USING COLOR TO ENHANCE SIGNAGE

Lesson overview

In this lesson, you'll learn how to do the following:

- Understand color modes and the main color controls.
- Create, edit, and paint with colors using a variety of methods.
- Name and save colors.
- Design your own custom color palette.
- · Work with color groups.
- Use the Color Guide panel.
- Explore the Edit Colors/Recolor Artwork features.
- Copy and paint appearance attributes from one object to another.
- Work with Live Paint.



This lesson will take about 90 minutes to complete. Please log in to your account on peachpit.com to download the files for this lesson, or go to the "Getting Started" section at the beginning of this book and follow the instructions under "Accessing the lesson files and Web Edition." Store the files on your computer in a convenient location.

Your Account page is also where you'll find any updates to the lessons or to the lesson files. Look on the Lesson & Update Files tab to access the most current content.



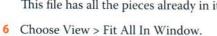
Spice up your illustrations with color by taking advantage of color controls in Adobe Illustrator CC. In this information-packed lesson, you'll discover how to create and paint fills and strokes, use the Color Guide panel for inspiration, work with color groups, recolor artwork, and more.

Starting the lesson

In this lesson, you'll learn about the fundamentals of color by creating and editing colors for a festival sign and artwork, using the Swatches panel and more.

- 1 To ensure that the tools function and the defaults are set exactly as described in this lesson, delete or deactivate (by renaming) the Adobe Illustrator CC preferences file. See "Restoring default preferences" in the "Getting Started" section at the beginning of the book.
- 2 Start Adobe Illustrator CC.
- 3 Choose File > Open, and open the L7_end1.ai file in the Lessons > Lesson07 folder to view a final version of the artwork.
- 4 Choose View > Fit All In Window. You can leave the file open for reference or choose File > Close to close it.
- 5 Choose File > Open. In the Open dialog box, navigate to the Lessons > Lesson07 folder, and select the L7_start1.ai file on your hard disk. Click Open to open the file.

This file has all the pieces already in it; they just need to be painted.



7 Choose File > Save As. In the Save As dialog box, navigate to the Lesson07 folder, and name it Festival.ai. Leave Adobe Illustrator (ai) chosen from the Format menu (macOS) or Adobe Illustrator (*.AI) chosen from the Save As Type menu (Windows), and click Save.



- 8 In the Illustrator Options dialog box, leave the options at their default settings and then click OK.
- 9 Choose Window > Workspace > Reset Essentials.
- Note: If you don't see Reset Essentials in the menu, choose Window > Workspace > Essentials before choosing Window > Workspace > Reset Essentials.

Note: If you have not already

downloaded the project

files for this lesson to

your computer from your Account page,

make sure to do so now. See the "Getting

Started" section at the

beginning of the book.

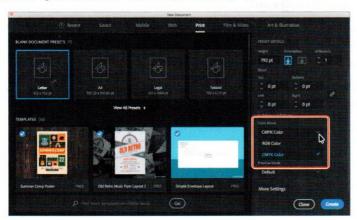
Exploring color modes

There are many ways to experiment with and apply color to your artwork in Adobe Illustrator CC. As you work with color, it's important to keep in mind which medium in which the artwork will be published, such as print or the web. The colors you create need to be suitable for the medium. This usually requires that you use the correct color mode and color definitions for your colors. Color modes will be described next.

Before starting a new document, you should decide which color mode the artwork should use, CMYK or RGB.

- CMYK—Cyan, magenta, yellow, and black are the colors of ink used in fourcolor process printing. These four colors are combined and overlapped in a pattern of dots to create a multitude of other colors.
- RGB-Red, green, and blue light are added together in various ways to create an array of colors. Select this mode if you are using images for on-screen presentations, the Internet, or mobile apps.

When you create a new document by choosing File > New, each new document preset, like Print or Web, has a specific color mode. For instance, the Print profile uses the CMYK color mode. You can easily change the color mode by choosing a different option from the Color Mode menu.



Once a color mode is chosen, solid colors in the document are displayed in and created from that color mode. Once a document is created, you can change the color mode of a document by choosing File > Document Color Mode and then switching to either CMYK Color or RGB Color from the menu.

Tip: To learn more about color and graphics, search for "About color" in Illustrator Help (Help > Illustrator Help).

Note: The templates you see in the New Document dialog box may be different and that's okay.

Working with color

In this lesson, you'll learn about the traditional methods of coloring (also called painting) objects in Illustrator using a combination of panels and tools, such as the Properties panel, Swatches panel, Color Guide panel, Color Picker, and the paint options in the Tools panel.

Note: The Tools panel you see may be a double column, depending on the resolution of your screen.

In previous lessons, you learned that objects in Illustrator can have a fill, a stroke, or both. At the bottom of the Tools panel, notice the Fill and Stroke boxes. The Fill box is white (in this case), and the Stroke box is Black. If you click those boxes one at a time, you'll see that whichever is clicked is brought in front of the other (it's selected). When a color is chosen, it is applied to the fill or stroke, whichever is selected. As you explore more of Illustrator, you'll see these fill and stroke boxes in lots of other places like the Properties panel, Swatches panel, and more.



As you will see in this section, Illustrator provides a lot of ways to arrive at the color you need. You'll start by applying an existing color to a shape and then work your way through the most widely used methods for creating and applying color.

Applying an existing color

Every new document in Illustrator has a series of default colors available for you to use in your artwork in the form of swatches in the Swatches panel. The first color method you'll explore is applying an existing color to a shape.

- 1 Click the Festival.ai document tab at the top of the Document window, if you did not close the L7_end1.ai document.
- 2 Choose 1 Festival Sign from the Artboard Navigation menu in the lower-left corner of the Document window (if it's not chosen already) and then choose View > Fit Artboard In Window.
- 3 With the Selection tool (▶), click in the red guitar shape to select it.
- 4 Click the Fill box (■) in the Properties panel on the right to reveal a panel. Click the Swatches button () in the panel, if it isn't already selected, to show the default swatches (colors). As you move the pointer over the swatches, tool tips appear revealing each swatch's name. Click to apply the orange swatch named "Orange" to change the color of the fill for the selected artwork.

