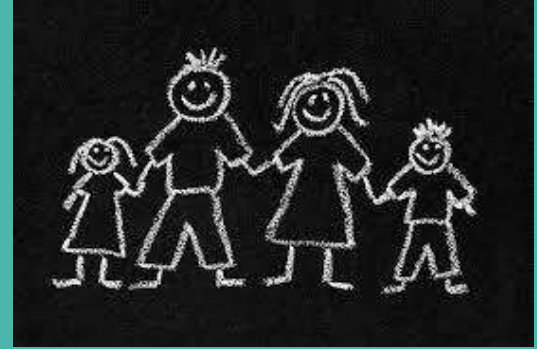# Lesson 1: Introduction to Graphic Design & Illustration

Principles of Art

Graphic

Definition: any visual image or object. A family photo, a road map, and a stick figure drawn on a chalkboard are all examples of graphics.
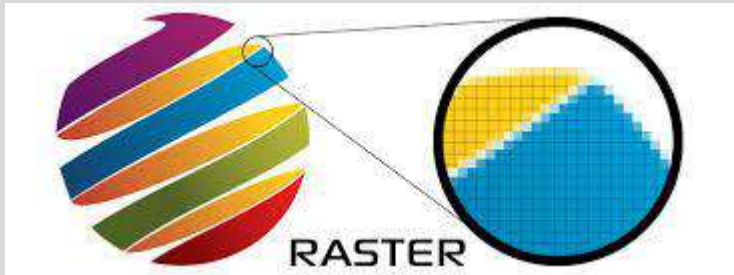
computer graphic

A computer graphic refers to anything that can be seen on the computer or device screen

types of digital graphics

two categories: **raster** graphics and **vector** graphics

A **raster** graphic, which is commonly called a bitmapped graphic or bitmap, is an image formed by a pattern of dots


***pixel** aka "picture element"

Some common raster file formats include:
- Graphics Interchange Format (GIF)
- Joint Photographic Experts Group (JPG)
- Portable Network Graphics (PNG)
- Windows Bitmap (BMP)
- Tagged Image File Format (TIF)

# types of digital graphics

- Graphics Interchange Format (GIF)
- Joint Photographic Experts Group (JPG) or (JPEG)
- Portable Network Graphics (PNG)
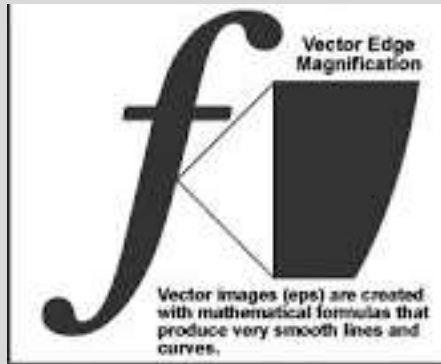- Windows Bitmap (BMP)
- Tagged Image File Format (TIF)
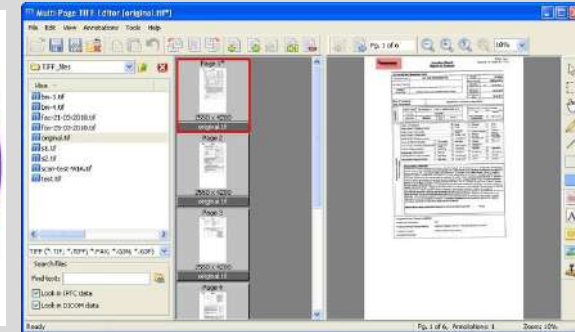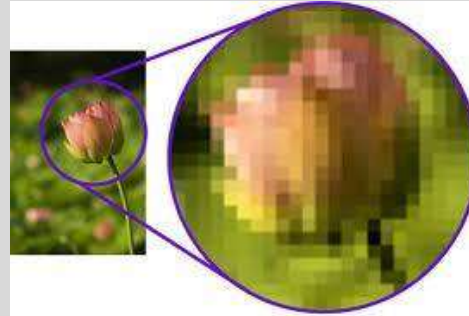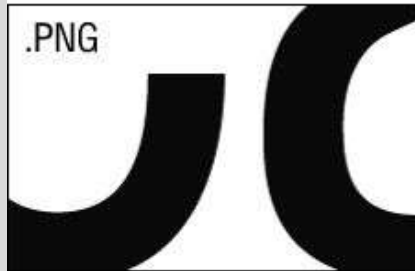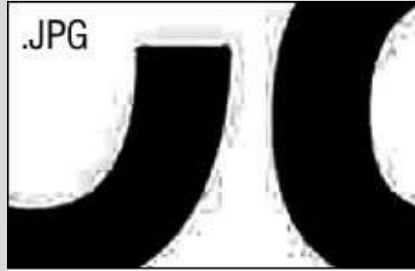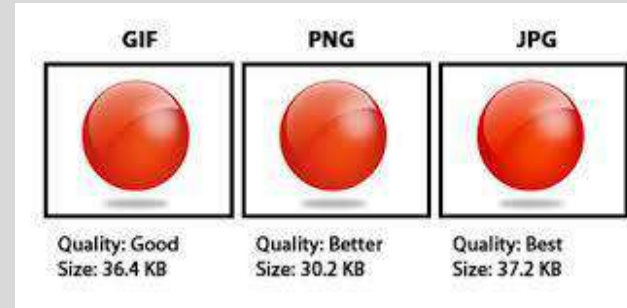
layers

