How to use symbols, patterns, and graphic styles

A wide range of symbols, patterns, and graphic styles are available in Adobe Illustrator to help you quickly and easily create and modify interesting design elements for your illustration projects.

The Symbol Sprayer acts like a particle sprayer—letting you add a large number of identical objects to the artboard at one time. For example, use the symbol sprayer to add hundreds of grass blades, wildflowers, bees, or snowflakes.

Pattern Creation tools allow you to create and edit vector shapes to create repeating, seamless patterns. Repeating patterns are often used in various industries including textiles, apparel, manufacturing, and even cartography. Pattern Creation tools in Illustrator allow you to easily create and edit repeating patterns at any time, so you can easily change artwork and tweak the design.

You can use the Symbol Sprayer and Pattern Creation tools in Illustrator to create interesting designs or backdrops and then import the Illustrator file into Adobe InDesign (**Figure 1**).

Figure 1 Backdrop design created with Symbol Sprayer and Pattern Creation tools

A *graphic style* is a set of reusable appearance attributes. Graphic styles allow you to quickly change the look of an object; for example, you can change its fill and stroke color, alter its transparency, and apply effects in one step. All the changes you apply with graphic styles are completely reversible.

A *symbol* set is a group of symbol instances that you create with the Symbol Sprayer. You can create mixed sets of symbols by using the Symbol Sprayer tool with one symbol and then using it again with another symbol **(Figure 2)**.


Figure 2 Artwork created with the symbol tools

As you work with symbol sets, keep in mind that the symbol tools affect only the symbol or symbols selected in the Symbols panel. For example, if you create a mixed symbol instance set that represents a meadow with grass and flowers, you can change the orientation of just the grass by selecting the grass symbol in the Symbols panel and then using the Symbol Spinner tool. To change the size of both the grass and the flowers, select both symbols in the Symbols panel and then use the Symbol Sizer tool.

To use the Symbol Sprayer:

1. Start Adobe Illustrator.

   The Start workspace opens. If you've previously used Illustrator, your recent files will be shown.

2. Click on the **New** button.

   The **New Document** dialog box opens.

3. In the **New Document** dialog box, click the **Print** category tab, if not already open.

4. Select the **Letter** preset option in the dialog box (**Figure 3**).
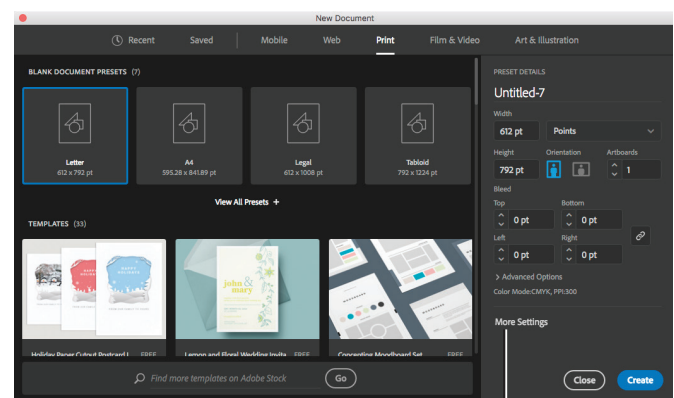
More settings

Figure 3 New Document dialog box

5. Use the **Preset Details** section of the **New Document** dialog box to set the following options:

    - **Orientation**: Landscape
    - **Color Mode**: CMYK Color

    Color Mode refers to the way your document will print. CMYK is the standard mode for documents sent to a print vendor.

6. Click the **More Settings** button to access the advanced document options and set **Raster Effects** option to **High (300 ppi)**.

    Raster Effect refers to the resolution of bitmap effects in the document. A higher value such as 300 ppi is always best for printing.

    Note: If you intend to use your symbol sprayer project for uses other than print, set **Color Mode** to **RGB Color** in step 5 and **Raster Effects** to **Screen (72 ppi)** in step 6.

7. Click the **Create Document** button in the **More Settings** dialog box.

    The dialog boxes close and the new document opens.

    Before you can use the Symbol Sprayer, you need to choose a symbol to spray.

8. Choose **Window** > **Symbols** to display the **Symbols** panel.

    By default, a limited number of symbols appear in the Symbols panel **(Figure 4)**.

9. Click the Symbol Libraries Menu button and choose a symbol library, such as **Flowers (Figure 5)**.

10. To add a symbol to the **Symbols** panel, click on any symbol in the library.

    The new symbol appears in the Symbols panel **(Figure 6)**.

11. Click one of the symbols in the **Symbols** panel to select it.

12. Choose the Symbol Sprayer in the Tools panel **(Figure 7)**.

    The pointer changes to a spray can surrounded by a wide circle.

    Note: You can change options for the Symbol Sprayer by double-clicking it in the Tools panel.
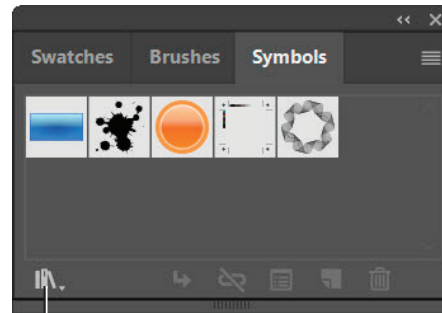
Symbol Libraries Menu button
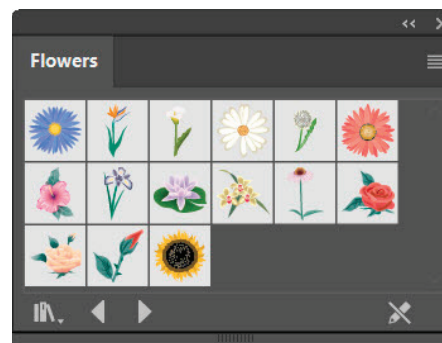
Figure 4 *Symbols panel*

