13 CREATING ARTWORK FOR A T-SHIRT

Lesson overview

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

- Work with existing symbols.
- Create, modify, and redefine a symbol.
- Store and retrieve artwork in the Symbols panel.
- Understand Creative Cloud libraries.
- Work with Creative Cloud libraries.

This lesson takes approximately 45 minutes to complete. Please log in to your account on peachpit.com to download the lesson files for this chapter, 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."

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

From the Library of Alvaro Alvarez

In this lesson, you'll explore a variety of useful concepts for working smarter and faster in Illustrator, including using symbols and working with Creative Cloud libraries to make your design assets available anywhere.

From the Library of Alvaro Alvarez

Starting the lesson

In this lesson, you'll explore several concepts such as symbols and the Libraries panel to create artwork for a T-shirt. Before you begin, you'll restore the default preferences for Adobe Illustrator. Then, you'll open the finished art file for this lesson to see what you'll create.

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.

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.

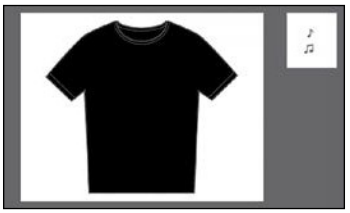
3 Choose File > Open, and open the L13_end.ai file in the Lessons > Lesson13 folder on your hard disk.

You're going to create artwork for a T-shirt design.

4 Choose View > Fit Artboard In Window and leave the file open for reference, or choose File > Close.

Note: If the Missing Fonts dialog box appears, click Close.

5 Choose File > Open. In the Open dialog box, navigate to the Lessons > Lesson13 folder, and select the L13_start.ai file on your hard disk. Click Open to open the file.



6 Choose View > Fit All In Window.

7 Choose File > Save As. In the Save As dialog box, navigate to the Lesson13 folder, and name the file **TShirt.ai**. Leave the Format option set to Adobe Illustrator (ai) (macOS) or the Save As Type option set to Adobe Illustrator (*.AI) (Windows) and then click Save.

8 In the Illustrator Options dialog box, leave the Illustrator options at their default settings and then click OK.

9 Choose Reset Essentials from the workspace switcher in the Application bar.

Note: If you don't see Reset Essentials in the menu, choose Window > Workspace > Essentials before choosing Window > Workspace > Reset Essentials.

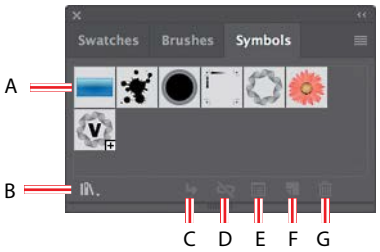
From the Library of Alvaro Alvarez

Working with symbols

A *symbol* is a reusable art object that is stored in the Symbols panel (Window > Symbols). For example, if you create a symbol from a flower you drew, you can then quickly add multiple *instances* of that flower symbol to your artwork, which saves you from having to draw each flower. All instances in the document are linked to the original symbol in the Symbols panel. When you edit the original symbol, all instances of the flower (in this example) that are linked to it are updated. You can turn all those flowers from white to red instantly! Not only do symbols save time, but they also greatly reduce file size.

Note: Illustrator comes with a series of symbol libraries, which range from tiki icons to hair to web icons. You can access those symbol libraries in the Symbols panel or by choosing Window > Symbol Libraries and easily incorporate them into your own artwork.

- Choose Window > Symbols to open the Symbols panel. The symbols you see in the Symbols panel are the symbols you can use with this document. Each document has its own set of saved symbols. The different options available in the Symbols panel are described here:



A. Symbol thumbnail

B. Symbol Libraries Menu

C. Place Symbol Instance

D. Break Link to Symbol

E. Symbol Options

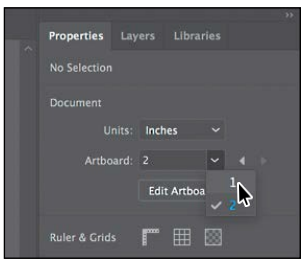
F. New Symbol

G. Delete Symbol

Using existing Illustrator symbol libraries

You'll start by adding a symbol from an existing symbol library to the artwork.

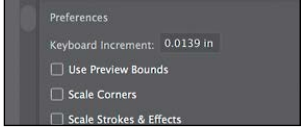
1 Click the Artboards menu in the Properties panel to the right of the document and choose 1 from the menu. The larger artboard with the black T-shirt on it will show in the Document window.



