Adobe Illustrator CS5
Part 2: Vector Graphic Effects

Summer 2011, Version 1.0

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Introduction

Adobe Illustrator CS5 is used to create graphics and type in vector format. Vector graphics are made up of points, lines, and curves that are defined by mathematical equations. Vector graphics are resolution independent, which means that they can be resized to any size without losing quality. This handout covers vector graphic effects which include text, color gradient, and gloss effects. The lessons include creating an icon and a customized t-shirt design.

Downloading the Data Files

This handout includes sample data files that can be used for hands-on practice. The data files are stored in a self-extracting archive. The archive must be downloaded and executed in order to extract the data files.

- The data files used with this handout are available for download at http://www.calstatela.edu/its/training/datafiles/illustratorcs5p2.exe.
- Instructions on how to download and extract the data files are available at http://www.calstatela.edu/its/docs/download.php.

Starting the Program

The following steps are for starting Illustrator CS5 using the computers in the ITS Training Program computer labs. The steps for starting the program on other computers may vary.

To start Illustrator CS5:

1. Click the **Start** button, click **All Programs**, click **Adobe Design Premium CS5.5**, and select **Adobe Illustrator CS5.1**.

Text Effects

Illustrator can be used to create text in vector format. In addition, you can apply different text effects to fit any project.

Creating Text with Effects

The first step in creating text effects is to create a new Illustrator document and create the text using the *Type* tool. The finished product in this lesson is intended to be printed. For this reason, the *New Document Profile* will be set to *Print* which uses a default letter size artboard.

To create text with effects:

1. Click the **File** menu and select **New**. The **New Document** dialog box opens (see Figure 1).
2. Type **Text** in the **Name** box.
3. Select **Print** from the **New Document Profile** list.
4. Select **Letter** from the **Size** list.
5. Next to **Orientation**, click the **Landscape** button .
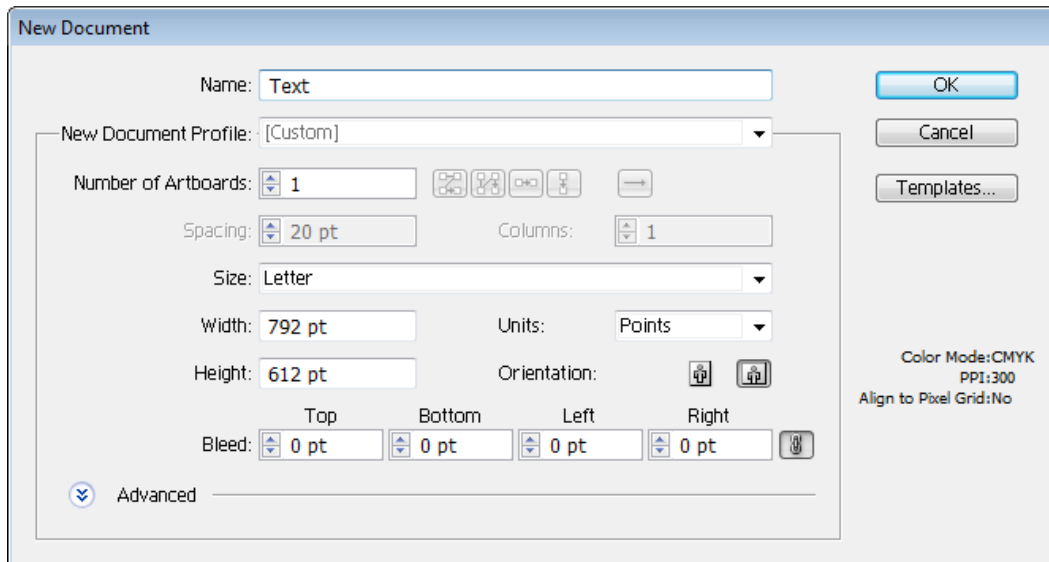6. Click the **OK** button.

Figure 1 – New Document Dialog Box

7. Select the **Type** tool ⊤ in the **Tools** panel.
8. Click in the center of the artboard and type **FRESH**.
9. With the **Selection** tool ▶, select the text on the artboard.
10. In the **Control** panel, select **Poplar Std Black** from the **Font** list, enter **250 pt** in the **Font Size** box, and click the **Stroke** box and select **None** (see Figure 2).

Figure 2 – Color and Font Options in the Control panel

11. In the **Control** panel, click **Align** to display the **Align** panel (see Figure 3).
12. Under **Align To**, select **Align to Artboard**.
13. Under **Align Objects**, select **Horizontal Align Center** and **Vertical Align Center** to center the text (see Figure 4).
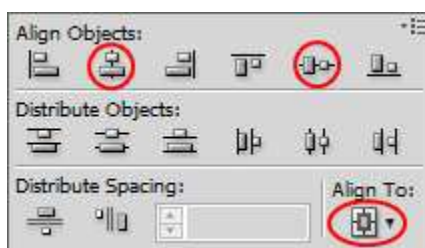

Figure 3 – Align Panel

Figure 4 – Centered Text

14. In the **Layers** panel, double-click the layer's name to open the **Layer Options** dialog box, type **1** in the **Name** box, and then click the **OK** button to rename the layer (see Figure 5).
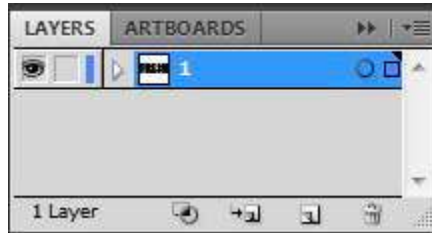
Figure 5 – Layers Panel with Renamed Layer

15. Click the **Layers** panel menu located in the upper-right corner of the panel and select **Duplicate** to duplicate the layer.
16. Rename the **1 copy** layer to **2**.
17. With the **Selection** tool , select the text on the artboard.
18. Click the **Effect** menu, point to **Path**, and select **Offset Path**. The **Offset Path** dialog box opens (see Figure 6).
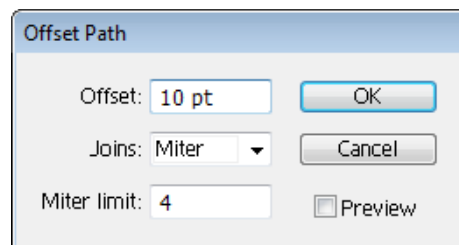19. Type **10 pt** in the **Offset** box, and then click the **OK** button.