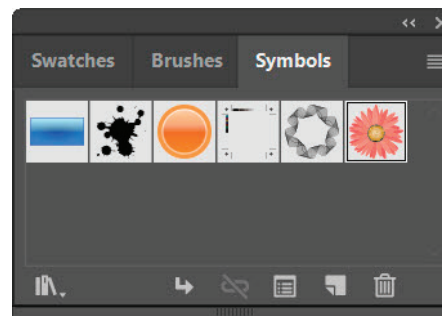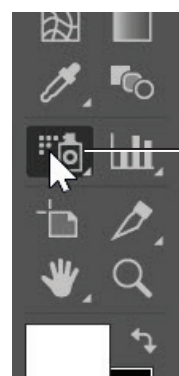***Figure 5*** *Flowers symbol library*

Figure 6 *New symbol added to Symbols panel*

Symbol Sprayer

Figure 7 *Tools panel*

13. Click on the canvas once or twice to place a few symbols.

14. Drag the Symbol Sprayer across the canvas.

    As you do, symbol-instance outlines appear under the pointer **(Figure 8)**.

15. When you are satisfied with the number of symbols on the document, release the mouse button.

    Symbols fill in wherever their outlines appeared **(Figure 9)**.
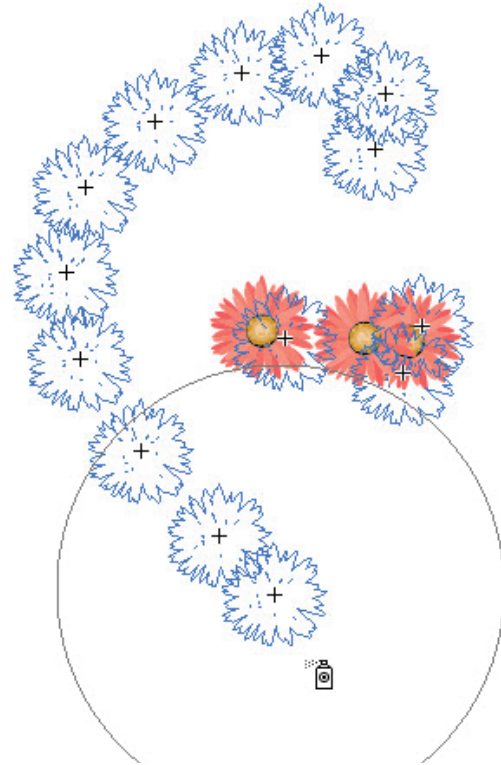
16. Save the document.

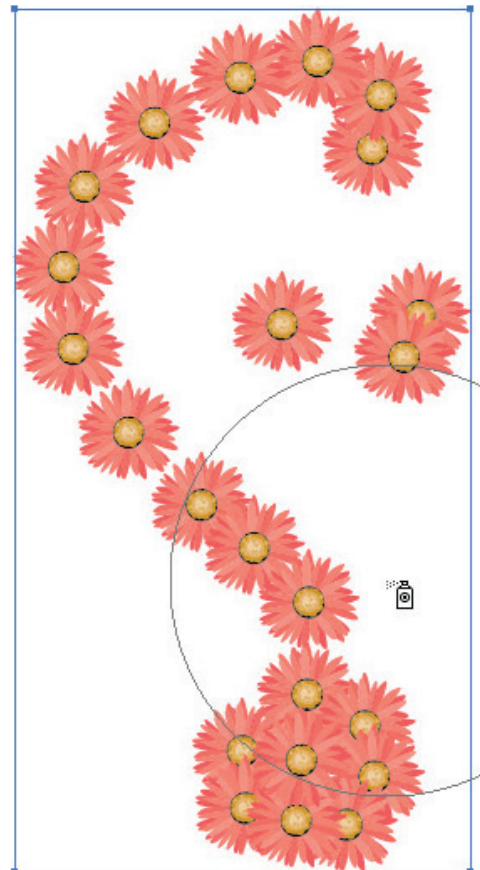***Figure 8*** *Dragging with the Symbol Sprayer*

Figure 9 *Results of Symbol Sprayer*

To edit a symbol source in isolation mode:

1. Choose the Selection tool in the Tools panel.

2. Double-click the symbol in the Symbols panel that you want to edit.

   The workspace enters isolation mode **(Figure 10)**.

3. Edit the symbol as needed.

   For example, you might decide to alter the colors of the symbol to better match a color scheme or image thematic. In this example, some petals of the pink flower are altered by color **(Figure 11)**. This way, when you spray an altered symbol, all instances of that symbol appear the same.

4. When you finish making edits, click the **Exit Symbol Editing Mode** button in the upper-left corner **(Figure 12)**.

   Bear in mind that any changes you make in isolation mode affect all instances of the symbol in your document **(Figure 13)**.
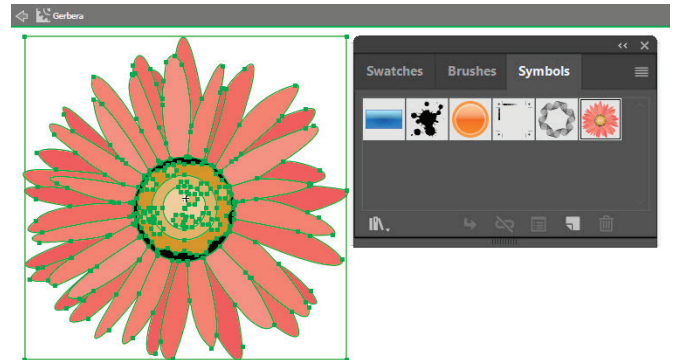
5. Save and close the document.