2 Click the Hide Smart Guides option in the Properties panel to turn the Smart Guides off temporarily.

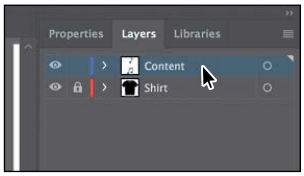
Tip: You can also choose View > Smart Guides to turn them off.

From the Library of Alvaro Alvarez



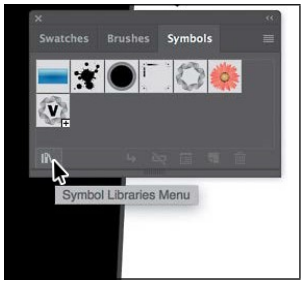
From the Library of Alvaro Alvarez

3 Click the Layers panel tab to show the Layers panel. Click the Content layer to make sure it is selected. Make sure that both of the layers are collapsed by clicking the disclosure triangles to the left of the layer names (if necessary).



When adding symbols to a document, the layer that is selected when they are added is the same layer they become a part of.

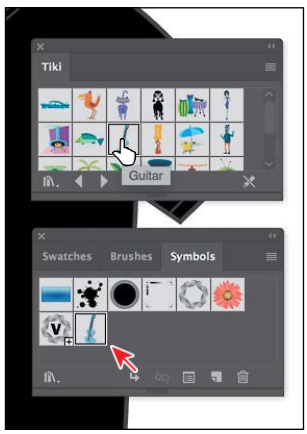
4 In the Symbols panel (Window > Symbols), click the Symbol Libraries Menu button ( ) at the bottom of the panel, and choose Tiki from the menu.



The Tiki library opens as a free-floating panel. The symbols in this library are not part of the file that you are working on, but you can import any of the symbols into the document and use them in the artwork.

Tip: If you want to see the symbol names along with the symbol pictures, click the Symbols panel menu icon ( ) and then choose Small List View or Large List View.

5 Position the pointer over the symbols in the Tiki panel to see their names as tooltips. Click the symbol named "Guitar" to add it to the Symbols panel. Close the Tiki panel.



When you add symbols to the Symbols panel, they are saved with the active document only.

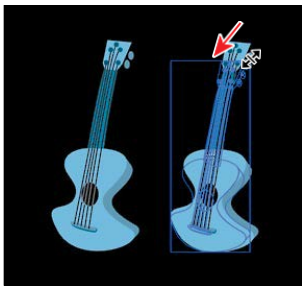
Tip: You can also copy a symbol instance on the artboard and paste as many as you need. This is the same as dragging a symbol instance out of the Symbols panel onto the artboard.

6 Using the Selection tool ( ), drag the Guitar symbol from the Symbols panel onto the artboard into the center of the black T-shirt. Do this *twice* to create two instances of the guitar on the T-shirt.

Each time you drag a symbol like the guitar onto the artboard, an *instance* of the original symbol is created. Next, you'll resize one of the symbol instances.

From the Library of Alvaro Alvarez

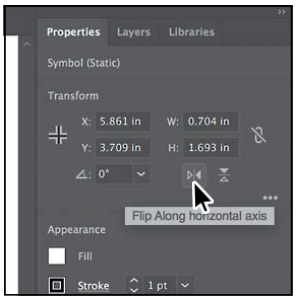
7 Click to select the Guitar instance on the right, if it's not already selected. Shift-drag the upper-right bounding point toward the center to make it a little smaller, while constraining its proportions. Release the mouse button and then the key.



A symbol instance is treated like a group of objects and can have only certain transformation and appearance properties changed (such as scale, rotate, move, transparency, etc.). You cannot edit the individual artwork that makes up an instance without breaking the link to the original symbol. With the symbol instance still selected on the artboard, notice that, in the Properties panel, you see "Symbol (Static)" and symbol-related options.

Note: Although you can transform symbol instances in many ways, specific properties of instances from static symbols like the guitar cannot be edited. For example, the fill color is locked because it is controlled by the original symbol in the Symbols panel.

8 With the same instance still selected, click the Flip Along Horizontal Axis option ( ) in the Properties panel to flip the guitar horizontally.

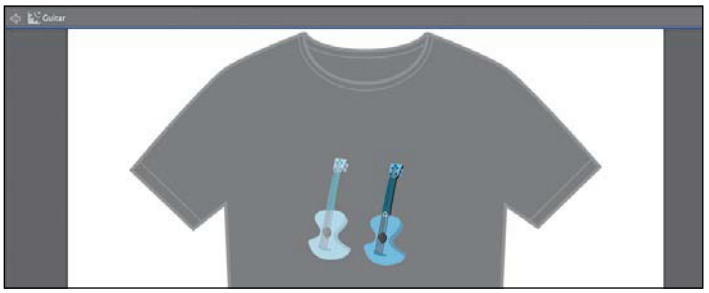


Editing a symbol

In this next section, you'll edit the Guitar symbol, and all instances in the document will be updated. There are several ways to edit a symbol, and in this section you will focus on one method.