Note: Throughout this lesson, you'll be working on a document with a color mode that was set to CMYK when the document was created. That means that colors you create will, by default, be composed of cyan, magenta, yellow, and black.



5 Press the Escape key to hide the panel.

Creating a custom color

There are lots of ways to create your own custom colors in Illustrator. Using the Color panel (Window > Color) or Color Mixer, which you'll learn more about in this section, you can apply custom colors you create to an object's fill and stroke and also edit and mix colors using different color models (CMYK, for example). The Color panel and Color Mixer display the current fill and stroke of the selected content, and you can either visually select a color from the color spectrum bar at the bottom of the panel or mix your own colors in various ways. Next, you'll create a custom color using the Color Mixer.

- 1 With the Selection tool (▶), click in the gray guitar shape to select it (see the figure).
- 2 Click the Fill box () in the Properties panel on the right to reveal a panel. Click the Color Mixer button () in the panel that appears.
- 3 Click in the yellow-orange part of the color spectrum to sample a yellow-orange color, and apply it to the fill (see the following figure). Since the spectrum bar is so small, you most

likely won't achieve the same color as you see in the book. That's okay, because you'll edit it shortly to match.



> Tip: To enlarge the color spectrum, you can open the Color panel (Window > Color) and drag the bottom of the panel down.



If artwork is selected when you create a color this way, the color is automatically applied.

4 In the Color Mixer panel, which should still be showing, type the following values in the CMYK fields: C=3, M=2, Y=98, K=0. This ensures that we are all using the same yellow.



Colors created in the Color Mixer panel are not saved anywhere except in the fill or stroke of the selected artwork. If you want to easily reuse the color you just created elsewhere in this document, you can save it as a swatch in the Swatches panel. All documents start with a default number of swatches, as mentioned earlier. Any colors you save or edit in the Swatches panel are available to the current document only, by default, since each document has its own defined swatches.

Saving a color as a swatch

You can name and save different types of colors, gradients, and patterns in the document as swatches so that you can apply and edit them later. Swatches are initially listed in the Swatches panel in the order in which they were created, but you can reorder or organize the swatches into groups to suit your needs.

Next, you'll save a color you create as a swatch so you can easily reuse it later.

- 1 With the Selection tool selected, click to select the black circle.
- 2 Click the Fill box (■) in the Properties panel on the right to reveal a panel. With the Color Mixer option () selected, change the CMYK values to C=0, M=84, Y=100, K=0.



Tip: Each CMYK

value is shown as

a percentage.

3 Click the Swatches button (at the top of the panel to see the swatches. Click the New Swatch button (\blacksquare) at the bottom of the panel to create a swatch from the fill color of the selected artwork.



- 4 In the New Swatch dialog box that appears, change the following options:
 - · Swatch Name: Dark Orange
 - Add To My Library: Deselected (In Lesson 13, "Creating Artwork for a T-Shirt," you'll learn all about Libraries.)

Notice the Global option that is selected by default. New swatches you create are global by default. That

means, if you later edit this swatch, everywhere it is applied, regardless of whether or not the artwork is selected, is updated.

> Tip: Naming colors can be an art form. You can name them according to their values (C=45, ...), appearance (light orange), or description like "text header," among other attributes.

5 Click OK to save the swatch.

Notice that the new Dark Orange swatch is highlighted in the Swatches panel (it has a white border around it). That's because it's applied to the selected shape automatically. Also notice the little white triangle in the lower-right corner of the swatch. This indicates that it's a global swatch.



Note: If the panel is hidden, click the Fill box in the Properties panel.

Leave the orange circle selected and the panel showing for the next section.

Creating a copy of a swatch

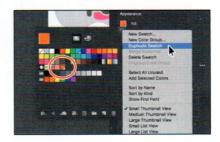
One of the easiest ways to create and save a color as a swatch is to make a copy of a swatch and edit the copy. Next, you'll create another swatch by copying and editing the swatch named "Dark Orange."

- With the circle still selected and the Swatches panel still showing, choose Duplicate Swatch from the panel menu ().
 - This creates a copy of the selected Dark Orange swatch. The new swatch is also now applied to the selected circle shape.
- 2 Click to apply the original Dark Orange swatch to the selected circle.
- 3 With the Selection tool (▶), click the light blue guitar shape to select it. An arrow is pointing to it in the following figure.
- Click the Fill box () in the Properties panel, and double-click the Dark Orange copy swatch to both apply it to the selected artwork and edit the color settings.



Tip: In the Swatch Options dialog box, the Color Mode menu lets you change the color mode of a specific color to RGB, CMYK, Grayscale, or another mode.

5 In the Swatch Options dialog box, change the name to Mustard; change the values to C=11, M=23, Y=100, K=0; and make sure that Add To My Library is deselected. Select Preview and then click OK.







Make sure the new Mustard swatch is applied to the selected shape.

Editing a global swatch

Next you'll save a color as a swatch and learn about global color. When you edit a global color, all artwork with that swatch applied is updated, regardless of which artwork is and isn't selected.

- 1 With the Selection tool (), click to select the gray shape above the "BLUEGRASS FESTIVAL" text. Press the Shift key, and click in the green guitar shape to select it as well.
- 2 Click the Fill box (2) in the Properties panel, and click to apply the swatch named "Dark Orange."
- 3 Double-click the Dark Orange swatch. In the Swatch Options dialog box, change the M value (Magenta) to 64, select Preview to see the changes (you may need to click in another field to see the change), and then click OK.





All of the shapes with the global swatch applied are updated, even if they weren't selected (the circle).

