

# Semester 1 Final Study Guide AC Pathway-Graphics Tech

## VOCABULARY

**ELEMENTS OF ART:** The visual components of color, form, line, shape, space, texture, and value.

### Line

An element of art defined by a point moving in space. Line may be two-or three-dimensional, descriptive, implied, or abstract.

### Shape

An element of art that is two-dimensional, flat, or limited to height and width.

### Form

An element of art that is three-dimensional and encloses volume; includes height, width AND depth (as in a cube, a sphere, a pyramid, or a cylinder). Form may also be free flowing.



# Value

The lightness or darkness of tones or colors. White is the lightest value; black is the darkest. The value halfway between these extremes is called middle gray.

# Space

An element of art by which positive and negative areas are defined or a sense of depth achieved in a work of art .

# Color

An element of art made up of three properties: hue, value, and intensity.

- Hue: name of color
- Value: hue's lightness and darkness (a color's value changes when white or black is added)
- Intensity: quality of brightness and purity (high intensity= color is strong and bright; low intensity= color is faint and dull)



# Texture

An element of art that refers to the way things feel, or look as if they might feel if touched.



# 5 Basic Principles Of Graphic Design

## 1. Contrast

The idea behind contrast is to avoid elements on the page that are merely similar. If the elements (type, color, size, line thickness, shape, space, etc.) are not the same, then make them very different.

Contrast is often the most important visual attraction on a page.

Can you see the difference between your content, ads, headings, body copy and comments?



## 2. Repetition

Repeat visual elements of the design throughout the piece. You can repeat color, shape, texture, spatial relationships, line thicknesses, sizes, etc. This helps develop the organization and strengthens the unity.

Do you have a consistent theme or brand throughout your site? Do you reuse the same color, shapes, block quotes, formatting for all of your articles?

### 3. Alignment

Nothing should be placed on the page arbitrarily. Every element should have some visual connection with another element on the page.

Does everything line up or have you got things centered, left aligned or out of place?

### 4. Proximity

Items relating to each other should be grouped close together. When several items are in close proximity to each other, they become one visual unit rather than several separate units. This helps organize information and reduces clutter.

### 5. Emphasis

Definition: (center of interest-focal point) the area **that first attracts attention in a piece of art**. This area is more important when compared to the other **elements** of art in a composition. This can be by contrast of values, more colors, and placement in the format.

Questions you ask yourself:

Where does your eye look first in a photo or piece of art?

Why does your eye go there first?



# Gestalt Theory Of Visual Perception

Gestalt is a psychology term which means "unified whole". It refers to theories of visual perception developed by German psychologists in the 1920s. These theories attempt to describe how people tend to organize visual elements into groups or unified wholes when certain principles are applied.

>The whole is greater than the sum of the parts<

These principles are:

## Similarity

Similarity occurs when objects look similar to one another. People often perceive them as a group or pattern.



The example above (containing 11 distinct objects) appears as a single unit because all of the shapes have similarity.

Unity occurs because the triangular shapes at the bottom of the eagle symbol look similar to the shapes that form the sunburst.

When similarity occurs, an object can be emphasised if it is dissimilar to the others. This is called anomaly.



The figure on the far right becomes a focal point because it is dissimilar to the other shapes.

## Continuation

Continuation occurs when the eye is compelled to move through one object and continue to another object.



**Continuation occurs in the example above, because the viewer's eye will naturally follow a line or curve. The smooth flowing crossbar of the "H" leads the eye directly to the maple leaf.**

