

# Introduction to Illustrator Creative Cloud (CC) Training



with examples and  
hands-on exercises

---

**WEBUCATOR**

Copyright © 2021 by Webucator. All rights reserved.

No part of this manual may be reproduced or used in any manner without written permission of the copyright owner.

**Version:** 3.0.1

## **The Authors**

### ***Tracy Berry***

Tracy has been a senior graphic designer/programmer, instructor, and consultant since 1993 and has developed hundreds of logos, marketing materials, websites, and multimedia solutions for customers worldwide, including involvement in large corporate software rollouts. She has helped many organizations optimize and streamline data solutions. She teaches both onsite and online courses and has her CTT (Certified Technical Trainer) certification. Tracy specializes in teaching graphics, desktop publishing, web design, reporting/productivity applications, as well as the creation of online courses with software from leading vendors.

### ***Ryan Dunn (Editor)***

## **Class Files**

Download the class files used in this manual at

[https://static.webucator.com/media/public/materials/classfiles/ILLCC.1-3.0.1\\_UNMf0h2.zip](https://static.webucator.com/media/public/materials/classfiles/ILLCC.1-3.0.1_UNMf0h2.zip).

## **Errata**

Corrections to errors in the manual can be found at

<https://www.webucator.com/books/errata/>.

# Table of Contents

|  |           |
|--|-----------|
| LESSON 1. Getting to Know the Illustrator Environment..... | 1         |
| Menus and Navigation .....                                 | 1         |
| Panels.....  | 11        |
| Tools.....   | 16        |
| Workspace.....   | 18        |
| Rulers and Guides.....                                     | 20        |
| File Management.....                                       | 22        |
| 📄 <b>Exercise 1: Illustrator Environment.....</b>          | <b>23</b> |
| LESSON 2. Getting Started.....                             | 29        |
| Creating a Project.....                                    | 29        |
| 📄 <b>Exercise 2: Create New Document.....</b>              | <b>32</b> |
| Creating Basic Shapes.....                                 | 35        |
| Selection.....   | 39        |
| 📄 <b>Exercise 3: Creating and Modifying Shapes.....</b>    | <b>40</b> |
| Using Drawing Modes.....                                   | 44        |
| The Alignment Tools.....                                   | 47        |
| 📄 <b>Exercise 4: Draw Components of the Project.....</b>   | <b>51</b> |
| Working with Colors.....                                   | 55        |
| Working with Swatches.....                                 | 59        |
| Fill and Stroke Attributes .....                           | 64        |
| 📄 <b>Exercise 5: Format Artwork.....</b>                   | <b>68</b> |
| LESSON 3. Organizing a Project.....                        | 71        |
| Organizing a Project.....                                  | 71        |
| 📄 <b>Exercise 6: Work with Layers.....</b>                 | <b>78</b> |
| Artboards.....   | 79        |
| 📄 <b>Exercise 7: Artboards and Duplication.....</b>        | <b>84</b> |

|  |            |
|--|------------|
| LESSON 4. Creating Advanced Illustrations.....           | 87         |
| The Pencil and Pen Tools.....                            | 87         |
| 📄 <b>Exercise 8: Drawing with the Pencil Tool.....</b>   | <b>93</b>  |
| More on the Pen Tool.....                                | 94         |
| 📄 <b>Exercise 9: Drawing with the Pen Tool.....</b>      | <b>103</b> |
| Using the Line Tools.....                                | 107        |
| 📄 <b>Exercise 10: Adding Spirals.....</b>                | <b>112</b> |
| Transforming Objects.....                                | 113        |
| Align and Distribute Objects.....                        | 115        |
| Tools for Reshaping.....                                 | 117        |
| Working with Grouped Objects.....                        | 119        |
| 📄 <b>Exercise 11: Manipulate Project Components.....</b> | <b>122</b> |
| LESSON 5. Advanced Management of Shapes.....             | 125        |
| Appearance Panel.....                                    | 125        |
| 📄 <b>Exercise 12: Appearance Panel.....</b>              | <b>128</b> |
| Working with Pathfinder.....                             | 131        |
| Working with Shape Builder Tool.....                     | 134        |
| 📄 <b>Exercise 13: Path and Shape Builder Tools.....</b>  | <b>136</b> |
| The Paintbrush Tool.....                                 | 137        |
| Live Paint.....  | 143        |
| Creating Patterns.....                                   | 146        |
| 📄 <b>Exercise 14: Brushes and Patterns.....</b>          | <b>149</b> |
| Using Gradient Tools.....                                | 152        |
| 📄 <b>Exercise 15: Gradients.....</b>                     | <b>158</b> |
| Working with Graphic Styles.....                         | 158        |
| 📄 <b>Exercise 16: Styles.....</b>                        | <b>160</b> |
| LESSON 6. Working with Type.....                         | 163        |
| Working with Type.....                                   | 163        |
| Format Text.....   | 168        |
| 📄 <b>Exercise 17: Creating Types of Text.....</b>        | <b>170</b> |
| Working with Styles.....                                 | 173        |
| Using Tab Stops.....                                     | 176        |
| 📄 <b>Exercise 18: Styles and Tabs.....</b>               | <b>179</b> |
| Working with Glyphs.....                                 | 182        |
| Converting Type to Outlines.....                         | 183        |
| 📄 <b>Exercise 19: Type to Outlines.....</b>              | <b>185</b> |

|   |            |
|---|------------|
| LESSON 7. Managing Project Components.....              | 187        |
| Project Components.....                                 | 187        |
| Custom Art Brush.....                                   | 195        |
| 📄 <b>Exercise 20: Reuse</b> .....                       | <b>199</b> |
| Import Text and Thread Text Frames.....                 | 201        |
| Import Styles.....                                      | 203        |
| Import Artwork.....                                     | 205        |
| 📄 <b>Exercise 21: Import</b> .....                      | <b>210</b> |
| Manage Linked and Embedded Project Components.....      | 212        |
| 📄 <b>Exercise 22: Working with Linked Content</b> ..... | <b>215</b> |
| LESSON 8. Sharing Your Project.....                     | 217        |
| Proofing Your Project.....                              | 217        |
| Preview Project.....                                    | 220        |
| 📄 <b>Exercise 23: Proof</b> .....                       | <b>222</b> |
| Printing.....   | 222        |
| Export Options.....                                     | 224        |
| Save for Video.....                                     | 226        |
| Package a Project.....                                  | 229        |



# LESSON 1

## Getting to Know the Illustrator Environment

---

### Topics Covered

- Menus and navigation.
- Panels and tools.
- Creating a workspace.
- Rulers and guides.
- Managing files.

Evaluation  
Copy

### Introduction

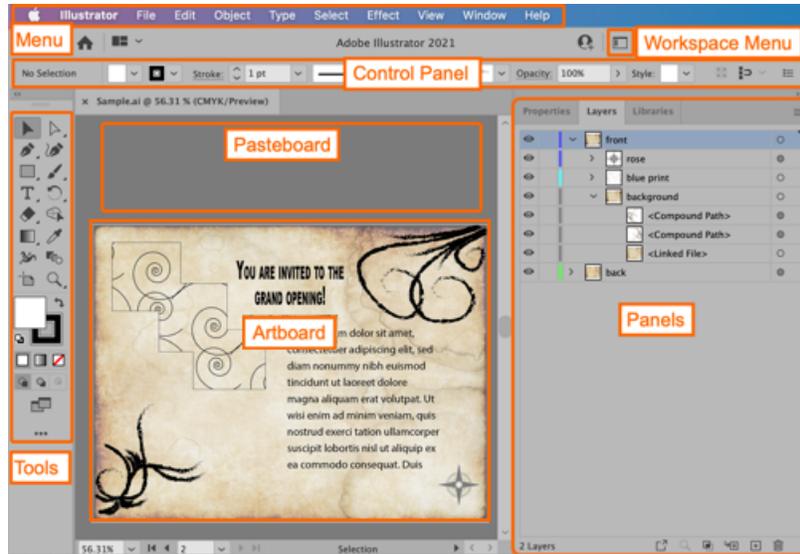
This course will help you to better understand all aspects of the design process.



### 1.1. Menus and Navigation

To help you understand the power of Illustrator, we will now explore the navigation of a sample file.

Below are a few of the screen elements.

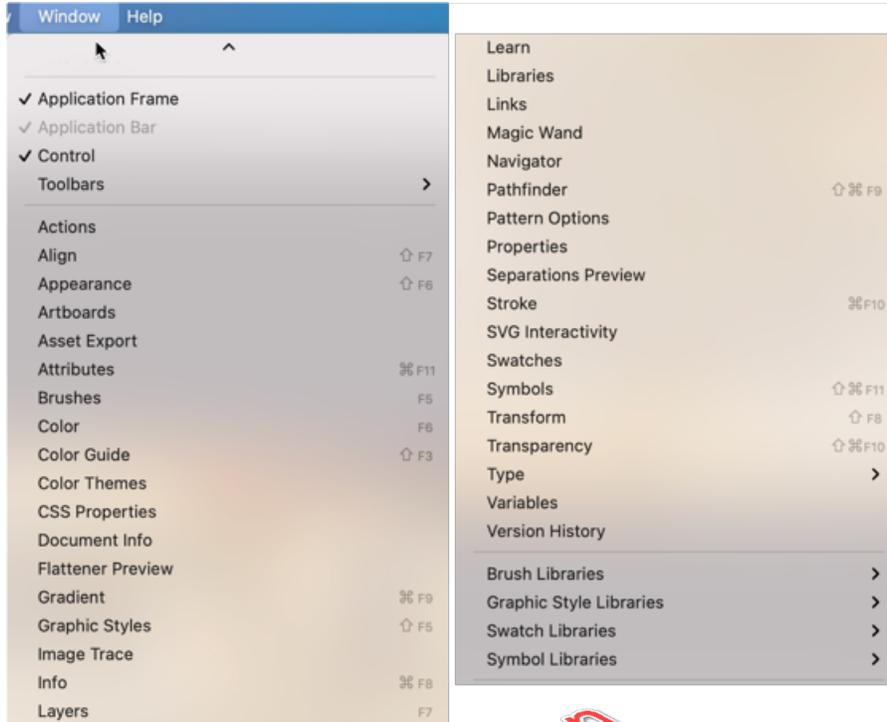


During this course, you will be creating a marketing postcard. We provide all of the artwork and steps required to create this project. If you have other artwork, or wish to build a different project, you can!



First, to learn about the environment, open a finished copy of our project provided in finished-postcard/postcard.ai to follow along.

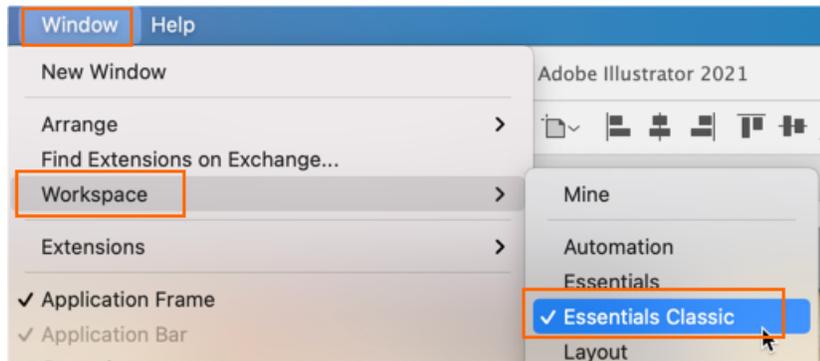
The interface can be customized depending on the features you plan to use. Click the **Window** menu to view the many panels available:



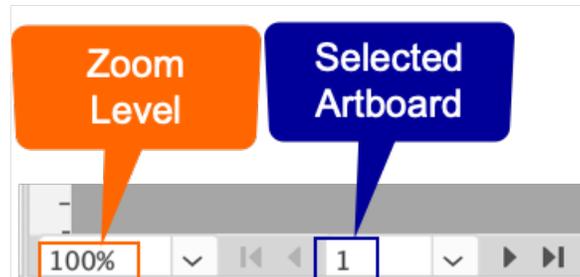
Often these will present themselves as they are needed. Panels can be opened and moved to different locations on the screen for ease of use. Most panels have a menu area with options for that panel.

### The Essentials Classic Workspace

Illustrator provides many options for setting up your workspace, and it also includes many preconfigured workspaces. So that your Illustrator looks like the one in the screenshots, please select **Window > Workspace > Essentials Classic**:



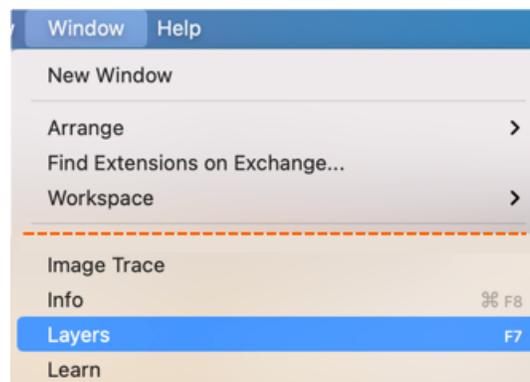
The **Control** panel (the long horizontal bar of options at the top of Illustrator) is content sensitive as it will update and reflect various options based on what you have selected. The zoom level in the bottom left of Illustrator also plays a part in working on large layouts allowing you to easily view big-picture layout ideas or edit individual items close up:



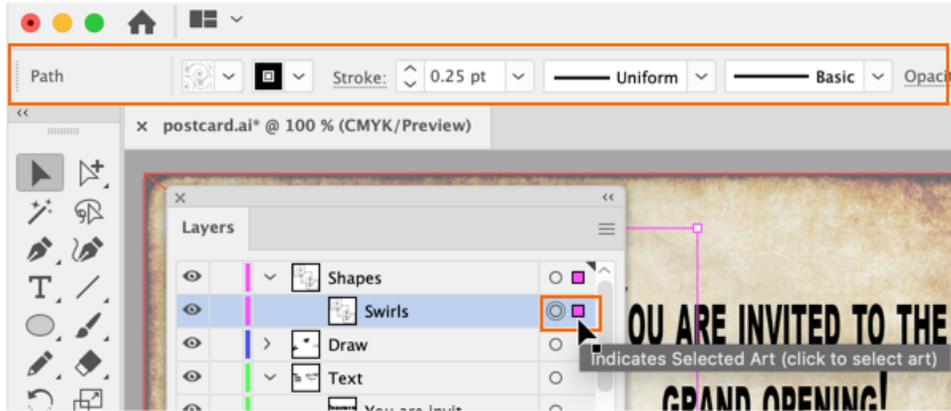
The artboards help to let you have individually or exact-sized “pages” to create more complex projects.

To use the content-sensitive **Control** panel:

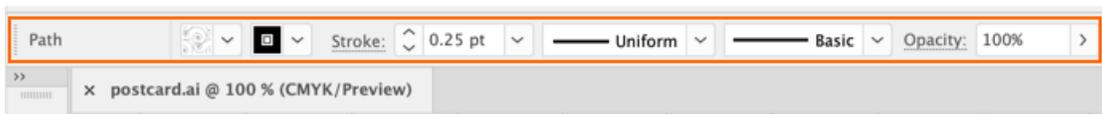
1. Open the **Layers** panel from the **Window** menu:



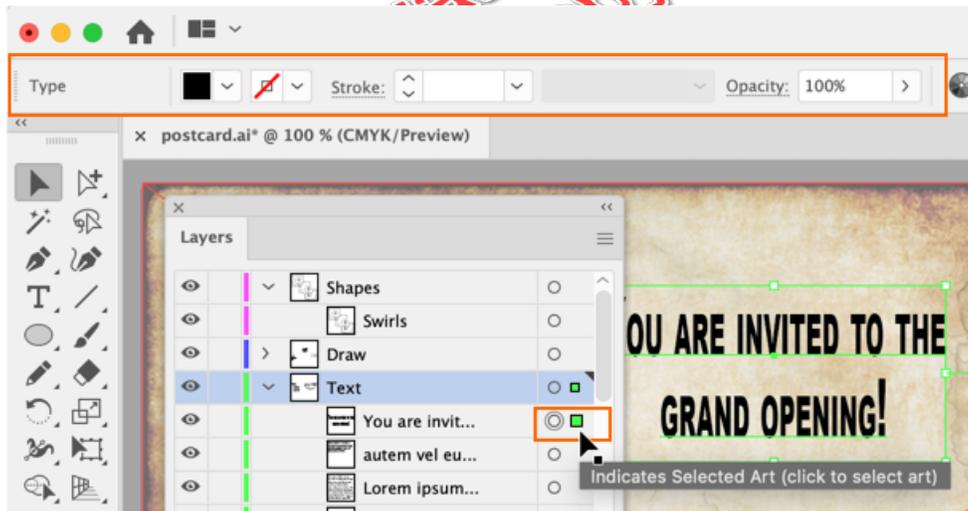
2. Expand the “Shapes” layer and select the “Swirls” object, which is a path, by clicking just to the right of the hollow disc.



Notice the **Control** panel updates to show options related to the path selected:



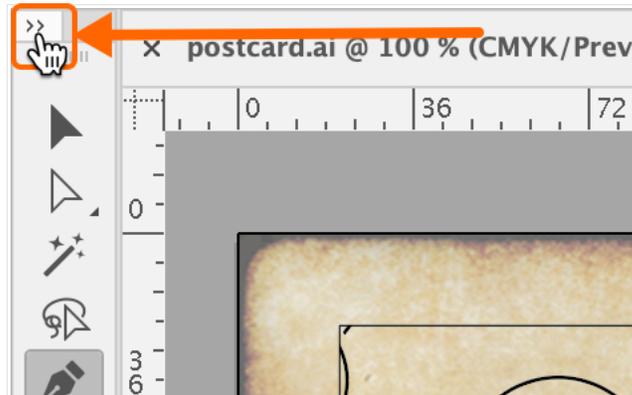
3. In the **Layers** panel, expand the “Text” layer and select the first text object by clicking just to the right of the hollow disc. Notice the **Control** panel updates to show options related to modifying the **Type**:



## The Toolbar

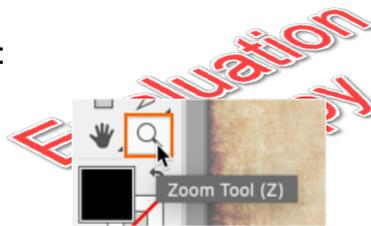
The **Toolbar** on the left of Illustrator holds the many tools you will use for creating and modifying shapes. By default, in the **Essentials Classic** workspace, it is one

long single column of tools. To display the tools in two columns, click the >> button in the top left of the **Toolbar**:



## The Zoom Tool

1. Select the **Zoom Tool**:



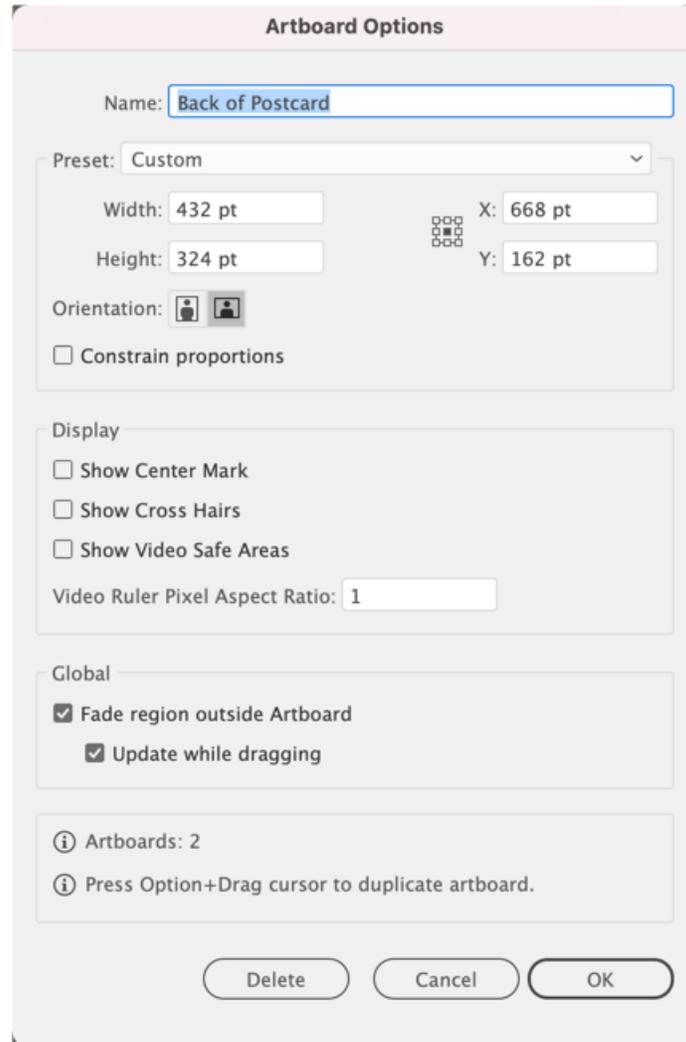
2. **Left-click** to zoom in. **Alt+click** to zoom out.
3. Keyboard shortcuts are also helpful as you do not have to switch tools.
  - **Ctrl++** to zoom in.
  - **Ctrl+-** to zoom out.
  - **Ctrl+0** to fit artboard in window.
  - **Alt+Ctrl+0** to fit all in window.
  - **Ctrl+1** to choose actual size.

