

# Project 2

# Logos

Timing: 4 to 7 hours

## Project overview

Logos can evoke immediate associations with companies or specific products. Organizations and corporations use logos to identify themselves and set up brands. A logo should be unique, functional, and versatile. In this project, students view sample logos and discuss color theory and design principles used in the logos. Students plan, create, and build a logo for use in other publications, such as business cards, menus, or advertisements. Students learn about file formats, resolution, and image size and select appropriate settings for a variety of final product scenarios.

*Student product:* Digital logos optimized for web, print, and video.

## Project objectives

At the completion of the project, students will have developed the following skills:

### Project management skills

- Planning and creating a logo
- Managing and organizing graphics elements and illustrations

### Design skills

- Understanding and employing design principles
- Understanding and employing color theory
- Identifying the difference in color modes
- Understanding color management
- Sketching
- Creating and editing graphical elements and illustrations
- Designing for a specific audience and purpose

### Research and communication skills

- Investigating logos
- Critiquing designs
- Communicating purpose and goal
- Communicating and presenting design decisions
- Giving feedback on a project

### Technical skills

#### *Photoshop*

- Using guides and rulers
- Understanding vector and bitmap graphics
- Using swatches
- Drawing lines
- Drawing and modifying shapes
- Creating vector masks
- Adding text to images
- Outputting for web
- Outputting for print
- Outputting for video

## Project materials

- Adobe Photoshop CS4 Extended installed on all machines
- Presentation: Introduction to graphic design
- Worksheet: Design principles
- Guide: How to understand color management
- Worksheet: Review and redesign of logos
- Photoshop guide: How to create a new document
- Photoshop guide: How to use drawing tools
- Photoshop guide: How to draw shapes
- Guide: Bitmap and vector images
- Photoshop guide: How to use selection tools (*from Project 1*)
- Photoshop guide: How to add text to images
- Photoshop guide: How to generate different file formats (*from Project 1*)

## Background preparation resources

- Technical and content information
- Key terms
- ISTE NETS\*S Standards for Students
- Adobe Certified Associate, Visual Communication objectives

## Project steps

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### Color theory and design

(Suggested time: 50–75 minutes)

1. Tell students they will be creating a logo they can use as an identifying element for themselves, for a fictional organization, or for a school group. Explain the goals of this project:
  - Explore color theory and design principles
  - Investigate selection, drawing, and painting tools in Adobe Photoshop CS4 Extended
  - Understand and incorporate image-optimization strategies and file formats
  - Identify aspects of redesign and its importance in the design process
2. Show students examples of print-, web-, and video-based logos and discuss with students the types of design principles used in these logos. Have students use the design principles worksheet to define design principles. As you introduce each principle, allow students time to fill in their worksheets. At the conclusion of the discussion, select a few students to share their documents and explain why the logo they chose represents a particular design principle. Some principles to cover include:
  - Emphasis/contrast (focal point)
  - Proximity/groupings
  - Balance
  - Alignment
  - Harmony/proportion
  - White space
  - Repetition
  - Color

*Presentation:* Introduction to graphic design

*Worksheet:* Design principles

**Note:** You might want to gather logos in a presentation to lead students through this exercise.

3. Show students examples of print-, web-, and video-based logos and ask them to identify visual cues and design principles that help the logos stick in their minds. Discuss how these logos are appropriate for the organizations they represent. Discuss how the designs reach the organization's target audience and meet the goals of the company or individual.
4. As students begin to think about their logos, explain that they will select the colors, layout, and elements that will bring their logos to life. Some principles to cover include:
  - Brightness: The quantity of light reaching the viewer's eye
  - Contrast and the color wheel
  - Using color in design
  - The differences between RGB and CMYK
  - Color management: Ensuring that viewers see the same color across different devices
5. To help students understand the importance of color management, explain why color variations occur between devices. Describe solutions to help them create consistency across devices. Some things to discuss include:
  - Causes of color variation
  - Monitor profiles
  - Input device profiles
  - Output device profiles
  - Manage color by using color settings
  - Soft-proof to prevent color variation from screen to print
  - Manage color when printing

*Guide:* How to understand color management

6. Instruct students to select the person, group, or organization they will create their logo for and brainstorm a set of words and goals that best describe that person, group, or organization. Have students determine design principles they can use to evoke descriptive words as they sketch concepts for this logo on paper. Explain that they can incorporate any images from Project 1. Have students record their initial goals in the review and redesign worksheet.