## **Closure**

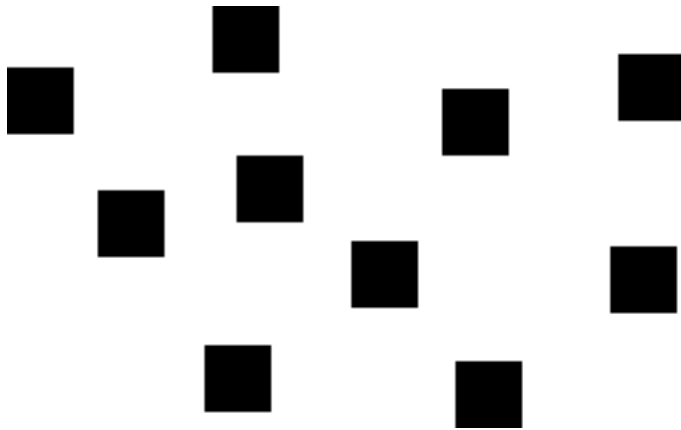
**Closure occurs when an object is incomplete or a space is not completely enclosed. If enough of the shape is indicated, people perceive the whole by filling in the missing information.**



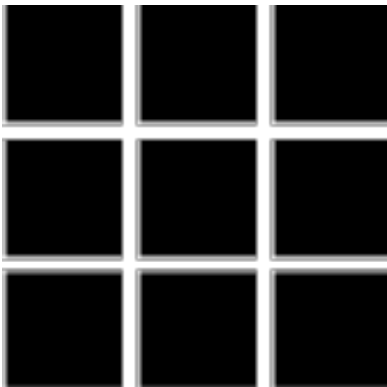
**Although the panda above is not complete, enough is present for the eye to complete the shape. When the viewer's perception completes a shape, closure occurs**

# Proximity

Proximity occurs when elements are placed close together. They tend to be perceived as a group.



The nine squares above are placed without proximity. They are perceived as separate shapes.



When the squares are given close





proximity, unity occurs. While they continue to be separate shapes, they are now perceived as one group.

The fifteen figures above form a unified whole (the shape of a tree) because of their proximity and because of their similarity

## Figure and Ground

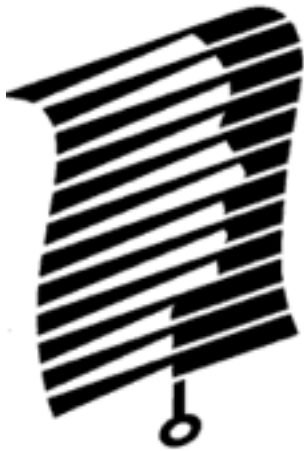
The eye differentiates an object from its surrounding area. a form, silhouette, or shape is naturally perceived as figure (object), while the surrounding area is perceived as ground (background).

Balancing figure and ground can make the perceived image more clear. Using unusual figure/ground relationships can add interest and subtlety to an image.

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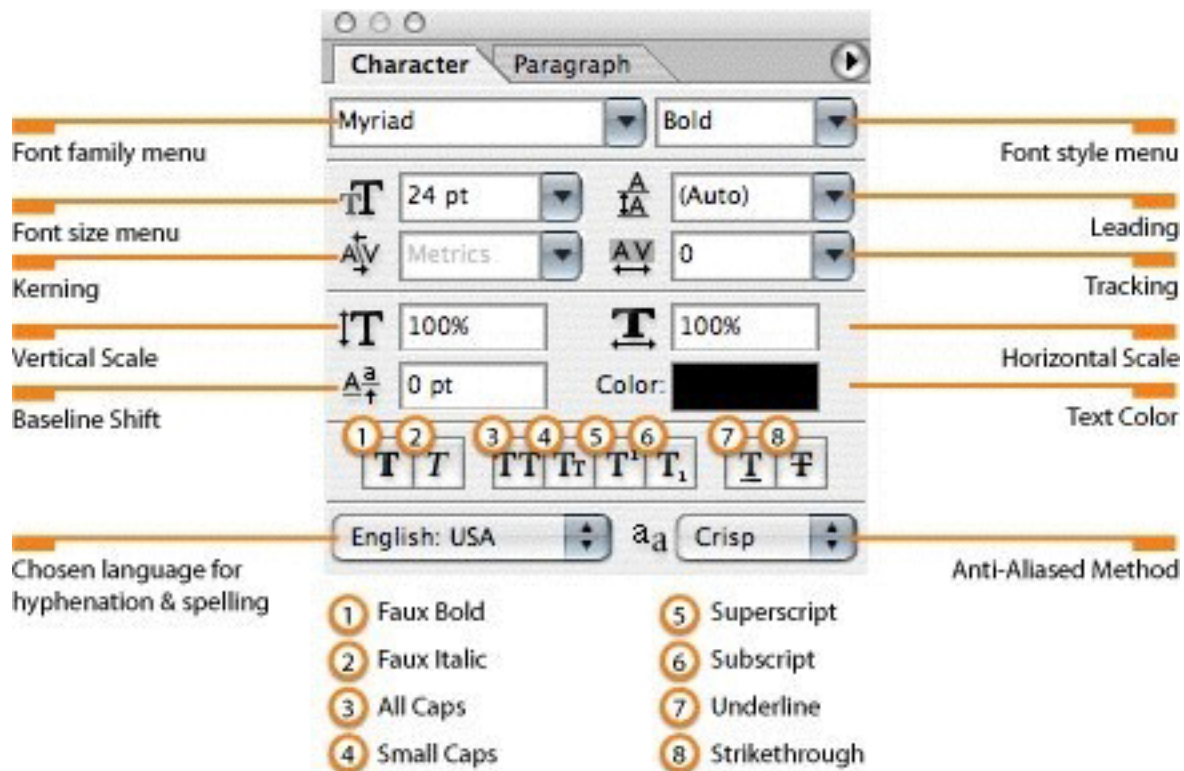
## Figure

