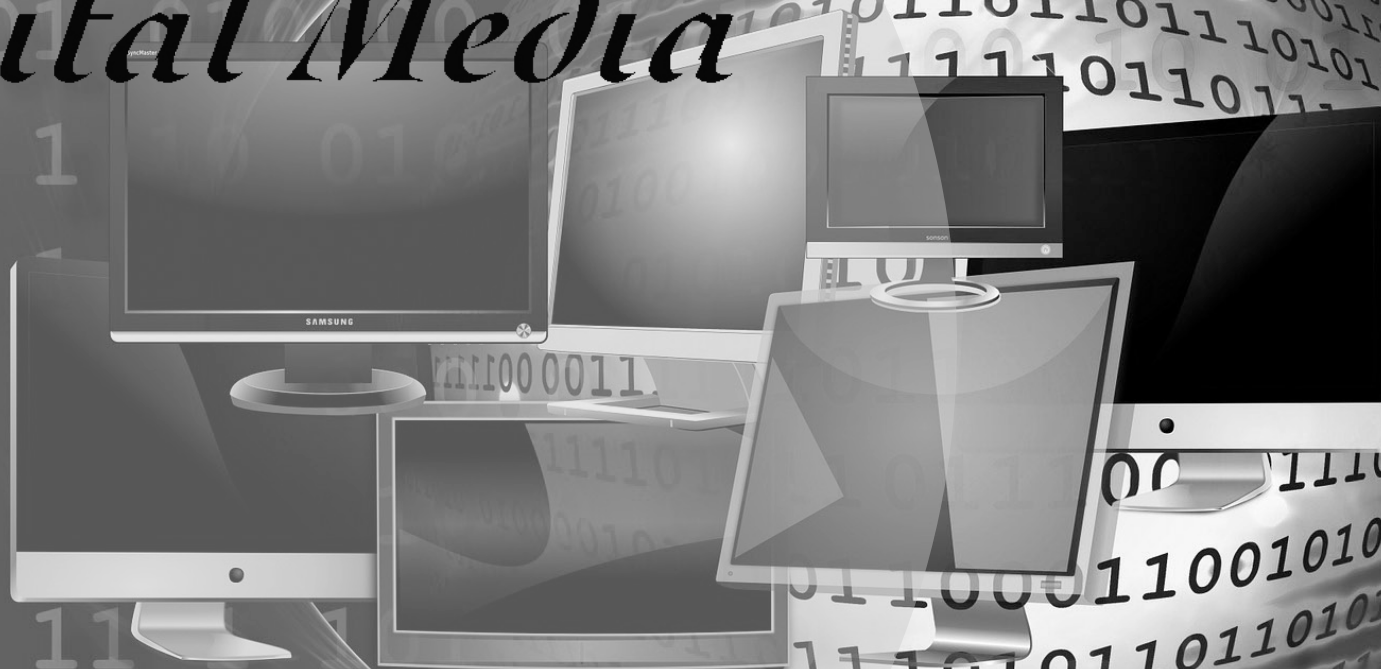




**ExplorNet's**

# *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.](#)



# DM COLOR

- 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

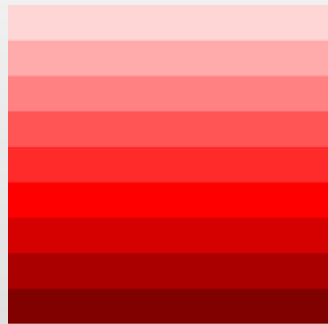
**PURPLE** - royalty, dignity  
mystery

**BLACK** - mourning, despair  
sophistication

**WHITE** - innocence, purity,  
faith

# DM **COLOR SCHEME**

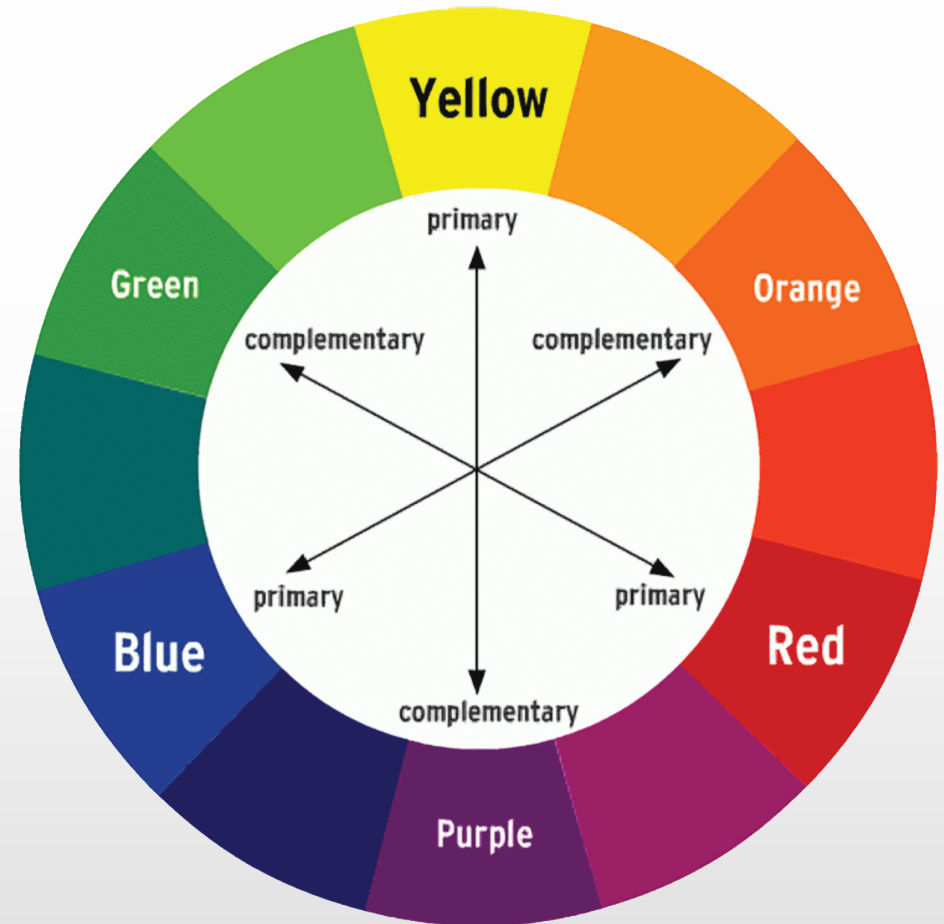