## Artboard Tool

1. To open **Artboard Options**, double-click the **Artboard Tool** on the **Toolbar** located on the left hand side:

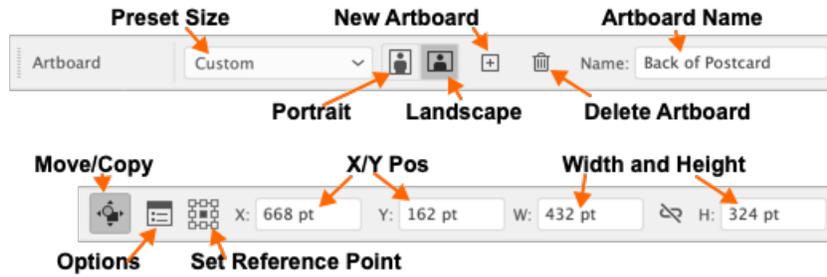


2. **Artboard Options** will display and you can edit the active artboard:

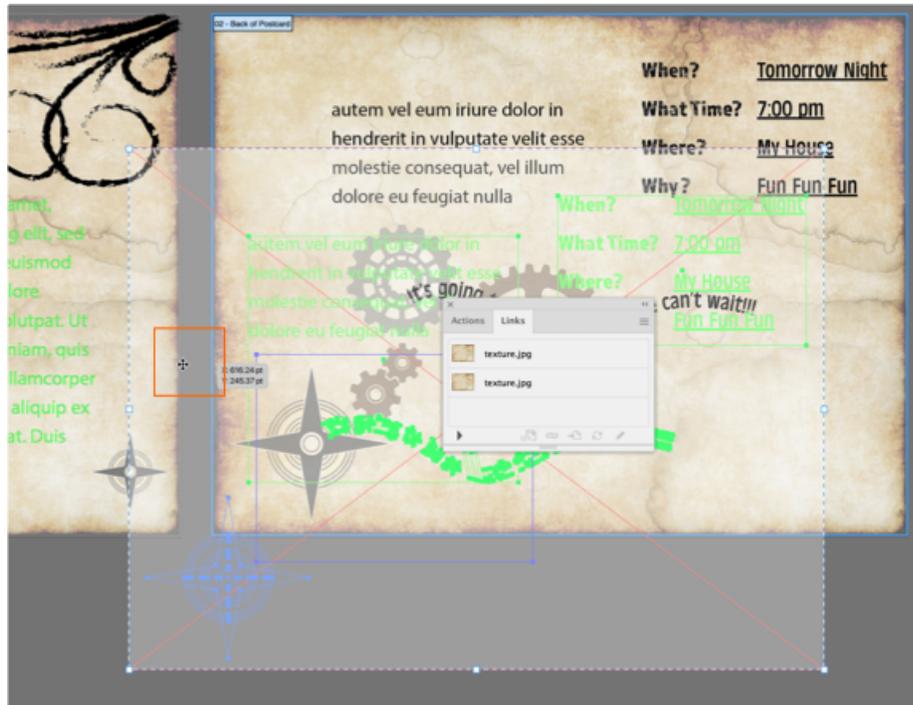


Click **OK** or **Cancel**

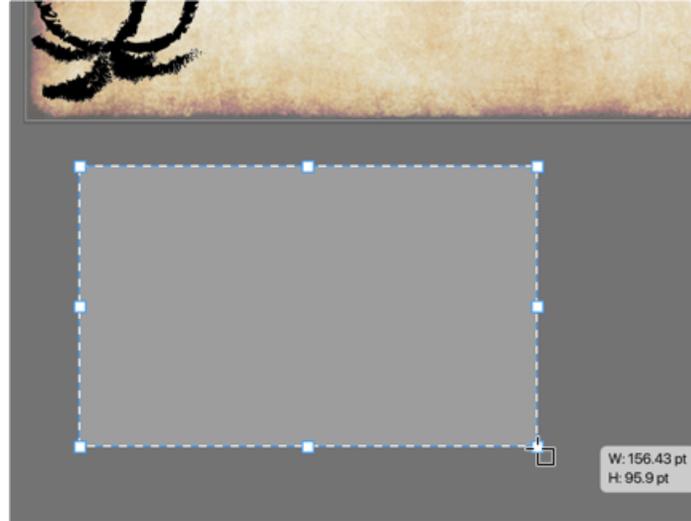
3. The **Artboard Tool** has options in the **Control** panel as seen below:



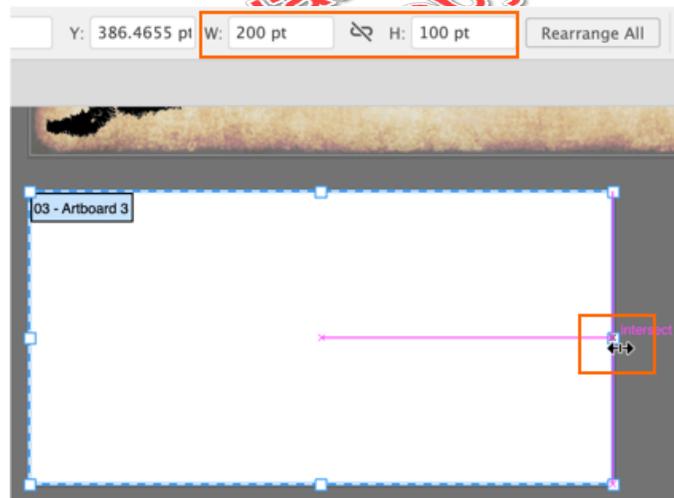
4. Drag and drop to move and reposition the artboards.



5. Use the **Artboard** tool to drag and draw a new artboard:



6. You can also use the **Artboard** tool to resize an existing artboard by typing in a new width/height or dragging the sizing handles:



7. Naming an artboard is a helpful way to keep organized. Type in a name and press **Enter**:

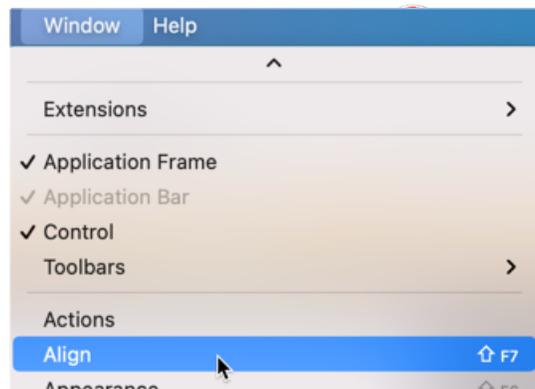


## 1.2. Panels

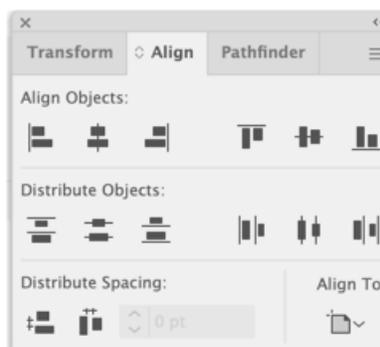
Panels are available to help control many of the features in Illustrator. Some panels will open when needed; others you must open manually from the **Window** menu.

### Opening a Panel

1. Select **Window > Align** to open the align panel.

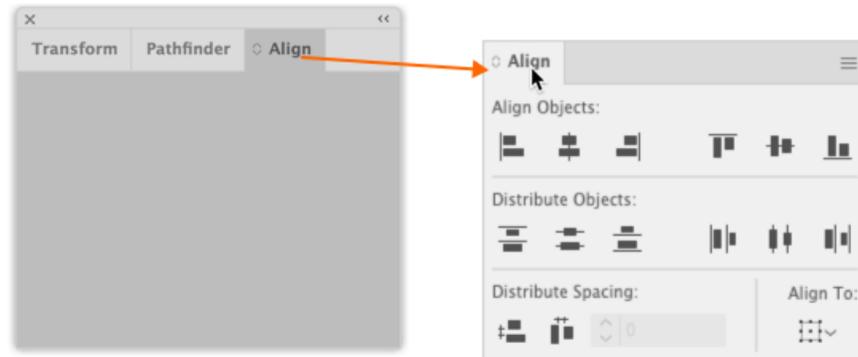


2. The **Align** panel will appear on the screen. It will appear in the last location it held the last time it was used:



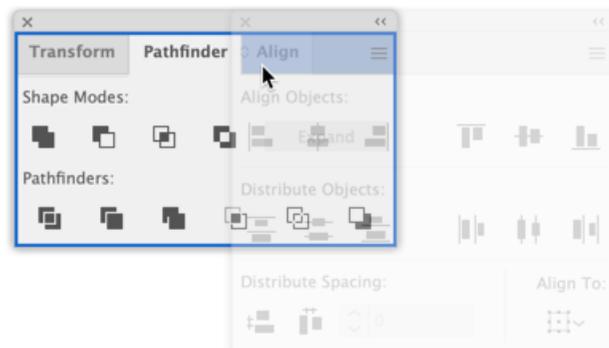
## Moving a Panel

Drag and drop (left-click, hold down, and drag the panel, releasing the mouse when you have reached the desired location) the panel to a new location.



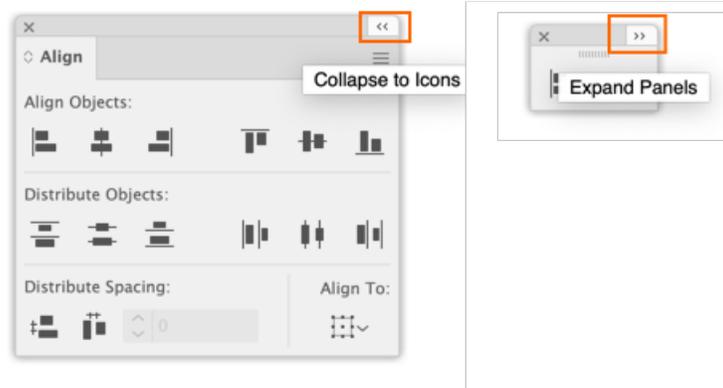
## Docking a Panel

Drag and drop the panel to one of the dock areas. The blue indicator shows the area it will now be a part of:



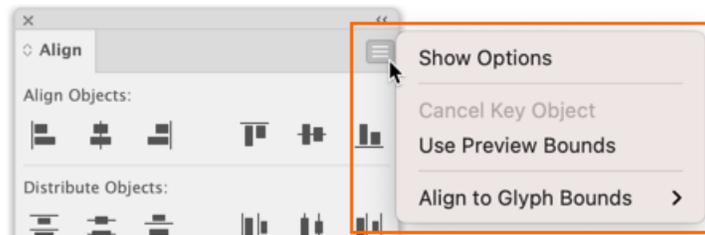
## Expanding / Collapsing Panels

Panels can be expanded and collapsed:



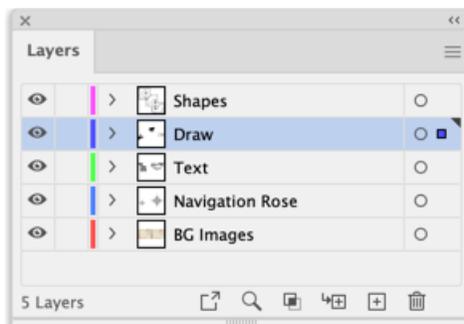
## Panel Menus

Most panels have a panel menu that will have options specific to that panel:

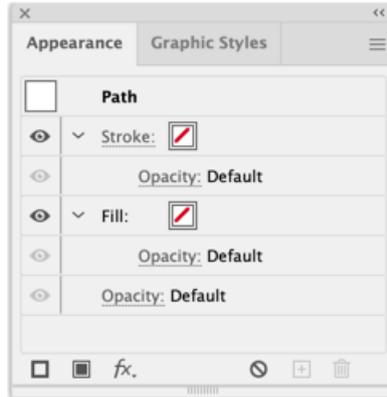


## Commonly Used Panels

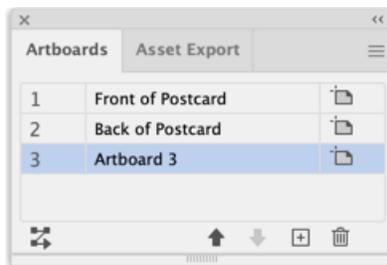
**Layers** panel - The **Layers** panel is used to organize, manage, and control visibility of artwork:



**Appearance** panel - The **Appearance** panel is used to set the stroke, fill, and opacity of a selected object:



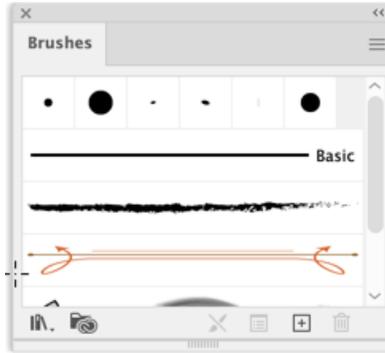
**Artboards** panel - Artboards are used to create multiple layouts in the pasteboard area:



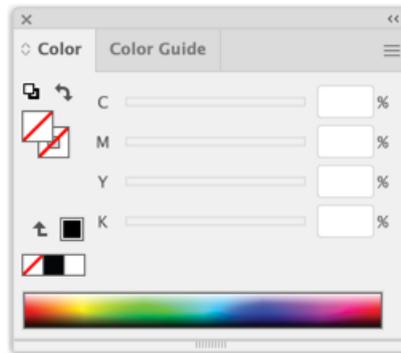
**Align** panel - The **Align** panel is used to align and distribute selected objects:



**Brushes** panel - The **Brushes** panel is used to view different brush shapes. New brushes can be created:



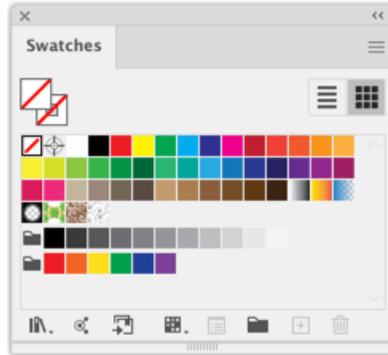
**Color** panel - The **Color** panel is used to mix colors to use for fill and stroke:



**Transform** panel - The **Transform** panel is used to adjust the width, height, and placement as well as other special proportions based on selected object:

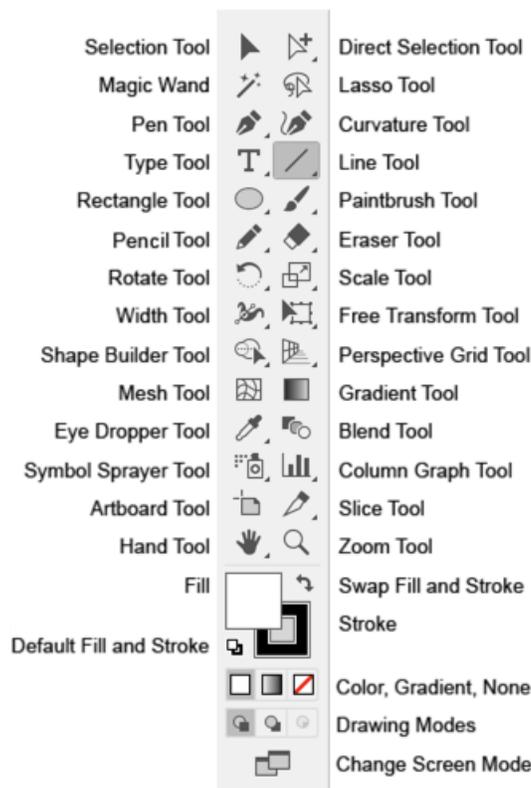


**Swatches** panel - The **Swatches** panel is used to store colors, gradients, and patterns for use on stroke and fill:



### 1.3. Tools

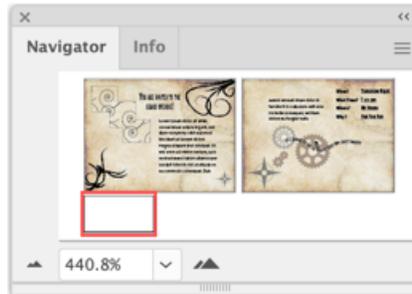
Tools are organized on the **Toolbars** panel. Use tools to edit, create, draw, reuse, etc. as you develop objects for your project:



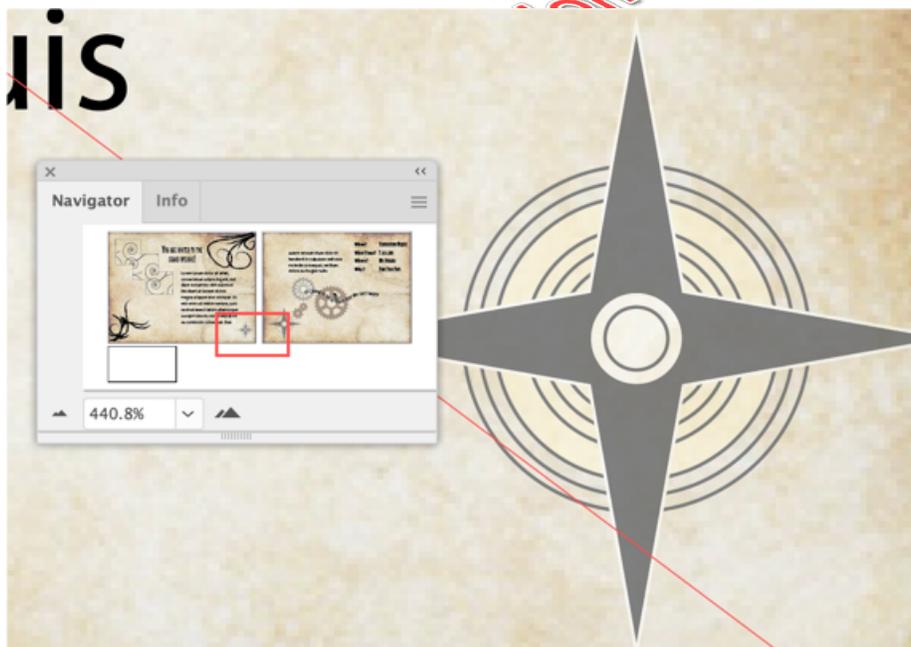
A few key navigation tools are the **Hand Tool** and the **Navigator** panel.

The **Hand Tool**  moves the artboard within the window. When using most of the tools, you can switch back to the **Hand Tool** by holding down the space bar.

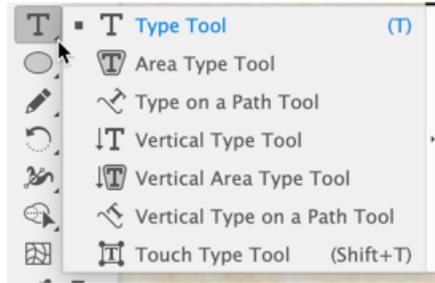
The **Navigator** panel provides proxy preview area (red box) with easy options to zoom in and out:



No matter how close we are viewing the artwork, the proxy preview area shows a small thumbnail of the artwork with an red box we can use to move to parts of the artboard:



Some tools are nested. To access the other tools in the group, you must hover the arrow over these tool icons and right-click to gain access to these additional tools in the group:

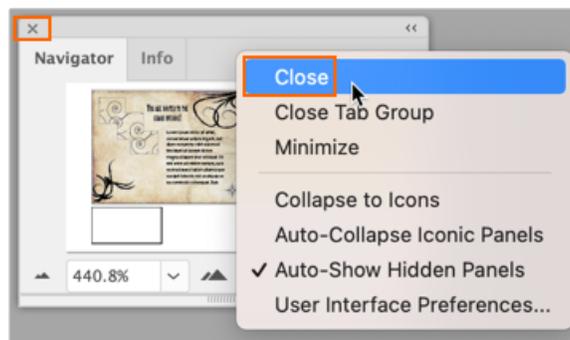


## 1.4. Workspace

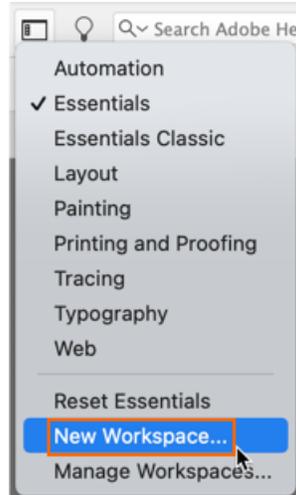
Workspaces make the use of all of the panels easy. You can choose a set of panels and place them, configure them, etc., and then save the layout as a workspace. When you are then developing different types of projects, you switch to that workspace and have the tools you need at hand.