Figure 6 – Offset Path Dialog Box

20. In the **Layers** panel, duplicate layer **2** and rename the new layer to **3**.
21. With the **Selection** tool , select the text on the artboard.
22. Repeat step 18 to open the **Offset Path** dialog box, type **10 pt** in the **Offset** box, and then click the **OK** button.
23. In the **Layers** panel, duplicate layer **3** and rename the new layer to **4**.
24. With the **Selection** tool , select the text on the artboard.
25. Repeat step 18 to open the **Offset Path** dialog box, type **10 pt** in the **Offset** box, and then click the **OK** button.
26. In the **Layers** panel, drag each layer to reposition layer **1** at the top, followed by layer **2**, layer **3**, and then layer **4** (see Figure 7).
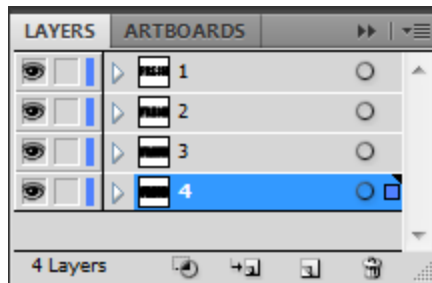

Figure 7 – Layers Panel with Reordered Layers

27. Click the **Target** icon on layer **1** to target the layer (see Figure 8). A double ring icon in the **Target** column indicates that the item is targeted; a single ring icon indicates that the item is not targeted.
28. Hold down the **Alt** key and click the **Eye** icon to the left of layer **1** to hide all other layers (see Figure 8).
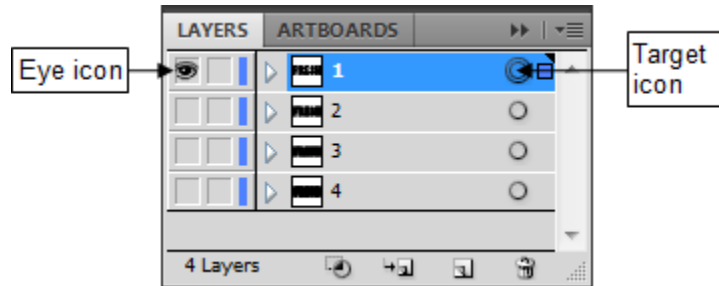
Figure 8 – Layers Panel with Layer 1 Targeted and Visible

Adding Color to Text

Once the text is created, the next step is to add color by creating outlines and filling them with a gradient.

To add color to the text:

1. Click the **Type** menu and select **Create Outlines**.
2. In the **Gradient** panel, click the **Gradient Fill** box and enter **90** in the **Angle** box (see Figure 9).
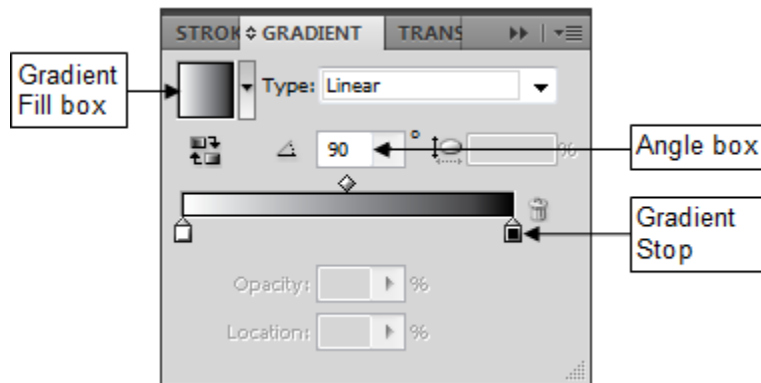

Figure 9 – Gradient Panel with Black and White Gradient

3. Double-click the black **Gradient Stop** (see Figure 9). The **Color** panel opens.
4. Click the **Color** panel menu ▾≡ in the upper-right corner of the panel and select **RGB**.
5. Enter the **RGB** values **63**, **169**, **245** (see Figure 10). The **Gradient Stop** changes to blue (see Figure 11).
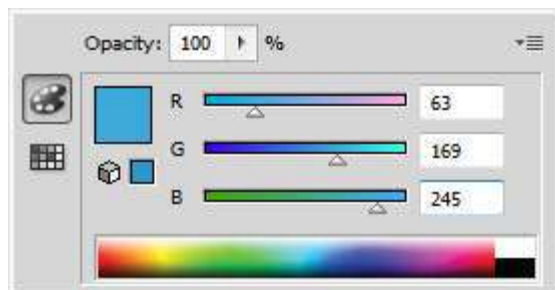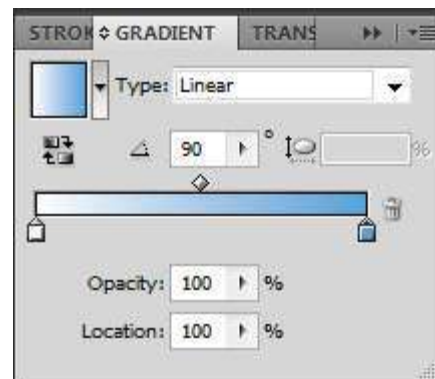

Figure 10 – Color Panel

Figure 11 – Gradient Panel with Blue and White Gradient

6. In the **Layers** panel, make layer **2** visible, and then target the layer.
7. In the **Control** panel, change the **Fill** color to white.

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8. In the **Layers** panel, make layer **3** visible, and then target the layer.
9. In the **Color** panel, change the **Fill** color to light blue by entering the **RGB** values **41**, **171**, **226**.
10. In the **Layers** panel, make layer **4** visible, and then target the layer.
11. In the **Color** panel, change the **Fill** color to blue by entering the **RGB** values **0**, **113**, **188** (see Figure 12).

Figure 12 – Text with Color and Gradient Effects

Adding Effects to Text

Once the text has color and a gradient fill, the next step is to add effects. In this lesson, a shadow is applied to each layer to make the text pop out.

To add effects to the text:
1. In the **Layers** panel, target layer **1**.
2. In the **Appearance** panel, click the **Add New Effect** button ![fx], point to **Stylize**, and select **Drop Shadow** (see Figure 13). The **Drop Shadow** dialog box opens (see Figure 14).
3. Enter **2 pt** in the **X Offset** box, **4 pt** in the **Y Offset** box, and **5 pt** in the **Blur** box.

   NOTE: To preview the effect on the artboard, select the **Preview** check box.
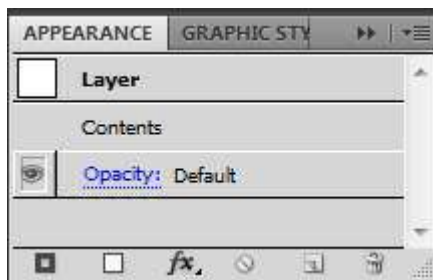
4. Click the **OK** button.

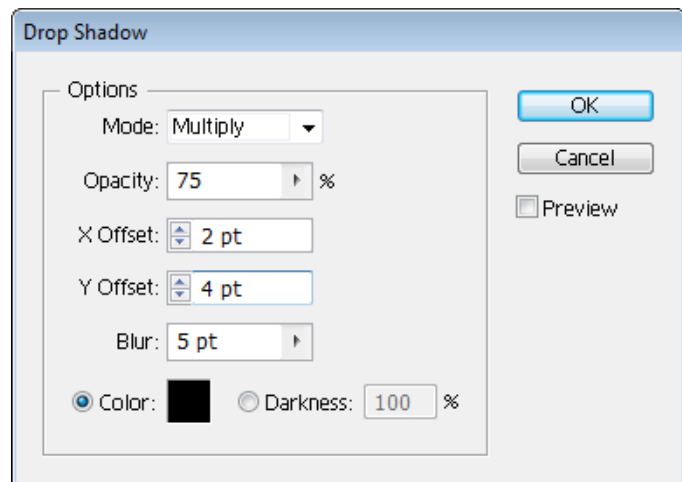**Figure 13 – Appearance Panel**

Figure 14 – Drop Shadow Dialog Box

5. In the **Layers** panel, target layer **2**.
6. Repeat step 2 to open the **Drop Shadow** dialog box, type **50** in the **Opacity** box, **1 pt** in the **X Offset** and **Y Offset** boxes, **5 pt** in the **Blur** box, and then click the **OK** button.
7. In the **Layers** panel, target layer **3**.
8. Repeat step 2 to open the **Drop Shadow** dialog box, type **50** in the **Opacity** box, **1 pt** in the **X Offset** and **Y Offset** boxes, **5 pt** in the **Blur** box, and then click the **OK** button.