1 With the Selection tool ( ) selected, double-click the selected Guitar symbol instance on the artboard. A warning dialog box appears, stating that you are about to edit the original symbol and that all instances will update. Click OK.

Tip: Another way to edit a symbol is to select the symbol instance on the artboard and then click the Edit Symbol button in the Properties panel.



From the Library of Alvaro Alvarez

This takes you into Symbol Editing mode, so you can't edit any other objects on the page. The Guitar symbol instance you double-clicked will appear larger and will no longer be reflected. That's because in Symbol Editing mode, you are looking at the *original* symbol artwork. You can now edit the artwork that makes up the symbol.

2 Select the Zoom tool (), and drag across the symbol content to zoom in closely.

3 Select the Direct Selection tool (), and click to select the blue body of the guitar artwork. An arrow is pointing to it in the following figure.

4 Click the Fill color box in the Properties panel, make sure the Swatches option is selected, and select the brown swatch with the tooltip "C=25 M=40 Y=65 K=0."

5 Double-click away from the symbol content, or click the Exit Symbol Editing Mode button () in the upper-left corner of the Document window until you exit Symbol Editing mode, so that you can edit the rest of the content.

6 Choose View > Fit Artboard In Window, and notice that both of the Guitar symbol instances on the artboard have been changed.

Working with dynamic symbols

As you just saw, editing a symbol updates all of the instances in your document. Symbols can also be *dynamic*, which means you can change certain appearance properties of instances using the Direct Selection tool () without editing the original symbol. In this section, you'll edit the properties of the Guitar symbol so that it is dynamic, and then you'll edit each instance separately.

1 In the Symbols panel, click the Guitar symbol thumbnail to select it, if it's not already selected. Click the Symbol Options button () at the bottom of the Symbols panel.

2 In the Symbol Options dialog box, select Dynamic Symbol, and click OK. The symbol and its instances are now dynamic.

Tip: You can tell a symbol is dynamic by looking at the thumbnail in the Symbols panel. If there is a small plus sign (+) in the lower-right corner of the thumbnail, it is a dynamic symbol.

From the Library of Alvaro Alvarez

3 Select the Zoom tool ( ), and drag across the symbol content (guitars) to zoom in.

4 Select the Direct Selection tool ( ) in the Tools panel. Click to select the blue, curved body shape of the guitar instance on the right. See the following figure.

With part of the symbol instance selected, notice the words "Symbol (Dynamic)" at the top of the Properties panel telling you it's a dynamic symbol.

5 Change the fill color to a darker brown swatch in the Properties panel.

The guitar on the right now looks a little different from the one on the left. Know that if you were to edit the original symbol like you did previously, both symbol instances would still update, but that darker brown part of the right guitar instance would remain different.

Tip: After making edits to a dynamic symbol instance with the Direct Selection tool, you can reselect the entire instance with the Selection tool and click the Reset button in the Properties panel to reset the appearance to the same as the original symbol.

Creating a symbol

Illustrator also lets you create and save your own symbols. You can make symbols from objects, including paths, compound paths, text, embedded (not linked) raster images, mesh objects, and groups of objects. Symbols can even include active objects, such as brush strokes, blends, effects, or other symbol instances. Next, you'll create your own symbol from existing artwork.

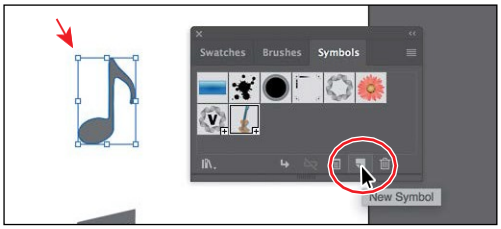
1 Choose 2 Symbol Artwork from the Artboard menu in the lower-left corner of the Document window.

2 With the Selection tool ( ) selected, click the top "musical note" shape on the artboard to select it.

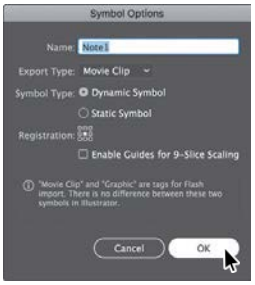
From the Library of Alvaro Alvarez

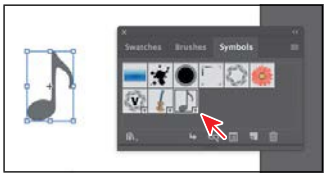
Tip: You can also drag the selected content into a blank area of the Symbols panel to create a symbol.