### Customizing a Workspace

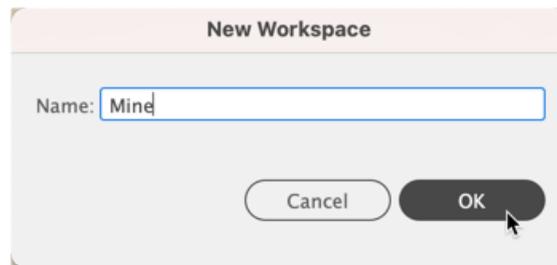
1. Add panels from the **Window** menu.
2. Close panels by clicking the **X** or right-clicking and selecting **Close**:



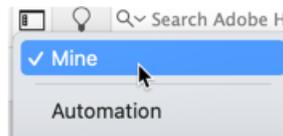
3. Click **Workspace** menu and choose **New Workspace**:



4. Name the workspace. Click **OK**:



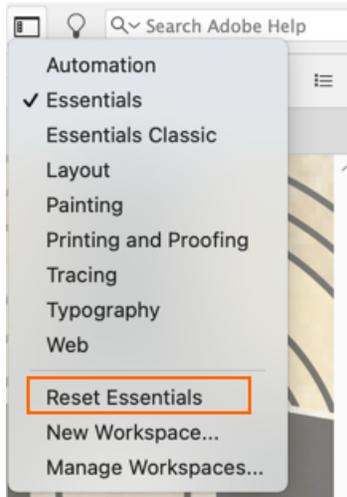
5. The new workspace is now saved and ready to use:



Note that if you create a new workspace using the name of an existing workspace, Illustrator will ask you if you want to replace that workspace.

## Resetting a Workspace

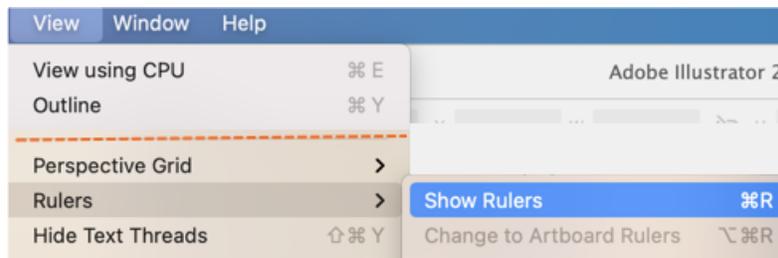
The workspaces will remember the ways you change them. You can switch between workspaces using the menu in the upper right of Illustrator. Use the **Reset** workspace option to remove any customizations you made to the selected workspace:



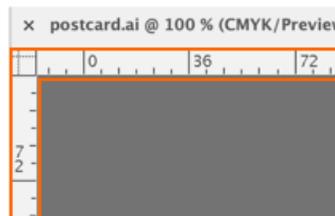
## 1.5. Rulers and Guides

Rulers and guides are helpful for placing items precisely on an artboard.

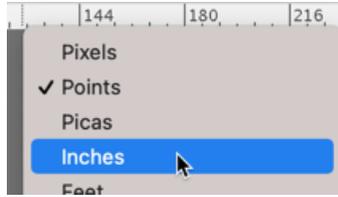
**Rulers:** If the rulers are not visible, select **View > Rulers > Show Rulers** (**Ctrl/Cmd + R**).



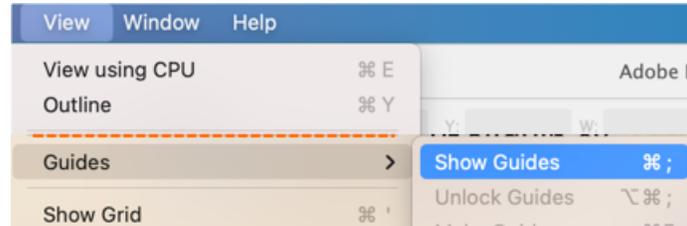
The rulers will then appear:



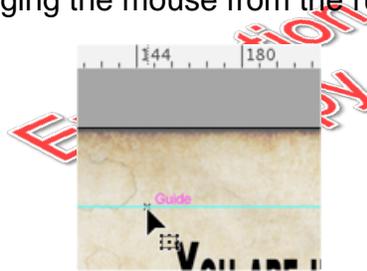
To change the unit of measurement used on a ruler, right-click the ruler and make a selection:



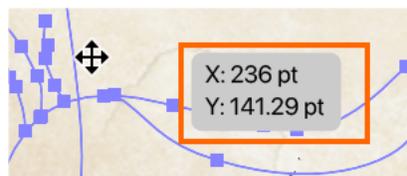
**Guides:** If the guides are not visible, select **View > Guides > Show Guides** (**Ctrl/Cmd + ;**):



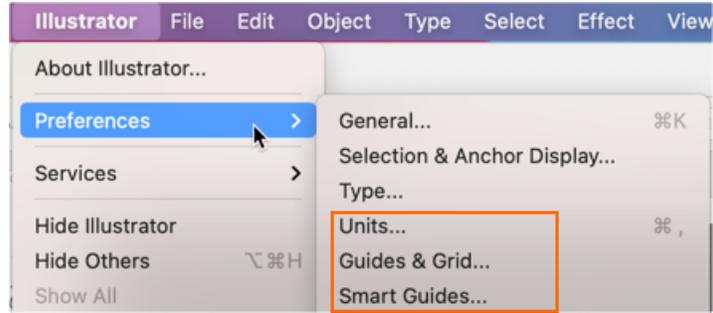
Guides can be placed by dragging the mouse from the ruler area:



**Smart Guides:** If the guides are not visible, select **View > Smart Guides**: Smart guides are content sensitive as they provide in the moment feedback on size, position, and alignment. As you create and move objects, the smart guides will let you know the position and alignment in proximity to other objects.

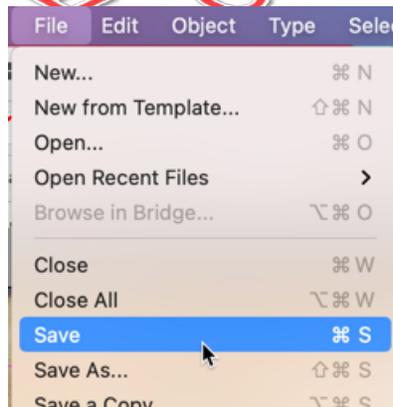


**Preferences:** Select **Edit > Preferences** (on Windows) or **Illustrator > Preferences** (on Mac). Then, choose **Units...**, **Guides & Grid...**, or **Smart Guides...**



## 1.6. File Management

Once a project has begun, the files should be named and stored in an organized way in order to maintain an efficient process. Select **File > Save** (**Ctrl/Cmd + S**).



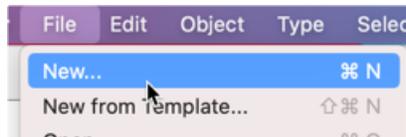
Choose a location and a name. Click **Save**.

# Exercise 1: Illustrator Environment

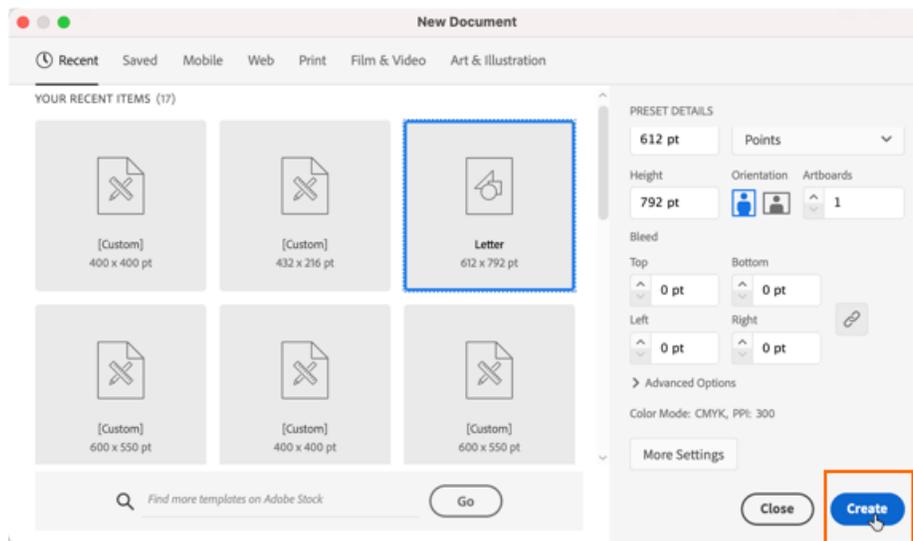
 5 to 10 minutes

In this exercise, you will create a new file, view rulers, set guides, and save a copy of your file.

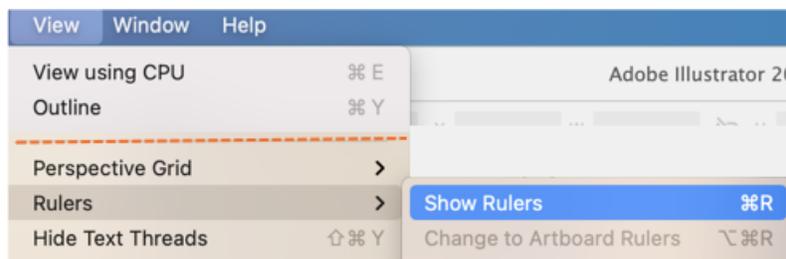
1. Select **File > New**:



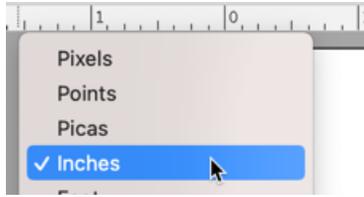
2. Select **Letter** (or any option you wish) and click **Create**:



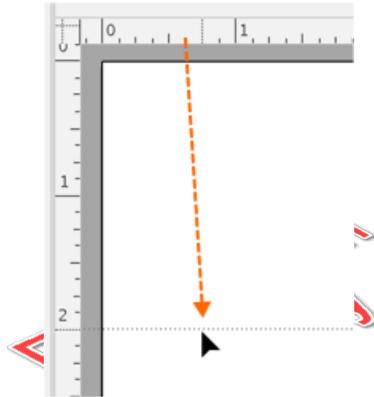
3. Select **View > Rulers > Show Rulers**:



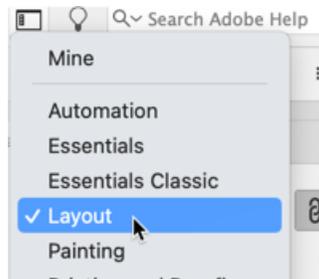
4. Set rulers to Inches. Right-click and choose **Inches**:



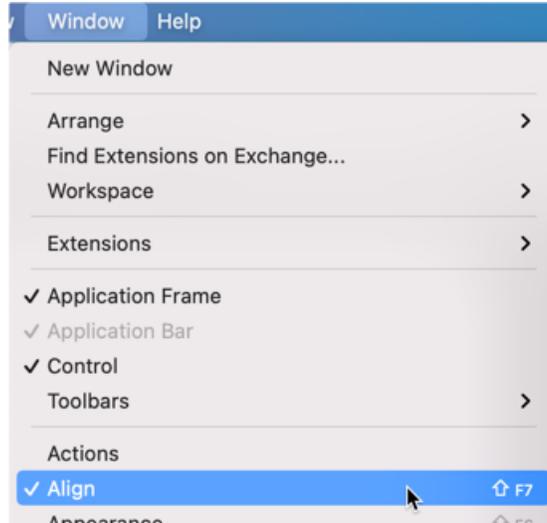
5. Use the mouse to drag a guide down to the 2-inch mark:



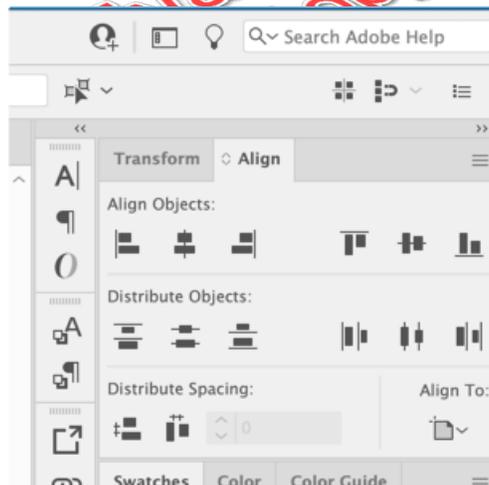
6. To switch to the workspace named Layout, choose **Layout** from the **Workspace** menu:



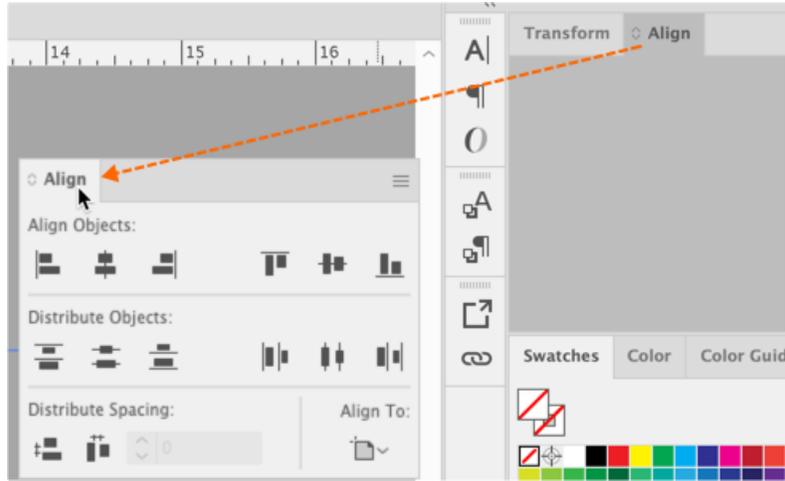
7. To open the **Align** panel, select **Window > Align**:



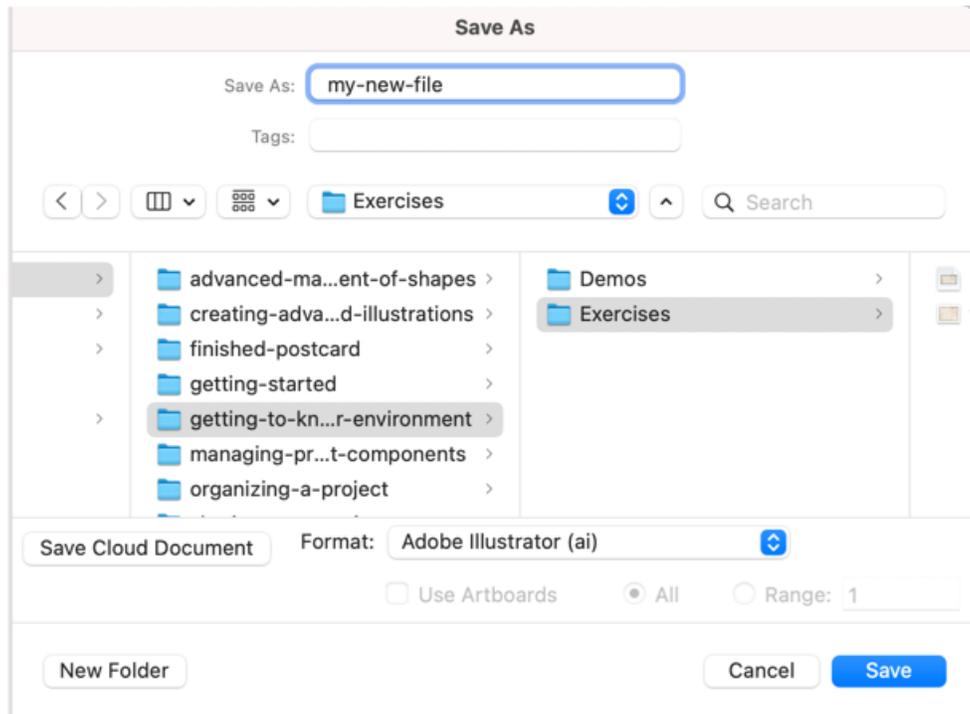
Notice that it is docked in the upper right:



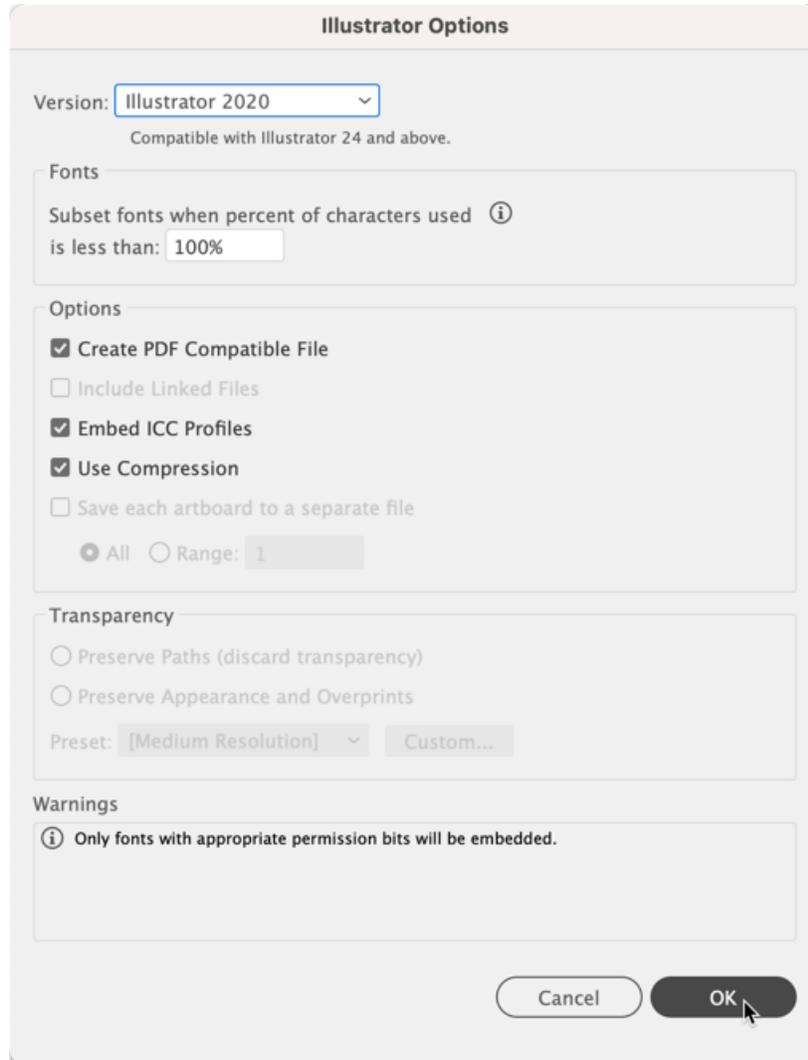
Undock the panel by clicking the tab and dragging:



8. Select **File > Save As** and save the file as `my-new-file.ai` in



9. Confirm the Illustrator options. Click **OK**.



10. Close the file.

## Conclusion

In this lesson, you have learned:

- How to work with menus and navigation.
- How to work with panels and tools.
- How to create a workspace.
- How to use rulers and guides.
- How to manage files.



# LESSON 2

## Getting Started

---

### Topics Covered

- Creating a new document.
- Basic shapes.
- Drawing modes.
- Color and swatches.
- Fill and stroke.

### Introduction

In this lesson, we will create a new project and draw various objects.

Evaluation  
\*Copy

---

## 2.1. Creating a Project

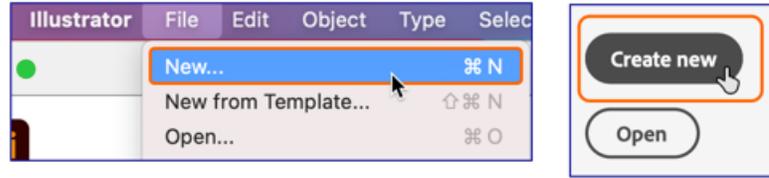
### ❖ 2.1.1. Create a New Document

When starting a new project, you will want to set the document size and color mode to match your needs. Projects that need to be printed up to the edge of the page should have the bleed (the amount of art that resides over the edge of the print bounding area) set based on mechanical requirements of the printer device. The number of *artboards* (similar to pages in other applications) and the default alignment of objects can also be set here.