The word above is clearly perceived as figure with the surrounding white space ground.



In this image, the figure and ground relationships change as the eye perceives the the form of a shade or the silhouette of a face.

# Illustrator Character Palette



**LEADING- the space between lines**

**TRACKING- the space between all characters**

**KERNING- the space between two selected characters**

Adobe Illustrator is a vector graphics editor developed and marketed by Adobe Systems. The latest version, Illustrator CC 2017, is the twenty-first generation in the product line

Vector art is ideal for printing since the art is made from a series of mathematical curves, it will print very crisply even when resized.[4]

For instance, one can print a vector logo on a small sheet of copy paper, and then enlarge the same vector logo to billboard size and keep the same crisp quality. A low-resolution raster graphic would blur or pixelate excessively

## What's the Difference Between Raster and Vector?

### Rasters and vectors defined

A raster image is made of up pixels, each a different color, arranged to display an image.

A vector image is made up of paths, each with a mathematical formula (vector) that tells the path how it is shaped and what color it is bordered with or filled by.

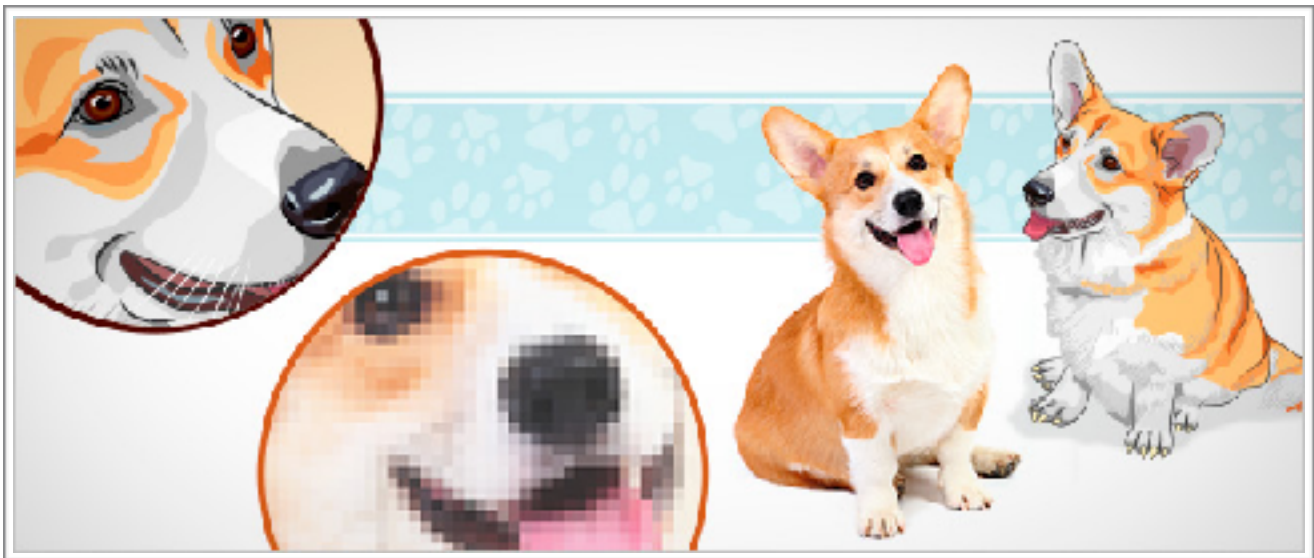
The major difference is that raster image pixels do not retain their appearance as size increases - when you blow a photograph up, it becomes blurry for this reason.