Editing a nonglobal swatch

The default color swatches that come with each Illustrator document are not saved as global swatches by default. As a result, when you edit one of those color swatches, the artwork that uses the color will update only if that artwork is selected. Next, you'll apply and edit a swatch that was not saved as a global swatch.

- 1 With the Selection tool (►) selected, click to select the guitar shape that you first applied the orange fill color to.
- 2 Click the Fill box () in the Properties panel and you will see that the swatch named "Orange" is applied to the fill. This was the first color you applied to content at the beginning of this lesson.



You can tell that the orange color swatch you applied is *not* a global swatch because it doesn't have the small white triangle in the lower-right corner of the swatch in the Swatches panel.

- 3 Press the Escape key to hide the Swatches panel.
- 4 Choose Select > Deselect.
- 5 Choose Window > Swatches to open the Swatches panel as a separate panel. Double-click the swatch named "Orange" to edit it.



Most of the formatting options you find in the Properties panel can also be found in separate panels. Opening the Swatches panel, for instance, can be a useful way to work with color without having to select artwork.

6 In the Swatch Options dialog box, change the name to Guitar Orange and the values to C=0, M=29, Y=100, K=0, select Global to ensure that it's a global swatch, and select Preview.

Note: You can change an existing swatch into a global swatch, but it requires a bit more effort. Either you need to select all of the shapes that swatch applied before you edit the swatch and make it global or you edit the swatch to make it global and then reapply the swatch to the content.



Notice that the color of the guitar doesn't change. That's because global wasn't selected in the Swatch Options dialog box when the color was applied to the guitar shape. After changing a nonglobal swatch, you need to reapply it to artwork that wasn't selected when you made the edit.

- 7 Click OK.
- 8 Click the X at the top of the Swatches panel group to close it.
- 9 Click to select the guitar shape again. Click the Fill box (IIII) in the Properties panel, and notice that what was the orange color swatch is no longer applied.
- 10 Click the Guitar Orange swatch you just edited to apply it.



11 Choose Select > Deselect and then choose File > Save.

Working with Adobe Color Themes

The Adobe Color Themes panel (Window > Color Themes) displays color themes you have created and synced with your account on the Adobe Color CC website (https://color.adobe.com/). The Adobe ID used in Illustrator CC is automatically used to sign in to the Adobe Color CC website, and the Adobe Color Themes panel is refreshed with your Adobe color themes.

Note: For more information about working with the Color Themes panel, search for "Color themes" in Illustrator Help (Help > Illustrator Help).

Using the Color Picker to create color

Another method for creating color is to use the Color Picker. The Color Picker lets you select a color in a color field or in a spectrum, either by defining colors numerically or by clicking a swatch. The Color Picker is also found in Adobe applications like InDesign and Photoshop. Next you'll create a color using the Color Picker and then save that color as a swatch in the Swatches panel.

- 1 With the Selection tool (), click in the blue guitar shape.
- 2 Double-click the blue Fill box at the bottom of the Tools panel, to the left of the document, to open the Color Picker.





In the Color Picker dialog box, the larger color field shows saturation (horizontally) and brightness (vertically). The color spectrum bar to the right of the color field shows the hue.

3 In the Color Picker dialog box, drag up and down in the color spectrum bar to change the color range. Make sure that you wind up with the triangles in a light orange color-it doesn't have to be exact.



- 4 Drag in the color field (where you see the circle in the following figure). As you drag right and left, you adjust the saturation, and as you drag up and down, you adjust the brightness. The color you create when you click OK (don't yet) appears in the New color rectangle, an arrow is pointing to it in the figure. Don't worry about matching the color in the figure yet.
- > Tip: You can also change the color spectrum you see by selecting H, S, B, R, G, or B.



5 In the CMYK fields, change the values to C=8, M=50, Y=100, and K=0.



- 6 Click OK, and you should see that the orange color is applied to the fill of
- 7 Click the Fill box () in the Properties panel to show the swatches. Click the New Swatch button () at the bottom of the panel, and change the following options in the New Swatch dialog box:
 - Swatch Name: Burnt Orange
 - Global: Selected (the default setting)
 - Add To My Library: Deselected
- 8 Click OK to see the color appear as a swatch in the Swatches panel.
- 9 Choose Select > Deselect.
- 10 Choose File > Save.



Note: The Color Swatches button in the Color Picker shows you the swatches in the Swatches panel and the default color books (the sets of swatches that come with Illustrator), and it lets you select a color from one. You can return to the color spectrum by clicking the Color Models button and then editing the swatch color values, if necessary.

Note: Sometimes it's practical to use process (typically CMYK) and spot inks (PANTONE, for instance) in the same job. For example, you might use one spot ink to print the exact color of a company logo on the same pages of an annual report where photographs are reproduced using process color. You can also use a spot-color printing plate to apply a varnish over areas of a process color job. In both cases, your print job would use a total of five inks—four process inks and one spot ink or varnish.

Using Illustrator swatch libraries

Swatch libraries are collections of preset colors, such as Pantone and TOYO, and thematic libraries, such as Earthtone and Ice Cream. Illustrator has default swatch libraries that appear as separate panels when you open them, and they cannot be edited. When you apply color from a library to artwork, the color in the library becomes a swatch that is saved in that document only and appears in the Swatches panel. Libraries are a great starting point for creating colors.

Next you'll create a spot color using a Pantone Plus library, which prints using a spot ink. You will then apply that color to artwork. When color is defined in Illustrator and later printed, the appearance of the color may vary. This is why most printers and designers rely on a color-matching system, like the PANTONE system, to help maintain color consistency and, in some cases, to access a wider range of colors.

Adding a spot color

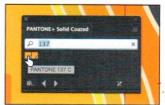
In this section, you'll see how to open a color library, such as the PANTONE color system, and how to add a PANTONE MATCHING SYSTEM (PMS) color to the Swatches panel.