3 Click the New Symbol button ( ) at the bottom of the Symbols panel to make a symbol from the selected artwork.



4 In the Symbol Options dialog box that opens, change the name to **Note1**. Ensure that Dynamic Symbol is selected, just in case you want to edit the appearance of one of the instances later. Click OK to create the symbol.



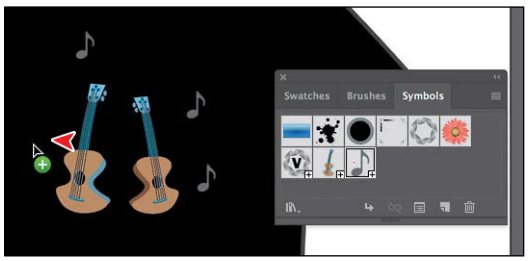


Tip: You can drag the symbol thumbnails in the Symbols panel to change their ordering. Reordering symbols in the Symbols panel has no effect on the artwork. It can simply be a way to organize your symbols.

In the Symbol Options dialog box, you'll see a note that explains that there is no difference between a movie clip and a graphic type in Illustrator. If you don't plan on exporting this content to Adobe Animate CC, you don't need to worry about choosing an export type. After creating the symbol, the note artwork on the artboard is converted to an *instance* of the Note1 symbol. The symbol also appears in the Symbols panel.

5 Choose 1 T-Shirt from the Artboard menu in the lower-left corner of the Document window.

6 Drag the Note1 symbol from the Symbols panel onto the artboard four times, and position the instances around the guitars like you see in the following figure.



7 Resize a few of the Note1 instances on the artboard using the Selection tool.

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

From the Library of Alvaro Alvarez

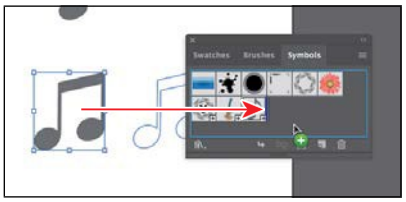
Duplicating symbols

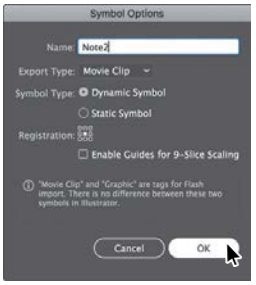
Often you will want to add a series of symbol instances to your artwork. After all, one of the reasons for using symbols is for storing and updating frequently used content like trees or clouds. In this section, you'll create, add, and duplicate a symbol that happens to be another musical note.

1 Choose 2 Symbol Artwork from the Artboard menu in the lower-left corner of the Document window.

2 Using the Selection tool (▶), click and drag the bottom "musical note" shape from the artboard into a blank area of the Symbols panel to create a new symbol.

3 In the Symbol Options dialog box, change the name to **Note2**, and make sure Dynamic Symbol is selected. Leave the remaining settings at their defaults, and click OK to create the symbol.

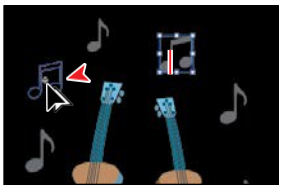




4 Choose 1 T-Shirt from the Artboard menu in the lower-left corner of the Document window to go back to the T-shirt artwork.

5 Drag one instance of the Note2 symbol from the Symbols panel onto the T-shirt, near the other notes.

6 Press Option (macOS) or Alt (Windows), and drag the Note2 symbol instance on the artboard to create a copy. When the new instance is in position (see the figure), release the mouse button and then the modifier key.



Note: Your symbol instances may not be in the same position on the artboard, and that's fine.

7 Create a few more copies by pressing Option (macOS) or Alt (Windows) and dragging any of the note symbol instances.

8 Resize and move a few of the symbol instances, making some smaller and some a bit larger, so they look different from each other.

9 Choose File > Save.

From the Library of Alvaro Alvarez

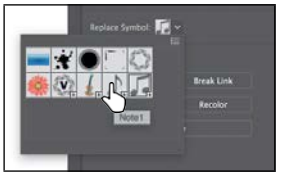
Replacing symbols

You can easily replace a symbol instance in the document with another symbol. Next, you'll replace a few of the Note2 symbol instances.