9. In the **Layers** panel, target layer **4**.
10. Repeat step 2 to open the **Drop Shadow** dialog box, type **50** in the **Opacity** box, **1 pt** in the **X Offset** and **Y Offset** boxes, **5 pt** in the **Blur** box, and then click the **OK** button (see Figure 15).

Figure 15 – Text with a Drop Shadow Effect

11. In the **Layers** panel, click the **Create New Layer** button to create a new layer, and then position it above layer **1**.
12. Hold down the **Alt** key and click in the **Edit** column to the left of the new layer to lock all other layers (see Figure 16).
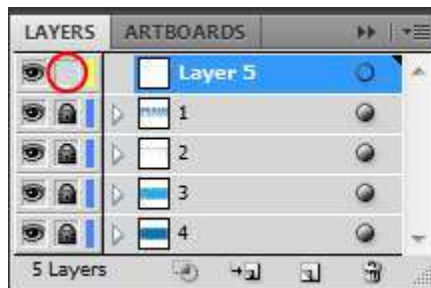
Figure 16 – Layers Panel with New Editable Layer

13. Select the **Pen** tool in the **Tools** panel.
14. On the artboard, create glare objects to fit the text (see Figure 17).

Figure 17 – Glare Objects Created with the Pen Tool

15. With the **Selection** tool , hold down the **Shift** key and click to select all of the glare objects on the artboard.
16. In the **Control** panel, change the **Fill** color to white, and lower the **Opacity** level. See Figure 18 for the final result.

Figure 18 – Final Text with Color, Gradient, and Glare Effects

Gradient Effects

Objects with solid colors are said to be flat. Applying a gradient is a great way to create objects with a three-dimensional look. Gradient fills are graduated blends of two or more colors. This lesson consists of creating a flower and applying gradients to the petals to give the flower a natural look.

Creating a Flower

The first step in creating a flower is to create a petal. The rest of the flower is created by copying and rotating the petal.

To create a flower:
1. Click the **File** menu and select **New**. The **New Document** dialog box opens.
2. Type **Flower** in the **Name** box.
3. Select **Print** from the **New Document Profile** list.
4. Select **Letter** from the **Size** list.
5. Next to **Orientation**, click the **Landscape** button 🖼.
6. Click the **OK** button.
7. Select the **Pen** tool 🖊 in the **Tools** panel.
8. On the artboard, create a petal (see Figure 19).

Figure 19 – Petal Created with the Pen Tool

9. With the **Selection** tool 🔺, select the petal on the artboard.
10. Select the **Rotate** tool 🔄 in the **Tools** panel.
11. On the artboard, click below the tip of the petal to reposition the reference point (see Figure 20).

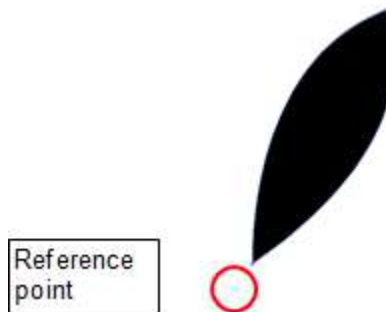   NOTE: Rotating an object turns it around a reference point.

Figure 20 – Petal with Reference Point

12. To create another petal, hold down the **Alt** key and drag the petal in a circular motion to rotate a copy of the petal (see Figure 21). Release the mouse button and then the **Alt** key.

Figure 21 – Copy of Petal

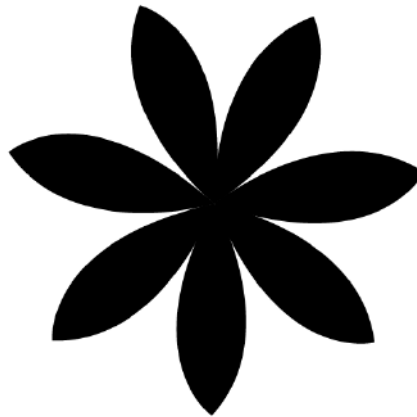13. Continue copying and rotating each petal to create a flower (see Figure 22).

Figure 22 – Completed Flower

Applying Gradients to the Flower

The next step is to add color to the flower by applying gradients.

To apply a gradient:

1. With the **Selection** tool , select one of the petals on the artboard.
2. Double-click the **Gradient** tool in the **Tools** panel.
3. Click the **Gradient Fill** box in the **Gradient** panel (see Figure 23). A black and white gradient is applied to the selected petal.
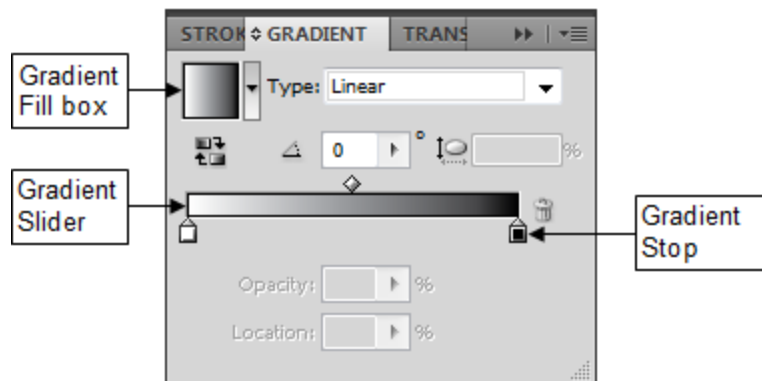
Figure 23 – Gradient Panel with Two Gradient Stops

4. Double-click the left **Gradient Stop** to open the **Color** panel, and enter the **RGB** values **241**, **90**, **36** (see Figure 24).

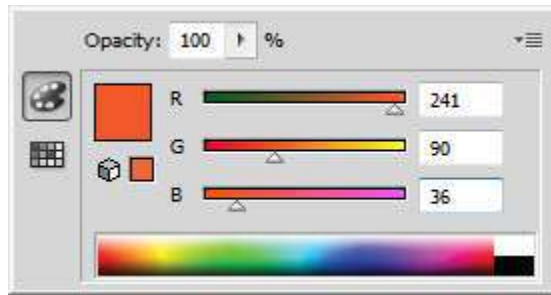   NOTE: To display the **RGB** color mode in the **Color** panel, click the **Color** panel menu and select **RGB**.

Figure 24 – Color Panel

5. Double-click the right **Gradient Stop**, and enter the **RGB** values **255**, **255**, **255**.
6. Position the mouse pointer slightly below the bottom edge of the **Gradient Slider**, and when the pointer changes to a white arrow with a plus sign, click to add a **Gradient Stop** in the middle of the **Gradient Slider**.
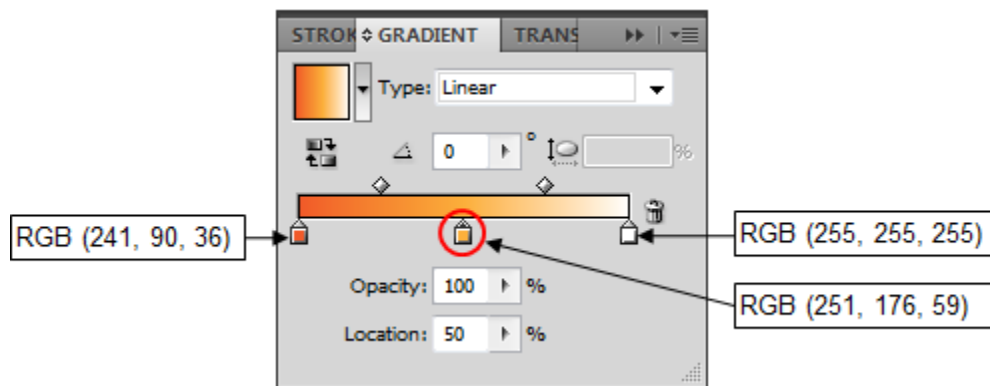7. Double-click the center **Gradient Stop**, and enter the **RGB** values **251, 176, 59** (see Figure 25).