- 1 Choose Window > Swatch Libraries > Color Books > PANTONE+ Solid Coated.
 - The PANTONE+ Solid Coated library appears in its own panel.
- 2 Type 137 in the Find field. As you type, the list is filtered, showing a smaller and smaller range of swatches.
- 3 Click the swatch PANTONE 137 C, beneath the search field to add it to the Swatches panel for this document. Click the X to the right of the search field to stop the filtering.
- 4 Close the PANTONE+ Solid Coated panel.
- 5 Choose 2 Pantone from the Artboard Navigation menu in the lower-left corner of the Document window.

The artboard should fit in the Document window. If it's not, you can choose View > Fit Artboard In Window.

- 6 With the Selection tool (▶), click the light gray guitar shape.
- 7 Click the Fill box () in the Properties panel to show the swatches, and select the PANTONE 137 C swatch to fill the shape.





Note: If you exit Illustrator with the PANTONE library panel still open and then relaunch Illustrator, the panel does not reopen. To automatically open the panel whenever Illustrator opens, choose Persistent from the PANTONE+ Solid Coated panel menu (**E**).

- 4 Drag in the color field (where you see the circle in the following figure). As you drag right and left, you adjust the saturation, and as you drag up and down, you adjust the brightness. The color you create when you click OK (don't yet) appears in the New color rectangle, an arrow is pointing to it in the figure. Don't worry about matching the color in the figure yet.
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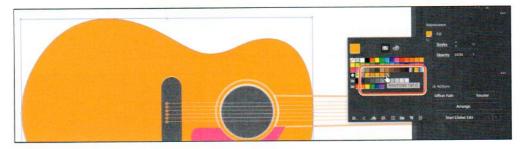
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- 4 Close the PANTONE+ Solid Coated panel.
- 5 Choose 2 Pantone from the Artboard Navigation menu in the lower-left corner of the Document window.
 - The artboard should fit in the Document window. If it's not, you can choose View > Fit Artboard In Window.
- 6 With the Selection tool (▶), click the light gray guitar shape.
- 7 Click the Fill box () in the Properties panel to show the swatches, and select the PANTONE 137 C swatch to fill the shape.







8 Choose Select > Deselect and then choose File > Save.

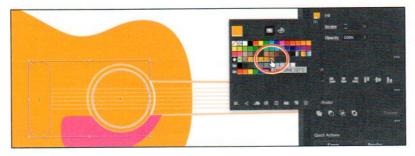
PANTONE swatches vs. other swatches in the Swatches panel

In the Swatches panel, you can identify spot-color swatches by the spot-color icon () when the panel is in List view or by the dot in the lower corner () when the panel is in Thumbnail view. Process colors do not have a spot-color icon or a dot.

Creating and saving a tint of a color

A tint is a mixture of a color with white to make the color lighter. You can create a tint from a global process color, like CMYK, or from a spot color. Next, you'll create a tint of the Pantone swatch you added to the document.

- 1 With the Selection tool (), press the Shift key and click the two darker gray shapes on the guitar to select them both.
- 2 Click the Fill box in the Properties panel (■) on the right. Select the PANTONE 137 C swatch to fill both shapes.

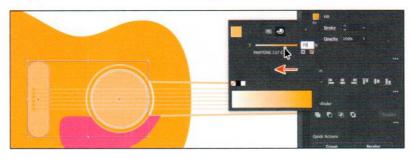


3 Click the Color Mixer button () at the top of the panel.

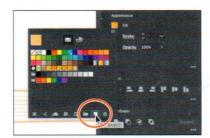
In the section "Creating a custom color," you created a custom color using the Color Mixer sliders. In that section, you were creating a custom color from scratch—that's why there were CMYK sliders. Now you will see a single slider

labeled "T" for tint. When using the color mixer for a *global* swatch, you will create a tint instead of mixing CMYK values.

4 Drag the tint slider to the left to change the tint value to 70%.



- 5 Click the Swatches button () at the top of the panel to show the swatches. Click the New Swatch button () at the bottom of the panel to save the tint.
- 6 Move the pointer over the swatch icon to see its name, which is PANTONE 137 C 70%.





7 Choose Select > Deselect and then choose File > Save.

Converting colors

Illustrator offers Edit Colors commands (Edit > Edit Colors) that allow you to convert colors between color modes, blend colors, invert colors, and much more, for selected artwork. Next, you'll change the guitar with the PANTONE 137 C color applied to use CMYK colors instead of Pantone.

- 1 Choose Select > All On Active Artboard to select all artwork on the artboard, including the shapes with the Pantone color and tint applied.
- 2 Choose Edit > Edit Colors > Convert To CMYK.

Any colors in the selected shapes that had Pantone applied as a spot color are now composed of CMYK. Using this method for converting to CMYK does *not* affect Pantone color swatches (PANTONE 137 C and the tint, in this case) in the Swatches panel. It simply converts the selected *artwork* colors to CMYK. The swatches in the Swatches panel are no longer applied to the artwork.

3 Choose Select > Deselect.

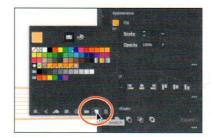
Note: Currently,
Convert to RGB in
the Edit Color menu
is dimmed (you
cannot select it).
That's because the
document color mode
is CMYK. To convert
the selected content
color to RGB using this
method, first choose
File > Document Color
Mode > RGB Color.

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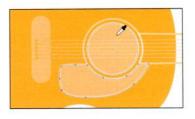
3 Choose Select > Deselect.

Note: Currently, Convert to RGB in the Edit Color menu is dimmed (you cannot select it). That's because the document color mode is CMYK. To convert the selected content color to RGB using this method, first choose File > Document Color Mode > RGB Color.

Copying appearance attributes

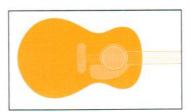
At times you may want to simply copy appearance attributes, such as text formatting, fill, and stroke, from one object to another. This can be done with the Eyedropper tool () and can really speed up your creative process.