1 With the Selection tool ( ), select one of the Note2 symbol instances on the artboard.

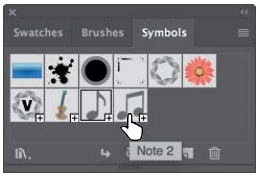
When you select a symbol instance, you can tell which symbol it came from because the symbol for the selected instance is highlighted in the Symbols panel.

2 In the Properties panel, click the arrow to the right of the Replace Symbol field to open a panel showing the symbols in the Symbols panel. Click the Note1 symbol in the panel.



If the original symbol instance you were replacing had a transformation applied, such as a rotation, the symbol instance replacing it would have the same transformations applied.

3 Double-click the Note2 symbol thumbnail in the Symbols panel to edit the symbol.



A temporary instance of the symbol appears in the center of the Document window. Editing a symbol by double-clicking the symbol in the Symbols panel hides all artboard content except the symbol artwork. This is just another way to edit a symbol.

4 Select the Selection tool ( ) in the Tools panel, and click the note shape. Press Command++ (macOS) or Ctrl++ (Windows) a few times to zoom in.

5 Change the fill color in the Properties panel to a light gray swatch with the tooltip that shows "C=0 M=0 Y=0 K=30."

From the Library of Alvaro Alvarez

6 Double-click away from the symbol content to exit Symbol Editing mode so that you can edit the rest of the content.

7 Choose View > Fit Artboard In Window.

8 Select the Selection tool (), and click one of the note symbol instances. It doesn't matter which symbol (Note1 or Note2) it is. Choose Select > Same > Symbol Instance.

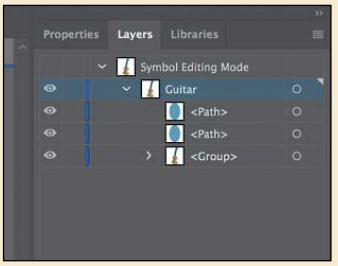
This is a great way to select all instances of a symbol in the document. You can see that the symbol instance on the right artboard was also selected.

9 Choose Select > Deselect.

Symbol layers

When you edit a symbol using any of the methods described, open the Layers panel, and you will see that the symbol has its own layering.

Similar to working with groups in Isolation mode, you see the layers associated with that symbol only, not the document's layers. In the Layers panel, you can rename, add, delete, show/hide, and reorder content for a symbol.



Breaking a link to a symbol

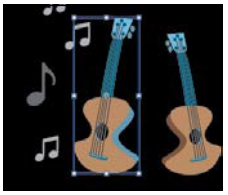
At times, you need to edit specific instances on the artboard. As you've learned, you can make changes, such as scaling, opacity, and flipping, only to a symbol instance, and saving the symbol as dynamic only lets you edit certain appearance attributes using the Direct Selection tool. In certain cases, you may need to break the link between a symbol and an instance. This breaks the instance into the original artwork on the artboard, and that instance will no longer update if the symbol is edited.

Next, you'll break the link to one of the guitar symbol instances.

From the Library of Alvaro Alvarez

Tip: You can also break the link to a symbol instance by selecting the symbol instance on the artboard and then clicking the Break Link To Symbol button ( ) at the bottom of the Symbols panel.

1 With the Selection tool ( ) selected, click to select the Guitar symbol instance on the left. In the Properties panel, click the Break Link button.



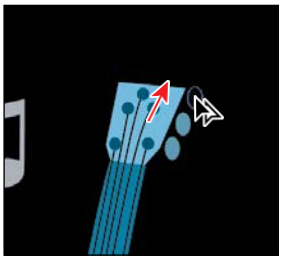
This object is now a series of paths; if you click to select the artwork, you'll see "Group" at the top of the Properties panel. You should be able to edit the artwork directly now. This content will no longer update if the Guitar symbol is edited.

2 Select the Zoom tool ( ), and drag across the top of the selected guitar artwork on the artboard to zoom in.

3 Choose Select > Deselect.

Note: I have you select the Direct Selection tool and not the Selection tool because the guitar is a group. Selecting with the Direct Selection tool usually allows you to select individual artwork in a group.

4 Select the Direct Selection tool, and click the top small blue circle toward the top of the guitar. Option-drag (macOS) or Alt-drag (Windows) the circle up to create a copy. Release the mouse button and then the modifier key.



5 Choose Select > Deselect.

6 Choose File > Save.

The Symbolism Tools

The Symbol Sprayer tool ( ) in the Tools panel allows you to spray symbols on the artboard, creating symbol sets.