Figure 10 Isolation mode for individual symbol editing
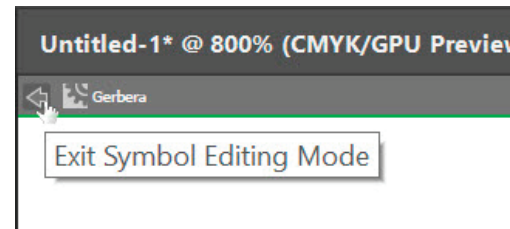

Figure 11 Editing the symbol
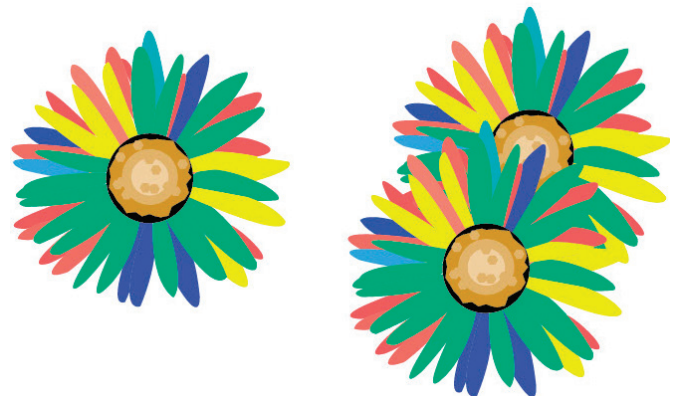

Figure 12 Exit Symbol Editing Mode button

Figure 13 All symbols updated in the document

Create new custom symbols

You can easily create your own, custom symbols from existing artwork **(Figure 14)**. To base a new symbol on an existing piece of bitmap artwork, you can trace it and convert it to a vector format using the Image Trace command.
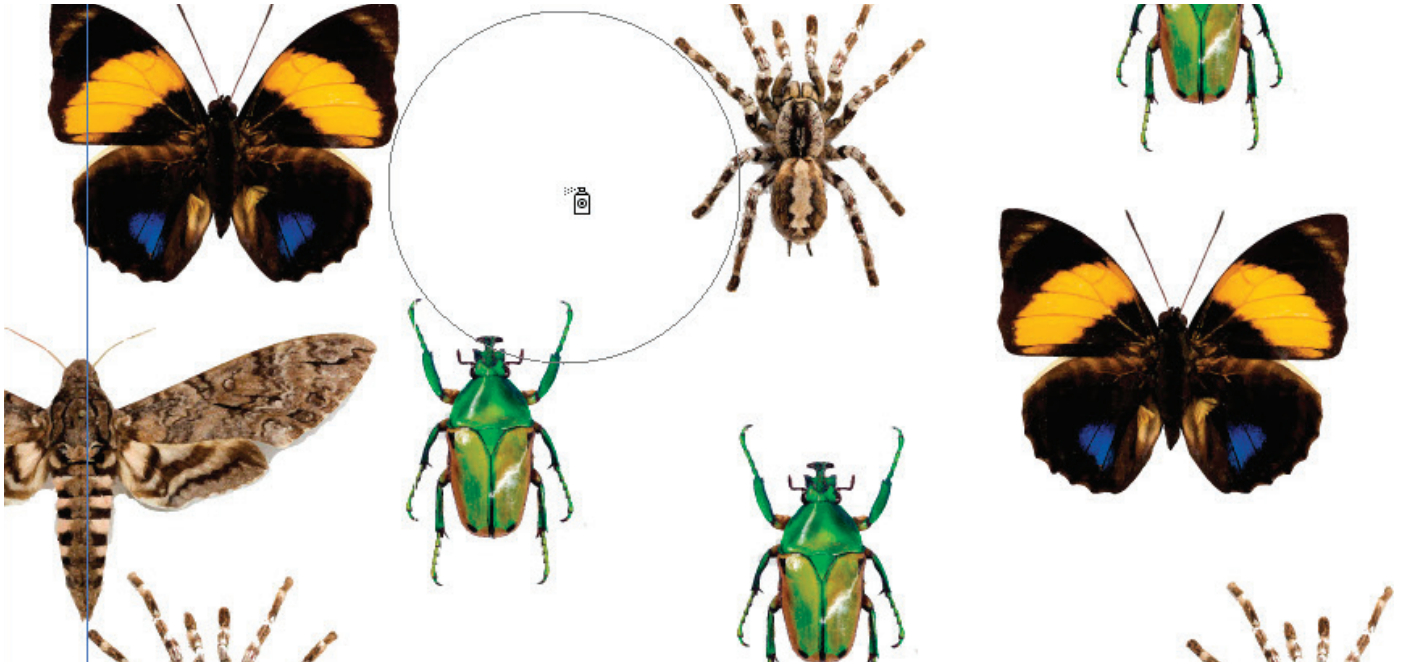

Figure 14 Symbol created from existing artwork.

To create a custom symbol:

1. Open or place a file you want to use as a source for the symbol.

2. Select the source image, and do one of the following:

    •   To trace the image using a tracing preset, open the Tracing Presets menu in the **Properties** panel, and select a preset **(Figure 15)**.

    •   To trace the image using the default tracing options, click **Image Trace** in the **Properties** panel, or choose **Object** > **Image Trace** > **Make**.

    Note: If you are working with a large image, you may see a dialog box warning that tracing may proceed slowly, and asking if you would like to proceed. Click **OK**.