- 1 Using the Selection tool (), select the pink shape.
- 2 Select the Eyedropper tool () in the Tools panel on the left. Click in the circle shape that you applied the tint to. See the figure.
 - The once pink shape now has the attributes from the circle shape applied, including a 2-pt white stroke.



> Tip: You can doubleclick the Eyedropper tool in the Tools panel before sampling to change the attributes that the Eyedropper picks up and applies.

- Click the Stroke color () in the Properties panel, and change the color to
- 4 Select the Selection tool (►) in the Tools panel.
- 5 Choose Select > Deselect and then choose File > Save.



Creating a color group

In Illustrator, you can save colors in color groups, which consist of related color swatches in the Swatches panel. Organizing colors by use, such as grouping all colors for a logo, can be helpful for organization and more, as you'll soon see. Color groups cannot contain patterns, gradients, the None color, or the Registration color. Next, you'll create a color group of some of the swatches you've created to keep them organized.

- 1 Choose Window > Swatches to open the Swatches panel. In the Swatches panel, click the swatch named "Guitar Orange" to select it. Pressing the Shift key, click the swatch named "PANTONE 137 C" to select five color swatches.
- 2 Click the New Color Group button () at the bottom of the Swatches panel. Change Name to Guitar colors in the New Color Group dialog box, and click OK to save the group.





- > Tip: You may want to drag the bottom of the Swatches panel down to see more of the content.
- Note: If objects are selected when you click the New Color Group button, an expanded New Color Group dialog box appears. In this dialog box, you can create a color group from the colors in the artwork and convert the colors to global colors.

- 3 With the Selection tool (▶) selected, click a blank area of the Swatches panel to deselect all in the panel.
 - Each swatch in a color group can still be edited independently by double-clicking a swatch in the group and editing the values in the Swatch Options dialog box.
- 4 Drag the swatch named "PANTONE 137 C" in the color group to the right of the PANTONE 137 C 70% swatch. Leave the Swatches panel open.







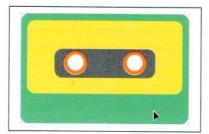


You can drag colors into or out of a color group. When dragging into a color group, make sure that you see a line appear on the right edge of a swatch within the group. Otherwise, you may drag the swatch to the wrong place. You can always choose Edit > Undo Move Swatches and try again.

Creative inspiration with the Color Guide panel

The Color Guide panel can provide you with color inspiration as you create your artwork. You can use it to pick color tints, analogous colors, and much more, and then apply them directly to artwork, edit them using several methods, or save them as a group in the Swatches panel. Next, you'll use the Color Guide panel to select different colors from artwork, and then you'll save those colors as a color group in the Swatches panel.

- 1 Choose 3 Cassette artwork from the Artboard Navigation menu in the lower-left corner of the Document window.
- 2 With the Selection tool (▶), click the darker green rounded rectangle. Make sure that the Fill box is selected toward the bottom of the Tools panel.



3 Choose Window > Color Guide to open the panel. Click the Set Base Color To The Current Color button () (see the following figure).

This allows the Color Guide panel to suggest colors based on the color showing in the Set Base Color To The Current Color button. The colors you see in the Color Guide panel may differ from what you see in the figure. That's okay.

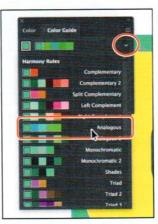
Next, you'll experiment with colors using Harmony Rules.

4 Choose Analogous from the Harmony Rules menu (circled in middle part of the following figure) in the Color Guide panel.

A base group of colors is created to the right of the base color (green), and a series of tints and shades of those colors appears in the body of the panel. There are lots of harmony rules to choose from, each instantly generating a color scheme based on any color you want. The base color you set (green) is the basis for generating the colors in the color scheme.

> Tip: You can also choose a different color variation (different from the default Tints/Shades), such as Show Warm/Cool, by clicking the Color Guide panel menu icon () and choosing one.







- 5 Click the Save Color Group To Swatch Panel button (at the bottom of the Color Guide panel to save the base colors (the five colors at the top) in the Swatches panel as a group. Leave the panel open.
- 6 Choose Select > Deselect.

In the Swatches panel you should see the new group added. You may need to scroll down in the panel.

Next, you'll experiment with the colors in the color group that you just created to create an alternate group of colors.



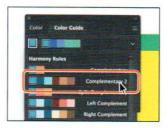


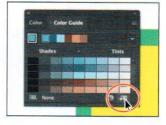
• Note: If you choose a different color variation than the one suggested, your color will differ from those in the rest of this section.

- 7 In the list of swatches in the Color Guide panel, select the sixth color from the left in the second row (see the figure). If the green cassette shape were still selected, it would now be filled with blue.
- 8 Click the Set Base Color To The Current Color button ((circled in the following figure) to ensure that all colors that the panel creates are based on that same blue color.
- Color Color Guide

 Shades
 Tlats
- 9 Choose Complementary 2 from the Harmony Rules menu.
- **10** Click the Save Color Group To Swatch Panel button (to save the colors as a group in the Swatches panel.







Editing a color group in the Edit Colors dialog box

When you create color groups in the Swatches panel or in the Color Guide panel, you can edit the swatches in the group either individually (by double-clicking each in the Swatches panel) or together. In this section, you'll learn how to edit the colors of a color group saved in the Swatches panel using the Edit Colors dialog box. Later, you will apply those colors to artwork.

- 1 Choose Select > Deselect (if it's available).
 Deselecting right now is important! If artwork is selected when you edit the color group, the edits apply to the selected artwork.
- 2 In the Swatches panel, click the Color Group icon () to the left of the colors in the *bottom* color group (the one you just saved) to ensure that it's selected. It's circled in the figure.
- 3 Click the Edit Color Group button (■) at the bottom of the Swatches panel to open the Edit Colors dialog box.