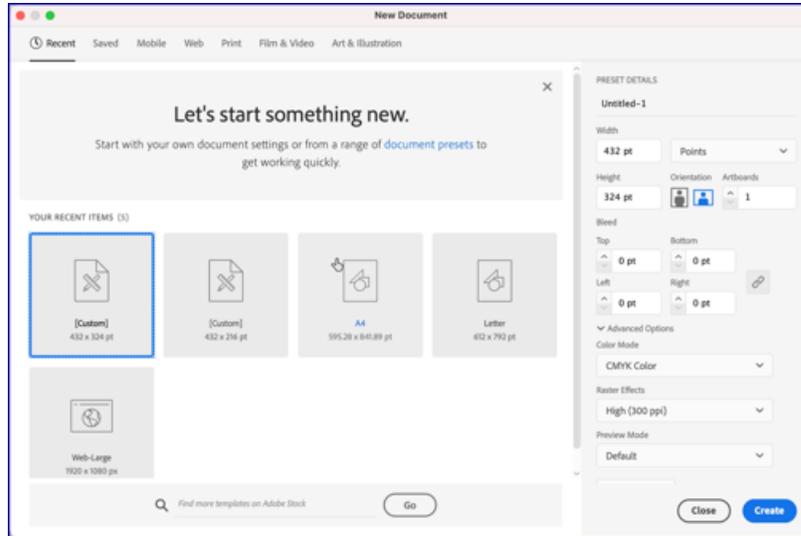
If you frequently create similar projects, you can save a profile to capture all of the relevant settings.

To create a new document:

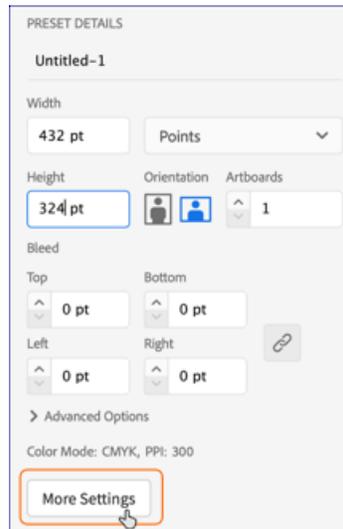
1. Select **File > New** or **Create New**:



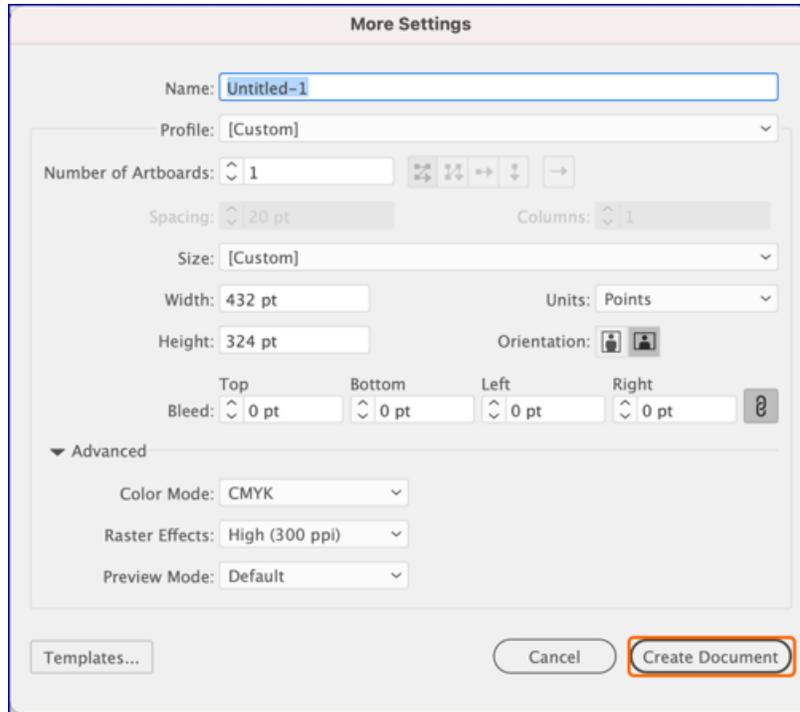
2. The **New Document** dialog box is available to **name** the document, set a **width** and **height** as well as the **color mode** and pixels per inch (ppi). Click **Create**.



3. If you need more details, click **More Settings**:

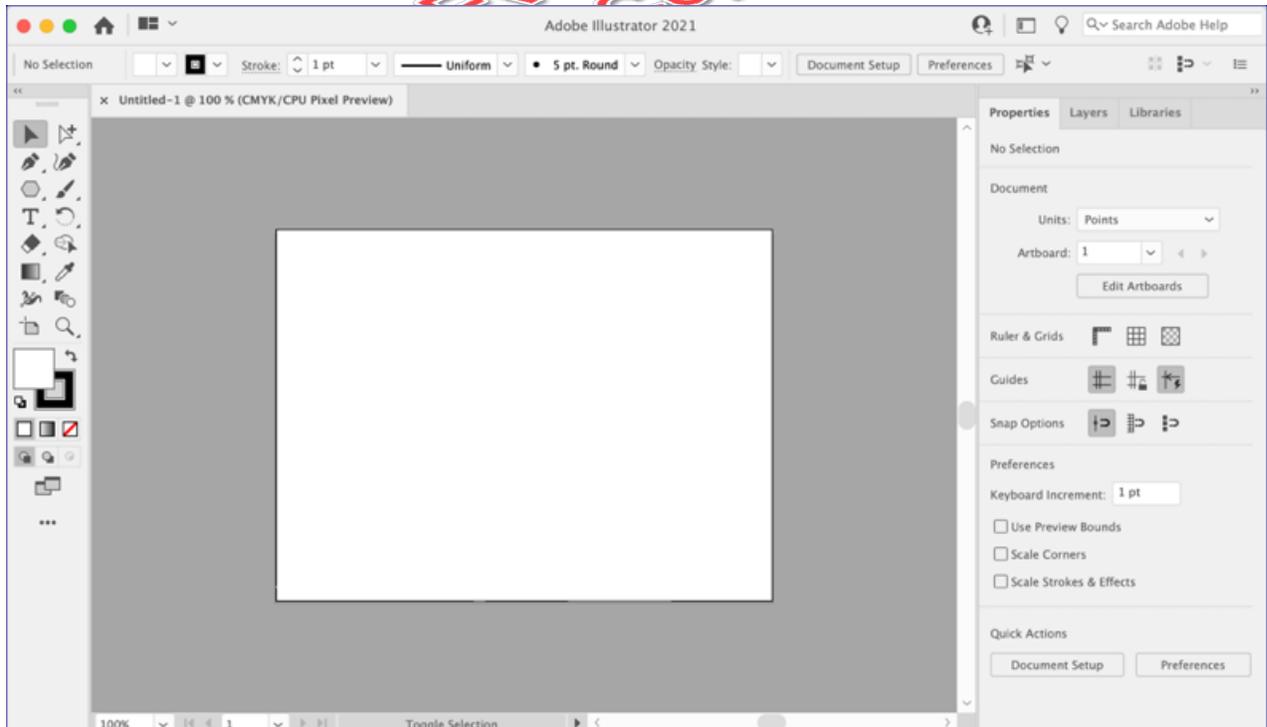


That will bring up this dialog:



Note that your default settings might be slightly different.

4. After clicking the **Create Document** button, the new document will open:

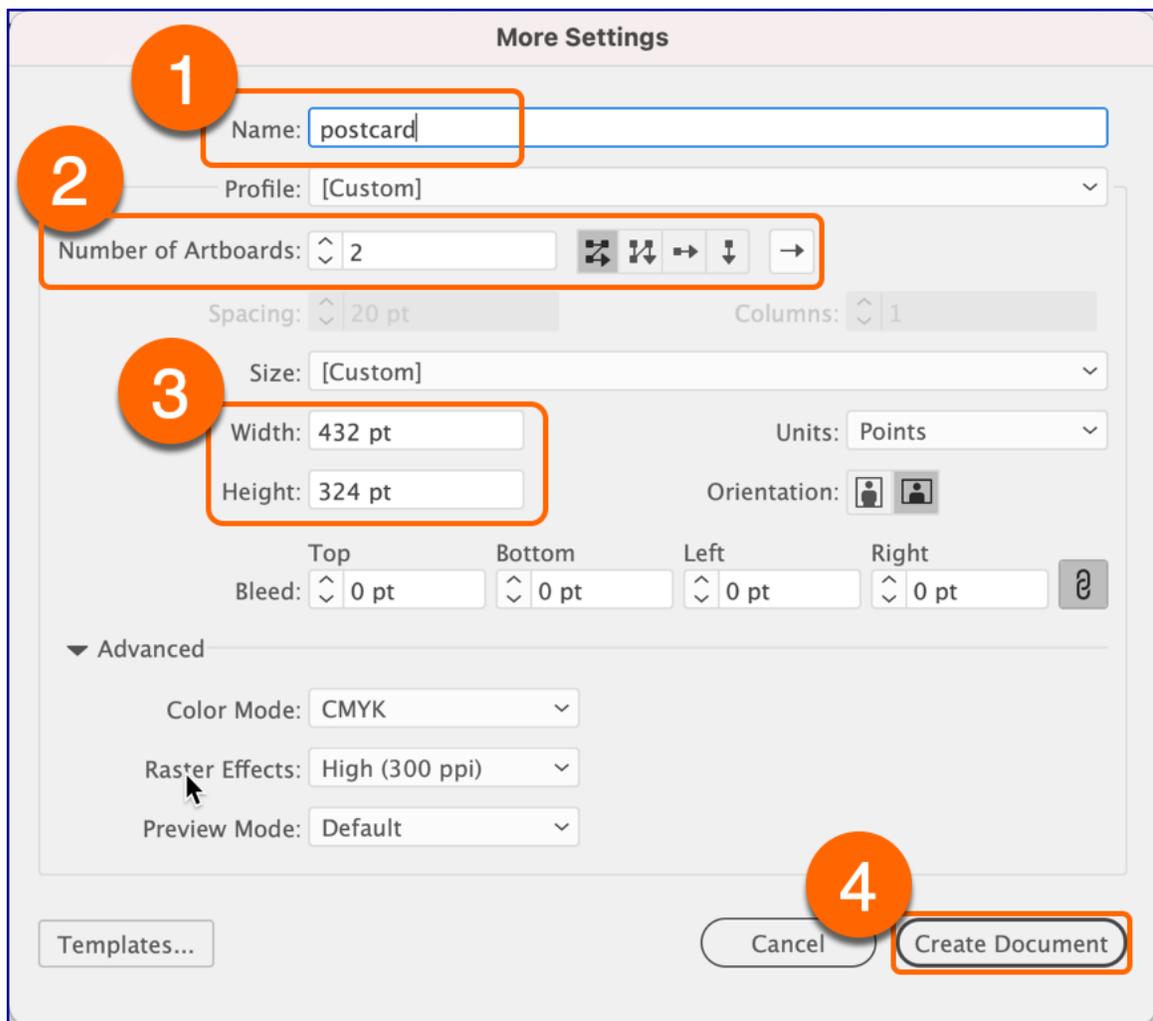


# Exercise 2: Create New Document

🕒 15 to 25 minutes

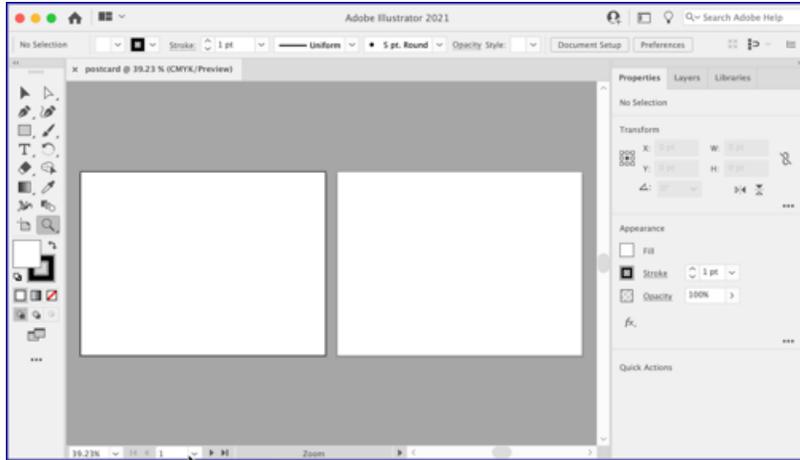
In this exercise, you will create a postcard size document (432pt x 324pt) with two artboards and save it as `postcard.ai` in `getting-started/Exercises`.

1. Select **File > New**. Click **More Settings** and set the details as shown in this screenshot:

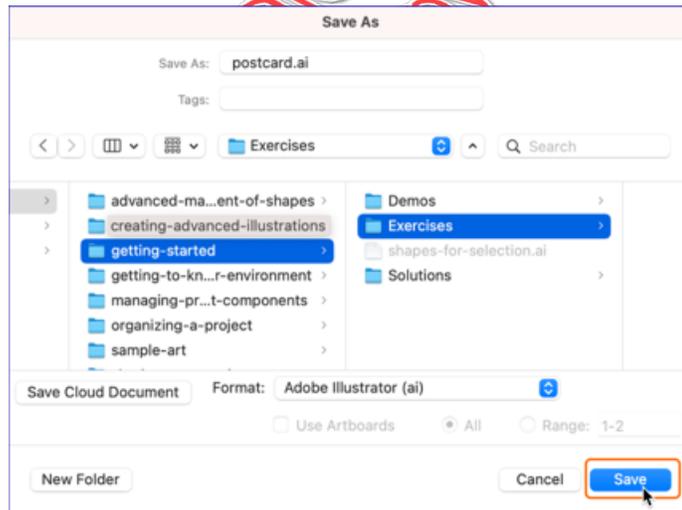


Click **Create Document**.

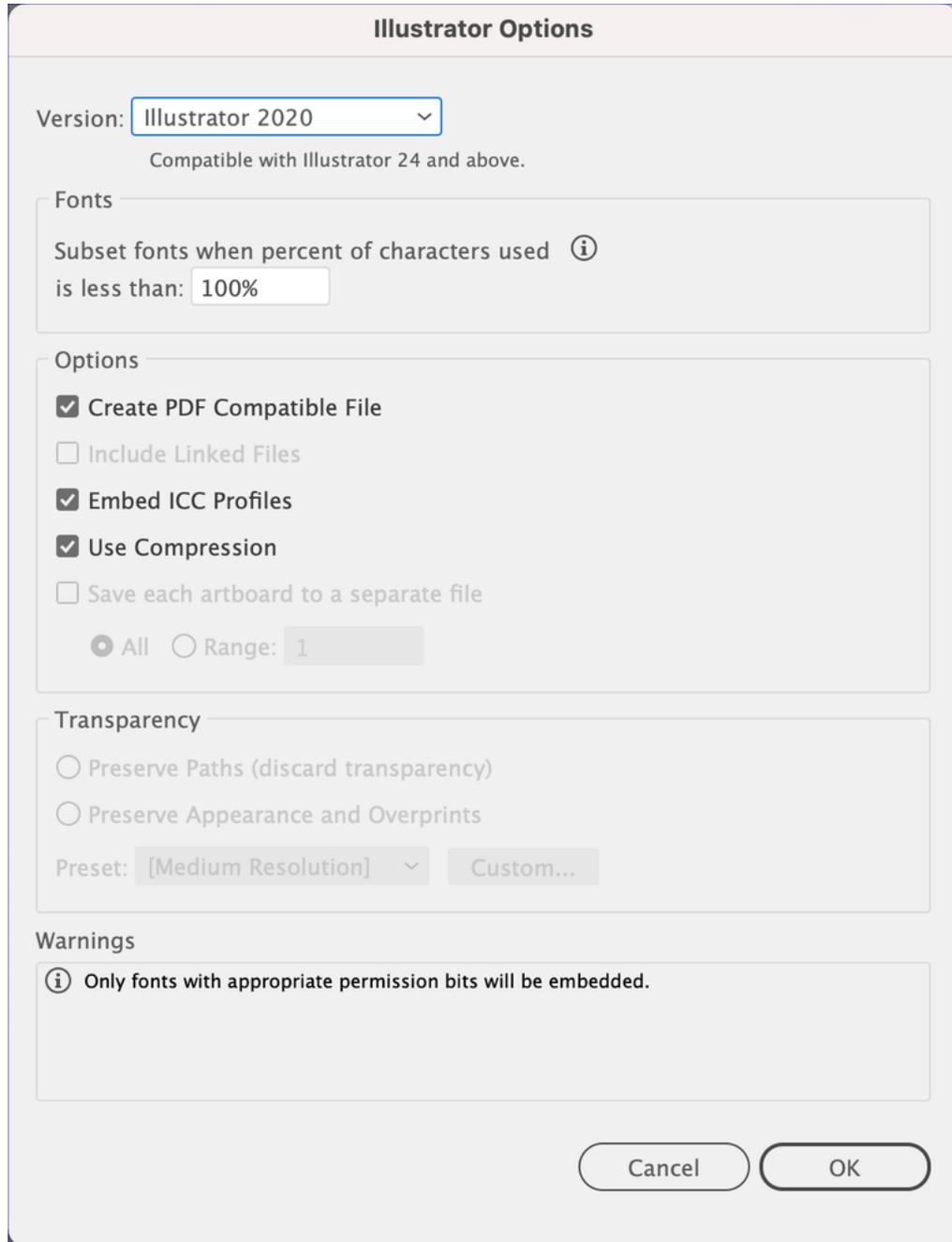
2. The file has been created, but has not yet been saved:



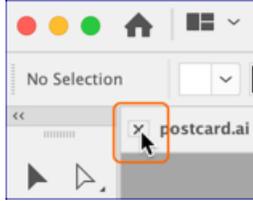
3. Select **File > Save**. Click **Save** and save the file as postcard.ai in the getting-started/Exercises folder:



4. You will be presented with some options. Keep the defaults and click **OK**.



5. You're done with this for now. Close the file by selecting **File > Close** or clicking the **X** to the left of the file's tab:



6. A completed version of the document is located at getting-started/Exercises/postcard-1.ai.

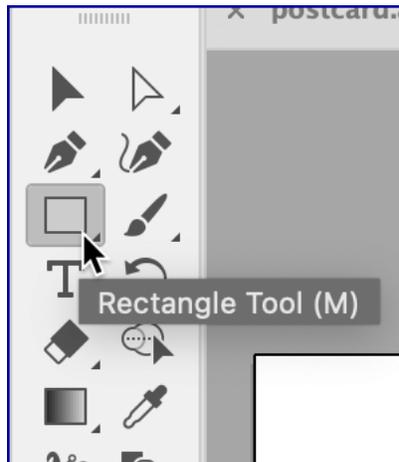


## 2.2. Creating Basic Shapes

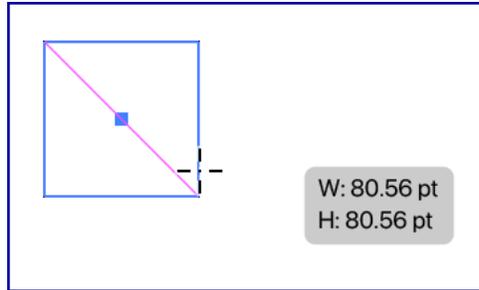
Let's get some practice creating new shapes. Create a new document (of any size) with a single artboard to experiment with the shape tools.

### Rectangle Tool

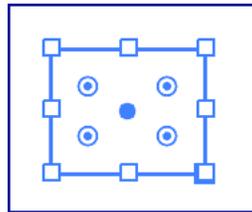
1. Select the **Rectangle Tool** by clicking it.



2. Click the artboard and drag diagonally to create a rectangle. Notice the **W** (width) and **H** (height) are there to show the size of the shape you are creating:



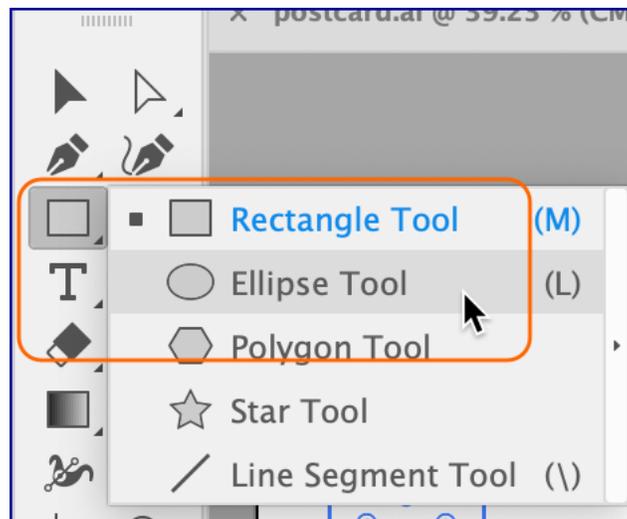
3. The created shape will look something like this:



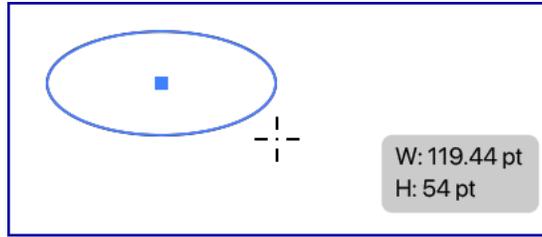
Notice the handles for resizing and rotating the shape.