    Adobe Illustrator processes the image and displays a **Progress** dialog box if the processing time is lengthy. When complete, the **Properties** panel displays advanced Image Tracing options.
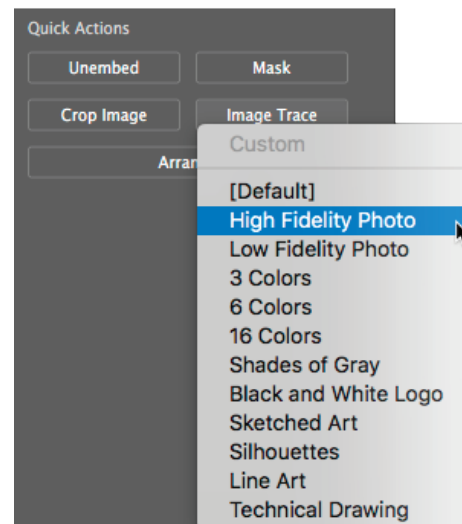

Figure 15 Image Trace options menu

3. (Optional) Use the **Properties** panel to adjust the results of the tracing by selecting other image tracing presets.

4. To manually edit the vector artwork, choose **Object** > **Image Trace** > **Expand** and convert the tracing object to paths.

5. Choose **Window** > **Symbols** to display the **Symbols** panel.

6. Click **New Symbol** from the panel menus **(Figure 16)**.

   The **Symbol Options** dialog box opens **(Figure 17)**.

7. Type a name for the symbol in the **Name** text box.

8. Select the **Export Type** as **Graphic**.

9. Click **OK**.

   The new symbol is added to the **Symbols** panel **(Figure 18)**.

10. Select the original image source on the canvas and delete it.

11. Click the just-added symbols in the **Symbols** panel to select it and choose the Symbol Sprayer in the Tools panel.

12. Click on the canvas or drag to place symbols on the canvas **(Figure 19)**.

13. (Optional) You can duplicate, edit or delete a symbol using options from the Symbols menu:

    • To duplicate a symbol, choose **Duplicate Symbol** from the menu. A copy of the symbol appears in the **Symbols** panel.

    • To delete an existing symbol from the **Symbols** panel, choose **Delete Symbol** from the panel menu, or choose the item and click the delete symbol button in the lower-right of the **Symbols** panel.

    • To edit a symbol, choose **Edit Symbol** from the panel menu, or double-click the item in the **Symbols** panel. The workspace enters isolation mode where you can edit the symbol as needed. Click the Exit Symbol Editing Mode button in the upper-left corner. Recall that any changes you make in isolation mode affect all instances of the symbol in your document
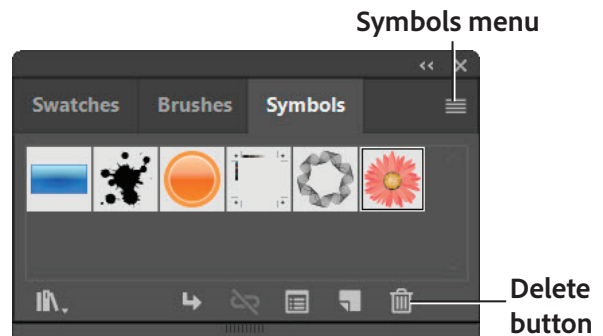
Symbols menu

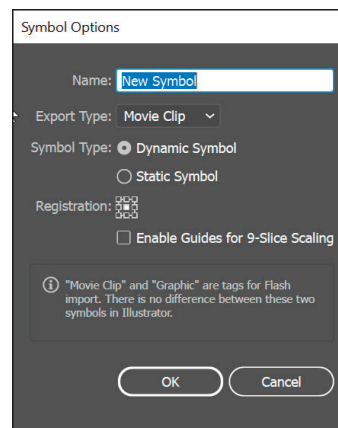**Delete button**

Figure 16 Symbols panel

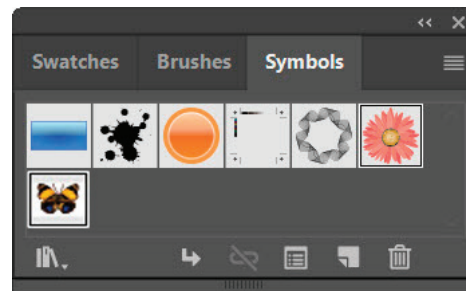*Figure 17 Symbol Options dialog box*

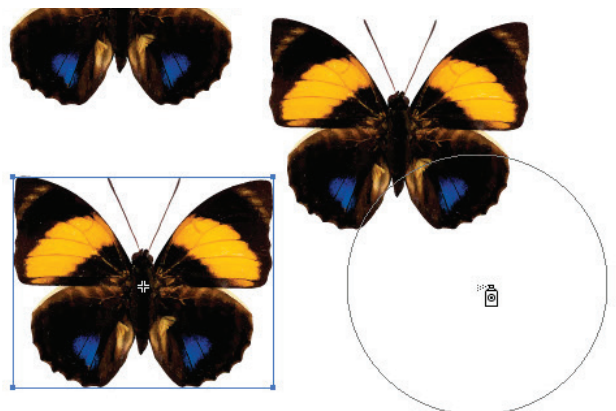*Figure 18 Symbols panel with new symbol added*

Figure 19 Results of Symbol Sprayer

About Patterns

It's easy to create simple, seamless patterns in Illustrator using a library object or an image of your own **(Figure 20)**.

Figure 20 Pattern created with the pattern tools

To use the Pattern Creation tool:

1. Start Illustrator and follow the steps to create a new document.

2. Choose **Window** > **Symbols** to display the **Symbols** panel.

3. Click the Symbol Libraries Menu button and choose a symbol pattern library, such as **Florid Vector Pack (Figure 21)**.

4. Choose one of the symbols from the **Florid Vector Pack** library, and click the symbol to add it to the library.

   The new symbol appears in the **Symbols** panel.