Layers are stacks of information placed on top of each other to create a graphic.

- When all layers are stacked, the complete picture is visible. You can edit each layer separately
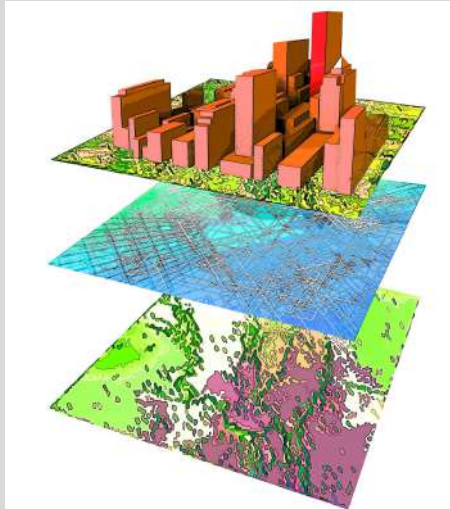
vector graphic

A vector graphic is an image that is created using paths or lines called Bezier curves

raster vs. vector
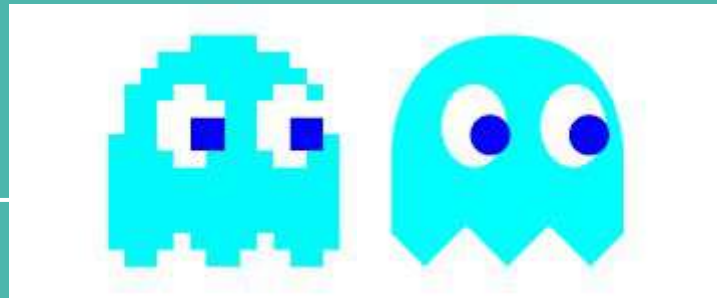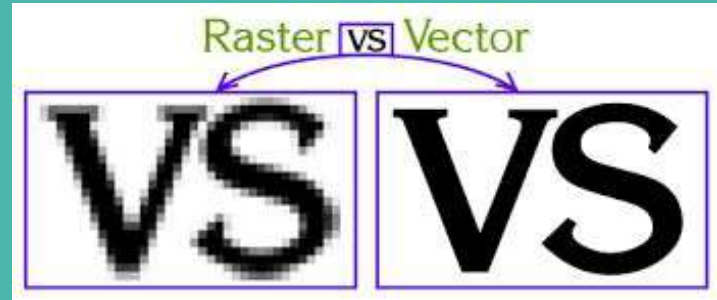
importing & exporting

Importing: information, such as a graphic, into a file from another file (uploading)

Exporting: data is saved in a format that can be used in another application

Image quality

*size and resolution

Clip art

My advice: only use when necessary. We don't use clipart in yearbook, but sometimes in the newspaper
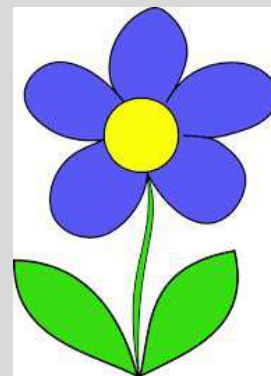
Identifying graphics programs

- Paint programs also allow you to open a raster image, view it on-screen, and make changes to it.
  - Ex. Paint (simple) or Photoshop (more advanced)
- Image editors are an advanced paint program. Editing raster images and adding special effects to photographs can be done. Ex. Photoshop and Adobe "Photoshop" Elements
- Draw Programs, such as Adobe Illustrator, let you to create and edit vector images
- Graphics Tablet

Pixar Animation Studio

Exploring the principles of design

- **Contrast**
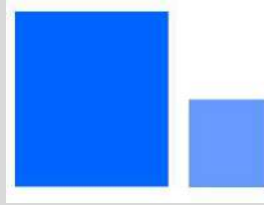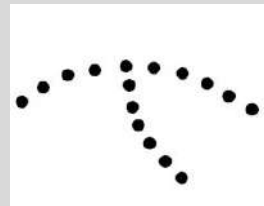 - Contrast uses differences in shape and color to create a comparison. Different sized objects and opposite colors can distinguish one part of the graphic from another.