A *symbol set* is a group of symbol instances that you create with the Symbol Sprayer tool. This can be really useful if, for instance, you were to create grass from individual blades of grass. Spraying the blades of grass speeds up this process greatly and makes it much easier to edit individual instances of grass or the sprayed grass as a group. You can create mixed sets of symbol instances by using the Symbol Sprayer tool with one symbol and then using it again with another symbol.

You use the symbolism tools to modify multiple symbol instances in a set. For example, you can disperse instances over a larger area using the Symbol Scruncher tool or gradually tinting the color of instances to make them look more realistic.

—From Illustrator Help

From the Library of Alvaro Alvarez

From the Library of Alvaro Alvarez

Working with Creative Cloud libraries

Creative Cloud libraries are an easy way to create and share stored content such as images, colors, text styles, Adobe Stock assets, Creative Cloud Market assets, and more between many Adobe applications like Adobe Photoshop CC, Adobe Illustrator CC, Adobe InDesign CC, and certain Adobe mobile apps.

Creative Cloud libraries connects to your Creative Profile, putting the creative assets you care about at your fingertips. When you create content in Illustrator and save it to a Creative Cloud library, that asset is available to use in all of your Illustrator files. Those assets are automatically synced and can be shared with anyone with a Creative Cloud account. As your creative team works across Adobe desktop and mobile apps, your shared library assets are always up to date and ready to use anywhere.

Note: In order to use Creative Cloud libraries, you will need to be signed in with your Adobe ID and have an Internet connection.

In this section, you'll explore CC libraries and use them in your project.

Adding assets to CC libraries

The first thing you'll learn about is how to work with the Libraries panel (Window > Libraries) in Illustrator and add assets to a Creative Cloud library. You'll open an existing document in Illustrator to capture assets from.

1 Choose File > Open. In the Open dialog box, navigate to the Lessons > Lesson13 folder, and select the Sample.ai file on your hard disk. Click Open.

Note: The Missing Fonts dialog box may appear. You need an Internet connection to sync the fonts. The syncing process may take a few minutes. Click Sync Fonts to sync all of the missing fonts to your computer. After they are synced and you see the message stating that there are no more missing fonts, click Close. If you have an issue syncing, you can go to Help (Help > Illustrator Help) and search for "Find missing fonts."

2 Choose View > Fit All In Window.

Using this document, you will capture artwork, text, colors, and type formatting to be used in the TShirt.ai document.

3 Choose Window > Libraries, or click the Libraries panel tab to open the Libraries panel.

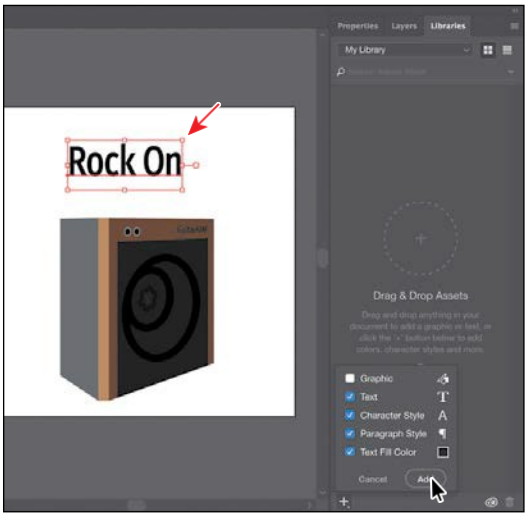
To start, you have one library to work with called "My Library." You can add your design assets to this default library, or you can create more libraries—maybe to save assets according to clients or projects.

4 Choose Select > Deselect, if necessary.

From the Library of Alvaro Alvarez

Note: The menu that appears after clicking the Add Content icon (+) is contextual. It changes depending on what can be saved from the selected artwork.

5 Select the Selection tool ( ), and click the type area that contains the text "Rock On." In the Libraries panel, click the Add Content icon (+) and make sure all of the options are selected, except for Graphic. Click Add to capture the text and formatting, and save it in the default library. If you see a warning dialog box about text appearance, click OK.



Tip: You can change the appearance of the items (icons or list) by clicking the buttons in the upper-right corner of the Libraries panel.

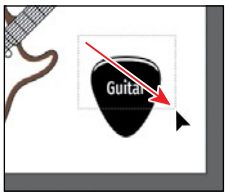
The paragraph style formatting, text object, and fill color will be saved in the currently selected library. In this case, it is adding the assets to my default library called "My Library." As you save assets and formatting in the Libraries panel, notice how it is organized by asset type.

6 Double-click the name "Text 1" in the Libraries panel, and change it to **Heading**. Press Enter or Return to accept the name change.