Vector images do retain appearance regardless of size, since the mathematical formulas dictate how the image is rendered.

### Pros and cons of rasters and vectors

Raster images are capable of displaying a myriad of colors in a single image and allow for color editing beyond that of a vector image. They can display finer nuances in light and shading at the right resolution.

Vector images are scalable, so that the same image can be designed once and resized infinitely for any size application - from business card to billboard.



# COLOR THEORY

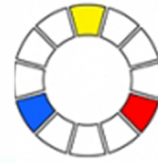
Color is an element of art.



Everytime I use color, I am creating a color scheme.

← This is a color wheel.

The most common color schemes are listed below.



## PRIMARY

YELLOW  
RED  
BLUE



## SECONDARY

ORANGE  
VIOLET  
GREEN



## TERTIARY

YELLOW ORANGE  
RED ORANGE  
RED VIOLET  
BLUE VIOLET  
BLUE GREEN  
YELLOW GREEN

Primary... {I can make all the other colors by mixing different amounts of primary colors.

Secondary... {I can mix two primary colors to make a secondary color.

Warm... {Yellow and all the colors with red and orange tones are warm.

Cool... {Violet and all the colors with blue and green tones are cool.

Complimentary... {Opposites on the color wheel are complimentary.}

Analogous... {Colors that are close neighbors on the color wheel are analogous.}

Rainbow... {Using primary and secondary colors placed in order from the color wheel, I can make a rainbow.

Intermediate... is a color term I need to know. It is the color in between the primary and secondary colors on the color wheel.

**Tint- Means to add white**  
**Shade- Means to add black**

**ROYGBIV**

# Typography

## Serif

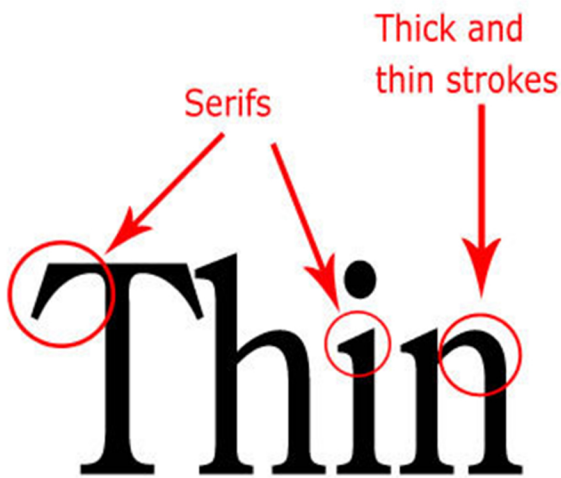
A serif is a small decorative flourish on the end of the strokes that make up letters and symbols

## Sans Serif

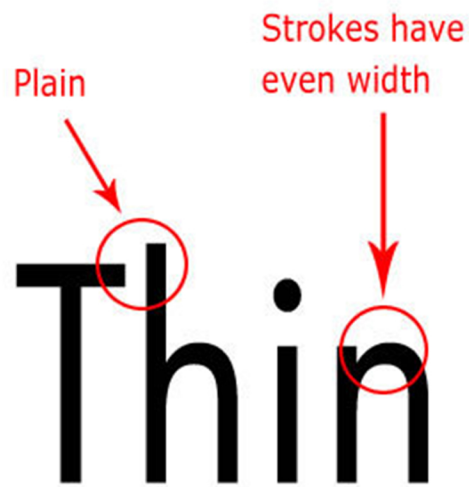
"Sans" (to be without) Serif fonts do NOT have any flourishes at the end of strokes.