## Ellipse Tool

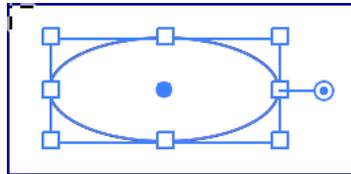
1. To switch to the **Ellipse Tool**, click and hold the **Rectangle Tool**, and then drag the mouse over the **Ellipse Tool** and let go:



2. Click the artboard and drag diagonally to create an ellipse. Again, notice the **W** (width) and **H** (height) are there to show the size of the shape you are creating:



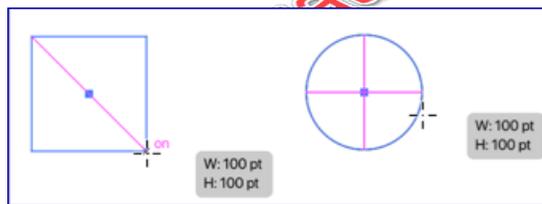
3. The created shape will look something like this:



Notice the handles for resizing and rotating the shape.

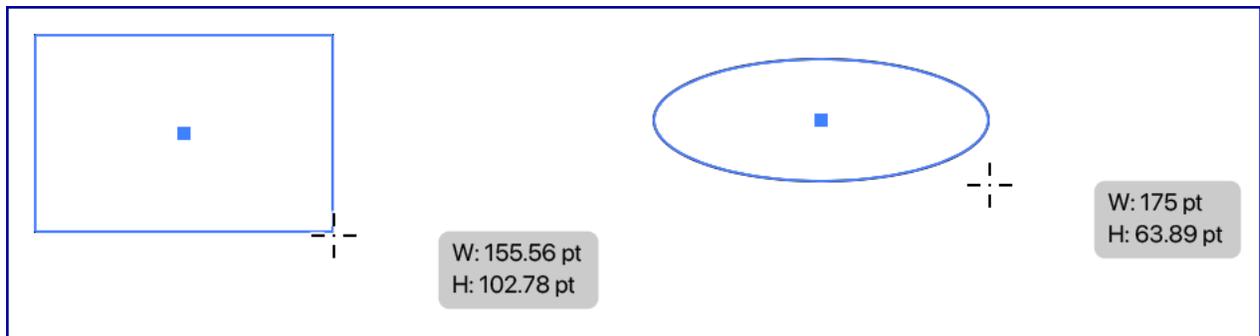
## Perfect Squares and Circles

To create a perfect square or circle, hold down the **Shift** key while drawing the shape:

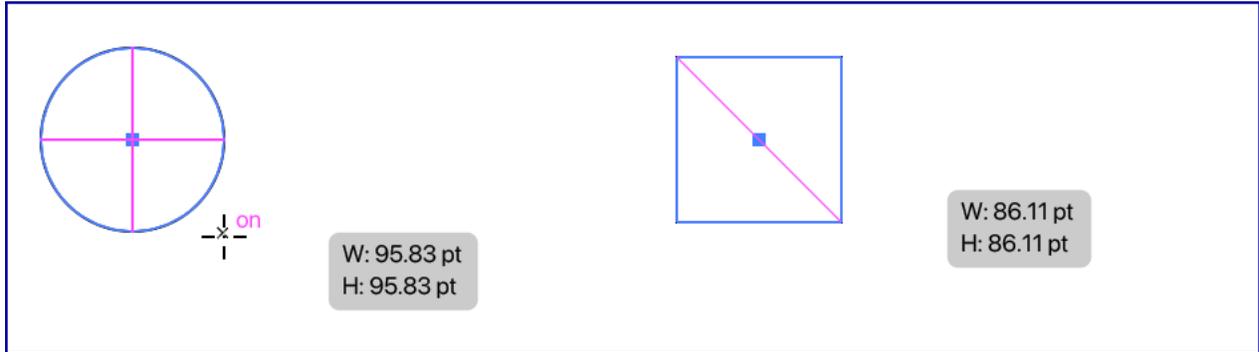


## Creating Shapes from the Center

To create shapes from the center out, hold down the **Alt/Option** key while drawing the shape:



To create perfect shapes from the center out, hold down **Shift + Alt/Option** together while drawing the shape:



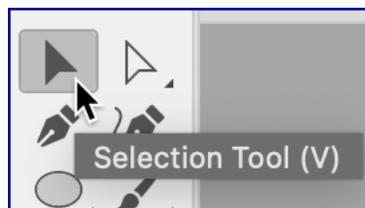
## Creating Shapes with Specific Dimensions

To create a shape using specific dimensions, select the shape tool and click the artboard. You will get a dialog like this one:

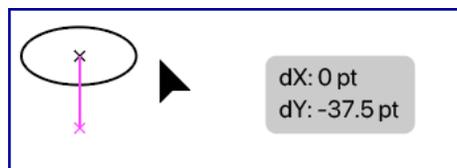


Enter the dimensions you want and click **OK**.

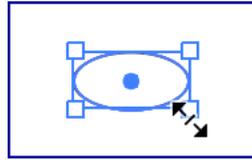
You can then move the shape to another location using the **Selection Tool**:



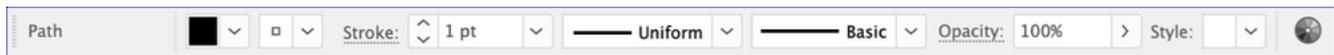
The picture below shows an oval being moved 37.5 points upward:



To resize the shape, use the **Selection Tool**, click down on a corner of the shape, and drag:

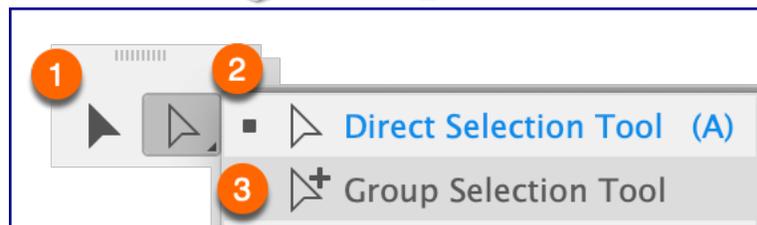


When the shape is selected, options for modifying its properties will show up in a toolbar at the top:



## 2.3. Selection

There are many selection tools built into Illustrator. Three of the most useful are shown below:



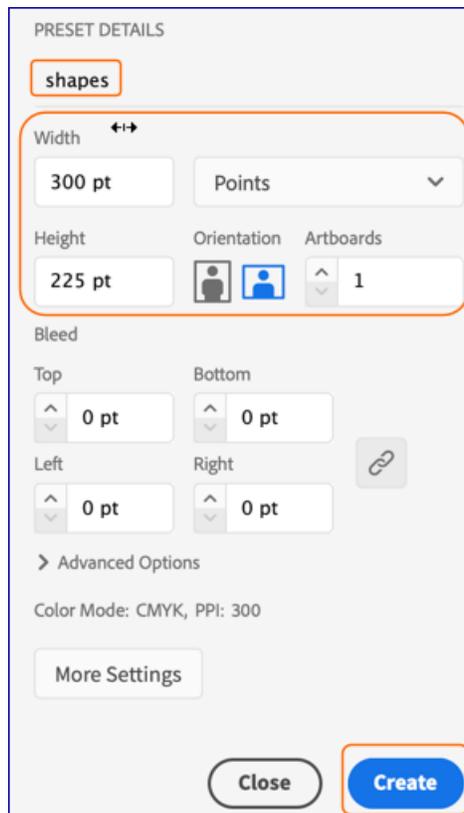
1. The **Selection Tool**  selects and works with the entire frame or bounding box.
2. The **Direct Selection Tool**  selects a precise anchor point in an editable object or path to then modifies the placement of the anchor point.
3. The **Group Selection Tool**  works with a group of shapes. Click the artboard and drag diagonally to create a box over the group of shapes you want to select.

# Exercise 3: Creating and Modifying Shapes

 20 to 30 minutes

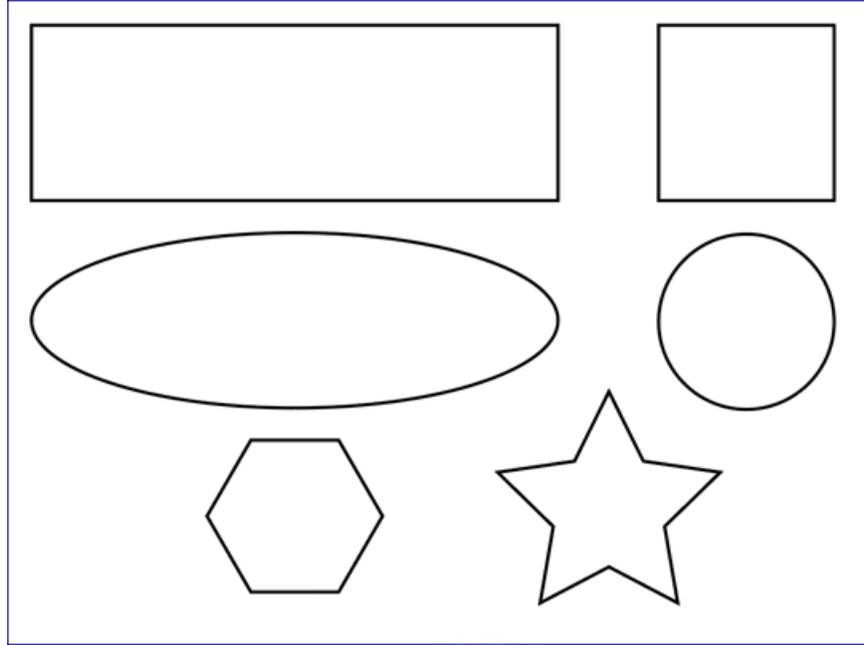
In this exercise, you will practice making and then modifying shapes.

1. Create a new 300 pt by 225 pt document with one artboard:

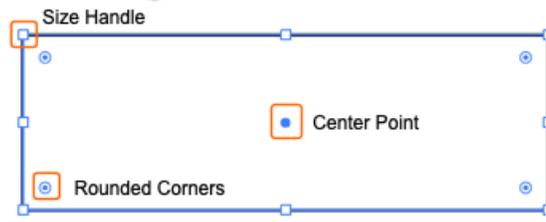


2. Draw the following shapes:
  - A. Rectangle: 180 pt by 60 pt.
  - B. Square: 60 pt by 60 pt.
  - C. Oval: 180 pt by 60 pt.
  - D. Circle: 60 pt by 60 pt.
  - E. Hexagon (6-sided Polygon) with a 30-pt radius.
  - F. 5-point Star with radius 1 of 40 pt and radius 2 of 20 pt.

The result should look something like this:

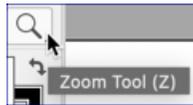


3. Click the rectangle. Notice there are extra controls:

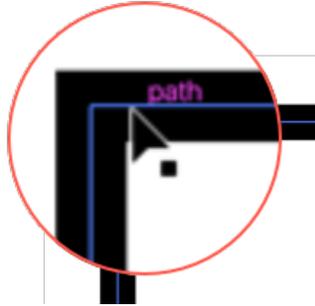


Different shapes have different controls.

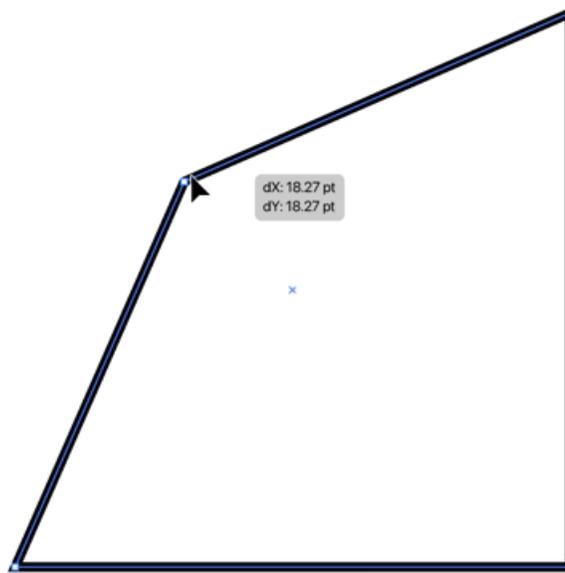
4. Using the **Zoom Tool**, zoom in on the square:



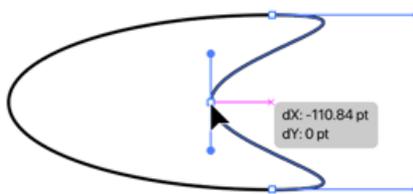
5. Using the **Direct Selection Tool**, hover over the upper-left corner of the square and click once to select the anchor:



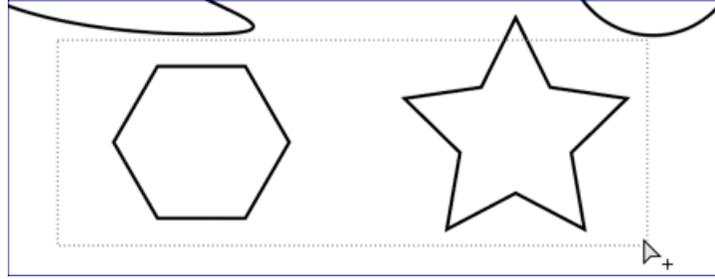
Then, click down again, hold, and drag toward the middle of the square:



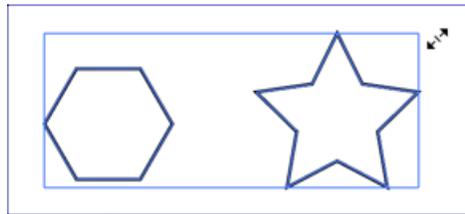
6. Hover over the right side of the oval until the work "path" appears, and then click down once to select the anchor and click a second time to drag toward the middle of the oval:



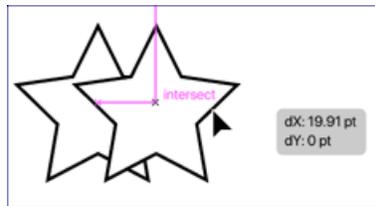
7. Using the **Group Selection Tool**, select both the hexagon and the star:



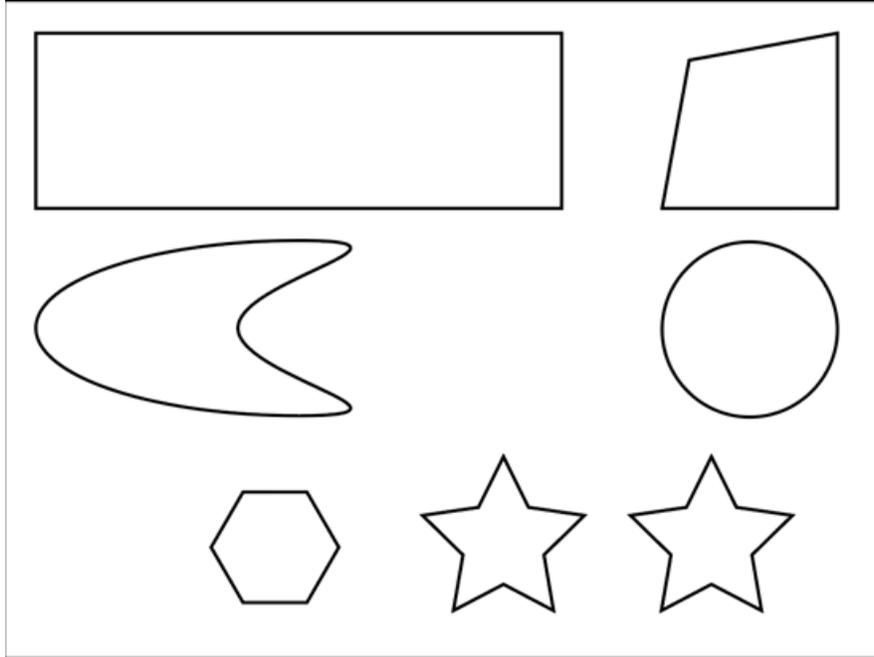
Then, shrink both shapes by holding down the **Ctrl/Cmd** key to make the box around the group appear, clicking the upper-right corner, and dragging toward the center:



8. Deselect the group by clicking anywhere on the white area of the artboard.
9. Create a copy of the star by holding down the **Alt/Option** key, clicking the star, and dragging to the right:

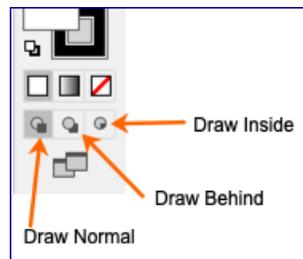


When you're finished, your artboard should look something like this:



## 2.4. Using Drawing Modes

When creating a project, you will usually be working with multiple shapes on your artboard. There are three drawing modes, located at the bottom of the **Toolbars** panel on the left, for working with shapes:

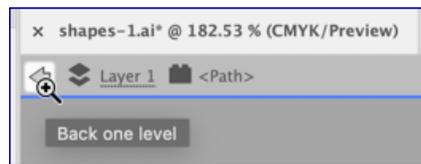


1. **Draw Normal** is the default mode. It's a good habit to set the drawing mode back to **Draw Normal** after using one of the other drawing modes, because the drawing mode last used will be loaded when Illustrator is opened.
2. **Draw Behind** can be used to draw behind a selected object, or if nothing is selected to create a new layer behind the current one.

3. **Draw Inside** is an efficient way to draw inside a selected object and can only be used when a path, compound path, or text is selected.

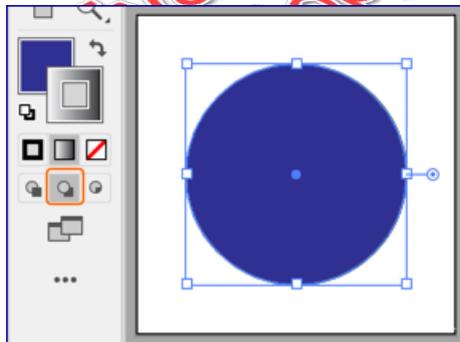
## Isolation Mode

Isolation mode allows you to edit, delete, or replace artwork in a group or layer. When in Isolation mode, the objects that are not part of the group or layer are locked and appear dim in contrast to the full color art you are editing. There are many ways to enter Isolation mode, the simplest of which is to double-click the group or layer you need to edit. To exit Isolation mode, press the **Esc** key or use the **Exit Isolation Mode button**, located at the top of the Document window, to move back one level:

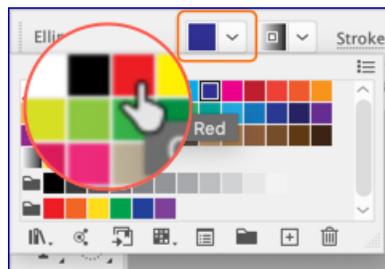


Try this:

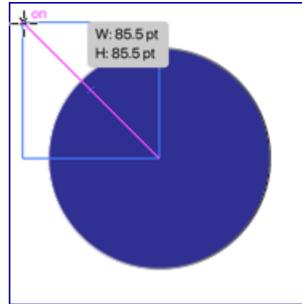
1. Open getting-started/Demos/drawing-modes.ai.
2. Select the **Draw Behind** mode:



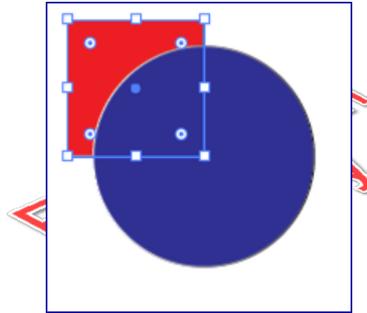
3. Using the **Selection Tool** click the color square in the toolbar at the top of Illustrator to change the fill color to red:



4. Select the **Rectangle Tool**.
5. Click the center of the blue circle and drag to the upper left to create a red rectangle behind the circle:



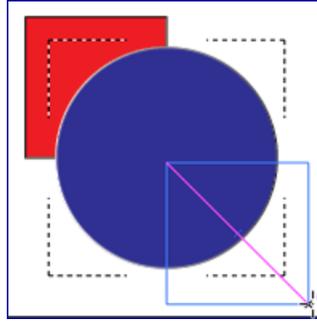
Let go to draw the square:



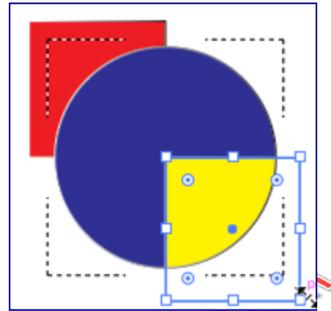
6. Using the **Selection Tool** click anywhere off the shapes to deselect.
7. Click the blue circle to select it and then click the **Draw Inside** mode on the **Toolbars** panel on the left:



8. Change the fill color to yellow.
9. Select the **Rectangle Tool**.
10. Click the center of the blue circle and drag to the lower right to create a yellow rectangle inside the circle:



Let go to draw the square:

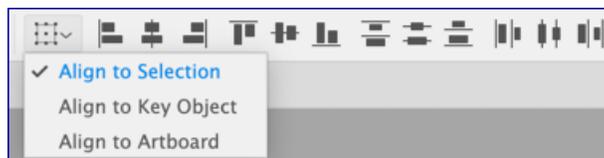


11. Click the **Selection Tool** and click anywhere off the shapes to deselect.
12. Click the **Draw Normal** mode, so that the next time you open Illustrator, it will be in that mode.