*Worksheet:* Review and redesign of logos

### **Constructing the logo**

(Suggested time: 100–150 minutes)

7. Discuss possible canvas sizes for logos. Typical sizes are 79 x 51 pixels (very small), 150 x 25 pixels, 125 x 144 pixels, and 243 x 103 pixels. Introduce how to create a new document in Photoshop and explain the options they can alter, including:
  - Document size
  - Resolution
  - Color mode (CMYK, RGB, grayscale, and so on)
  - Background color

*Photoshop guide:* How to create a new document

8. Introduce how to use guides and rulers in Photoshop.

9. Introduce drawing and image-editing tools such as the Line, Shape, Eraser, and Paint tools. Discuss the differences between vector and bitmap graphics.

*Photoshop guide:* How to use drawing tools

*Photoshop guide:* How to draw shapes

*Guide:* Bitmap and vector images

10. Introduce using vector masks as a useful tool for hiding selected parts of an image.

*Photoshop guide:* How to use selection tools (*from Project 1*)

11. Introduce text-effect tools such as Bevel and Emboss.

*Photoshop guide:* How to add text to images

12. Allow students time to build their logos.

### **Review and redesign**

(Suggested time: 20–30 minutes)

13. Through a class discussion, define *review* and *redesign*. Explore what redesign means for student work and why it might be a useful step in the overall design process. Develop class definitions and discuss possible steps or questions that will help in redesigning a product. Some possible categories for review include:

- Meeting initial focus, purpose, and audience
- Changing focus, purpose, or audience
- Applying good design principles

14. Have students individually review their own logos against their initial goals and intended design principles.

*Worksheet:* Review and redesign of logos

15. After the review, allow students time to redesign their logos if needed.

## Optimizing and finalizing images

(Suggested time: 50–100 minutes)

16. Explain to students that they need to prepare multiple versions of their logos for use in color and in black-and-white printed documents, as well as for use on the web and in videos. Discuss image optimization and the importance of file formats. Discussion topics might include:
- The difference between printed and on-screen images (inches versus pixels, size variation, scaling versus resampling, and ink dots versus RGB values)
  - File formats (such as GIF, JPEG, TIFF, EPS, and PDF)
  - Image resolution (such as pixels versus inches; ppi and dpi for printing, pixels for the web, and line screen frequency for commercial printing)
  - Preserving image quality when manipulating images
  - Broadcast standards for video (such as NTSC and HDTV) to help select the appropriate TV image preset
  - Avoiding thin lines (thinner than 2 pixels) because interlacing can create flicker when the image is displayed in video
  - Using the NTSC Colors filter when working with color for video use because saturated or bright colors can cause bleeding when displayed in video

**Note:** In discussing file formats, it may be helpful to identify the best file formats for the web (JPG, GIF, PNG), for photos (PSD, TIFF, JPG, PDF, DICOM, large document format), for commercial printing (TIFF, EPS, PDF, PSD, DCS), for video (PSD, TGA, PICT), and for PowerPoint/Word (PNG).

*Photoshop guide:* How to generate different file formats (*from Project 1*).

17. Allow students time to prepare their logos for web, print, and video then save their settings as presets for future use.