Figure 25 – Gradient Panel Settings for the Petal

8. On the artboard, position the mouse pointer just off the small white square on the **Gradient Annotator**, and when the pointer changes to the rotation icon ↻, drag to rotate the white side of the gradient toward the center of the flower (see Figure 26).
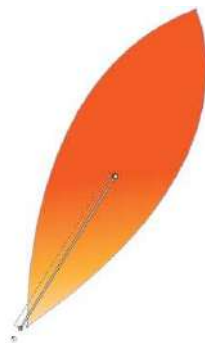

Figure 26 – Petal with Gradient Annotator

9. With the **Selection** tool, hold down the **Shift** key and click to select all the petals on the artboard.
10. With the **Eyedropper** tool, click the petal that has a gradient fill. The same gradient is applied to all the petals.
11. With the **Gradient** tool, rotate the gradient for all the petals to have the white side of the gradient toward the center of the flower (see Figure 27).
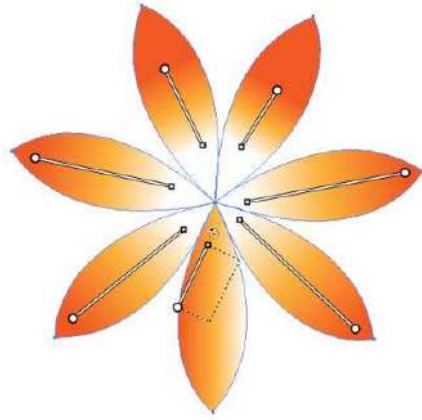
Figure 27 – Petals with Rotated Gradients

12. In the **Tools** panel, select the **Star** tool ⭐ hidden under the **Rectangle** tool.
13. On the artboard, drag to create a thin star in the center of the flower (see Figure 28). Hold down the **Ctrl** key as you drag to modify the shape of the star.
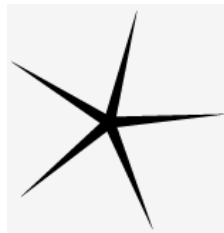

Figure 28 – Star

14. Double-click the **Gradient** tool 🟦 in the **Tools** panel.
15. In the **Gradient** panel, click the **Gradient Fill** box, and select **Radial** from the **Type** list.
16. Double-click the left **Gradient Stop**, and enter the **RGB** values **255**, **247**, **169**.
17. Double-click the center **Gradient Stop**, and enter the **RGB** values **255**, **241**, **0**.
18. Double-click the right **Gradient Stop**, and enter the **RGB** values **255**, **215**, **0**.
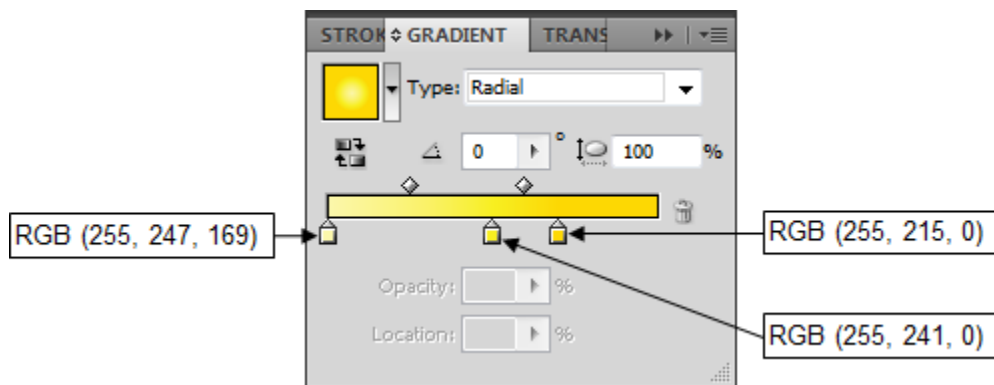19. Drag to position the **Gradient Stops** as shown in Figure 29.

Figure 29 – Gradient Panel Settings for the Star

20. Select the **Ellipse** tool 🔵 in the **Tools** panel.
21. On the artboard, hold down the **Shift** key and drag to draw a circle in the center of the flower.
22. Double-click the **Gradient** tool 🟦 in the **Tools** panel.
23. In the **Gradient** panel, click the **Gradient Fill** box, and select **Radial** from the **Type** list.

24. Double-click the left **Gradient Stop**, and enter the **RGB** values **221**, **30**, **71**.
25. Double-click the center **Gradient Stop**, and enter the **RGB** values **237**, **61**, **87**.
26. Double-click the right **Gradient Stop**, and enter the **RGB** values **243**, **127**, **123**.
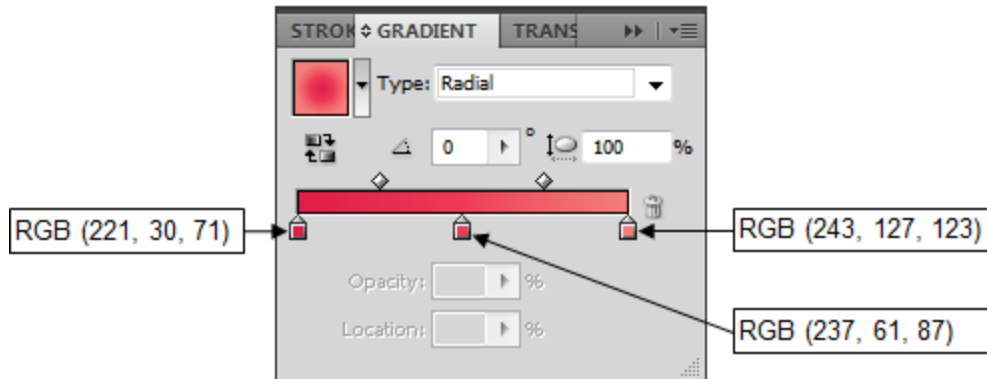27. Drag to position the **Gradient Stops** as shown in Figure 30.

Figure 30 – Gradient Panel Settings for the Circle

28. In the **Transparency** panel, select **Hard Light** from the **Blending Mode** list, and type **65** in the **Opacity** box (see Figure 31).

Figure 31 – Transparency Panel

Drawing a Flower Stem

The next step is to create a stem for the flower by using the Pen tool and by applying a gradient.