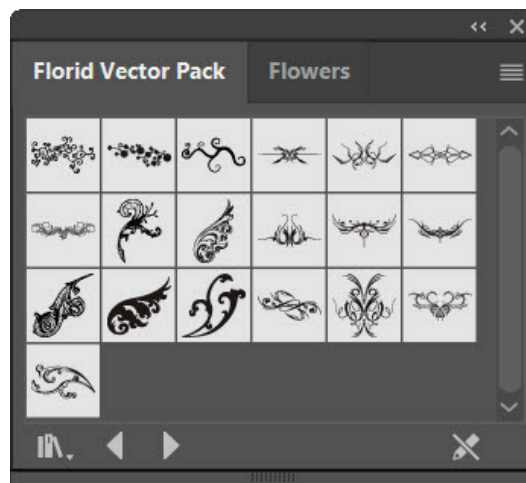5. Select the just-added object and drag it onto the artboard.

Figure 21 Florid Vector Pack Library

6. Choose **Object** > **Pattern** > **Make**.

   The **Pattern Options** panel opens **(Figure 22)**.

   As well, a dialog box opens telling you that the new pattern has been added to the **Swatches** panel and that any changes made while in Pattern Editing mode will be applied to the swatch upon exit.

7. Click **OK** to close the dialog box.

   The pattern tiles across the artboard according to the default settings and the pattern enters Pattern Definition mode **(Figure 23)**.

   Pattern Definition mode is a form of isolation mode where you can modify new or existing patterns. It is similar to symbol editing mode. While in Pattern Definition mode, you can add new objects to the pattern. Depending on the current settings, objects extending outside of the pattern definition area can wrap back in from the other side of the artboard.

   Dimmed objects will appear that are replicas of the original, editable object. A rectangle appears around the original object's boundary showing the pattern definition area.

8. Click the Tile Type popup menu to select a different repetition tiling option:

   - *Grid* objects arranged in an even, linearly distributed horizontal and vertical format

   - *Brick by Row* offsets objects linearly along a horizontal axis

   - *Brick by Column* offsets objects linearly along a vertical axis

   - *Hex by Column* arranges objects vertically along six sides of the source object

   - *Hex by Row* arranges objects horizontally along six sides of the source object

   Choosing a different replication type may change the shape of the Pattern Definition Area boundary. You can also change the size of the pattern definition area, which will change how the objects are tiled.

9. Use the Copies menu **(Figure 22)** to select the number of grid copies to be included in the pattern.

10. When you finish making edits, click the Save A Copy option from the Pattern Options menu.
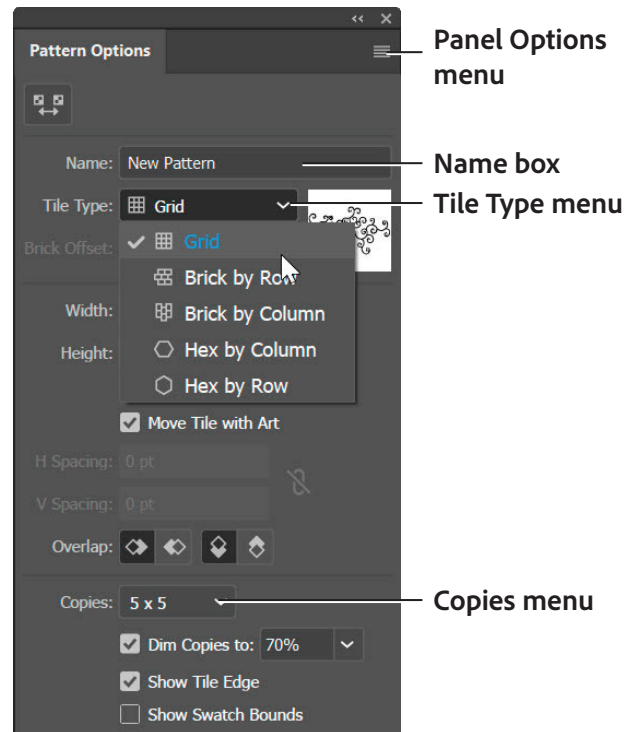
    The **New Pattern** dialog box opens **(Figure 24)**.

Panel Options menu

Name box

Tile Type menu

Copies menu

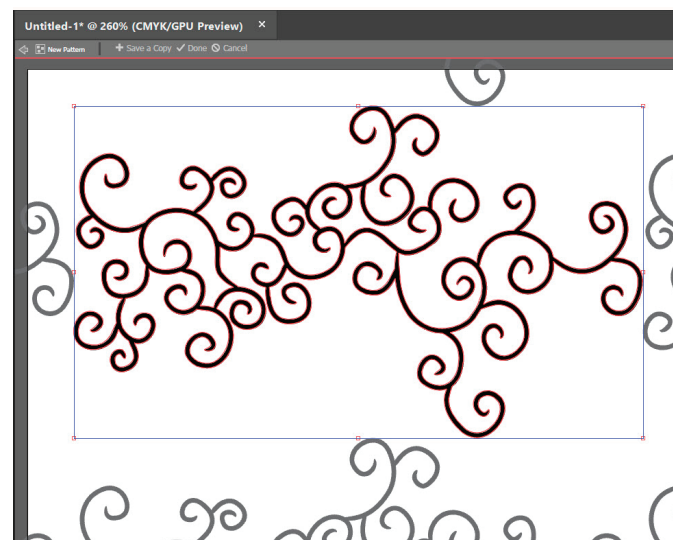**Figure 22** *Pattern Options panel*

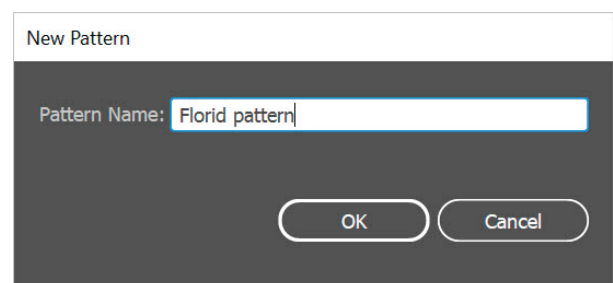**Figure 23** *Pattern tiling across the artboard*

Figure 24 *New Pattern dialog box*

11. Give the new pattern a name and click **OK**.

    The new pattern is saved to the Swatches panel **(Figure 25)**.