## 2.5. The Alignment Tools

The alignment tools will appear in the **Control** panel at the top of Illustrator after selecting objects on the artboard. The tools can be used to align shapes to each other and to the artboard:

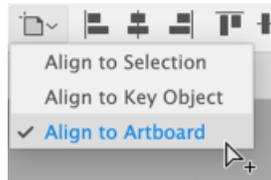


To experiment with alignment, open `getting-started/Demos/alignment.ai` in Illustrator. It should look like this:

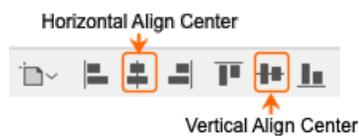


## Aligning to the Artboard

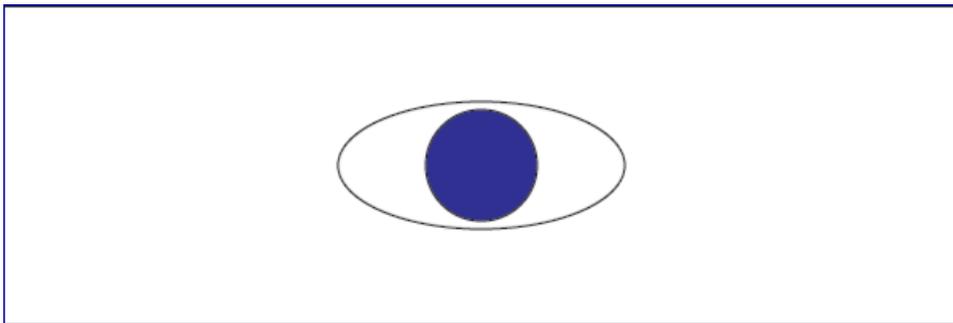
1. Select both shapes, either by using the **Selection Tool** and then clicking the two images while holding down the **Shift** key, or by using the **Group Selection Tool**.
2. Select the **Align to Artboard** option on the **Control** panel:



3. Click the **Horizontal Align Center** and the **Vertical Align Center** options:

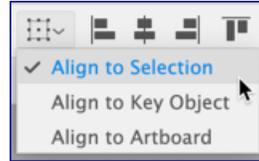


4. The artboard should now look like this:



## Aligning to Selection

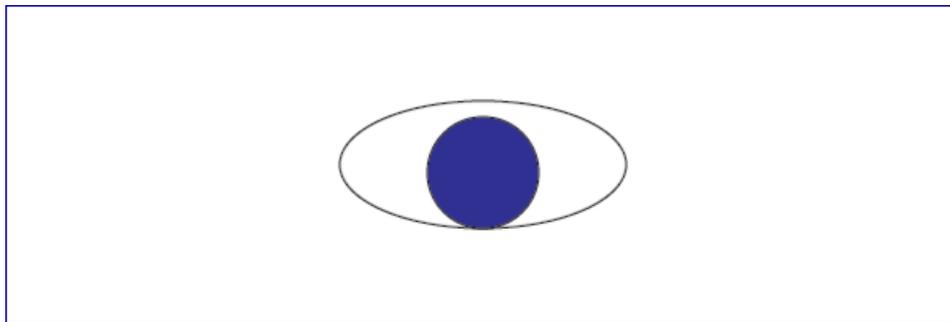
1. Select both shapes.
2. Select the **Align to Selection** option:



3. Click the **Vertical Align Bottom** option:

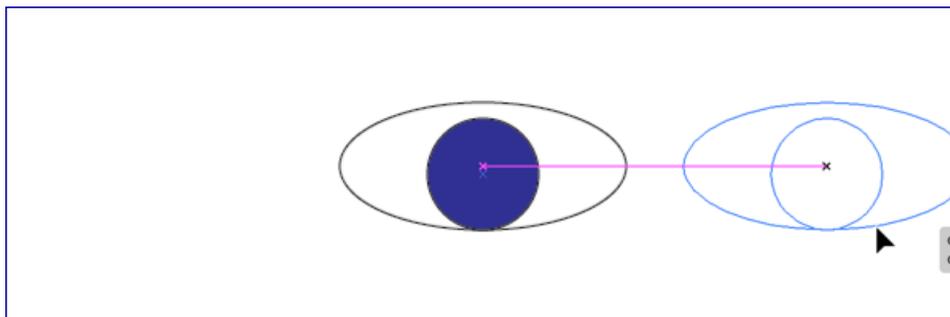


4. The artboard should now look like this:

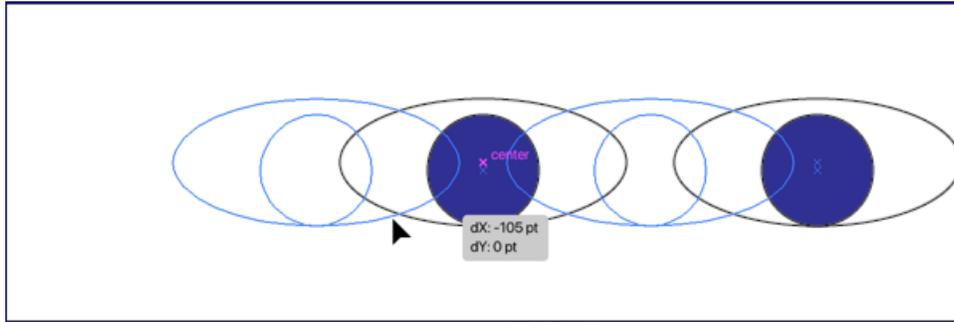


## Make Two Eyes

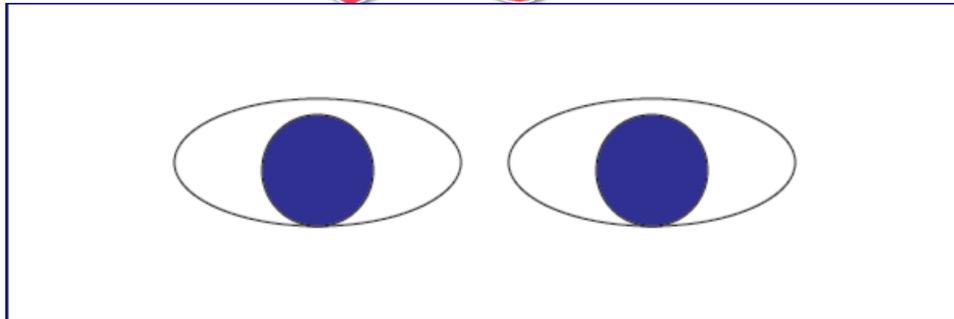
1. Select both shapes.
2. Hold down the **Alt/Option** key, click down on the shapes and drag right to create a second eye:



3. With all the shapes selected, click and drag to the left until the word “center” appears:



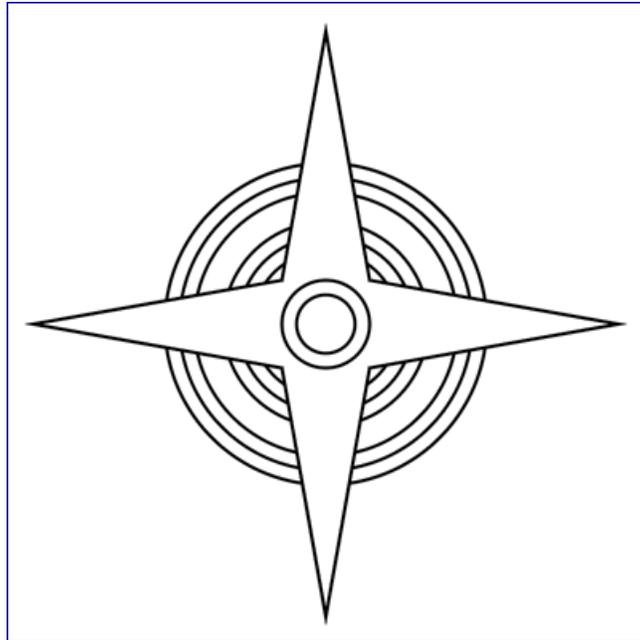
4. The artboard should now look like this:



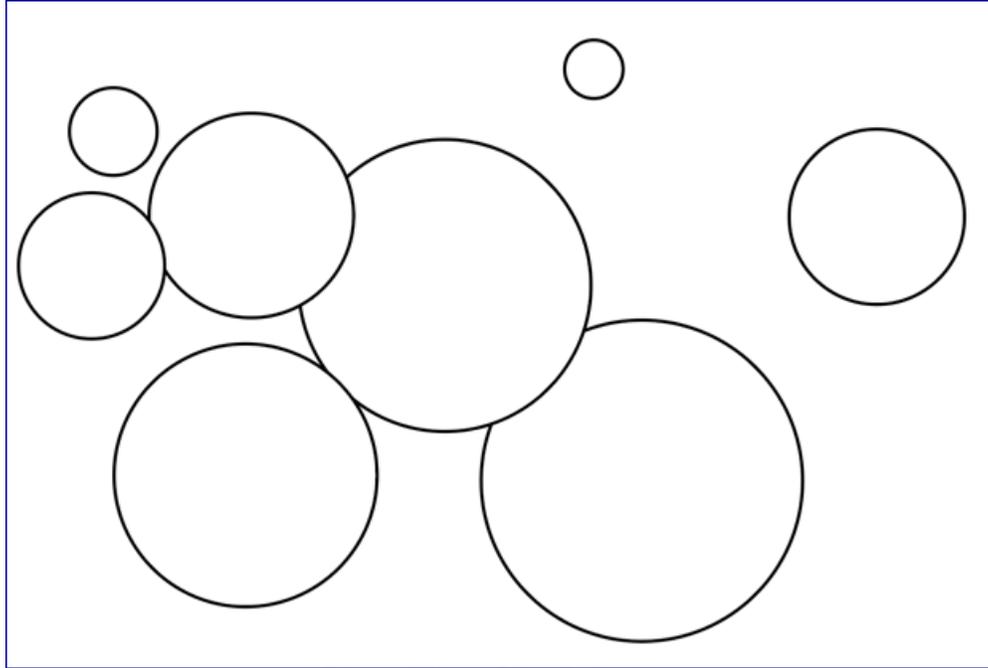
# Exercise 4: Draw Components of the Project

 15 to 25 minutes

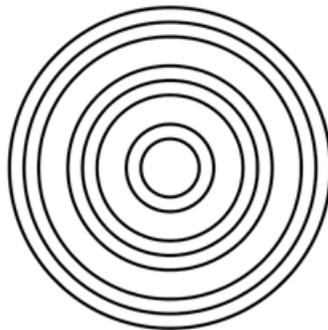
In this exercise, you will begin to create the postcard project by drawing the following design:



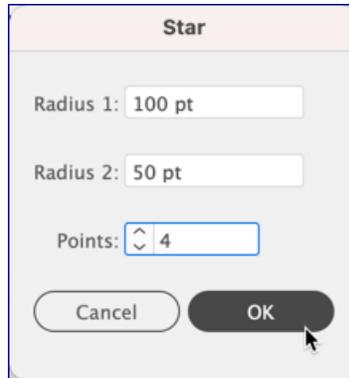
1. Open the `postcard.ai` document that you created earlier from `getting-started/Exercises` folder.
2. Create eight circles with the following widths/heights:
  - A. 110 pt
  - B. 100 pt
  - C. 90 pt
  - D. 70 pt
  - E. 60 pt
  - F. 50 pt
  - G. 30 pt
  - H. 20 pt



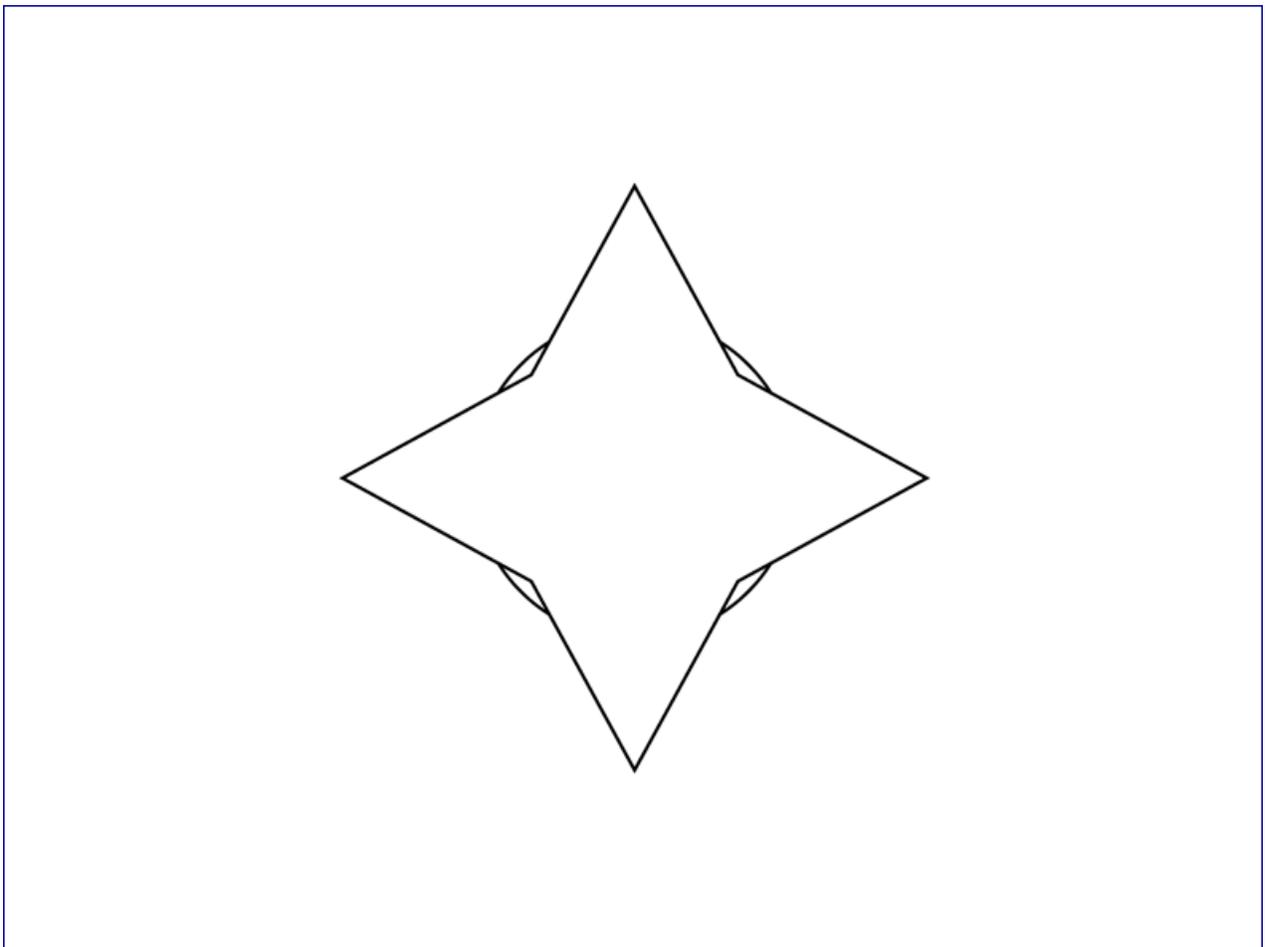
3. Select all the circles and align them to the center of the artboard, horizontally and vertically. You should see this design in the center of your artboard:



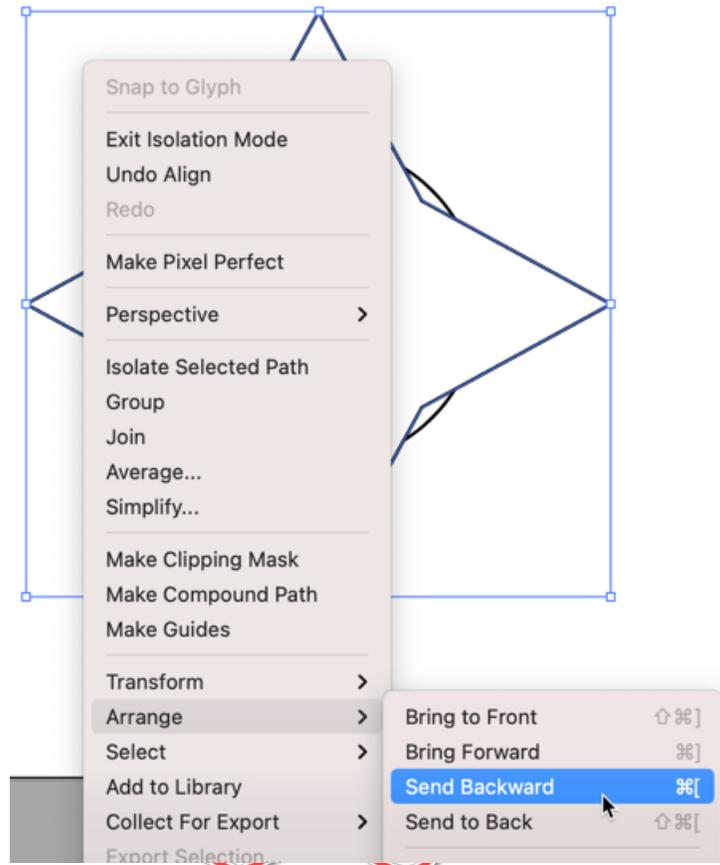
4. Select the **Star Tool** and create a four-sided star with radii of 100 pt and 50 pt:



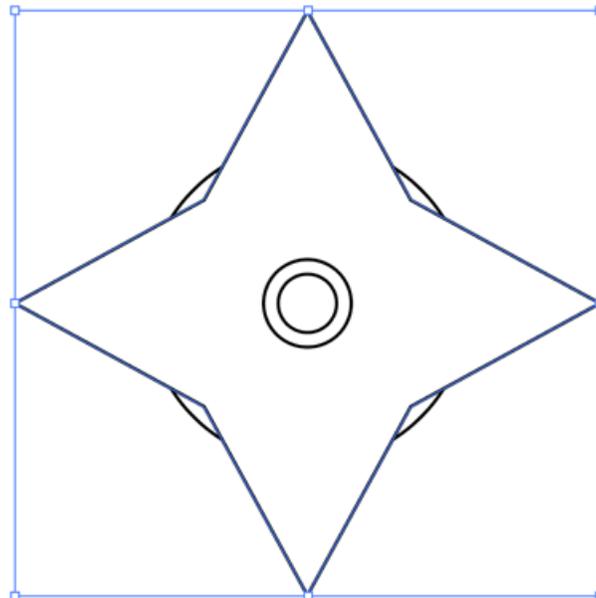
5. Center the star on the artboard, horizontally and vertically:



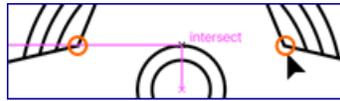
6. Place the star behind the two smaller circles by selecting the star with the **Selection Tool**, right-click, and select **Arrange > Send Backward**. Repeat two times:



It should now look like this:



7. With the **Direct Selection Tool**, shift-click the first anchor circled in the screenshot below, shift-click-hold the second anchor circled below and drag down until the word “intersect” appears over the larger of the two small circles:



8. Repeat the same process to drag the bottom up, and the sides in:



9. Save and close the file.



## 2.6. Working with Colors

Good use of color will bring a professional look to your project. Make sure to think about the purpose and audience of the project when you're choosing your colors. Colors can also be saved and used in other Adobe products so that all parts of a project use a consistent color theme.

Color modes are:

- CMYK – cyan, magenta, yellow, black:



- RGB – red, green, blue:



- Grayscale – shades of gray.