- The purposeful selection of colors for use in design.
- Sets a mood, attracts attention, or makes a statement.
- Color can be your most powerful design element if you learn to use it effectively.
- Color schemes usually are only 2 or 3 colors.



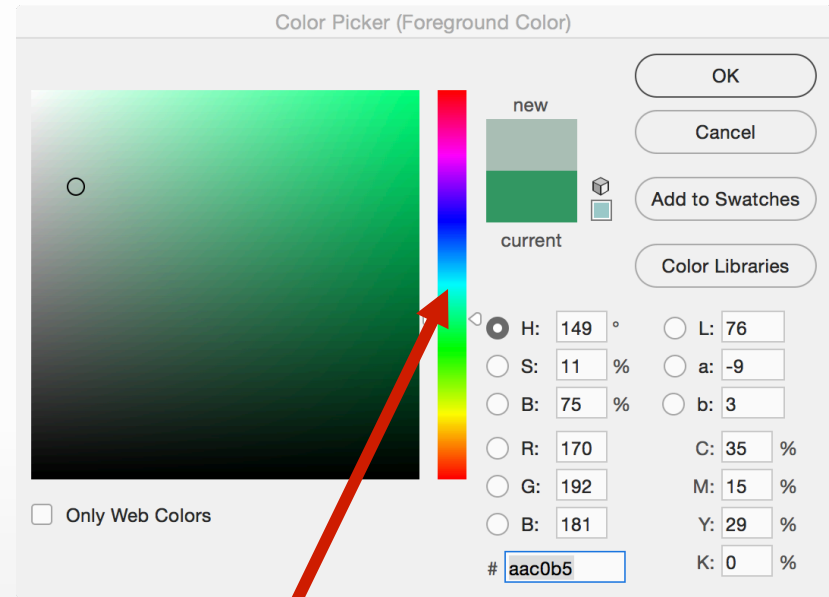


# COMPLEMENTARY COLORS

- 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.

