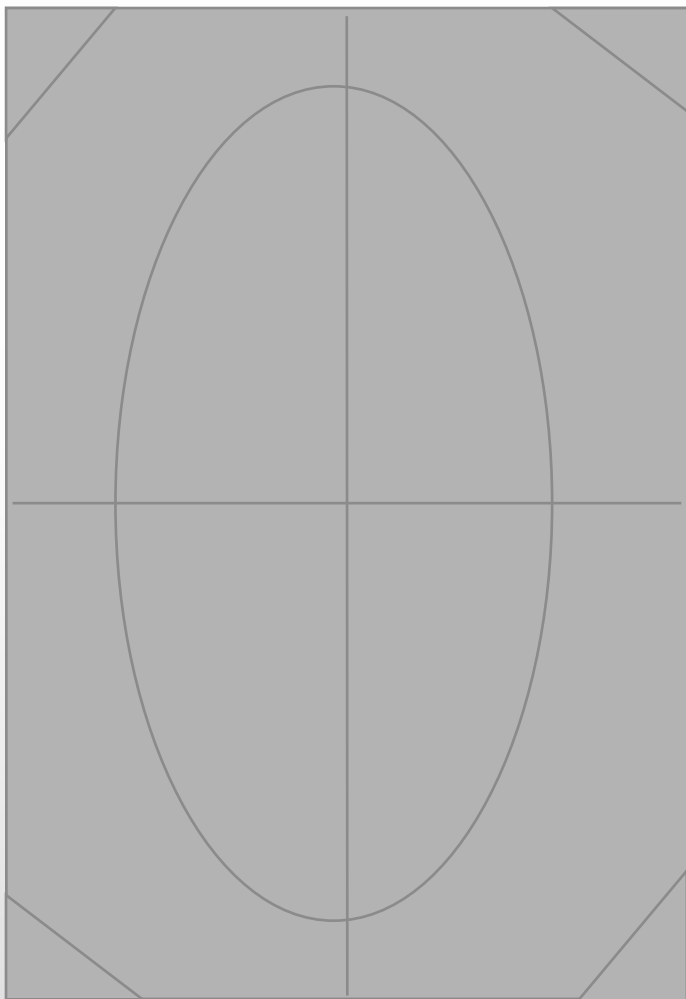
INFORMAL BALANCE

- Also known as asymmetrical balance.
- Both sides of the design are not equal, but are still balanced.



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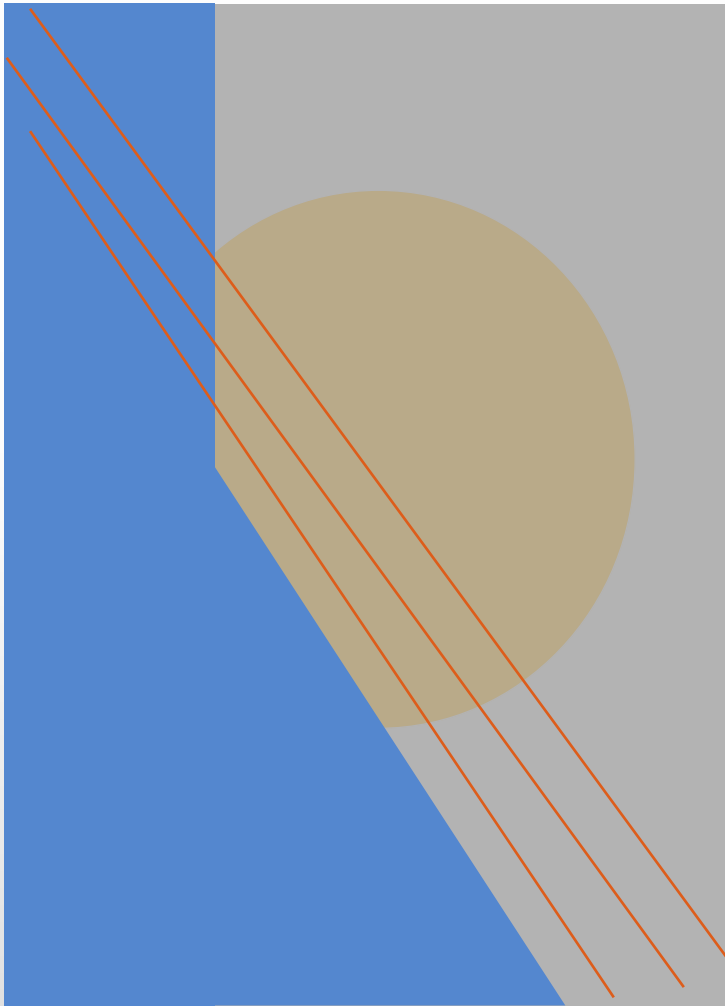
SYMMETRICAL BALANCE