## Presenting their work

(Suggested time: 50–100 minutes)

18. Explain that each student will present three logos to the class and include the following in their presentation:
- Their design decisions in creating each logo and their rationale for preparing the images for each medium (web, print, video), including the file type, size, and resolution for each version and situation.
  - Explanations of any changes they made during the review and redesign stage.
  - What they learned in the project and what they want to learn next.
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## Extension activities

You can extend the project in the following ways:

- *Design activity:* Have students explore the color schemes posted on Kuler in Adobe labs: <http://kuler.adobe.com>. Have students, in small groups, select their favorite color scheme and articulate where they might use such a color scheme and why it is useful for that purpose.
- *Design challenge:* Select a student logo that incorporates complex colors and effects. Have the students in the class optimize this logo, trying to achieve a smaller file size than the creator's original web version while maintaining the look and quality of the logo. Have students vote on the versions to select the one with the best quality and the smallest file size.

## Assessment

- Project rubric

## Background preparation resources

- Review the student step-by-step guides referenced in this project.
- For an overview of the user interface and for more information on the technical aspects of Photoshop, see Photoshop Help.
- You might supplement this project with the following design book:
  - Lawler, B. (2006). *The Official Adobe Print Publishing Guide, Second Edition*. Berkeley: Adobe Press.

## Logos

- You might want to download and prepare sample logos from the following kinds of organizations:
  - Nonprofit organizations
  - Large businesses
  - Small local businesses
  - Sports teams
  - Media organizations
  - Web-based companies
- A short article on making logo designs: [www.webdesignfromscratch.com/logos.cfm](http://www.webdesignfromscratch.com/logos.cfm).
- Types of logos and their construction: [www.grantasticdesigns.com/logos1.html](http://www.grantasticdesigns.com/logos1.html).

## Graphic design

- Review the Introduction to Graphic Design presentation.
- An article on design principles: [www.digital-web.com/articles/principles\\_of\\_design](http://www.digital-web.com/articles/principles_of_design).
- Before-and-after formats illustrating design principles: [http://desktoppub.about.com/od/designprinciples/1/aa\\_pod2.htm](http://desktoppub.about.com/od/designprinciples/1/aa_pod2.htm).
- A short introduction to graphic design theory, explaining the aspects of design to consider when composing a piece of fine art or producing a graphic layout: [www.usask.ca/education/coursework/skaalid/theory/cgdt/designtheory.htm](http://www.usask.ca/education/coursework/skaalid/theory/cgdt/designtheory.htm).

- A brief discussion of the main principles of design:  
<http://char.txa.cornell.edu/language/principl/principl.htm>.
- Definitions and examples of elements and principles of design:  
[www.johnlovet.com/test.htm](http://www.johnlovet.com/test.htm).
- Definitions for graphic design principles:  
[www.msu.edu/~glazered/tc801/graphic.html](http://www.msu.edu/~glazered/tc801/graphic.html).

### Color theory

- An overview of color theory and the color wheel:  
[www.colormatters.com/colortheory.html](http://www.colormatters.com/colortheory.html).
- A color theory tutorial: [www.worqx.com/color/](http://www.worqx.com/color/).
- A site to spur discussion and terminology of color selection:  
<http://kuler.adobe.com>.

### Design process

- This article from design-lib.com design libraries discusses the design process:  
[www.design-lib.com/guidelines-to-graphic-design-process-gd.php](http://www.design-lib.com/guidelines-to-graphic-design-process-gd.php).

### Key terms

- |                    |                       |
|--------------------|-----------------------|
| • Logo             | • file format         |
| • color wheel      | • resolution          |
| • hue              | • optimize            |
| • saturation       | • review              |
| • chroma           | • redesign            |
| • tint             | • vector              |
| • tone             | • bitmap              |
| • shade            | • proximity/groupings |
| • brightness       | • balance             |
| • RGB              | • alignment           |
| • CMYK             | • harmony/proportion  |
| • color gamut      | • white space         |
| • color profiles   | • repetition          |
| • color management | • pixels              |

## **ISTE NETS\*S Standards for Students**

This project is aligned to the ISTE NETS\*S Technology Standards. Depending on the subject and content area the student selects, you may research your own state's content standards to see how this project aligns to your state requirements.