# DM **SATURATION**

The amount of hue used in a particular color.

○ Example:  
PURPLE



Less saturated with the purple hue.



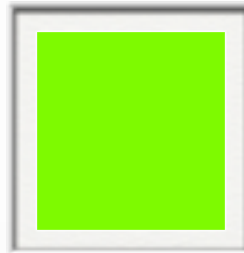
More saturated with the purple hue.



# DM **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**

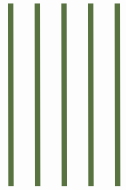
- Why would a designer want to use complimentary colors when creating a logo?
- Summarize the benefits of using color as a design element.
- Identify several ways a color scheme can impact a graphic.
- Contrast the color psychology of black and white and how this affects advertising choices.

- 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

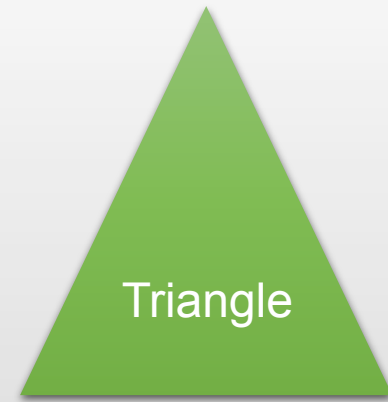
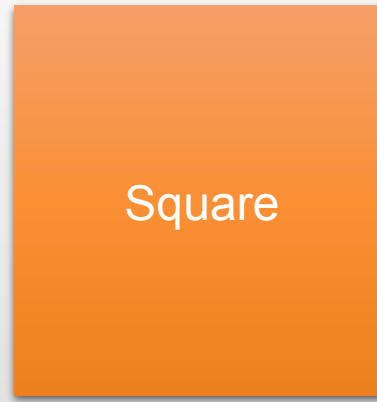