DM

ASYMMETRICAL BALANCE



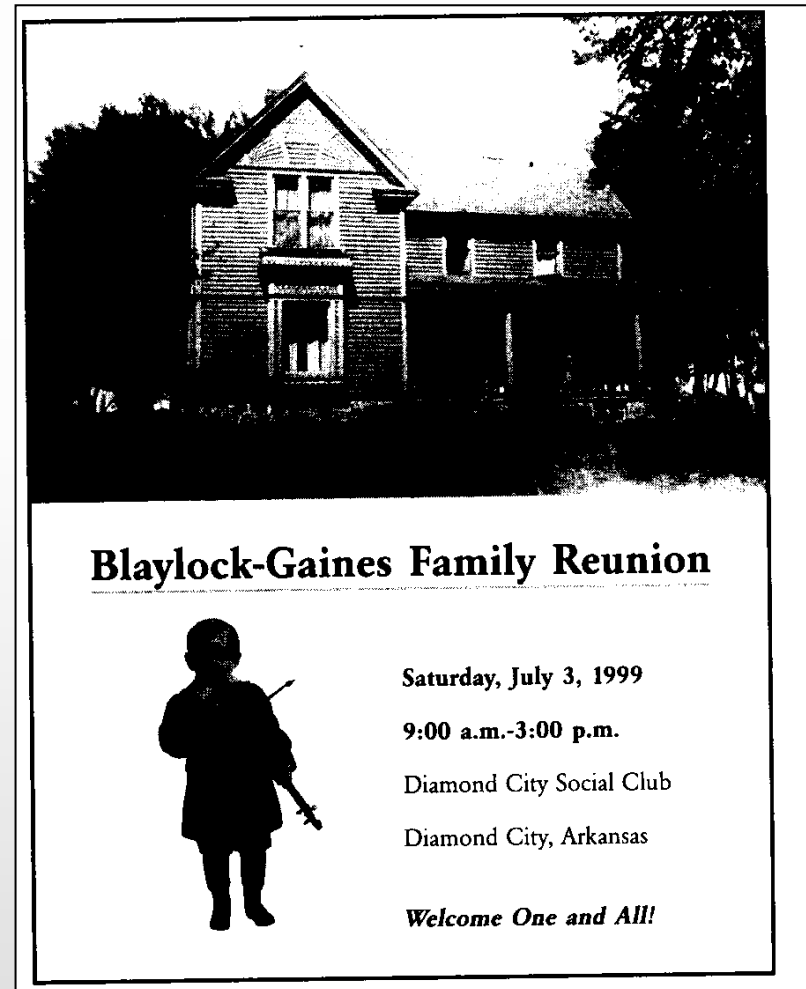
- Creating the feeling of movement in a design.
- Generated through the repetition of lines, colors, shapes, and textures.



	
Espresso	\$1.50
Who would have thought? Our espresso is a teeny-tiny shot of pure energy!	
Espresso Ristretto	\$2.00
Whoa Nelly! An even stronger pick-me-up!	
Espresso Macchiato	\$2.00
The pinnacle of espresso. A shot of espresso with a bit of steamed milk on top.	
Cappuccino	\$2.00
Available in a variety of flavors including amaretto, mocha, and hazelnut. We also have daily specials.	
Caffe Americano	\$2.00
A shot of espresso cut with extremely hot water for a generous serving.	
Caffe Latte	\$1.50
The milk-and-coffee lover's delight. Our best espresso mixed with steamed milk and a topping of foamed milk.	
Plain-Jane Joe	\$1.00
Coffee. Just coffee. Just good coffee. In a variety of flavors including amaretto, mocha, and hazelnut.	