### Serif Font

### Sans Serif Font



Century Old Style



Futura Book



## SERIF FONTS

Times New Roman

Century Old Style

**American Typewriter**

## SANS SERIF FONTS

Arial

Helvetica

Calibri

— THE —  
**PSYCHOLOGY**  
 BEHIND TYPE CHOICES



EACH FONT TYPE YOU USE FOR YOUR BUSINESS EVOKES DIFFERENT EMOTIONS.

*Get the emotions you want people to feel when you select the right logo font.*

**SERIF**

SERIF

**Tradition**

TIMES NEW ROMAN

**RESPECTABLE**

TRAJAN

**Reliable Comfort**

BASKERVILLE

GEORGIA ITALIC

**Sans Serif**

SANS SERIF

**Stability**

HELVETICA BOLD

**OBJECTIVE**

FRANKLIN GOTHIC

**Clean Modern**

CALIBRI

MYRIAD ITALIC



SCRIPT

**Elegance**

BICKHAM SCRIPT

**Affectionate**

EDWARDIAN SCRIPT

**Creativity**

LAVANDERIA

DISPLAY

**Friendly**

COOPER

**unique**

SPACEAGE ROUND

**EXPRESSIVE**

VALENCIA

**Amusing**

GIDDYUP

MODERN

**STRONG**

FUTURA

**Progressive**

ITC AVANT GARDE EXTRA LIGHT

**Stylish Chic**

DIDOT ITALIC

CENTURY GOTHIC



Resources:

<http://visual.ly/psychology-fonts>, <http://www.onestrapaest.com/2011/12/13/the-psychology-of-fonts/>, <http://thelogocompany.net/blog/infographics/psychology-color-logo-design/>, <http://thehub.com/contests/the-taxonomy-of-type/>, <http://thelogocompany.net/blog/infographics/psychology-color-logo-design/>, <http://handwritinginstitute.com/psychology-of-fonts/>, <http://psychology.wichita.edu/aur/usabilitynews/1/PersonalityofFonts.asp>

## TYPOGRAPHY GLOSSARY

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Words to guide you through your typographic wakening.

### serif

A serif is a typeface with a small projection at the end of letter strokes.

### sans serif

A sans serif is a typeface without any stroke embellishments or detail.

### *Script*

A script typeface links together letter-to-letter, they are best saved for headings and display.

### slab serif

A slab serif is a typeface that's identified by its thick, block-like serifs.

### ALIGNMENT

Alignment is the arrangement or adjustment of components to make them sit together.

### Hierarchy

The order in which you read your information based on typeface, scale, position and style.

### **Serif fonts are easier to read in printed works**

This is because the serif make the individual letters more distinctive and easier for our brains to recognise quickly. Without the serif, the brain has to spend longer identifying the letter because the shape is less distinctive.

### **Sans serif fonts are better on the web**

An important exception must be made for the web. Printed works generally have a resolution of at least 1,000 dots per inch; whereas, computer monitors are typically around 100 dots per inch.



# A Few Simple Type Rules

- Your typeface selection affects the TONE of your page  
All type families have their own personality/  
characteristics
  - **Legibility-** is how easy it is to identify text in short phrases like  
headlines, slogans
  - **Readability-** is how easy it is to read lots of text on a page
  - Use only one decorative or novelty font per page
  - Avoid using 2 serifs or sans serifs on the same page-they conflict
  - Avoid all CAPS
  - Avoid using italics
  - **Color should improve** -not take away from readability
  - **Type Combinations that work-**  
**Use No More Than 2 type combinations in a design**  
Use only one decorative typeface per page
- Emphasize headlines, titles, more than body copy