To draw a flower stem:

1. Select the **Pen** tool in the **Tools** panel, and draw a stem on the artboard (see Figure 32).

Figure 32 – Stem Created with the Pen Tool

2. Double-click the **Gradient** tool ▣ in the **Tools** panel.
3. In the **Gradient** panel, click the **Gradient Fill** box, and select **Linear** from the **Type** list.
4. Double-click the left **Gradient Stop**, and enter the **RGB** values **209**, **228**, **165**.
5. Double-click the center **Gradient Stop**, and enter the **RGB** values **172**, **212**, **121**.
6. Double-click the right **Gradient Stop**, and enter the **RGB** values **118**, **184**, **63**.
7. Drag to position the **Gradient Stops** as shown in Figure 33. See Figure 34 for the final result.
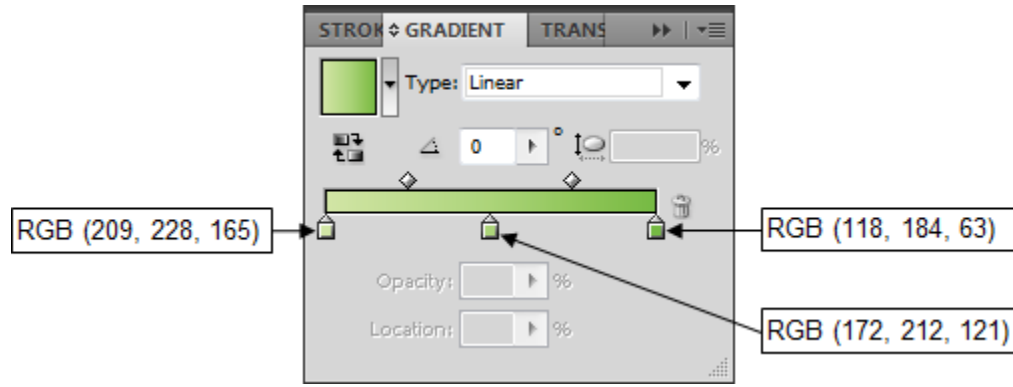
Figure 33 – Gradient Panel Settings for the Stem

Figure 34 – Final Flower

Gloss Effect

Adding gloss to a graphic enhances the visual look. Gloss makes graphics pop out, which in a sense takes a flat object and coverts it to a three-dimensional object. Gloss can be added to any shape such as a button or an icon, or in this case, a ball.

Creating a Ball

The first step in creating a glossy ball is to create a circle using the Ellipse tool.

To create a ball:
1. Click the **File** menu and select **New**. The **New Document** dialog box opens.
2. Type **Glossy Ball** in the **Name** box.
3. Select **Web** from the **New Document Profile** list.
4. Select **640 x 480** from the **Size** list.
5. Click the **OK** button.
6. Select the **Ellipse** tool ⬤ in the **Tools** panel.
7. On the artboard, hold down the **Shift** key and drag to draw a circle.

Applying a Gradient to the Ball

The next step in creating a glossy ball is to add color to the circle. A solid color will not work because it will just make the image look like a colored circle. Instead, a gradient will be applied to make the circle look like a sphere.

To apply a gradient to the ball:
1. With the **Selection** tool ▸, select the circle on the artboard.
2. Double-click the **Gradient** tool ▢ in the **Tools** panel.
3. In the **Gradient** panel, click the **Gradient Fill** box, and select **Radial** from the **Type** list.
4. Click below the bottom edge of the **Gradient Slider** to add a **Gradient Stop** between the center and the right edge of the **Gradient Slider** (see Figure 35).
5. Double-click the left **Gradient Stop** to open the **Color** panel, and enter the **RGB** values **252**, **228**, **33**.

   NOTE: To display the **RGB** color mode in the **Color** panel, click the **Color** panel menu ▾ and select **RGB**.

6. Double-click the center **Gradient Stop**, and enter the **RGB** values **255**, **147**, **30**.
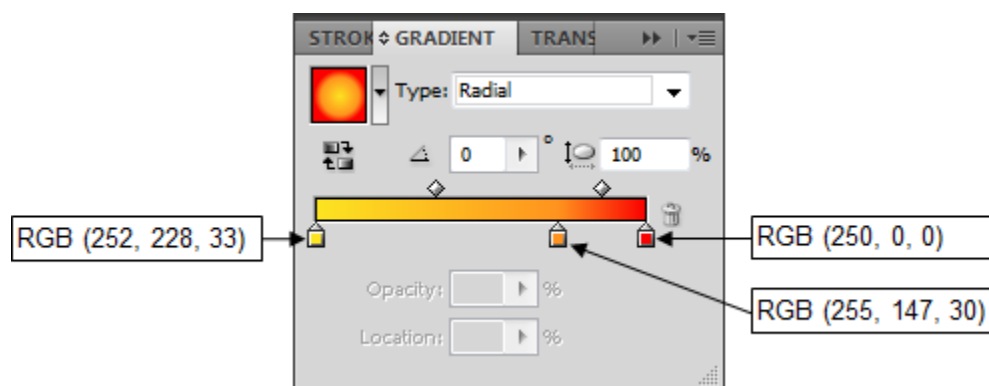7. Double-click the right **Gradient Stop**, and enter the **RGB** values **250**, **0**, **0**.

Figure 35 – Gradient Panel Settings for the Ball

8. In the **Color** panel, click the **Stroke** box, and enter the **RGB** values **255**, **255**, **0** (see Figure 36).
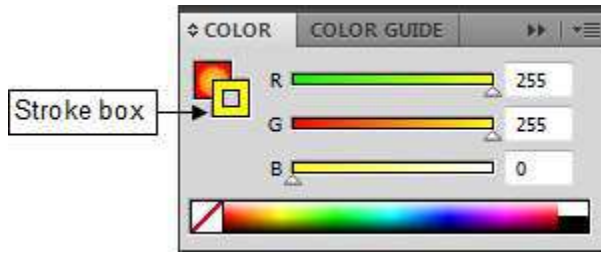

Figure 36 – Color Panel

9. In the **Control** panel, enter **3 pt** in the **Stroke Weight** box to increase the stroke size (see Figure 37).

Figure 37 – Color Options in the Control Panel

Adding Gloss to the Ball

The last step in creating a glossy ball is to add gloss. Gloss is created by drawing an ellipse and adding a gradient to it. The trick to creating gloss is to change the Blending Mode.

To add gloss to the ball:

1. Select the **Ellipse** tool in the **Tools** panel.
2. On the artboard, drag to draw an ellipse to represent the gloss (see Figure 38).

Figure 38 – Ellipse Created with the Ellipse Tool

3. To create the gloss effect, double-click the **Gradient** tool in the **Tools** panel.
4. In the **Gradient** panel, click the **Gradient Fill** box, and select **Linear** from the **Type** list (see Figure 39).
5. Double-click the left **Gradient Stop**, and enter the **RGB** values **0**, **0**, **0** (black).
6. Double-click the right **Gradient Stop**, and enter the **RGB** values **255**, **255**, **255** (white).

NOTE: If there are any other **Gradient Stops** on the **Gradient Slider**, remove them by selecting them and then clicking the **Delete Stop** button.
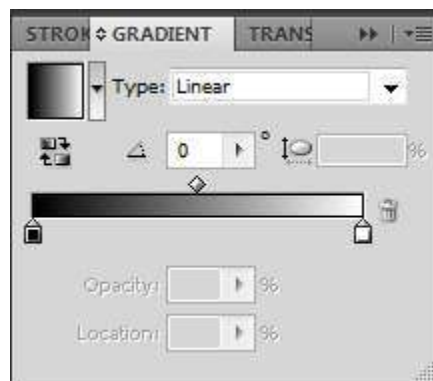

Figure 39 – Gradient Panel Settings for the Gloss

7. On the artboard, position the mouse pointer just off the small white square on the **Gradient Annotator**, and when the pointer changes to the rotation icon ↻, drag to position it vertically (see Figure 40).
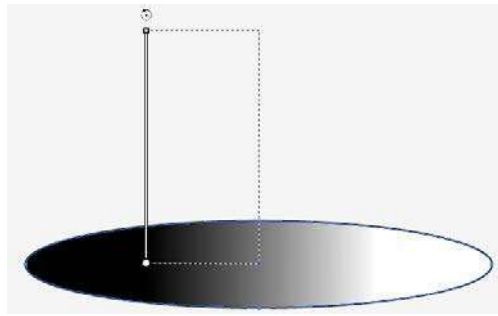

Figure 40 – Rotating the Gradient Annotator

8. Position the mouse pointer directly over the **Gradient Annotator** to turn it into a slider, and then drag the arrow end of the **Gradient Slider** to resize it to fit within the ellipse (see Figure 41).