DM EMPHASIS

- Center of interest in a design.
- Noticed first by the audience.
- Creates visual flow or hierarchy which carries the viewer's eye through the design.
- Use differences in size, color, and type.





UNITY/HARMONY

- When all components of a design look as if they belong together. Achieved when the Elements and Principles of Design are used effectively.
- Alignment often impacts unity/harmony.
- Arranging design components in an organized and visually appealing manner.
- White Space--The absence of text or graphics in a design; visual breathing room for the eye; helps avoid over-crowding and creates natural flow.



QUESTIONS TO CONSIDER

- Identify ways to achieve harmony in designing a layout.
- How can placement, alignment, size, and white space of text and graphic elements impact readability?
- How does balance change depending on the number and placement of graphics?



PART 3: DIGITAL GRAPHICS

Any image or design created or edited by a computer.

- Drawings
- Logos
- Photos
- Buttons & Icons
- Diagrams
- Charts





BITMAP VS. VECTOR GRAPHICS

Bitmap

- Use square pixels arranged in a grid that have assigned colors.
- Usually larger file size.
- Lose clarity when viewed up close or zoomed in.
- Also referred to as Raster Graphics.

Vector

- Use mathematical formulas to define lines, points, curves, and other attributes.
- Small file size.
- Do not lose clarity when viewed up close or zoomed in.
- Best type of graphic for printing in large scale.

The logo features a circular icon on the left containing a grid of binary digits (0s and 1s). To the right of this icon, the letters 'DM' are written in a large, stylized, light gray font. Below 'DM', the word 'RESOLUTION' is written in a bold, black, sans-serif font.

DM RESOLUTION

- Describes the clarity of Bitmap Graphics.
- Determined and defined by the number of Pixels Per Inch (PPI).

Low Resolution

- Blurry in appearance.
- Relatively small file size.

High Resolution

- Very clear in appearance.
- Relatively large file size.



QUESTIONS TO CONSIDER

- Predict the quality of the same graphic with a small file size versus a large file size.
- Why are logos best created in a vector graphic software program?

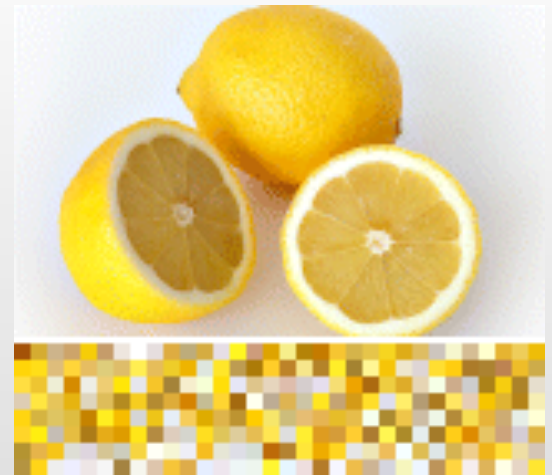


COLOR MODES

- Black & White - uses only true black and true white.
- Grayscale - uses true black, true white, and all shades of gray in between.
- True Color - all possible color combinations.
- RGB (Red, Green, Blue) - optimized for viewing on a screen.
- CMYK (Cyan, Yellow, Magenta, Black) - optimized for printing purposes.

COLOR DEPTH

- The number of distinct colors a graphic is capable of displaying.
- Related to color mode:
 - Black & White
 - Indexed Color (256 colors)
 - True Color (16.7 million colors)





QUESTIONS TO CONSIDER

- What factors can affect the decision to use RGB or CMYK when creating a graphic?
- Why would designers prefer to use true color for high resolution photos?