➤ Tip: With no artwork selected, you could also double-click the Color Group icon (the folder) in the Swatches panel to open the Edit Colors dialog box.

The Edit Color Group button () appears in multiple locations, like the Swatches and Color Guide panels. The Edit Colors dialog box allows you to edit a group of colors in various ways or even to create new color groups. On the right side of the Edit Colors dialog box, under the Color Groups section, all of the existing color groups in the Swatches panel are listed.

Select the name "Color Group 2" in the field above the Color Groups section if not already selected (circled in the figure), and rename the group Cassette colors. This is one way you can rename a color group.



Next you'll make a few changes to the colors in the group. On the left side of the Edit Colors dialog box, you can edit the colors of each color group, either individually or together, and edit them visually or precisely using specific color values. In the color wheel, you'll see markers (circles) that represent each color in the selected group.

5 In the color wheel on the left side of the dialog box, drag the largest blue circle, called a marker, in the lower-left section of the color wheel down and to the left a little bit.

Moving the largest color marker away from the center of the color wheel increases saturation, and moving it toward the center decreases saturation. Moving a color marker around the color wheel

(clockwise or counterclockwise) edits the hue.



> Tip: You'll notice that all of the colors in the group move and change together. This is because they are linked together by default.

Note: The largest blue marker is the base color of the color group that you set in the Color Guide panel initially.

Note: You can match the H, S, B (hue, saturation, brightness) values below the color wheel in the Edit Colors dialog box to mimic what you see in the figure, if you want to match exactly the color I achieved.

6 Drag the Adjust Brightness slider below the color wheel to the right a little to brighten all the colors at once.

Next you'll edit the colors in the group independently and then save the colors as a new named group.



7 Click the Unlink Harmony Colors button (12) so it looks like 🛭 in the Edit Colors dialog box to edit the colors independently.

The lines between the color markers (circles) and the center of the color wheel become dotted, indicating that you can edit the colors independently. Next, you'll edit just one of the colors, since they are now



unlinked. You will edit that color by using specific color values rather than by dragging the color in the color wheel.

- 8 Click the Color Mode icon () to the right of the H, S, B values below the color wheel, and choose CMYK from the menu, if the CMYK sliders are not already visible.
- 9 Click to select the top red/purple marker on the right side of the color wheel (circled in the first part of the following figure). Change the CMYK values to C=48, M=74, Y=21, and K=0.







Notice that the marker has moved in the color wheel, and it's the only one that moved. That's because you clicked the Unlink Harmony Colors button. Leave the dialog box open.

10 Click the Save Changes To Color Group button () in the upper-right corner of the Edit Colors dialog box to save the changes to the color group.

If you decide to make changes to colors in another color group, you can select the color group you want to edit on the right side of the Edit Colors dialog box and edit the colors on the left side. You can then



save the changes to the group by clicking the Save Changes To Color Group button () in the upper-right corner of the dialog box.

- 11 Click OK to close the Edit Colors dialog box.
 - The changes to the colors in the group should show in the Swatches panel. Don't worry if the colors you see don't exactly match the figure.
- 12 Close the Swatches panel group and the Color Guide panel groups.
- 13 Choose File > Save.



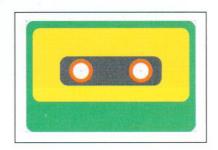
Note: If a dialog box appears after clicking OK, click Yes to save the changes to the color group in the Swatches panel.

Editing colors in artwork

You can also edit the colors in selected artwork using the Recolor Artwork command. It's really useful when global swatches weren't used in the artwork. Without using global colors in your artwork, updating a series of colors in selected artwork may take a lot of time. Next you'll edit the colors for cassette artwork that was created with some colors that were not global swatches.

- Choose Select > All On Active Artboard to select all of the artwork.
- Click the Recolor button in the Properties panel to open the Recolor Artwork dialog box.

The options in the Recolor Artwork dialog box allow you to edit, reassign, or reduce the colors in your selected



artwork and to create and edit color groups. You'll probably notice that it looks an awful lot like the Edit Colors dialog box. The big difference is that instead of editing color and color groups, as well as creating color groups to apply later, you are dynamically editing colors in the currently selected artwork.

As in the Edit Colors dialog box, all of the color groups in the Swatches panel appear on the right side of the Recolor Artwork dialog box (in the Color Groups storage area). In the Recolor Artwork dialog box you can apply colors from these color groups to the selected artwork. In this part of the lesson, you just need to edit the colors found in the selected artwork.

- 3 In the Recolor Artwork dialog box, click the Hide Color Group Storage icon (◀) on the right side of the dialog box (an arrow is pointing to it in the following figure) to hide the color groups temporarily.
- the Recolor Artwork dialog box to make sure that the colors from the selected artwork are showing in the Recolor Artwork dialog box.
- 5 Click the Edit tab to edit the colors in the artwork using the color wheel.
- Make sure that the Link Harmony Colors icon is disabled so you can edit colors independently. The Link Harmony Colors icon should look like this: 8, not like this: 8.



Tip: You can also choose Edit > Edit Colors > Recolor Artwork.

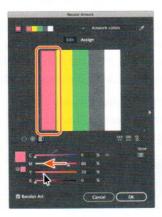
The lines between the color markers (circles) and the center of the color wheel should be dotted. When you created a color group, you worked with the color wheel and the CMYK sliders to edit color. This time, you will adjust color using a different method.

- 7 Click the Display Color Bars button (III) to show the colors in the selected artwork as bars.
- 8 Click the orange color bar to select it.
- 9 At the bottom of the dialog box, change the Y value (Yellow) to 20. If the Recolor Artwork dialog box isn't in the way, you should see the artwork changing.
- 10 With the pointer over the gray color bar, rightclick and choose Select Shade from the menu that appears. Click in the shade picker, and drag to change the color of the shape. Click away from the shade menu to close it.