### **1. Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.

### **2. Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.

### **3. Research and Information Retrieval**

Students apply digital tools to gather, evaluate, and use information. Students:

- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

### **4. Critical Thinking and Problem Solving**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:

- b. plan and manage activities to develop a solution or complete a project.

### **5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- c. demonstrate personal responsibility for lifelong learning.

### **6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.

## **Adobe Certified Associate, Visual Communication objectives**

- 1.1 Identify the purpose, audience, and audience needs for preparing image(s).
- 2.1 Demonstrate knowledge of image resolution, image size, and image file format for web, video, and print.
- 2.2 Demonstrate knowledge of design principles, elements, and image composition.
- 2.5 Demonstrate knowledge of image-generating devices, their resulting image types, and how to access resulting images in Photoshop.
- 2.6 Understanding key terminology of digital images.
- 3.3 Demonstrate knowledge of importing, exporting, organizing, and saving.
- 3.5 Demonstrate an understanding of and select the appropriate features and options required to implement a color management workflow.
- 4.1 Demonstrate knowledge of working with selections and measurement.
- 4.2 Use Photoshop guides and rulers.
- 4.6 Demonstrate knowledge of drawing and painting.
- 4.7 Demonstrate knowledge of type.
- 5.1 Demonstrate knowledge of preparing images for web, print, and video.

## Assessment

	<b>0 - Does not meet expectations</b>	<b>3 - Meets expectations</b>	<b>5 - Exceeds expectations</b>
<b>Brainstorm</b>	Absent or incomplete.	Identifies person, group, or organization for which to design logo. Provides descriptive words and sketch of logo with a purpose and goal.	Identifies person, group, or organization for which to design logo. Provides descriptive words and sketch of logo with clear purpose and goal.
<b>Logo – content</b>	Absent or incomplete.	Logo communicates a purpose and goal for person, group, or organization it is designed for.	Logo clearly and effectively communicates a purpose and goal for person, group, or organization it is designed for.
<b>Logo for print – color</b>	Absent or incomplete.	Creates logo in appropriate file format and size for printing in color. Employs appropriate color theory and design principles.	Creates logo with a clear purpose and goal. The logo is in appropriate file format and size for print in color. Clearly and efficiently employs appropriate color theory and design principles.
<b>Logo for print – black &amp; white</b>	Absent or incomplete.	Creates logo in appropriate file format and size for printing in black & white. Employs appropriate color theory and design principles.	Creates logo with a clear purpose and goal. The logo is in appropriate file format and size for print in black & white. Clearly and efficiently employs appropriate color theory and design principles.
<b>Logo for web</b>	Absent or incomplete.	Creates logo in appropriate file format and size for the web. Employs appropriate color theory and design principles.	Creates logo with a clear purpose and goal. The logo is in appropriate file format and size for the web. Clearly and efficiently employs appropriate color theory and design principles.

	<b>0 - Does not meet expectations</b>	<b>3 - Meets expectations</b>	<b>5 - Exceeds expectations</b>
<b>Logos for video</b>	Absent or incomplete.	Creates logo in appropriate file format and size for video. Employs appropriate color theory and design principles.	Creates logo with a clear purpose and goal. The logo is in appropriate file format and size for video. Clearly and efficiently employs appropriate color theory and design principles.
<b>Presentation</b>	Absent, incomplete, or unfocused.	Presentation includes rationale for the selected file format, size, and resolution for each final product scenario. Presentation explains how the logos communicate a purpose and details changes made in the review and redesign cycle. Presentation reflects on what they learned and what they would like to learn next.	Presentation is clear and compelling. Rationale for the selected file format, size, and resolution for each final product scenario is succinct and logical. Presentation clearly explains how the logos communicate a purpose and details changes made in the review and redesign cycle. Presentation reflects on what students learned and identifies what they want to learn next and why.