Figure 41 – Resizing the Gradient Annotator

9. In the **Control** panel, click the **Stroke** box ▢▾ and select **None** ⊘ to remove the stroke from the ellipse.
10. With the **Selection** tool ▶, position the ellipse near the top of the ball (see Figure 42).
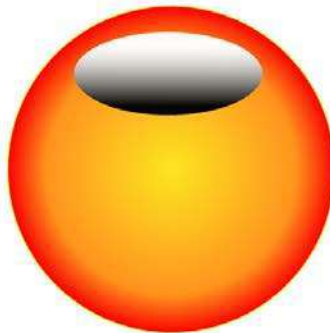

Figure 42 – Ellipse Positioned on the Ball

11. In the **Transparency** panel, select **Screen** from the **Blending Mode** list, and lower the **Opacity** level (see Figure 43).
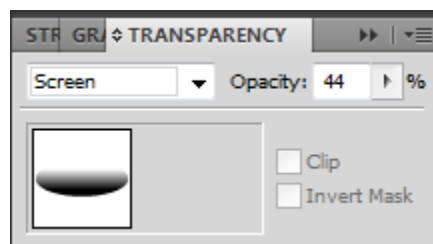

Figure 43 – Transparency Panel

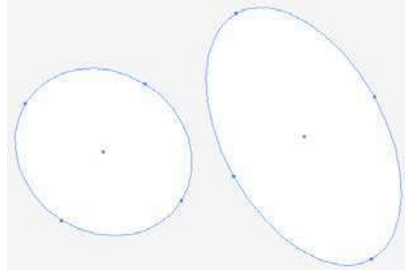12. To enhance the gloss effect, create two white ellipses with no stroke to add glare to the gloss (see Figure 44).

Figure 44 – Two White Ellipses Created with the Ellipse Tool

13. With the **Selection** tool , position the two white ellipses near the top of the ball (see Figure 45).

Figure 45 – Two White Ellipses Positioned on the Ball

14. With the **Selection** tool , select the ball on the artboard.
15. In the **Appearance** panel, click the **Add New Effect** button , point to **Stylize**, and select **Drop Shadow** (see Figure 46). The **Drop Shadow** dialog box opens (see Figure 47).
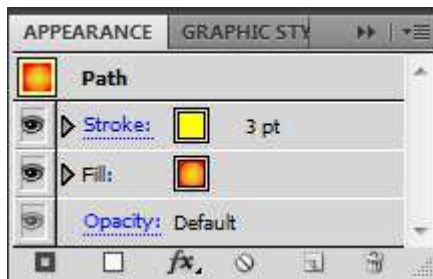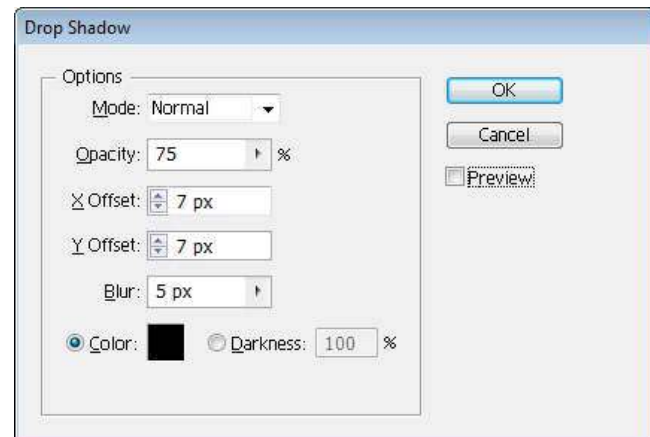

Figure 46 – Appearance Panel

Figure 47 – Drop Shadow Dialog Box

16. Enter **7 px** in the **X Offset** and **Y Offset** boxes, and then click the **OK** button. See Figure 48 for the final result.
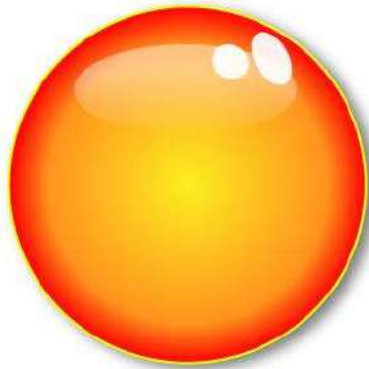
Figure 48 – Final Ball with Gloss Effect

Icons

With mobile applications or apps becoming very popular and new ones coming out every day, the need for icons has increased. Icons can be set to represent a program, an app, or even a link to a website.

Creating an Icon

The first step in creating an icon is to create a new Illustrator document. The *New Document Profile* will be set to *Web* because the icon is intended to be viewed on the screen. The icon created in this lesson is a square shaped icon with a gradient fill.

To create an icon:
1. Click the **File** menu and select **New**. The **New Document** dialog box opens.
2. Type **Icon** in the **Name** box.
3. Select **Web** from the **New Document Profile** list.
4. Select **640 x 480** from the **Size** list.
5. Next to **Orientation**, click the **Portrait** button.
6. Click the **OK** button.
7. Select the **Rounded Rectangle** tool in the **Tools** panel.
8. On the artboard, hold down the **Shift** key and drag to draw a rounded square (see Figure 49).

Figure 49 – Rounded Square

9. Double-click the **Gradient** tool in the **Tools** panel.
10. In the **Gradient** panel, click the **Gradient Fill** box, and select **Radial** from the **Type** list.
11. Double-click the left **Gradient Stop**, and enter the **RGB** values **63**, **169**, **245**.
12. Double-click the right **Gradient Stop**, and enter the **RGB** values **0**, **113**, **188** (see Figure 50 and Figure 51).

NOTE: The **Reverse Gradient** button ![icon] in the **Gradient** panel can be used to reverse the colors in the gradient.
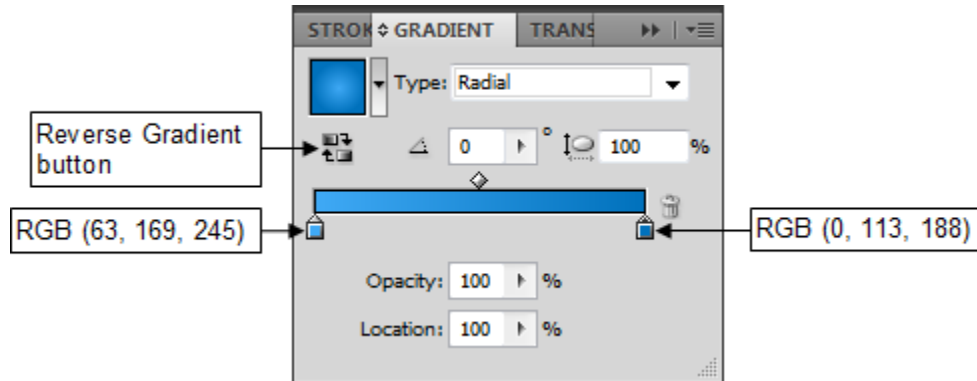

Figure 50 – Gradient Panel Settings for the Rounded Square

Figure 51 – Rounded Square with a Blue Radial Gradient

13. Click the **Edit** menu and select **Copy**, and then click the **Edit** menu and select **Paste in Front** to duplicate the rounded square.