## CURVED LINES

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

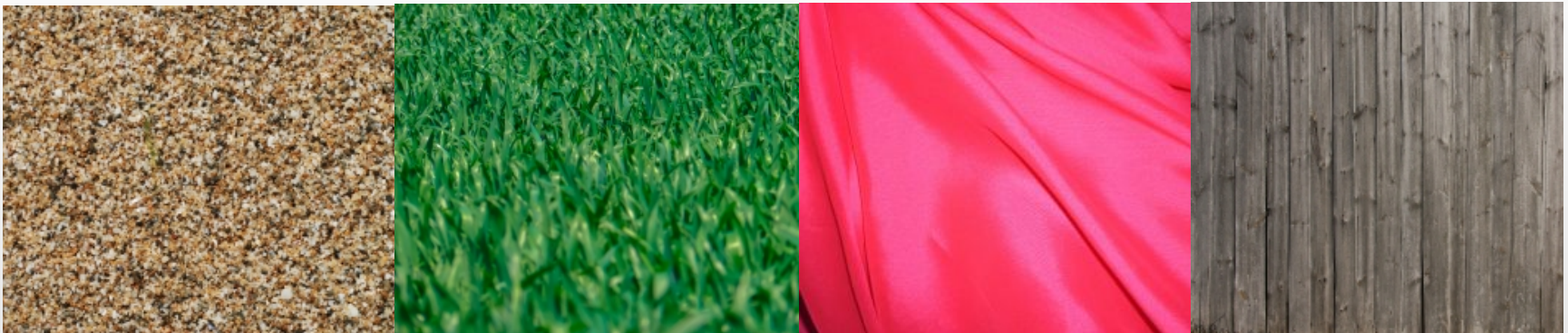
# DM SHAPES

- 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





# DM **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.



# **DM** **BALANCE**

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

## FORMAL BALANCE

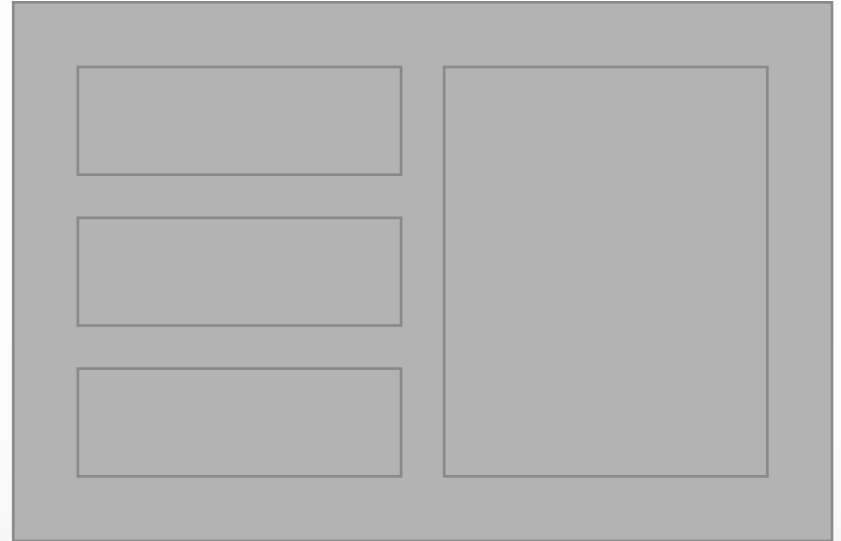
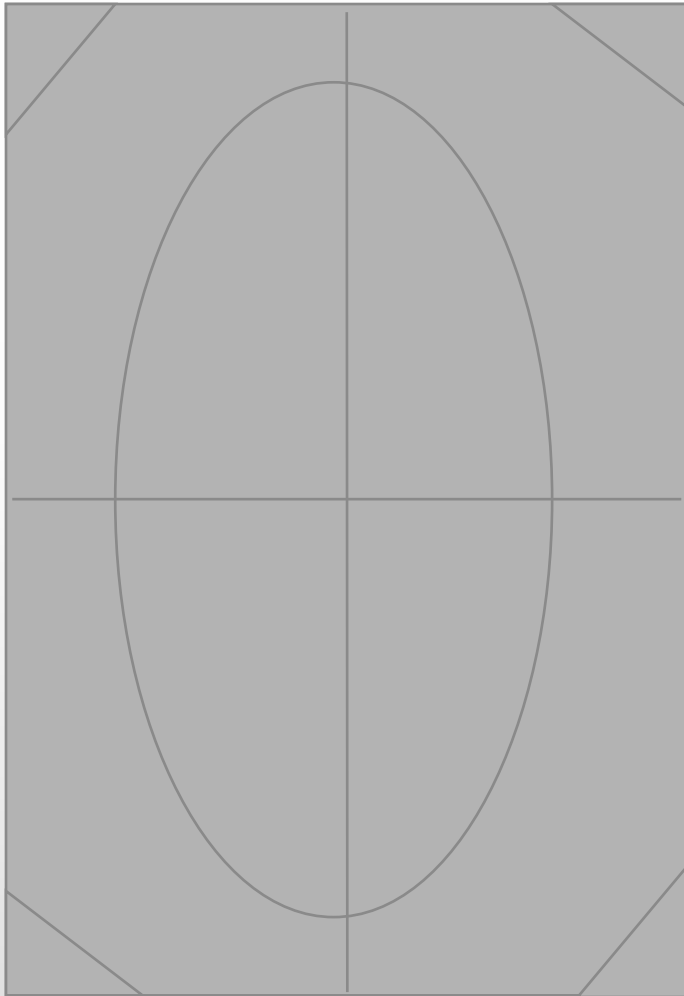
- Also known as symmetrical balance.
- Design is exactly equal on both sides.