# INTRODUCTION TO GRAPHIC DESIGN

## MOVEMENT, BALANCE, UNITY, CONTRAST, EMPHASIS, LINE, AND COLOR

# Graphic design elements

- **Graphic design elements** are the building blocks of graphics.
  - Line
  - Color
  - Shape
  - Texture

# Lines

- **Lines** can be straight or curved.
- How are lines used in the composition on this slide?



# Color definitions

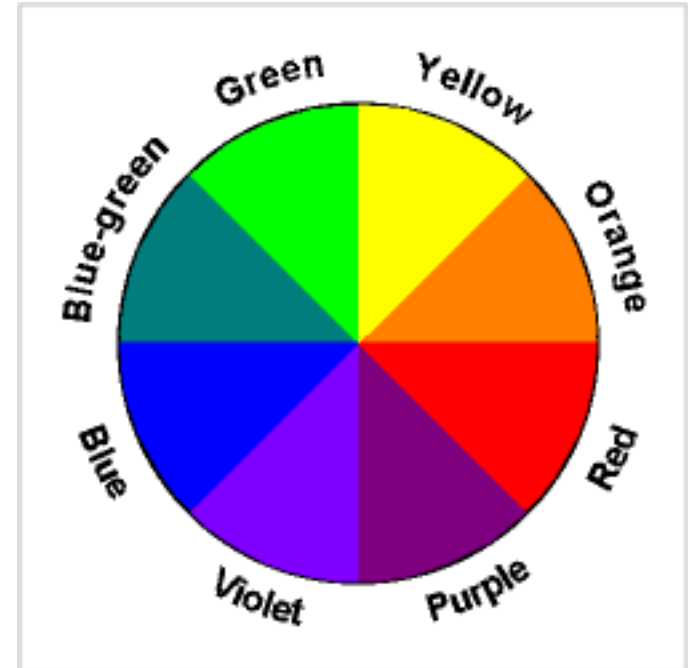
- **Hue** is another word for color.
- **Chroma** is the intensity or purity of color.
- **Tint** is a color mixed with white.
- **Tone** is a color mixed with gray.
- **Shade** is a color mixed with black.

# Color and contrast

- Using color can enhance or detract from a composition.  
[www.lighthouse.org/color\\_contrast.htm](http://www.lighthouse.org/color_contrast.htm)
- Color wheels help determine which colors are in greatest contrast.

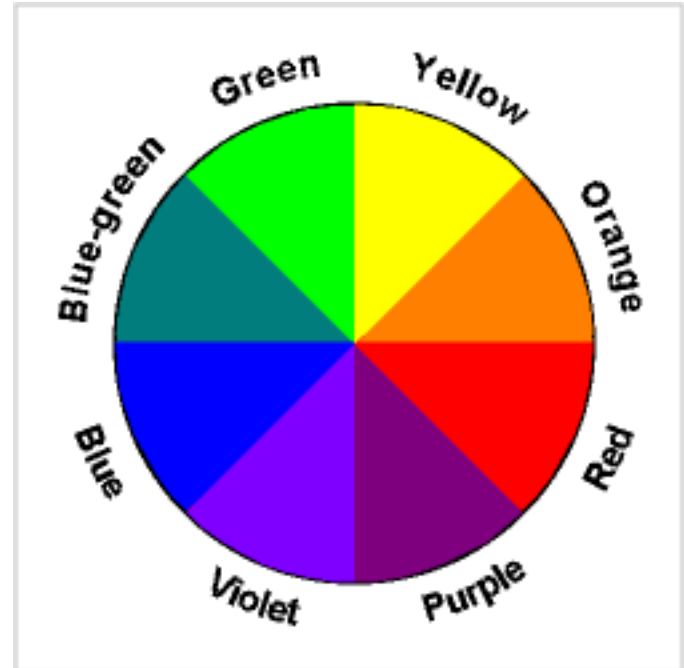
**Use Kuler from Adobe Labs to try out new color schemes:**

<http://kuler.adobe.com/>



# Color wheels

- **Analogous colors** are adjacent to each other on the color wheel.
- **Complementary colors** are opposite each other on the color wheel.