14. In the **Control** panel, click the **Stroke** box ![icon] and select **None** ![icon] to remove the stroke.

15. To add gloss, select the **Eraser** tool ![icon] in the **Tools** panel.

16. On the artboard, drag over the rounded square to erase a portion in the shape of a wave. This divides the square into two sections (see Figure 52).
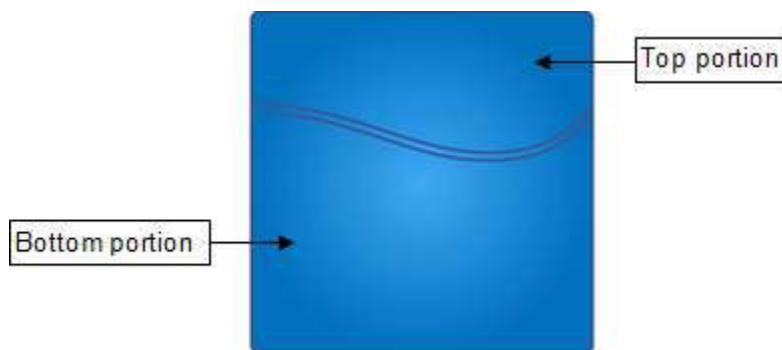

Figure 52 – Rounded Square Divided into Two Sections

17. Click the **Select** menu and select **Deselect**.

18. With the **Selection** tool ![icon], select the top portion of the rounded square and press the **Delete** key to delete it.

19. Select the bottom portion of the rounded square.

20. In the **Color** panel, click the **Fill** box, and then enter the **RGB** values **32**, **100**, **168**.

21. Click the **Stroke** box, and then click the **None** box to remove the stroke (see Figure 53).
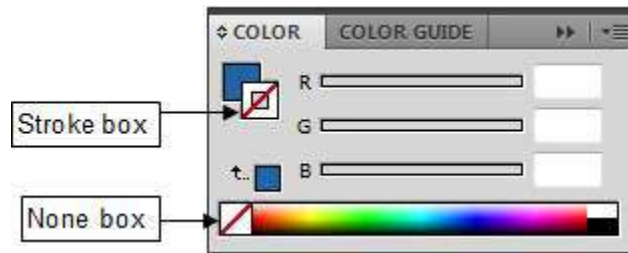

Figure 53 – Stroke Settings in the Color Panel

22. Select the original square on the artboard.
23. In the **Color** panel, click the **Stroke** box, and then enter the **RGB** values **59**, **89**, **151**.
24. In the **Control** panel, enter **4 pt** in the **Stroke Weight** box to increase the stroke size (see Figure 54).

Figure 54 – Color Options in the Control Panel

25. Select the **Type** tool in the **Tools** panel.
26. Click on the rounded square on the artboard and type **f**.
27. With the **Selection** tool , select the text on the artboard.
28. In the **Control** panel, select **Lucida Sans** from the **Font** list, and then click the **Fill** box and select white.
29. On the artboard, hold down the **Shift** key and drag a corner of the bounding box to resize the letter to make it the size of the square (see Figure 55).
30. Drag to position the letter near the right side of the rounded square.
31. Right-click the letter and select **Create Outlines** from the shortcut menu (see Figure 56).

Figure 55 – Resizing the Letter

Figure 56 – Final Icon Design

T-shirt Design

Creating custom t-shirts is a form of expression. The first step is to come up with a design. This is the most important and probably the most time consuming step in the process. The second step is to create the design in a digital format using Illustrator. This lesson consists of creating graphics and text and using those objects to create the front and back side designs of a t-shirt. The data file used in this lesson includes a t-shirt outline that is used as the basis for the design.

Creating the Back Side Design

This lesson consists of creating text and using the Golden Eagle graphic included in the data file to design the back side of the t-shirt.

To create the back side design:

1. Click the **File** menu and select **Open**. The **Open** dialog box opens.
2. Navigate to the folder that contains the sample data file, select the **T-shirt.ai** file, and then click the **Open** button.

   NOTE: To hide the grid, click the **View** menu and select **Hide Grid**. To display the grid again, click the **View** menu and select **Show Grid**.

3. With the **Selection** tool , select the Golden Eagle graphic on the artboard and drag to position it in the center of the back side of the t-shirt (see Figure 57).
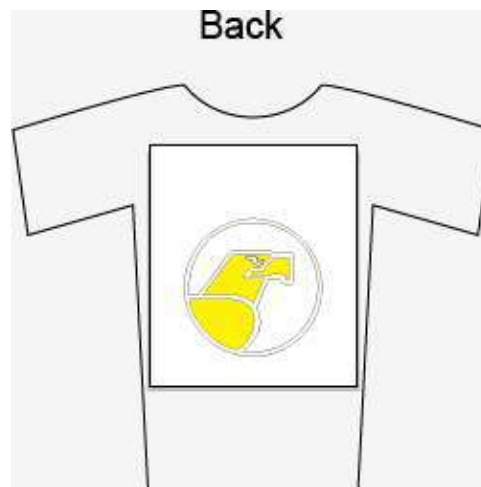
Figure 57 – Golden Eagle on the Back Side of the T-shirt

4. Select the **Type** tool in the **Tools** panel, click on the artboard, and type **CSULA**.
5. With the **Selection** tool , select the text on the artboard.
6. In the **Control** panel, select **Bernard MT Condensed** from the **Font** list, and enter **300 pt** in the **Font Size** box (see Figure 58).

Figure 58 – Font Options in the Control Panel

7. With the **Selection** tool , drag to position the text above the Golden Eagle graphic on the back side of the t-shirt.
8. Hold down the **Shift** key and click to select both the text and the Golden Eagle graphic on the artboard.
9. In the **Control** panel, select **Align to Artboard** from the list, and then click the **Horizontal Align Center** button (see Figure 59). See Figure 60 for the final result.
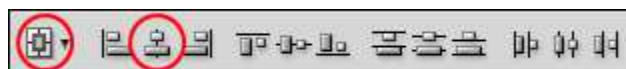

Figure 59 – Align Options in the Control Panel

Figure 60 – Final Back Side Design of T-shirt

Creating the Front Side Design

This lesson consists of creating text and a simple mouse graphic to design the front side of the t-shirt.