> Tip: If you want to return to the original colors, click the Get Colors From Selected Art button (22).

Note: If you don't see the CMYK sliders, choose CMYK from the menu () to the right of the sliders in the Recolor Artwork dialog box.



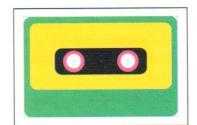




Note: If you click the gray color bar, it may jump to the first position on the left. That's okay.

Editing the colors as bars is just one of the many ways to edit the colors. To learn more about these options, search for "Color groups (harmonies)" in Illustrator Help (Help > Illustrator Help).

- 11 Click OK in the Recolor Artwork dialog box.
- 12 Choose Select > Deselect and then choose File > Save.



Tip: You can save edited colors as a color group by clicking the Show Color Group Storage icon () on the right side of the dialog box and then clicking the New Color Group button ().

Assigning colors to your artwork

In the previous section, you learned that you can edit colors in existing selected artwork in the Recolor Artwork dialog box. You can also "assign" colors from an existing color group to your artwork in the Recolor Artwork dialog box. Next, you'll assign a color group to other artwork.

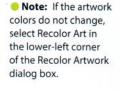
- 1 Choose 4 Sunglasses artwork from the Artboard Navigation menu in the lower-left corner of the Document window.
- With the Selection tool (►) selected, click the green sunglasses to select them.
- 3 Click the Recolor button in the Properties panel to open the Recolor Artwork dialog box.
- 4 Click the Show Color Group Storage icon (N) on the right side of the dialog box to show the color groups, if they aren't already showing. Make sure that, in the top left of the dialog box, the Assign button is selected.
 - On the left side of the Recolor Artwork dialog box, notice that the colors from the selected sunglasses artwork are listed in the Current Colors (4) column, in what is called *hue-forward* sorting. That means they are arranged, from top to bottom, in the ordering of the color wheel: red, orange, yellow, green, blue, indigo, and violet.
- 5 In the Color Groups section on the right side of the Recolor Artwork dialog box, select the Cassette Colors color group you created earlier. The selected sunglasses artwork on the artboard should change in color.

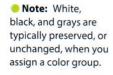


On the left side of the Recolor Artwork dialog box, notice that the colors from the Cassette colors group are *assigned* to the colors in the sunglasses artwork. The Current Colors column shows what the color originally was in the sunglasses artwork, and an arrow to the right of each of those colors points to the New column, which contains what the color has become (or has been *reassigned to*).

6 Click the Hide Color Group Storage icon (<a>¶) to hide the color groups. Drag the dialog box by the title bar at the top to see the artwork.







7 Click the small arrow to the right of the green bar in the Current Colors column. This tells Illustrator not to change that color in the selected artwork. You can see that reflected in the artwork on the artboard.



You also might not like how the colors in the Cassette colors group were assigned to your artwork. You can edit the colors in the New column in different ways, even reassigning current colors. That's what you'll do next.

8 Drag the red bar up, on top of the pink bar in the Current Colors column.





Essentially, you just told Illustrator to replace the darker red and the lighter red with the blue-green color in the New column. Illustrator assigns both colors using the tint values of the original colors.

- 9 Click the blue-green color box in the New column (circled in the figure). Change the M value (Magenta) to 100.
- 10 Click the Show Color Group Storage icon () on the right side of the dialog box to show the color groups.
- 11 Click the Save Changes To Color Group button () in the upper-right corner of the Recolor Artwork dialog box to save the changes to the color group without closing the dialog box.



Tip: You can also double-click a color in the New column to edit it in the Color Picker.

- 12 Click OK to close the Recolor Artwork dialog box. The color changes that you just made to the color group are saved in the Swatches panel.
- 13 Choose Select > Deselect and then choose File > Save.

There are a lot of color edits that can be made to selected artwork in the Recolor Artwork dialog box, including reducing the number of colors, applying other



colors (like Pantone colors), and much more. You can close the Color Guide panel group and the Swatches panel group, if they're still open.

14 Choose File > Close.

Working with Live Paint

Live Paint lets you paint vector graphics intuitively by automatically detecting and correcting gaps that might otherwise affect the application of fills and strokes. Paths divide the drawing surface into areas that can be colored, whether the area is bounded by a single path or by segments of multiple paths. Painting objects with Live Paint is like coloring in a coloring book or using watercolors to paint a sketch. The underlying shapes are not edited.

In this first part, you'll draw some artwork and then apply color using the Live Paint Bucket tool.

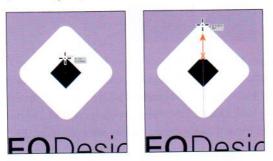
- 1 Choose File > Open, and open the L7_start2.ai file in the Lessons > Lesson07 folder.
- Choose File > Save As. In the Save As dialog box, navigate to the Lesson07 folder, and name it GeoDesign.ai. Leave Adobe Illustrator (ai) chosen from the Format menu (macOS) or Adobe Illustrator (*.AI) chosen from the Save As Type menu (Windows), and click Save.
- 3 In the Illustrator Options dialog box, leave the options at their default settings and then click OK.
- 4 Choose View > Fit All In Window.
- 5 Click to select the white rounded corner square on the top of the left artboard.
- 6 Press Command and + (macOS) or Ctrl and + (Windows) a few times to zoom in.
- Choose Select > Deselect.

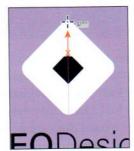
You'll draw a few lines so you can color parts of the logo with different colors using Live Paint.

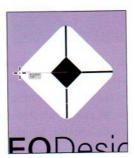


Note: To learn more about Live Paint and all that it can do, search for "Live Paint groups" in Illustrator Help (Help > Illustrator Help).