12. Click the **Done** button or Exit Pattern Editing Mode button in the upper left corner **(Figure 23)**.

13. Select and delete the original object on the artboard.

14. Click-drag the new pattern from the **Swatches** panel onto the artboard.

    Note: Double-clicking on the thumbnail in the Swatches panel will return you to Pattern Definition mode with an instance of the pattern available for editing in the artboard.

15. Save the document.

To create a pattern using your own image:

1. Open or place a file to use as the source image for the tracing and position as needed so that it has enough room to tile across the artboard **(Figure 26)**.

2. Select the source image, and do one of the following:

    • To trace the image using a tracing preset, open the Tracing Presets menu in the **Properties** panel, and select a preset **(Figure 27)**.

    • To trace the image using the default tracing options, click **Image Trace** in the **Properties** panel, or choose **Object** > **Image Trace** > **Make**.

    Note: If you are working with a large image, you may see a warning that tracing may proceed slowly, and asking if you would like to proceed. Click **OK**.

    Adobe Illustrator processes the image and displays a **Progress** dialog box if the processing time is lengthy. When complete, the **Properties** panel displays advanced Image Tracing options.

3. (Optional) Use the **Properties** panel to adjust the results of the tracing by selecting other image tracing presets **(Figure 27)**.

4. Choose **Object** > **Pattern** > **Make**.

    The **Pattern Options** panel opens **(Figure 22)**. An informational dialog box opens as well.

5. Click **OK** to close the informational dialog box.

    The Pattern tiles across the artboard according to the default settings (or the last settings used) and the pattern enters Pattern Definition mode.
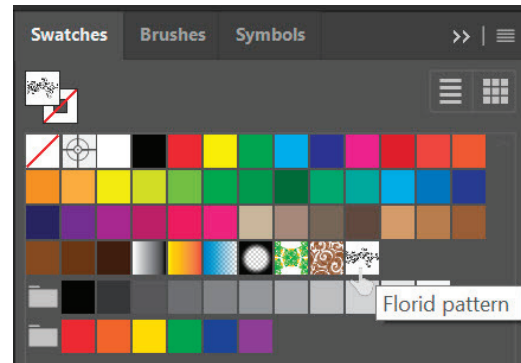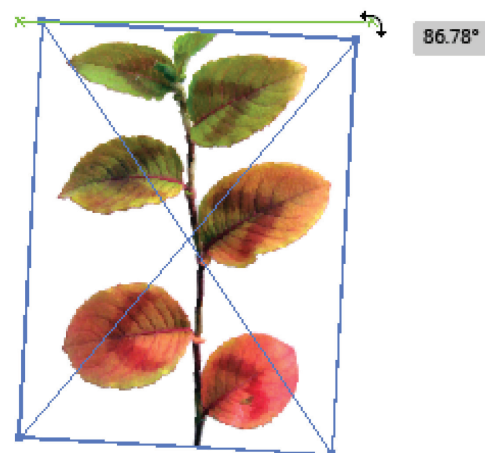

Figure 25 New pattern saved to Swatches panel
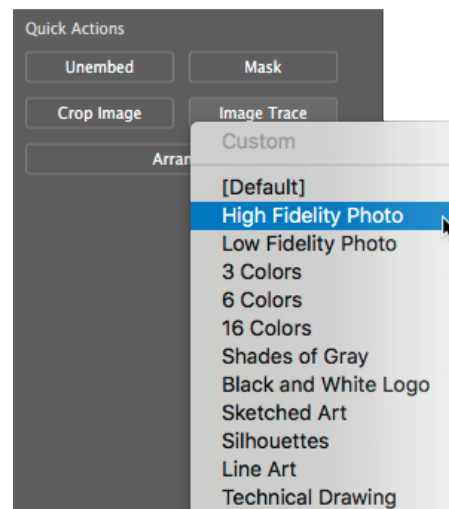

Figure 26 Rotating and scaling a placed image

Figure 27 Image Trace options menu

6. In the **Pattern Options** panel, adjust the **Tile Type**, number of copies, and other options.

7. When you finish making edits, click the Save A Copy option from the Pattern Options menu.

    The **New Pattern** dialog box opens.

8. Give the new pattern a name and click **OK**.

    The new pattern is saved to the **Swatches** panel.

9. Click the **Done** button or Exit Pattern Editing Mode button in the upper-left corner of the document window.

10. Select and delete the original object on the artboard.

11. Click-drag the new pattern from the **Swatches** panel onto the artboard **(Figure 28)**.

12. Save the document.

Figure 28 Placing the new pattern onto the artboard

Importing symbols and patterns into InDesign

Once you've completed your symbol and pattern designs in Illustrator, you can import the files into Adobe InDesign.

To add Illustrator images to an InDesign page spread:

1. Start InDesign and create a new document with the following specifications.
    •   Number of Pages: 1
    •   Page Size: Letter
    •   Orientation: Landscape

2. Click **OK**.

3. Choose **File** > **Place**.

    The **Place** dialog box appears.

4. Browse to the location of the Adobe Illustrator file you saved in the previous steps, and select it.

5. Confirm **Show Import Options** is selected in the **Place** dialog box and click Open.

    The **Place PDF** dialog box appears **(Figure 29)**.