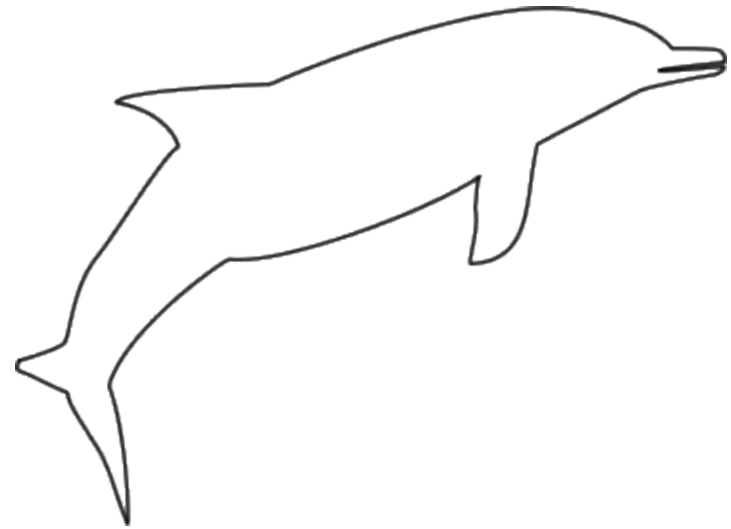


# Color in design

- Use color to label or show hierarchy.
- Use color to represent or imitate reality.
- Use color to unify, separate, or emphasize.
- Use color to decorate.
- Use color consistently.

# Shapes

- **Shapes** are enclosed objects that can be created by line or created by color and value changes that define their edges.



# Texture

- **Texture** is the surface look of an object created by varying dark and light areas.
  - Roughness
  - Smoothness
  - Depth

# Graphic design principles

- **Graphic design principles** are ways in which elements are used together.
  - Movement
  - Balance
  - Emphasis
  - Unity

# Movement

- **Movement** is the use of lines, color, and repetition to create the illusion of motion.
  - Curved forms or lines
  - Repetition of geometric forms
  - Fuzzy lines or outlines

# Lines

- **Lines** can indicate motion or direction.
- How are lines used in the composition on this slide?



# Balance

- **Balance** is the act of comparing or estimating two things, one against the other, and the contrast between:
  - Empty space (white space) and filled space
  - Text and images
  - Color and no colors and different colors
  - Textures against flat colors