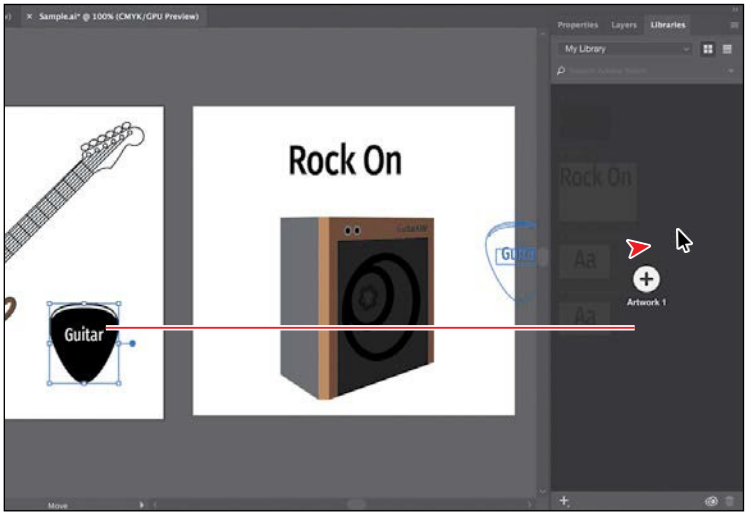
You can change the name of the color, character style, and paragraph style saved in the Libraries panel as well. In the case of the character and paragraph styles saved, you can move the pointer over the asset and see a tooltip that shows the saved formatting.

From the Library of Alvaro Alvarez

7 Drag across the black artwork in the lower-right corner with the text "Guitar" on it to select all of the artwork.



8 Drag the selected artwork into the Libraries panel. When a plus sign (+) and a name (such as "Artwork 1") appears, release the mouse button to add the artwork as a graphic.



The assets you store as a graphic in a Creative Cloud library retain their vector form wherever you use the graphic.

9 Drag the amp artwork, below the "Rock On" text, into the Libraries panel to save it as a graphic asset.

10 Choose File > Close to close the Sample.ai file and return to the TShirt.ai file. Don't save the file if asked.

Notice that the Libraries panel still shows the assets in the library. The libraries and their assets are available no matter which document is open in Illustrator.

Tip: You can share a copy of your library with others by choosing the library you want to share in the Libraries panel and then choosing Share Link from the panel menu.

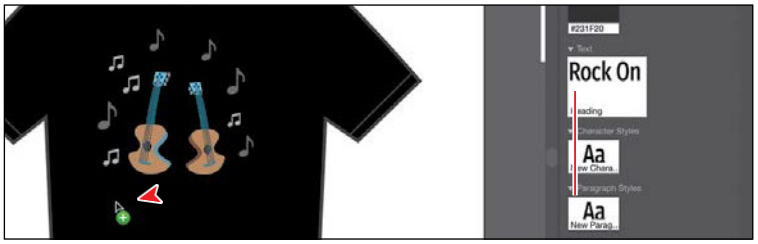
From the Library of Alvaro Alvarez

Using library assets

Now that you have some assets in the Libraries panel, once synced, those assets will be available to other applications and apps that support libraries, as long as you are signed in with the same Creative Cloud account. Next, you will use some of those assets in the TShirt.ai file.

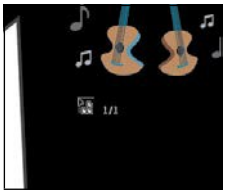
1 While still on the 1 T-Shirt artboard, choose View > Fit Artboard In Window.

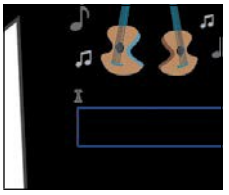
2 Drag the Heading text asset from the Libraries panel onto the artboard.



Tip: As you'll learn in the next section, graphics you drag from the Libraries panel are linked. If you Option-drag (macOS) or Alt-drag (Windows) the artwork from the Libraries panel into a document, it will be embedded by default.

3 Click to place the text.





Tip: To apply the color or styles saved in the Libraries panel, select artwork or text and click to apply. When it comes to text styles in the Libraries panel, if you apply them to text in a document, a style of the same name and formatting will appear in the Paragraph Styles panel or Character Styles panel (depending on which you selected in the Libraries panel).

4 Press Esc to select the Selection tool and the type object. Click the Properties panel tab and change the fill color to white.

5 Double-click the "Rock On" text to switch to the Type tool. Press Command+A (macOS) or Ctrl+A (Windows) to select the text.