## INFORMAL BALANCE

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



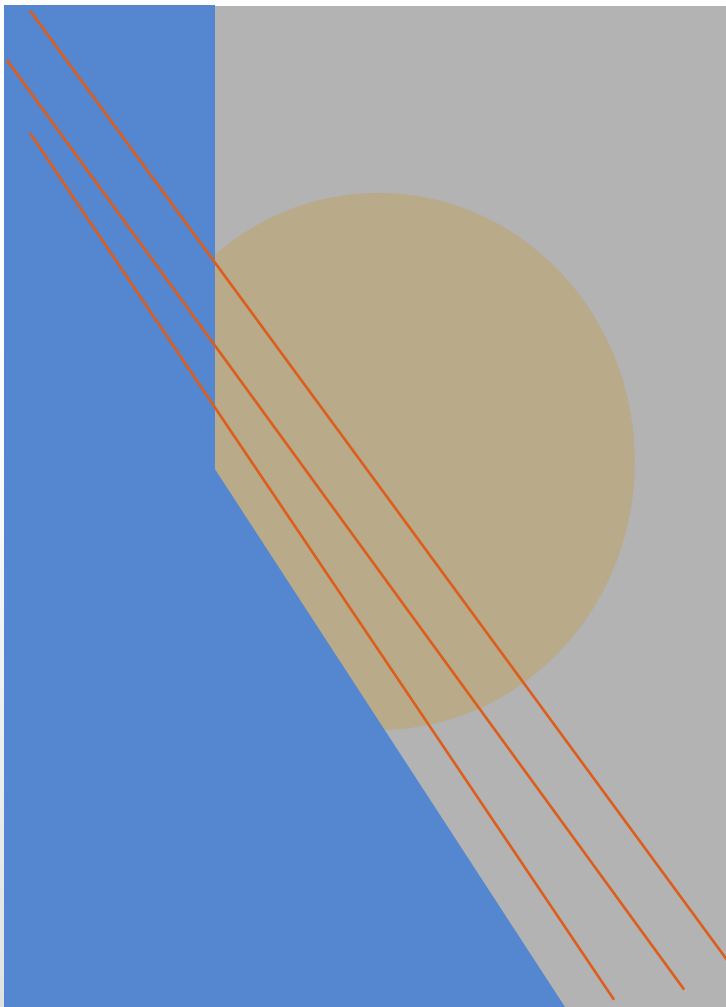
# ***SYMMETRICAL BALANCE***





# 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.



**Blaylock-Gaines Family Reunion**



Saturday, July 3, 1999  
9:00 a.m.-3:00 p.m.  
Diamond City Social Club  
Diamond City, Arkansas  
*Welcome One and All!*



# **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 the letters 'DM' in a large, stylized, light gray font. To the left of 'DM' is a circular graphic composed of binary code (0s and 1s) arranged in a grid. Below 'DM' is the word 'RESOLUTION' 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?

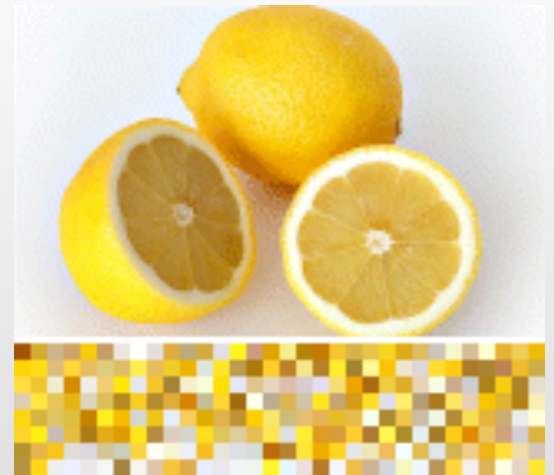


# **DM** **COLOR MODES**

- 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.

# DM 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?