6. Confirm **Preview** is selected. Select an option in the **Crop To** menu to specify how the imported image is to be cropped.
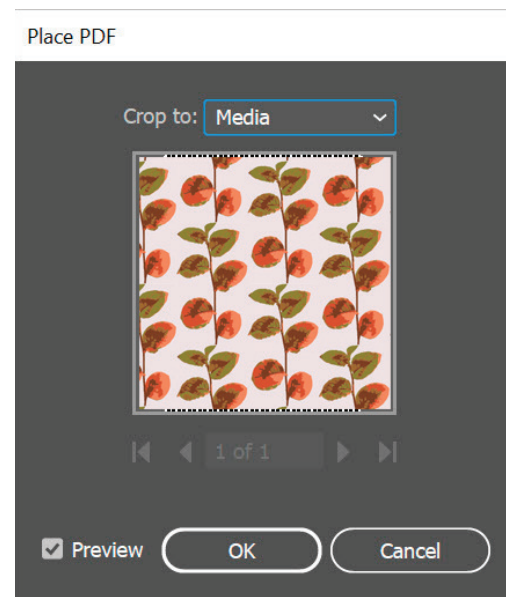
    With the **Preview** option, you can preview the Adobe Illustrator file in the left section of the **Place PDF** dialog box.

Figure 29 Place PDF dialog box

7. Click **OK**.

   The image replaces the pointer as a thumbnail image.

8. Click to place the image into the spread **(Figure 30)**.

9. (Optional) Move and scale image to fit the spread.

10. Choose **Window** > **Layers** to display the Layers panel.

11. Add a new layer, and rename the original layer **Background**.

12. Add content to the spread (text and graphic frames) in the new layer.

13. Save the InDesign file.

   Note: To reuse the design on multiple pages, you could add the background to a master page. For more information on master pages, see InDesign Help.

Figure 30 Image placed in spread

Working with graphic styles

A graphic style is a set of reusable appearance attributes that allow you to quickly change the look of an object **(Figure 31)**. You can apply graphic styles to objects, groups, and layers. When you apply a graphic style to a group or layer, every object in the group or layer takes on the attributes of the graphic style. For example, assume you have a graphic style that consists of 50% opacity. If you apply the graphic style to a layer, all objects in or added to that layer will appear 50% opaque. However, if you move an object out of the layer, the object's appearance reverts to its previous opacity.

Figure 31 Applying a Graphic style for type with text for the preview

Graphic Styles panel overview

You use the Graphic Styles panel (Window > Graphic Styles) to create, name, and apply sets of appearance attributes. The panel lists a default set of graphic styles when you create a document. Graphic styles that are saved with the active document appear in the panel when that document is open and active.

If a style doesn't have a fill and stroke (for example, an effect-only style) the thumbnail appears in the shape of the object with a black outline and white fill. In addition, a little red slash appears, indicating the absence of a fill or stroke. If you've created a style for type, choose Use Text For Preview from the Graphics Styles panel menu to see a thumbnail of the style applied to a letter rather than a square. To see any style more clearly, or to preview the style on a selected object, right-click (Windows) or Ctrl-click (Mac OS) the style's thumbnail in the Graphic Styles panel and view the large pop-up thumbnail that appears.

How to create a graphic style:

1. To create a graphic text style from scratch, add a block of text, then apply any combination of appearance attributes, including fills and strokes, effects, and transparency settings.

2. Choose **Window** > **Graphic Styles** to display the **Graphic Styles** panel **(Figure 32)**.

3. Select **New Graphic Style** from the panel menu.

   The **Graphic Style Options** dialog box opens **(Figure 33)**.

4. Type a name in the **Style Name** box.

5. Click **OK**.

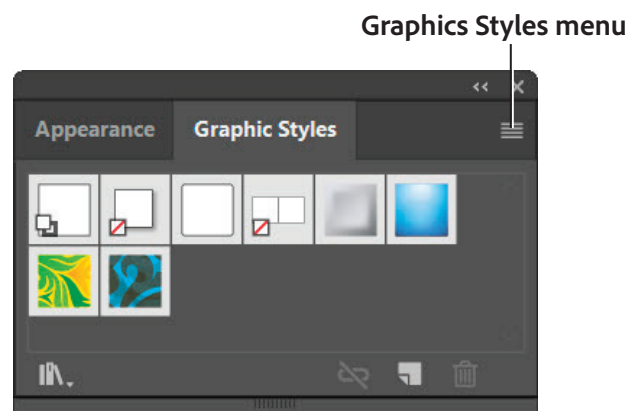   The new graphic style is added to the **Graphic Styles** panel.

Graphics Styles menu
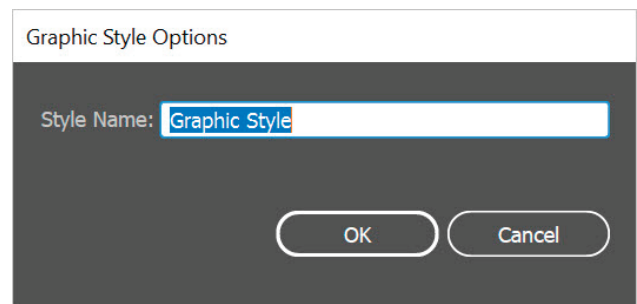

Figure 32 Graphic Styles panel

Figure 33 Graphic Style Options dialog box

6. From the **Graphic Styles** panel menu, choose Use **Text For Preview** to see a thumbnail of the style applied **(Figure 34)**.

    The **Graphics Styles** panel view is updated **(Figure 35)**.

7. To apply a text graphic style to a second block of text, select the text and apply a rough style.

    For example, you might initially set the font size, stroke and fill for a text, these elements will not change when you apply the graphic style.

8. Select the just-created style from the **Graphic Styles** panel to apply it to a block of text **(Figure 36)**.

9. (Optional) You can duplicate, edit or delete a style using options from the **Graphic Style** menu:

    •   To duplicate a symbol, choose **Graphic Style** from the panel menu. A copy of the symbol appears in the **Symbols** panel.

    •   To delete an existing symbol from the **Symbols** panel, choose **Delete Symbol** from the panel menu, or choose the item and click the delete symbol icon in the lower-right of the **Symbols** panel.