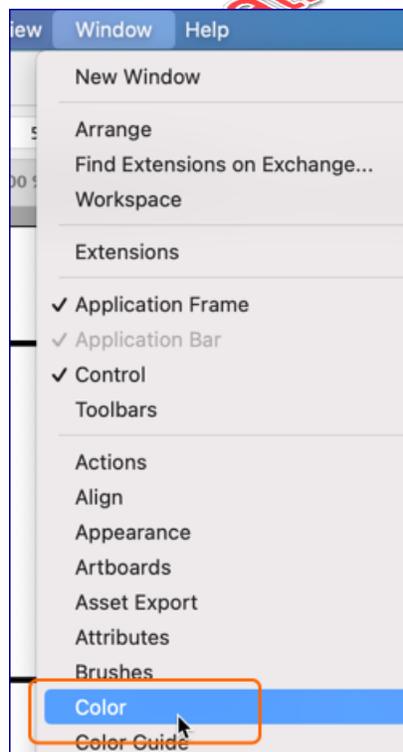
- HSB – hue, saturation, brightness.
- Web Safe RGB – limited set of colors.

There are many pre-existing color panels to choose from. Each one is blended for specific purposes and industrial uses:

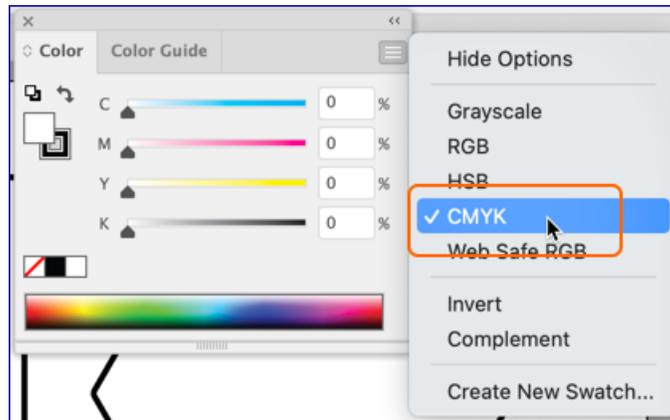
- **Spot colors** are generated by pre-mixed ink in a single run. In Illustrator, they are global by default.
- **Process colors** are generated by using four standard inks: cyan, magenta, yellow, and black typically in multiple runs. This is the default type in Illustrator and can be global or local.
- **Global colors** are automatically updated when edits are made where local are not.
- **Color groups** are named groups of colors, making it easy to reuse colors together.

To experiment with color, open a new document in Illustrator.

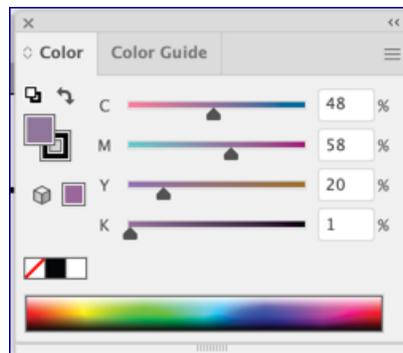
1. From the **Window** menu, select **Color**:



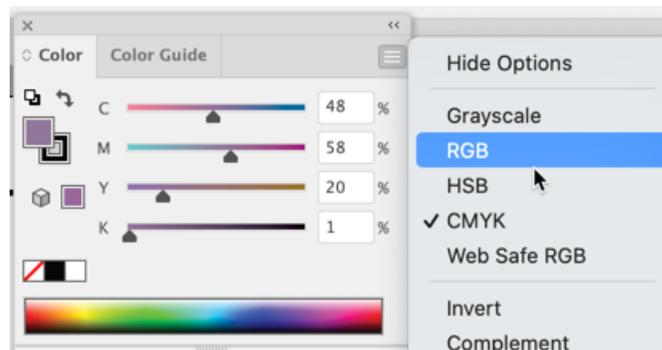
- This will bring up the **Color** panel. Make sure **CMYK** is selected in the panel menu located in the top right of the panel. This is what you will usually use for print projects:



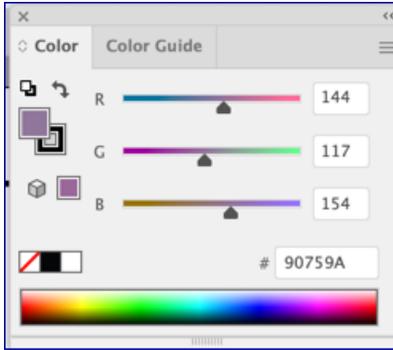
- You can now mix colors using the percentage values. Enter "48,"58,"20,"1" to create a light purple:



- Switch to **RGB** in the panel menu for on-screen projects:

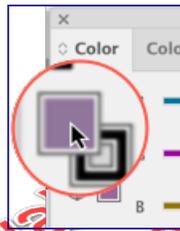


- Notice the same light purple is now showing mixed in RGB values.

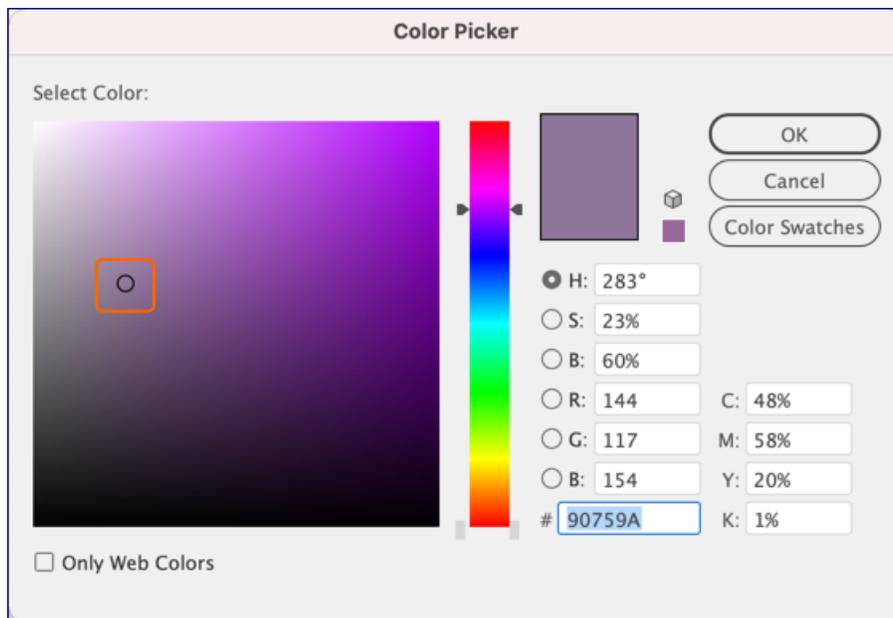


## Creating a Custom Color

1. Double-click the color chip:



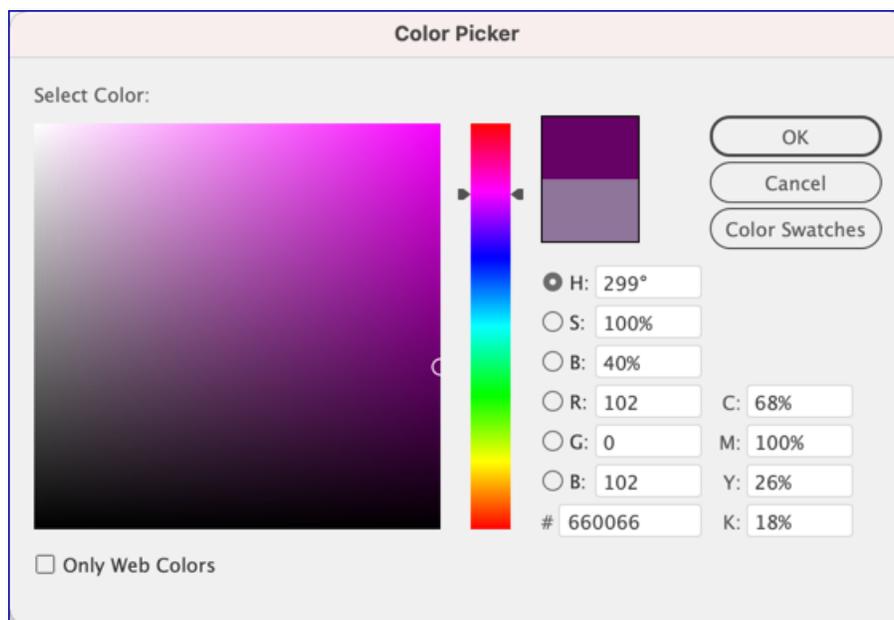
This will open the **Color Picker** allowing you to choose a color with the mouse:



2. Be cautious of the color warnings: These will only appear if the color is not able to mix for accurate printing (Out of Gamut Warning) or on screen viewing (Out of Web Color Warning):



3. To have Illustrator select a similar color that is safe, click the warning icons. The new safe color will then be ready to use:



## 2.7. Working with Swatches

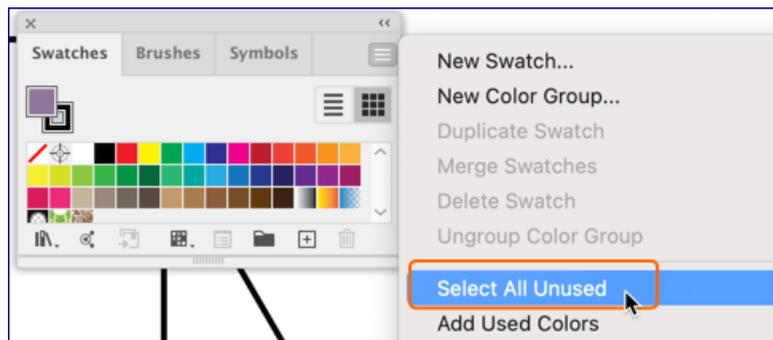
Once you choose all of the right colors, you may need a way to store and reuse the color scheme. If you know the exact colors you need to build, you can create the swatches

before you begin. You will want to clear the unused colors on the **Swatches** panel before you create your new set of colors. With color groups, you can assign a purpose to each color, making it easier to understand later how that color should be used in your project.

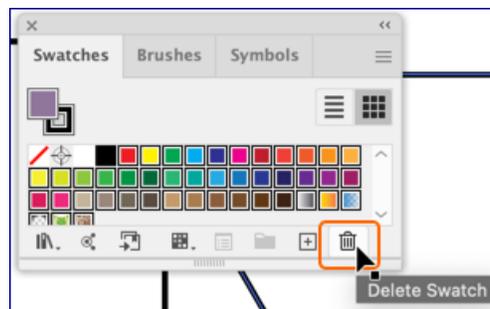
To experiment with swatches, open a new document in Illustrator.

It is always good to start by clearing unused colors:

1. From the **Window** menu, select **Swatches**.
2. On the **Swatches** panel, click the menu icon in the upper right, select **Select All Unused**:

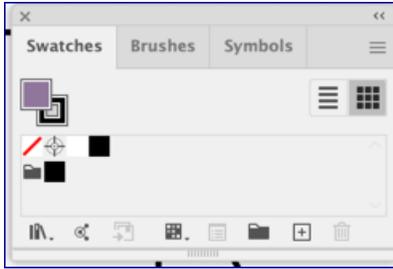


3. Click the **Delete Swatch** button (the trash can) in the lower right:



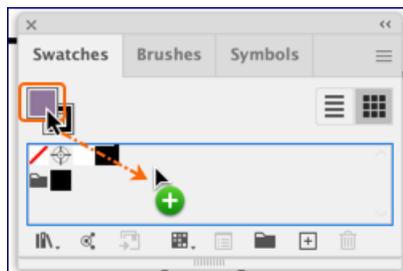
If you receive a warning, confirm you wish to delete the selected swatches.

4. The **Swatches** panel is now cleared and ready to add your colors without the clutter of all of the default colors:

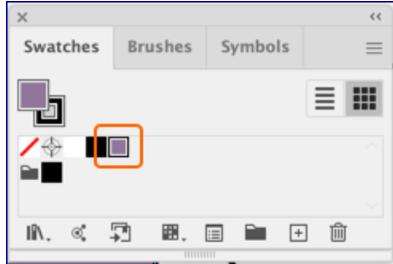


## Saving a Color Swatch

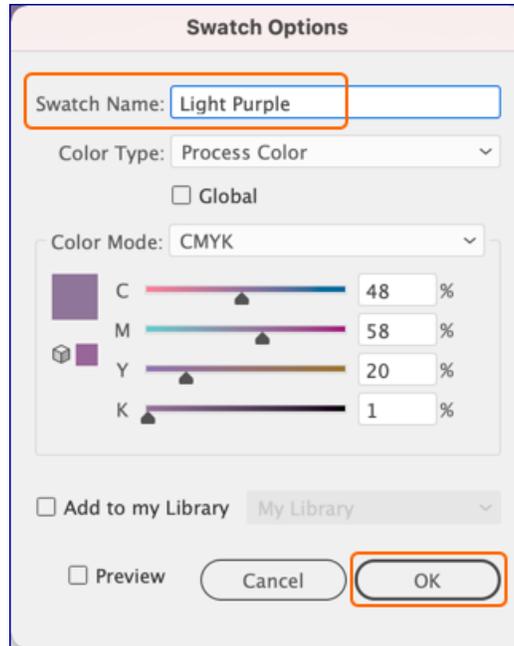
1. Drag the color chip to the **Swatches** panel:



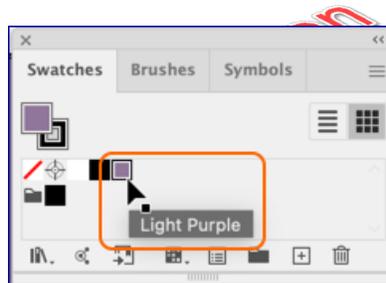
2. The color is now part of the **Swatches** panel.



3. Double-click the new color to bring up the **Swatch Options**. Name the color swatch and click **OK**:

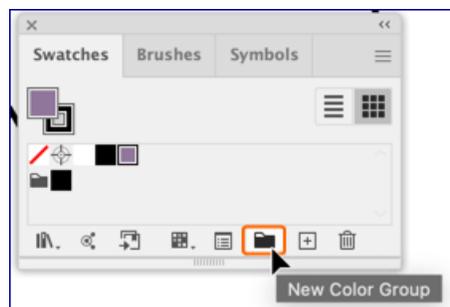


The swatch color is now named and ready to use:

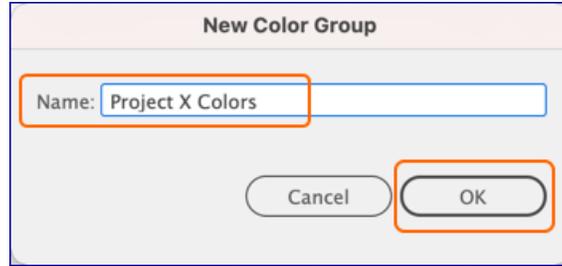


## Creating a Color Group

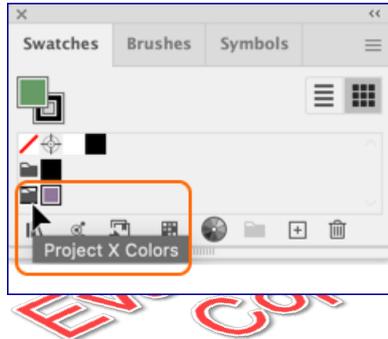
1. In the **Swatches** panel, click the **New Color Group** button in the lower right.



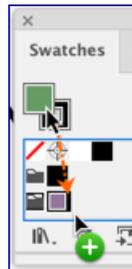
2. Name the group and click **OK**:



3. Click the new color group to select it:

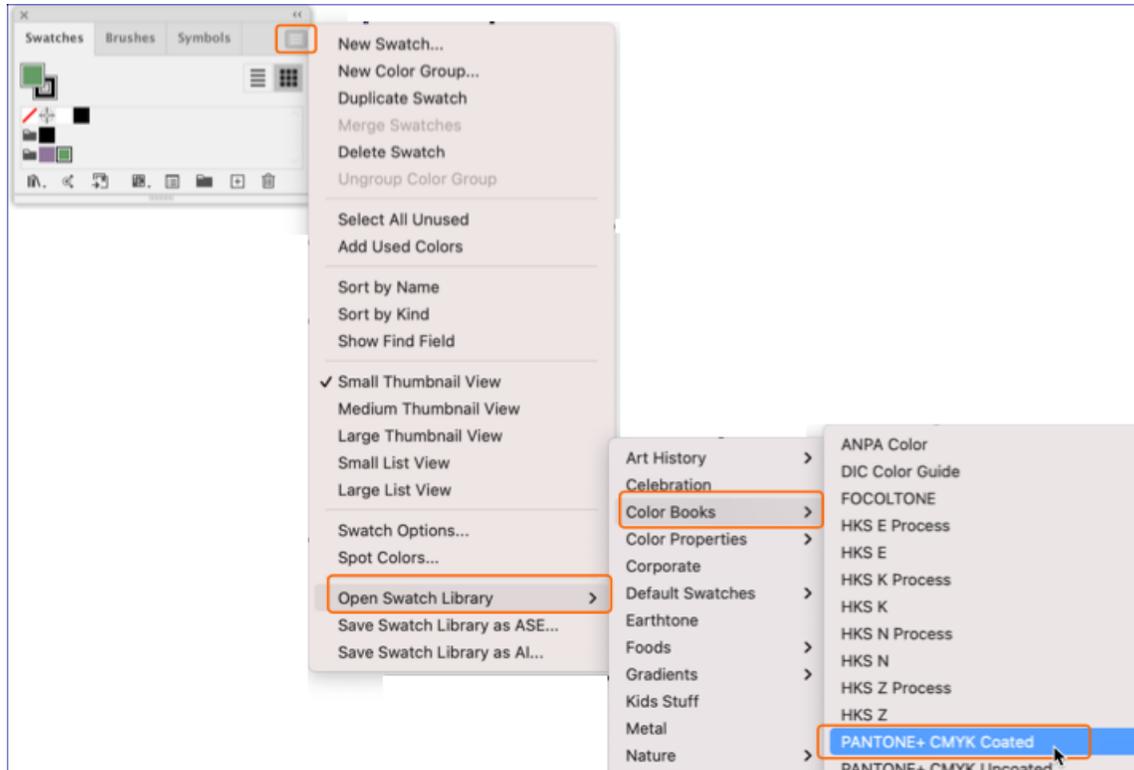


4. Try creating a new color and dragging it into the color group:



## Opening a Swatch Library

1. Go to the **Swatch** panel menu and select **Open Swatch Library > Color Books > Pantone CMYK Coated**:



2. The panel is opened and ready for you to choose a color:

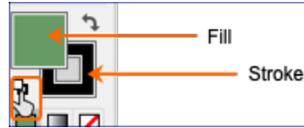


## 2.8. Fill and Stroke Attributes

The *fill* is the color inside a shape. The *stroke* is the color of the lines that make the shape.

### Resetting the Default Fill and Stroke

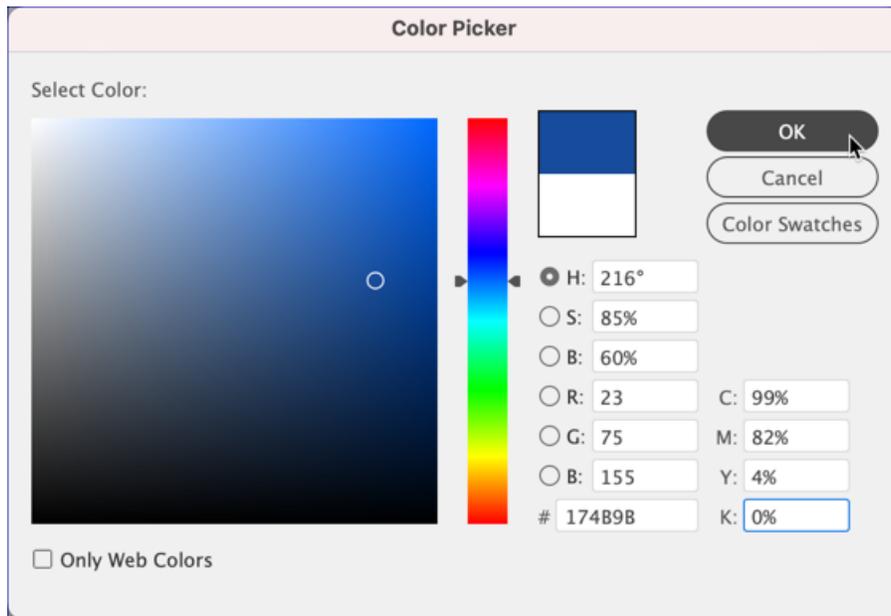
To reset to the default colors, click **Default Fill and Stroke** on the **Toolbars** panel:



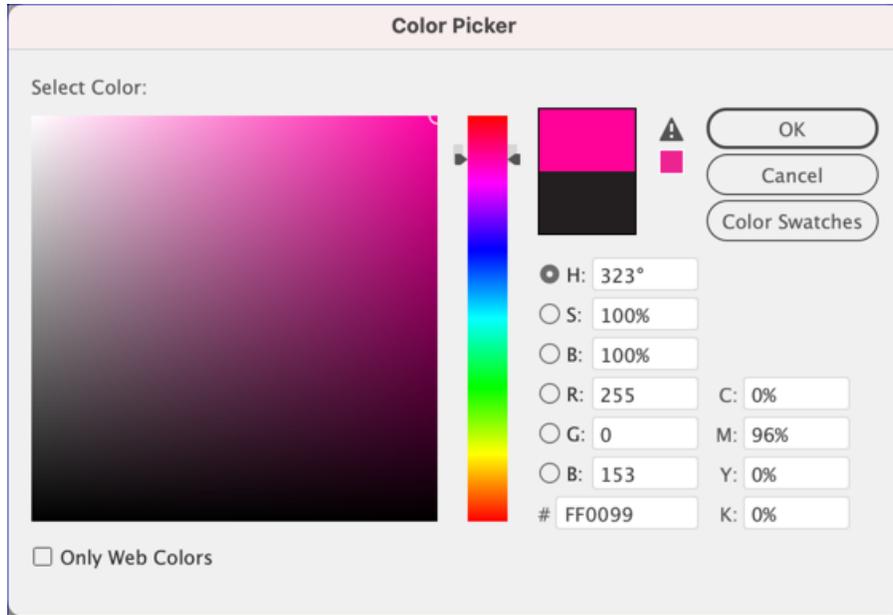
To experiment with fills and strokes, open `getting-started/Demos/colors.ai` in Illustrator. It contains a bunch of shapes.

