

**LIGHT BULB GRAPHIC**

LESSON **4**

**DESCRIPTION**

Creating more complex object based graphic images using additional Adobe Illustrator geometric tools, object transformation/control, and menu functions.

**ASSIGNMENT**

Create the **LIGHT BULB** graphic as demonstrated and shown on page 5.

Use the **template provided** as a guide for the graphic.

Follow the procedures on page 3-4 of the assignment to construct the graphic

Follow the specifications and visual composition of the light bulb graphic composition provided on page 5 of the assignment.

**SPECIFICATIONS**

*DOCUMENT FORMAT*

- 8.5"x11" image area/artboard (letter size). Vertical orientation.

*DESIGN & TECH:*

- Document color mode is RGB
- Build your illustration using SHAPE tools and related functions.
- Use layers to help manage the elements in your design. Label all layers. 5 layers — one for template, three for artwork, one for text. See page 5 for layer names and contents
- Use Groups - in combination with layers - to help manage complex elements. See page 5 for details on the layer contents.
- Template is embedded — not linked.
- See page 5 for artwork colors and stroke widths.

**PRESENTATION**

**Paper** — 100% scale on letter paper from the color letter printer.

**EVALUATION** 0-25

**Process** - ongoing progress (milestones), to finished design.

**Technical** - document construction and quality of execution using tools, procedures, and techniques (Adobe Illustrator); follows specifications.

**Presentation** - paper and electronic.

**Deadline** - (deduction for not meeting deadline).

ASSIGNMENT  
SCHEDULE

Illustrator Demo T 2/5  
Lesson 4

Introduction of  
Project I Train  
Graphic

## TOPICS

- Planning the construction of an Illustrator graphic
- Working with color models — why, when, limitations
  - RGB, CYMK, Pantone
- Outputting (printing) and viewing digital images
  - ink jet and laser
  - on screen
  - Postscript vs. raster
  - screen to output color inconsistency
  - output of color files in Graphic Design Studio
- Painting objects — using eye dropper and acquire/deposit options
- Using dialog boxes to create objects
- Transform an object — tool/dialog/Transform sub-menu
  - scale
  - reflect
- Using the Transform and Align Palettes
- Duplicating objects
  - drag copy using option key
  - dialog box (transformation tools)
- Layers Palette
  - planning and organizing your artwork layers
  - adding/creating layers and sub layers
  - hide/view and lock layers
  - shuffle layers
  - moving artwork between layers
- Drawing tools — pen
  - straight lines
  - open polygons
  - closed polygons
- Selecting “parts of an object”
  - direct selection (open arrow)
- Alter an object
  - selecting and moving “edges”
  - selecting and moving anchor points
  - adding and deleting points
  - using scissors to cut
- Combine objects using Pathfinder palette
- Rulers and guides (making, moving, releasing, deleting)
- Joining anchor points with line, averaging and joining anchor points

## NOTES

- Moving artwork between documents — copy/paste vs. place.
- Working with images as tracing templates in an Illustrator document.
  - file formats/options for templates and placed images
  - placing images in Adobe Illustrator — linked vs. embedded, other options
  - maintaining template file link/reestablishing broken template link

## PROCEDURES

### SETUP AND PREP

- Launch Illustrator. Create a new file and set the Artwork Board to letter size, page orientation to **vertical** (portrait).

### BEGINNING LAYER - Template

- Access the *Light Bulb Template* by choosing File...Place. Locate the template file by navigating the hierarchical file system. Once located, highlight file name and click PLACE. Make sure the **link box is unchecked** so that you are **embedding** the actual template file in your Illustrator document. This places image as a template on layer 1. Title this layer Template.
- Check the template layer to make sure is it set to (PREVIEW, DIM, and LOCK). You can turn off individual layers as needed by clicking on the "eye" in the layers palette. You can toggle your document between outline and preview using the View menu, or individual artwork layers by Command clicking on the "eye". in the layers palette.

## CREATE YOUR ARTWORK

### NEW LAYER (2) - Background

1. Draw the two vertical panels that make up the majority of the background. They can abut or overlap, but it is better to overlap one vertical panel over the other — having the right panel's left edge be the left vertical center line. Fill the right one red, the left one light blue.
2. Create the top and bottom rectangles and corner blocks.
  - a. Draw the top horizontal rectangle. Fill it dark blue.
  - b. Draw and position the right corner square. Fill it purple.
  - c. Create a duplicate left square by using the Shift/Option key technique.
  - d. Select the horizontal rectangle and the two squares and group them.
  - e. Create the bottom set of panel/squares by duplicating the group by using the Shift/Option key technique

### NEW LAYER (3) - Bulb

3. Draw the large circle that represents the top of the bulb (use draw from center). Give it a 12pt stroke and fill it yellow.
4. Draw the rectangle that represents the glass shaft of the light bulb. Give it the same 12pt stroke and yellow fill as the circle. Make sure the top of the rectangle overlaps bottom of circle.

5. Combine the circle and rectangle into a single shape using the Pathfinder palette — "add".
6. Using the Pen Tool "point to point" function click points to create the filament. Give it a 10pt black stroke - no fill.
7. Draw the rectangle that represents the base of the light bulb. Give it a 10pt black stroke and a light brown fill.
8. Draw the angled rectangle that represents one of the threads on the base. Draw it in the horizontal position. Fill it. black, no stroke Then rotate and move it into position., "burying" the ends in the sides of the rectangle that represents the base. Copy the thread using the Shift/Option key technique.
9. Draw the oval that represents the contact at the base of the bulb. Fill it 25% black. Cut and target paste it behind the base or shuffle it using the layers palette. Position as needed.