    •   To merge a style with an object's existing style attributes, or apply multiple styles, select the object and then **Alt-click** (Windows) or **Option-click** (Mac OS) the style in the **Graphic Styles** panel.

10. Add the graphic styles you want to the **Graphic Styles** panel, and delete any graphic styles you don't want.

    Note: To select all graphic styles that aren't used in a document, choose **Select All Unused** from the **Graphic Styles** panel menu and click the trash can icon to delete.

    You may now want to save your newly-created styles as a graphic style library for use in another project.

    Graphic style libraries are collections of preset graphic styles. When you open a graphic style library, it appears in a new panel (not the **Graphic Styles** panel). You select, sort, and view items in a graphic style library the same as you do in the Graphic Styles panel.

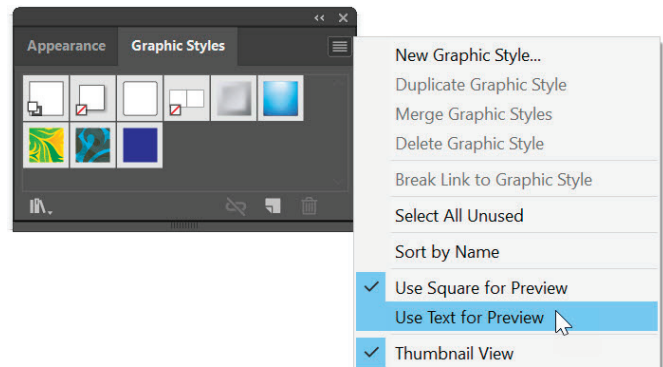11. To save a library, choose **Save Graphic Style Library** from the **Graphic Styles** panel menu.

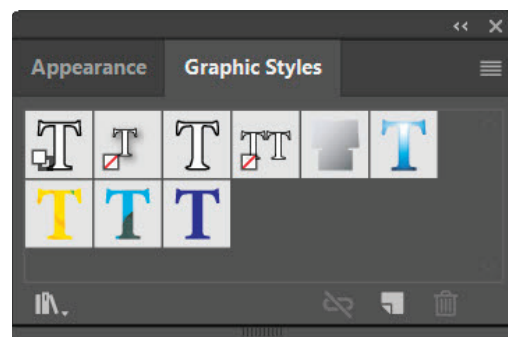

Figure 34 *Graphic Style Options menu*

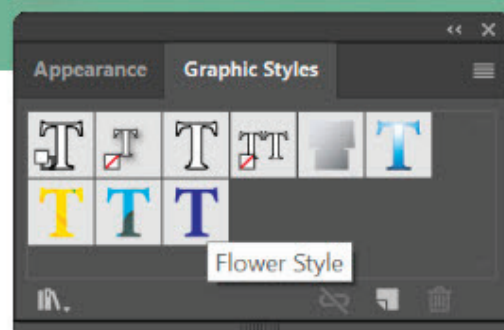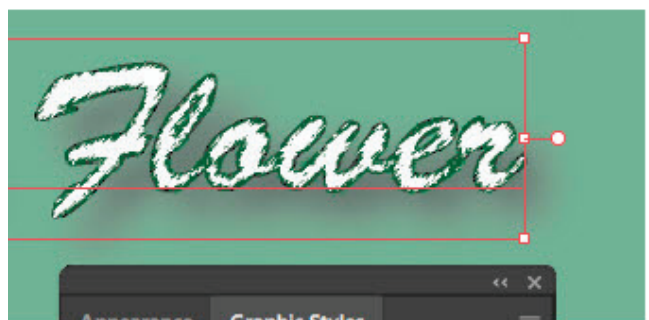**Figure 35** *Graphic Style panel*

Figure 36 *Text before style applied (top) and after Graphic Style applied (bottom)*

12. The **Save Graphic Styles as Library** dialog box opens.

13. Type a name in the **File Name** box and click **Save**.

14. To open your custom Graphics Styles Library, choose **Window** > **Graphic Style Libraries** > **User Defined** > **<your library> (Figure 37)**.

    The custom **Graphic Styles Library** panel opens **(Figure 38)**.

    You can also import graphic styles from other documents.

15. Choose **Window** > **Graphic Style Libraries** > **Other Library**.

16. Select the file from which you want to import graphic styles, and click Open.

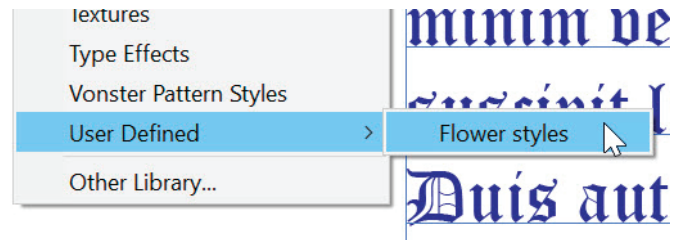   The graphic styles appear in a graphic style library panel.

Figure 37 Window > Graphic Styles Libraries options
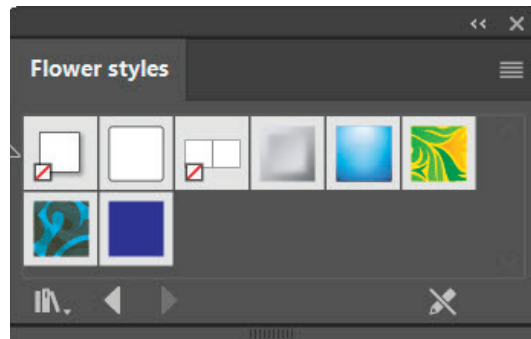

Figure 38 Botany Styles saved Graphic Styles Library

For more information

Get instant access to free courses, workshops, & teaching materials and connect with the creative education community on the Adobe Education Exchange: https://edex.adobe.com/.