6 Change the text to **ROCK ON!** (with an exclamation point).

7 Click the Libraries panel tab to show the panel. Drag the pick graphic asset and then the amp graphic asset from the Libraries panel onto the artboard. Don't worry about position for now.

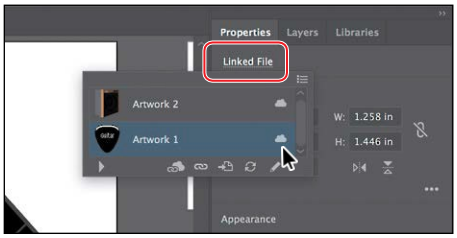
Note: You will most likely need to click to place the assets, like you did with the text.

From the Library of Alvaro Alvarez

Updating a library asset

When you drag a graphic from your Creative Cloud library to an Illustrator project, it is automatically placed as a linked asset. If you make a change to a library asset, the linked instances will update in your projects. Next, you'll see how to update the asset.

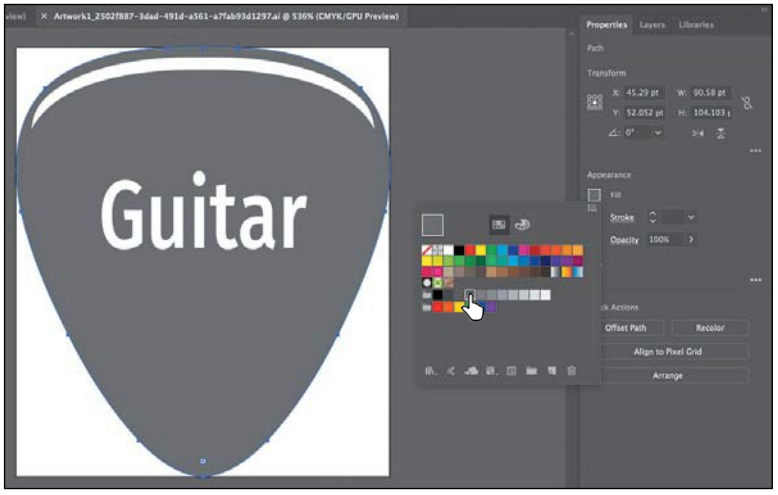
1 Select the Selection tool (▶), and click the pick asset on the artboard and look at the top of the Properties panel (you'll need to click the Properties panel tab to show it). Click the words "Linked File" to open the Links panel.



In the Links panel that appears, you will see the name of the pick asset, as well as a cloud icon to the right of the name. The cloud icon indicates that the artwork is a linked library asset.

2 Back in the Libraries panel, double-click the pick asset thumbnail. The artwork will appear in a new, temporary document.

3 With the Direct Selection tool, click to select the black shape. Change the fill color to a gray with the tooltip "C=0 M=0 Y=0 K=70" in the Properties panel.

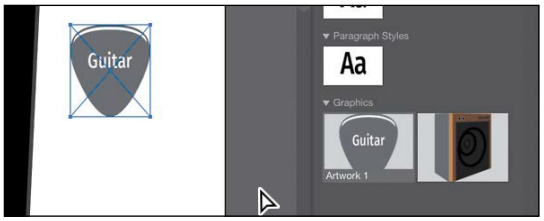


Note: You'll learn more about the Links panel in Lesson 14, "Using Illustrator CC with Other Adobe Applications."

Tip: You can edit a linked library asset like the guitar pick by clicking Edit Original (✎) at the bottom of the Links panel.

From the Library of Alvaro Alvarez

4 Choose File > Save and then choose File > Close.



In the Libraries panel, the graphic thumbnail should update to reflect the appearance change you made. Back in the TShirt.ai document, the pick graphic on the artboard should have updated. *If it hasn't,* with the pick artwork still selected on the artboard, click the Linked File link in the Properties panel. In the Links panel that shows, with the pick asset row selected, click the Update Link button ( ) at the bottom of the panel.

5 With the artwork selected, click the Embed button back in the Properties panel.

The artwork is no longer linked to the original library item and will not update if the pick library item is updated. That also means it is now editable in the TShirt.ai document. Just know that Libraries panel artwork that is embedded after it has been placed will typically have a clipping mask applied.

6 With the Selection tool, click the amp artwork and, to send it behind everything else, click the Arrange button in the Properties panel and choose Send To Back.

7 Drag all of the artwork like you see in the following figure. You may want to resize the pick and amp artwork to make them each a little smaller. If you resize any of the artwork, make sure you press the Shift key to constrain the proportions as you scale; then release the mouse button and key when finished.

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

From the Library of Alvaro Alvarez