- **Balance**
  - The way objects are arranged is called balance. Symmetrically arranged objects are evenly balanced, while asymmetrically arranged objects are unevenly balanced.

- **Proportion**
  - The size & location of one object in relation to other objects in the graphic is called proportion

- **Pattern**
  - using the same image, object, or symbol in different location within the art

- **Rhythm**
  - created when
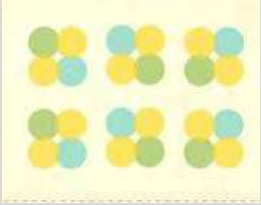 - elements of design are used to create a feeling of movement

- **Continuity**
  - separate elements within the artwork are viewed as part of the same shape, or form

Exploring the principles of design

- ## Repetition
  - a color, shape, or pattern is repeated throughout the graphic

- ## Emphasis
  - creates a focal point

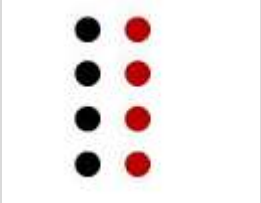- ## Proximity
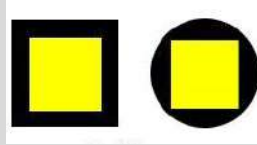 - the closeness between objects indicates a relationship

- ## Unity
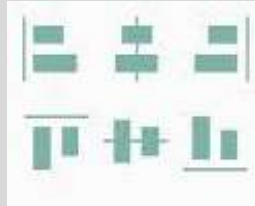 - objects in the image establish a connection through style or color

- ## Harmony
  - the elements of the graphic come together as a complete idea

- ## Alignment
  - the placement of text & objects so they line up within a space

- ## Variety
  - creates visual interest by using different colors and shapes

Exploring the elements of design

LINE

A line is a mark between two points. There are various types of lines, from straight to squiggly to curved and more. Lines can be used for a wide range of purposes: stressing a word or phrase, connecting content to one another, creating patterns and much more.

SHAPE

Height + width = shape. We all learned basic shapes in grade school – triangles, squares, circles and rectangles. Odd or lesser seen shapes can be used to attract attention.

There are three basic types of shape: geometric (triangles, squares, circles etc), natural (leaves, animals, trees, people), and abstracted (icons, stylizations, graphic representations etc).

VALUE

Value is how light or how dark an area looks. A gradient, shown above, is a great way to visualize value – everything from dark to white, all the shades in-between, has a value. Use value to create depth and light; to create a pattern; to lead the eye; or to emphasize.

COLOR

Color is used to generate emotions, define importance, create visual interest and more. CMYK (cyan/magenta/yellow/black) is subtractive; RGB (red/green/blue) is additive.

Some colors are warm and active (orange, red); some are cool and passive (blue, purple).

There are various color types (primary to analogous) and relationships (monochromatic to triad) worth learning more about as well.
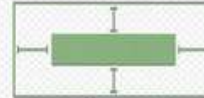
ELEMENTS OF DESIGN

quick reference sheet

SPACE

Space is the area around or between elements in a design. It can be used to separate or group information. Use it effectively to: give the eye a rest; define importance; lead the eye through a design and more.

TEXTURE

Texture relates the to surface of an object; the look or feel of it. Concrete has a rough texture; drywall has a smooth and subtle texture. Using texture in design is a great way to add depth and visual interest. Printed material has actual, textile texture while screen material has implied texture.
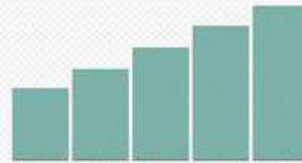
SIZE

Size is how small or large something is: a small shirt vs. an extra large shirt, for example. Use size to define importance, create visual interest in a design (via contrasting sizes), attract attention and more.

white space

Area between objects in a graphic or on a page; and texture, which is the quality of the surface of shapes, causing them to look smooth like glass or rough like sand