#### NEW LAYER (4) - Glow

10. Add the triangular "glow" rays of the light bulb.
  - a. These are created as point-to-point closed polygons using the pen tool — make sure you close the shape. Start by creating the one in the center top. Give it a yellow fill, no stroke
  - b. Select this object and Option key and drag to the left to make a duplicate. Rotate and position duplicate. Repeat this until all triangles on left side are complete. Alternate the fills yellow then orange.
  - c. Select all the triangles on the left side (but not the top center one) and group them. Mirror the group by Option Clicking using the Reflect Tool. Choose vertical and copy. Position the set of copies by shift/drag horizontally.

#### NEW LAYER (5) - Text

11. Typeset the word IDEA in a 24pt. bold typeface. Fill the letters with white. Space them out using the spacebar and position as indicated in layout.
12. Typeset the ? marks in 36pt. bold typeface. Fill the letters with medium blue and position as indicated in layout.
13. Add your name to your composition.
14. Check/set all specs, layers, layer names, and groups (see page 5)
15. Print at 100% scale on letter size paper to the color letter printer.

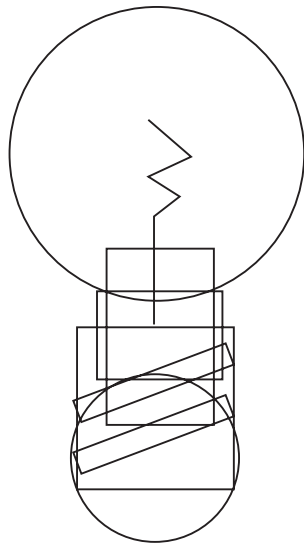
#### SAVE

- Save your artwork as a .ai file in the Illustrator CC version.
- Make appropriate backup copies of your file on servers, Flash drive.
- NO EXCUSES for lost files.

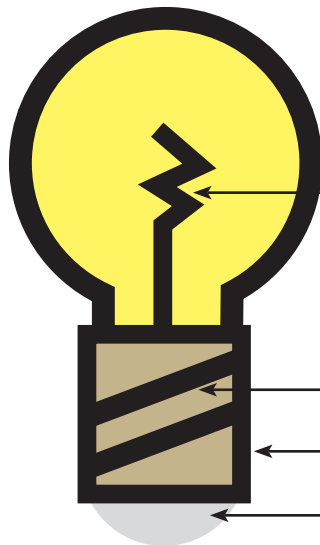
#### FINAL OUTPUT & PRESENTATION

- Assemble final prints as required.

# ARTWORK SPECIFICATIONS AND LAYOUT



outline view



preview

## Specifications

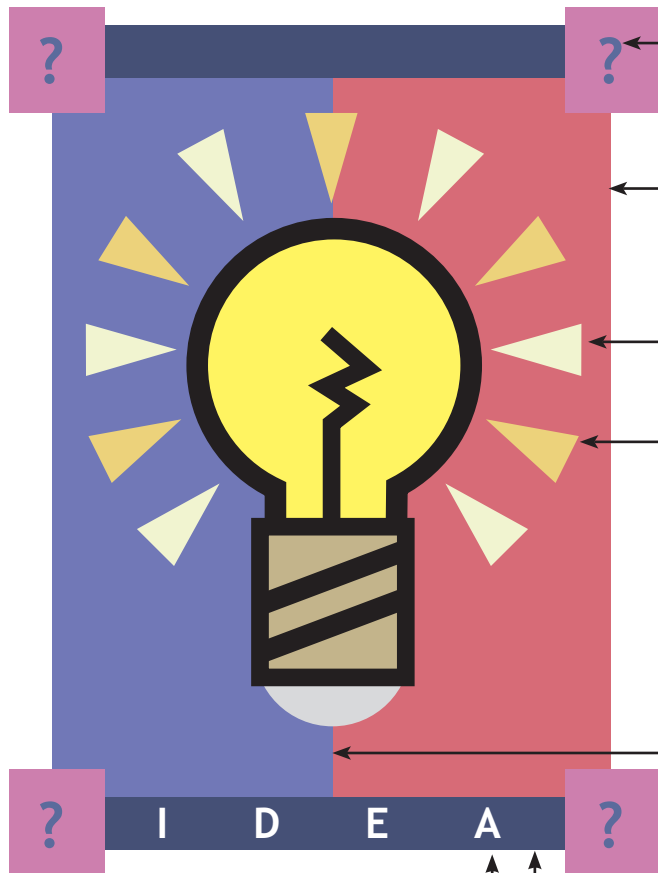
12pt black stroke/yellow fill

10pt black stroke/no fill

no stroke/black fill rectangles

10pt black stroke/light brown fill

no stroke/25% black fill



medium blue ?s 36pt. bold typeface

purple fill/no stroke

red fill/no stroke

light yellow fill/no stroke

yellow-orange fill/no stroke

light blue fill/no stroke

navy blue fill/no stroke

white text 24 pt. bold typeface

## Layer and group setup:

### LAYERS

- text
- bulb
- glow
- background
- template

### GROUPS

- bulb glass & filament
- bulb base
- glow shapes
- top/bottom shapes
- text