- 8 Select the Line Segment tool (✓) from the Rectangle tool (□) group in the Tools panel.
- 9 Press the D key to set the default fill of white and stroke of black for the lines you are about to draw.
- 10 Move the pointer over the top corner of the smaller black square. Drag up to make a line to the top corner of the larger white square.
- 11 Repeat this for the three other corners of the smaller black square (see the figure).



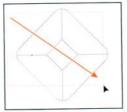




Creating a Live Paint group

Next you'll turn the logo artwork you just created into a Live Paint group.

- 1 Choose View > Outline to see the artwork in Outline mode.
- 2 Select the Selection tool (▶), and drag across the logo artwork to select it.
- 3 Choose View > Preview (or GPU Preview) to see the selected artwork.
- 4 Click Edit Toolbar () at the bottom of the Tools panel. Scroll in the menu that appears, and drag the Live Paint Bucket tool (%) into the Tools panel on the left to add it to the list of tools. Make sure it's selected in the Tools panel.
- 5 Click the Fill box in the Properties panel on the right to reveal a panel. Click the Swatches button () at the top of the panel to see the swatches. Click to select the purple swatch named "Purple 1."

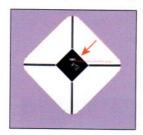




Note: You may want to press the Escape key to hide the extra tools menu.

Tip: You can convert selected artwork to a Live Paint group by choosing Object > Live Paint > Make.

6 With the Live Paint Bucket tool selected, move the pointer over the smaller black square in the center of the selected artwork (see the first part of the following figure). Click to convert the selected shapes to a Live Paint group, and fill the shape with the purple color.



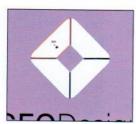


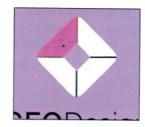
You can click any of the shapes to convert them to a Live Paint group. The shape you click is filled with the currently selected fill color of purple. Clicking selected shapes with the Live Paint Bucket tool creates a Live Paint group that you can paint with that same tool. Once a Live Paint group is created, the paths are fully editable, but they are treated like a group. Colors are automatically reapplied to new regions created when you move or adjust a path's shape.

Painting with the Live Paint Bucket tool

After objects are converted to a Live Paint group, you can paint them using several methods, which is what you'll do next.

- 1 Move the pointer over the area you see in the first part of the following figure. A red highlight appears around the area that will be painted, and three color swatches appear above the pointer. The selected color (Purple 1) is in the middle, and the two adjacent colors in the Swatches panel are on either side.
- 2 Press the right arrow key once to select the Purple 2 swatch (shown in the three swatches above the pointer). Click to apply the color to the area.





- 3 Press the right arrow key once to select the Purple 3 swatch (shown in the three swatches above the pointer). Click to apply the color to the right of the center square. See the following figure.
- 4 Click the Fill box in the Properties panel on the right, and click to select the swatch named "Purple 2" again. Click in the area below the center shape.

5 Click the Fill box in the Properties panel on the right, and click to select the swatch named "Purple 4." Click in the area to the left of the center shape. See the last part of the following figure.







By default, you can only paint fills with the Live Paint Bucket tool. Next, you'll see how to paint strokes with the Live Paint Bucket tool.

- 6 Double-click the Live Paint Bucket tool (in the Tools panel. This opens the Live Paint Bucket Options dialog box. Select the Paint Strokes option and then click OK.
- 7 Click the Stroke color box in the Properties panel () on the right, and select None () for the stroke color, if it isn't already selected. Press the Escape key to hide the panel.

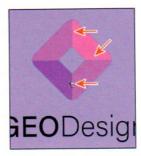


Tip: With the live Paint Bucket tool selected in the Tools panel, you can also click the Tool Options button at the top of the Properties panel to open the Live Paint **Bucket Options** dialog box.

8 Move the pointer over any black stroke in the middle of the logo artwork, as shown in the figure. When the pointer changes to a paintbrush (\searrow), click the stroke to remove the stroke color (by applying the None swatch). Do the same for the three other strokes (see the last part of the following figure).







- 9 Choose Select > Deselect and then choose File > Save.
- 10 Choose View > Fit Artboard In Window.

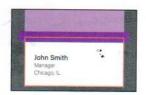
Modifying a Live Paint group

When you make a Live Paint group, each path remains editable. When you move or adjust a path, the colors that were previously applied don't just stay where they were, as they do in natural media paintings or with image-editing software. Instead, the colors are automatically reapplied to the new regions that are formed by the intersecting paths. Next you'll edit a path in another Live Paint group you create.

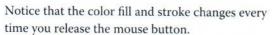
- Select the Selection tool (▶). Click the light purple rectangle shape in the background of the artboard on the left.
- 2 Choose Object > Live Paint > Make.
- 3 With the Selection tool, Shift-click the purple path going across the background to select both objects.
- 4 Choose Object > Live Paint > Merge to add the new purple path to the Live Paint group.
- 5 Select the Live Paint Bucket tool (🐚) in the Tools panel. Click the Fill color in the Properties panel and select a white color. Move the pointer over the purple background below the purple line. When you see a red outline, click to paint it white.

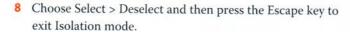


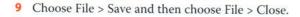


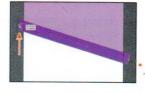


- 6 Select the Selection tool, and with the Live Paint object selected, double-click the Live Paint object to enter Isolation mode.
- 7 Select the Direct Selection tool. Move the pointer over the left anchor point on the purple line and click to select it. Press and drag the point up to reshape it.











Note: The purple path is a line with a

large stroke. To select it, you'll need to click in

the middle of the path,

not just anywhere in the purple.

Review questions

- 1 Describe what a global color is.
- 2 How can you save a color?
- 3 Describe what a *tint* is.
- 4 How can you choose color harmonies for color inspiration?
- 5 Name two things that the Recolor Artwork dialog box allows you to do.
- 6 Explain what Live Paint allows you to do.