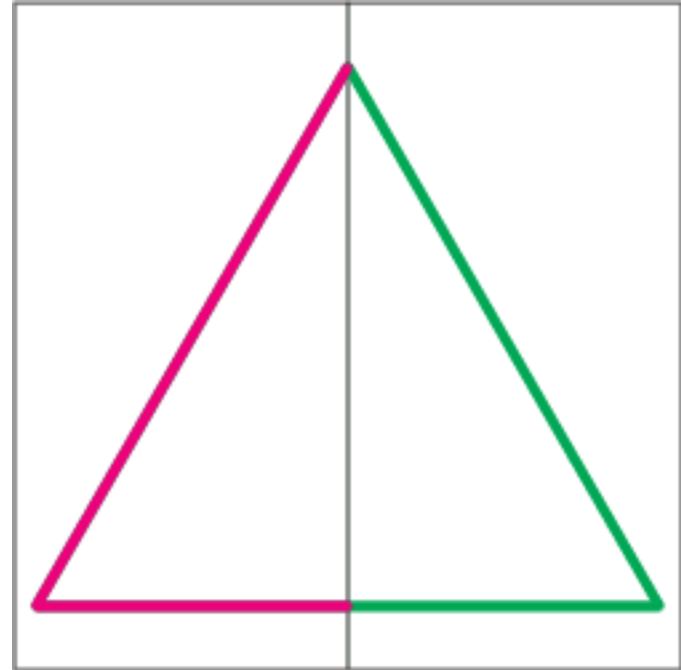
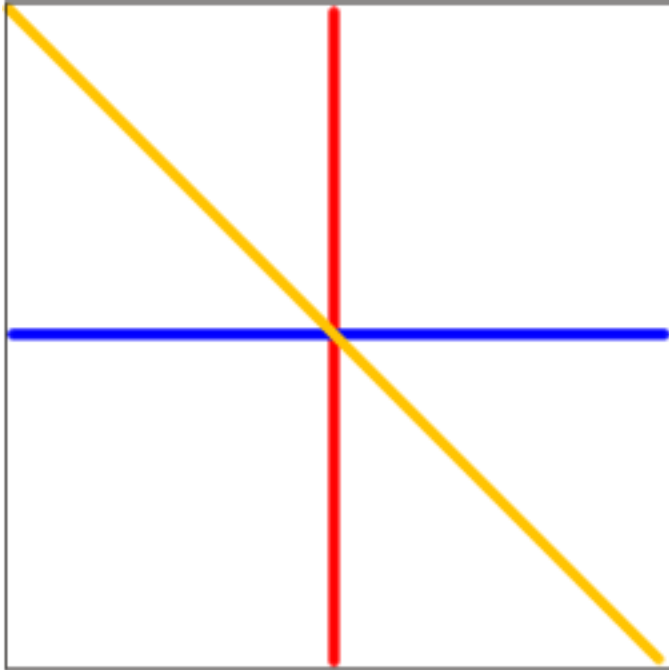
# Balance in composition

- There are three different types of balance when using color, shape, and position:
  - Symmetry
  - Asymmetry
  - Radial symmetry

# Symmetrical or formal balance

- You can usually identify at least one of three **lines of symmetry**.
  - Horizontal
  - Vertical
  - Diagonal

# Symmetrical balance



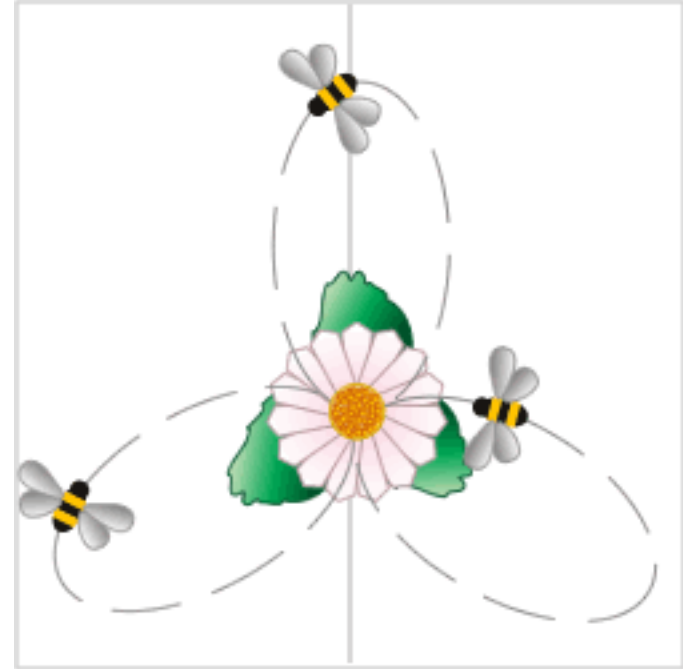
# Examples of symmetrical balance



# Examples of asymmetrical balance



# Examples of radial balance



# Unity

- **Unity:** The correct balance of composition or color that produces a harmonious effect.
- What is the focus of the message?



# Emphasis

- **Emphasis:** To express with particular stress or force.
- What message is stressed here?



# Summary

- The basis of good graphic design is use of design elements and their thoughtful application in the form of design principles.
- Clearly identify what you are trying to accomplish — use design to convey your message.
- Brainstorm alternatives.