To create the front side design:

1. Select the **Type** tool ![T] in the **Tools** panel, click on the artboard, and type **ITS**.
2. With the **Selection** tool ![arrow], select the text on the artboard.
3. In the **Control** panel, enter **175 pt** in the **Font Size** box.
4. With the **Selection** tool ![arrow], drag to position the text at the upper-left corner of the white box on the front side of the t-shirt (see Figure 61).
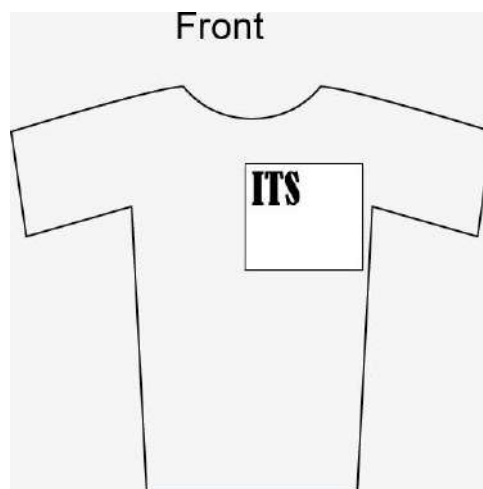
Figure 61 – Text on the Front Side of the T-shirt

5. To draw a mouse, select the **Ellipse** tool ![ellipse] in the **Tools** panel, and drag on the artboard to draw an ellipse (see Figure 62).
6. In the **Control** panel, click the **Fill** box ![fill] and select white, and then click the **Stroke** box ![stroke] and select black.
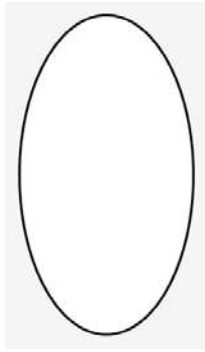
**Figure 62 – Ellipse Created with the Ellipse Tool**

7. To draw the mouse buttons, select the **Pen** tool in the **Tools** panel.
8. On the artboard, click to add two anchor points to form a horizontal line (see Figure 63).

Figure 63 – Line Created with the Pen Tool

9. Click to add another anchor point above the right anchor point to form the right side of the mouse button (see Figure 64).
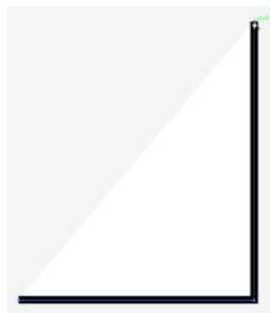

Figure 64 – Bottom and Right Sides of the Mouse Button

10. Click and hold down the mouse button on the left anchor point and drag to create a curve (see Figure 65).
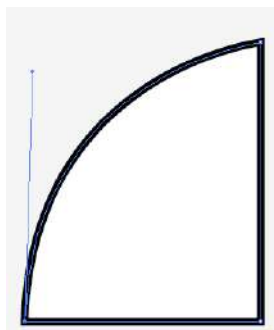
Figure 65 – Left Button of the Mouse

11. With the **Selection** tool , right-click the created shape, point to **Transform**, and select **Reflect**. The **Reflect** dialog box opens (see Figure 66).
12. Under **Axis**, select the **Vertical** option, and then click the **Copy** button.
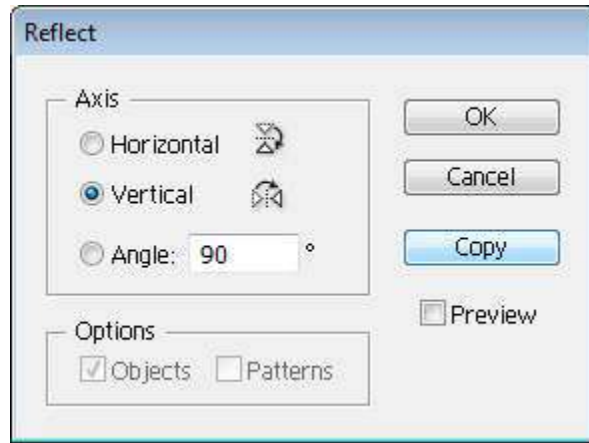
Figure 66 – Reflect Dialog Box

13. With the **Selection** tool ![icon], drag to position the two buttons side by side within the ellipse to create a mouse (see Figure 67 and Figure 68).
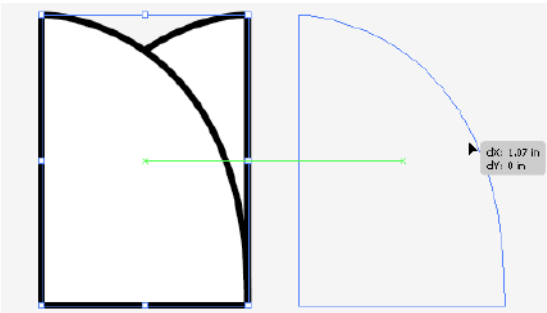

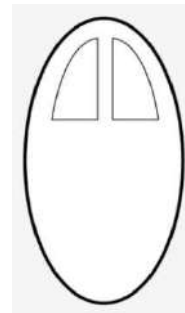**Figure 67 – Positioning the Buttons Side by Side**


Figure 68 – Mouse with Two Buttons

14. To draw the mouse chord, select the **Pen** tool ![icon] in the **Tools** panel.
15. On the artboard, click to add two anchor points to form a small horizontal line on top of the ellipse (see Figure 69).

Figure 69 – Small Line Created with the Pen Tool

16. Click and hold down the mouse button above and to the left of the small line and drag to create a curve (see Figure 70).
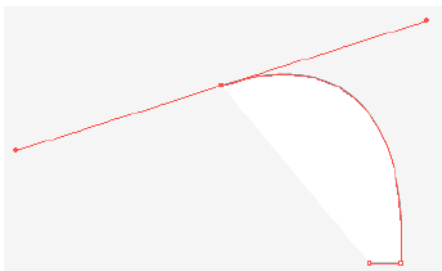17. Click the newly created anchor point to reset it (see Figure 71).

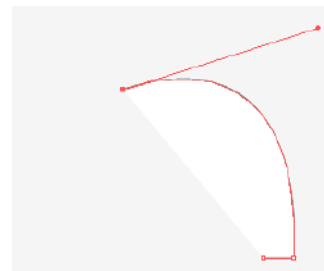**Figure 70 – Creating the Curve of the Mouse Chord**

Figure 71 – Resetting the Anchor Point

18. Click and hold down the mouse button on the left anchor point of the small line and drag to create a curve to complete the cord (see Figure 72).
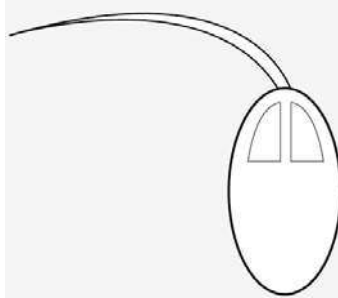

Figure 72 – Completed Mouse

19. With the **Selection** tool , drag to position the mouse next to the text.
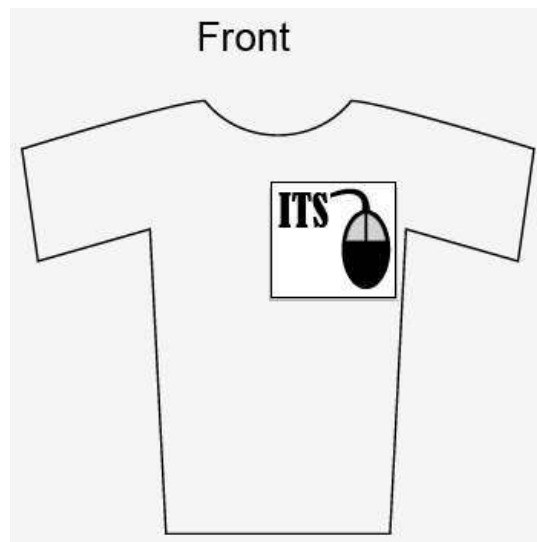20. Add color to the mouse and make any necessary adjustments. See Figure 73 for the final result.

Figure 73 – Final Front Side Design of T-shirt