## Editing the Fill and Stroke

1. Double-click the **Fill** tool to open **Color Picker**. Set the fill color and click **OK**:



2. Double-click the **Stroke** tool to open **Color Picker**. Set the stroke color and click **OK**:

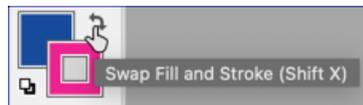


3. Try to create a 6-sided star with your new fill and stroke:

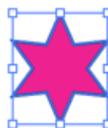


## Swapping Fill and Stroke

With your new star selected, click the **Swap Fill and Stroke** tool:

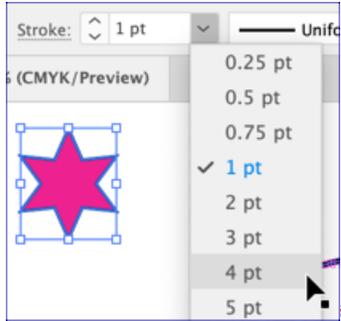


The colors of the star should be swapped:



## Setting the Stroke Weight

With your new star selected, choose a new stroke weight from the **Stroke** drop-down:



The colors of the star should be swapped:



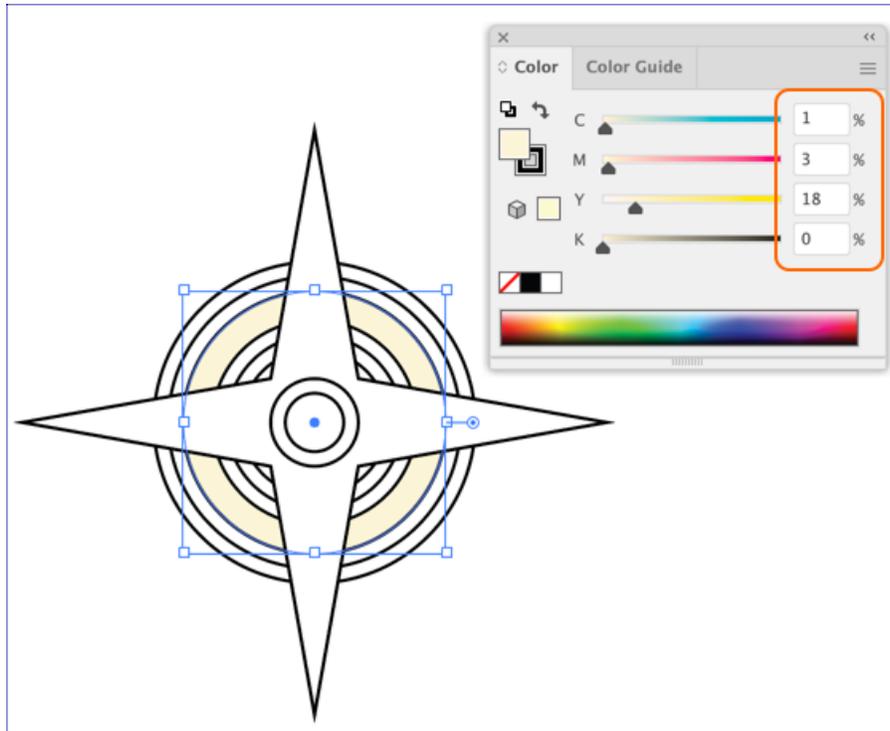
Play around with modifying the fills and strokes of the other shapes. You can see what we did in [getting-started/Demos/colors-with-fills-and-strokes.ai](#).

# Exercise 5: Format Artwork

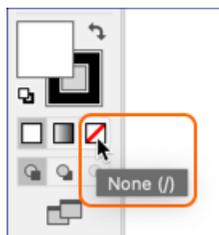
🕒 5 to 10 minutes

In this exercise, you will open a file and set the fill and stroke.

1. Open getting-started/Exercises/postcard.ai.
2. Select the third circle from the outside and set the fill to CMYK: 1%, 3%, 18%, 0%:

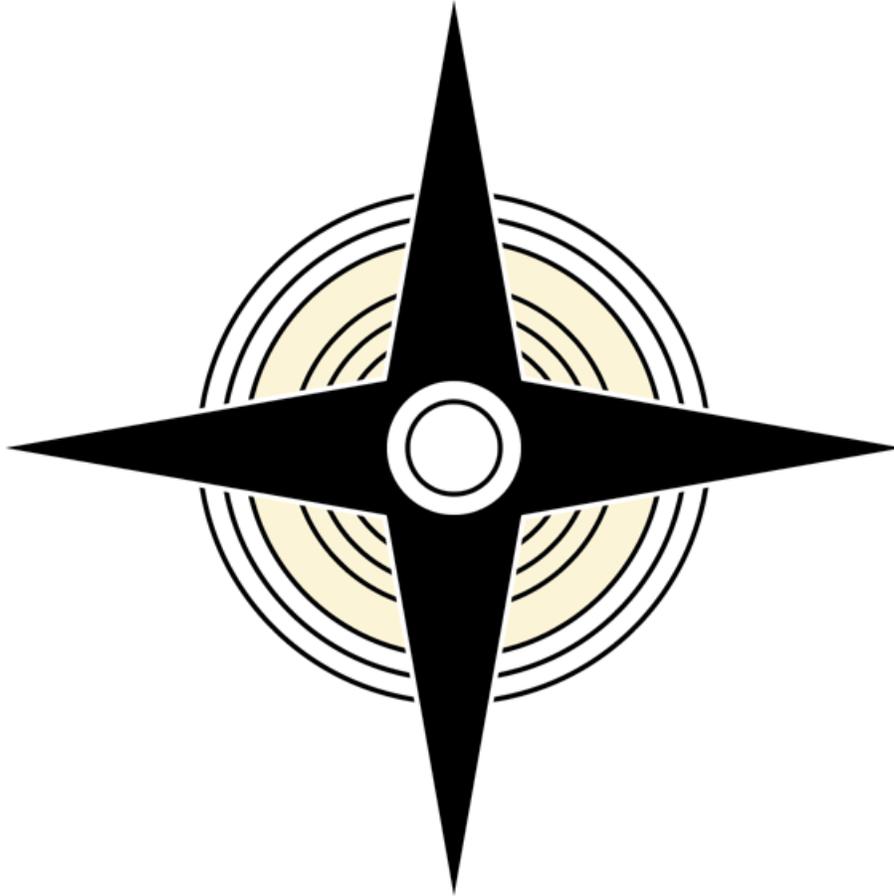


3. Set the fill for the two smaller circles to white and the stroke to black.
4. Set the fill for the remaining circles to none:



You can set all at once by holding down the **Shift** key and clicking the circles, or you can do each individually.

5. Set the fill of the star to black and give it a white stroke.
6. It should now look like this:



7. Save and close the file.

## Conclusion

In this lesson, you have learned:

- How to create a new document.
- How to create basic shapes.
- How to work with drawing modes.
- How to work with color and swatches.
- How to work with fill and stroke.



# LESSON 3

## Organizing a Project

---

### Topics Covered

- ☑ Layers and sublayers.
- ☑ Organizing with layers.
- ☑ Organizing with artboards.
- ☑ Working with duplication.

### Introduction

In this lesson, you will create an organization structure that includes artboards and layers.

---

### 3.1. Organizing a Project

Projects can easily become cluttered. Using artboards for multiple sized layouts and layers to organize the objects and shapes into named layers and sublayers helps keep things organized.

#### ❖ 3.1.1. Creating Layers and Sublayers

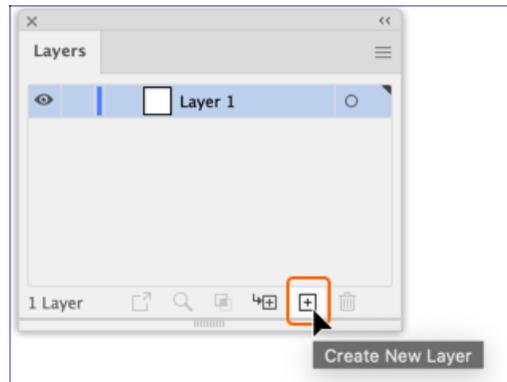
Layers can be locked, hidden, and named to keep order in the project. The **Layers** panel has the following features:

- **Visibility:** For setting layers to visible, hidden, template, or outline.
- **Edit:** For locking and unlocking layers.
- **Selection:** For showing the selection status.
- **Target:** For targeting an item.

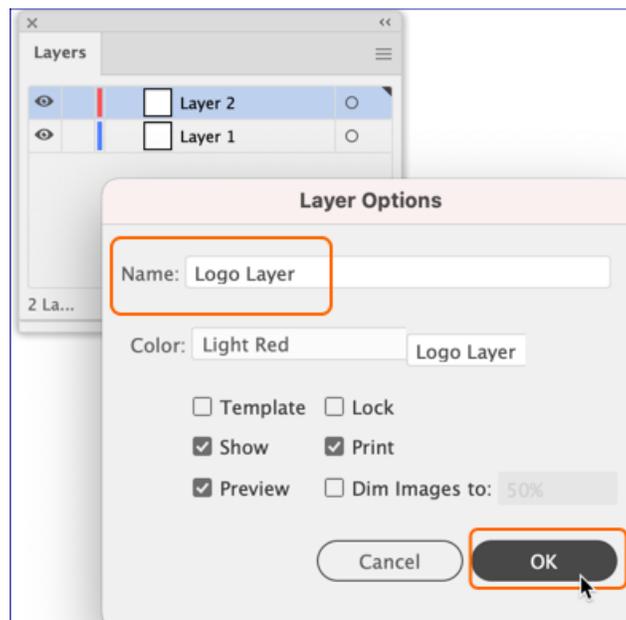
To experiment with layers, create a new document in Illustrator. The size does not matter.

## Creating a New Layer

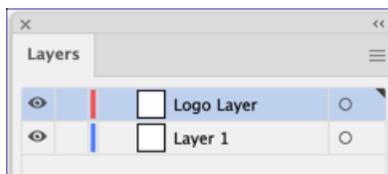
1. On the **Layer** panel, click the **Create New Layer** button:



2. Double-click the layer to bring up the layer options. Name the layer and click **OK**:



3. The layer is now ready for use:



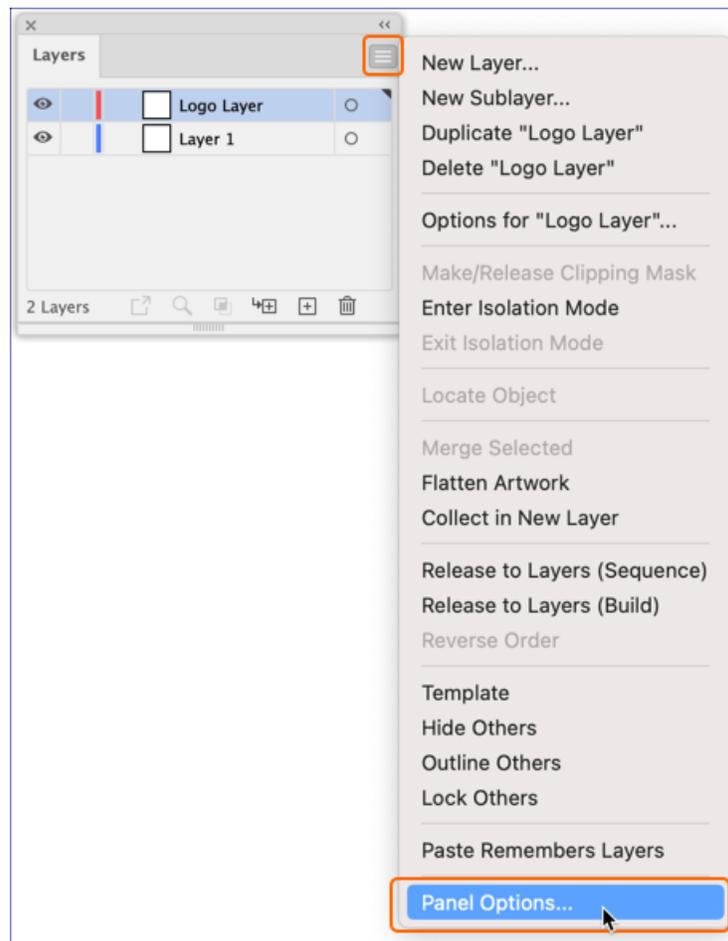
Another option is to hold down the **Alt/Option** key while you click the create new layer button to open the layer options as the new layer is created.

## Layer Options

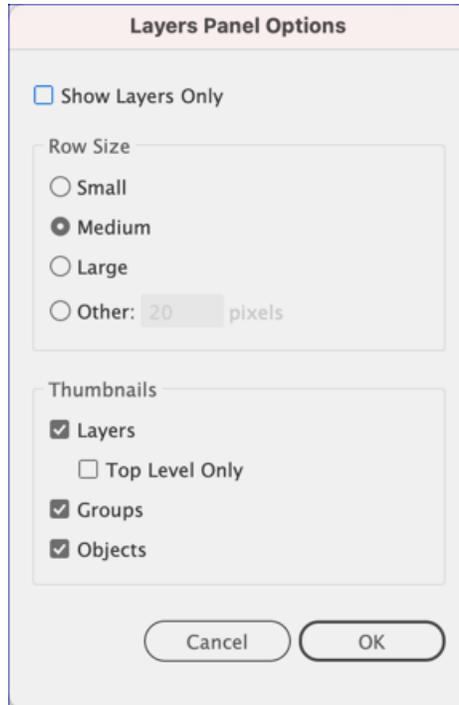
Layers can be viewed on the panel in different ways based on the **Panel Options**.

To change the layer options:

1. From the **Layers** panel menu, select **Panel Options...**:



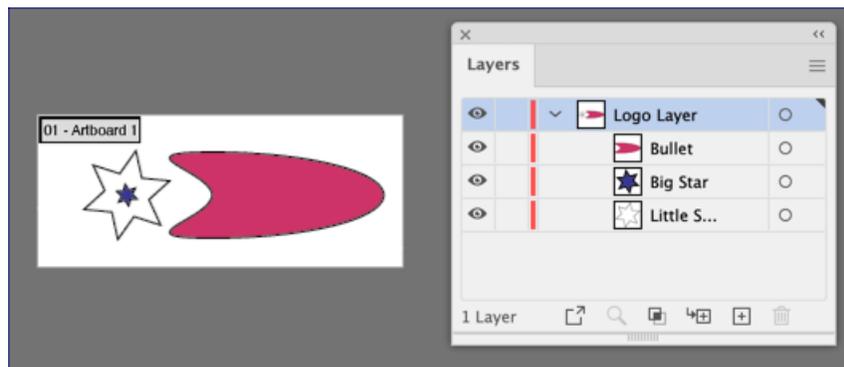
2. The **Layer > Panel Options** dialog allows you to configure how the layers appear in the **Layers** panel:



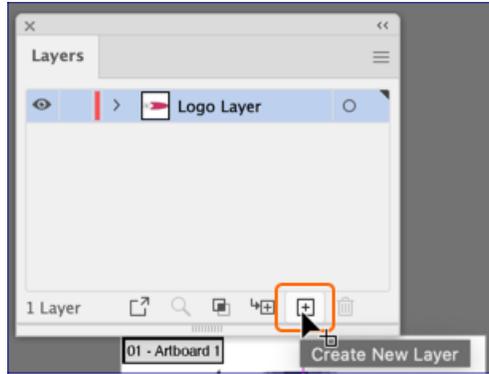
Evaluation Copy

## Moving Items Between Layers

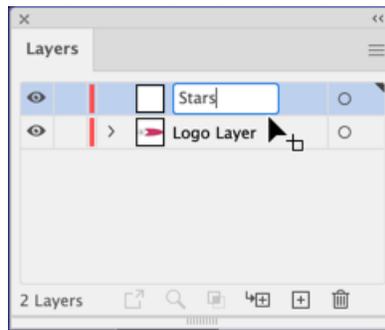
To experiment with moving items between layers, open logo.ai from organizing-a-project/Demos:



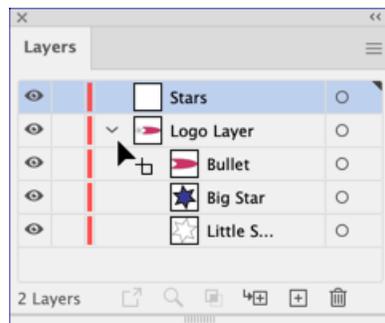
1. In the **Layers** panel, click the **Create New Layer** button:



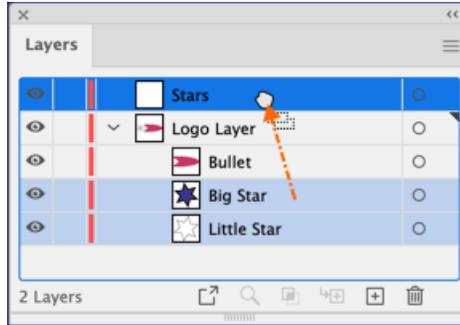
2. Double-click the “Layer 2” name and rename the new layer “Stars”:



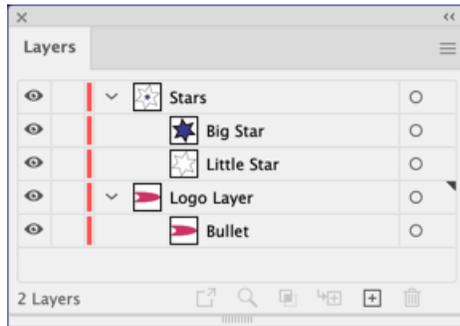
3. Expand the “Logo Layer” by clicking the chevron to the left of it:



4. **Shift-click** on the “Big Star” and “Little Star” items and drag them into the “Stars” layer:



5. Your layers will now look like this:

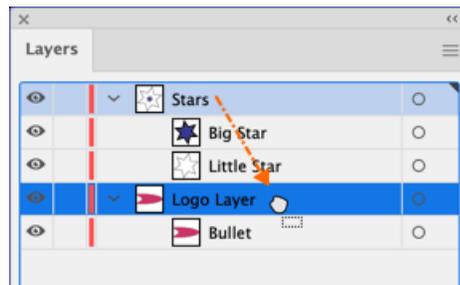


Evaluation Copy

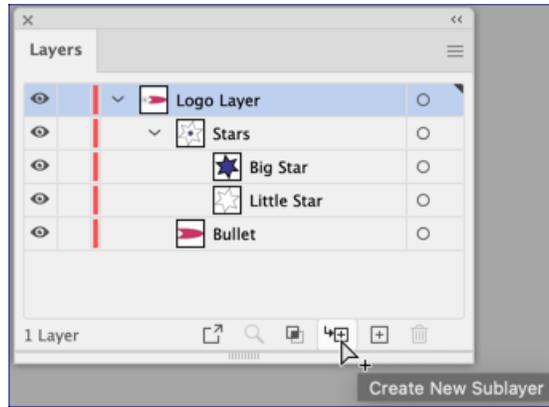
## Sublayers

As the stars are really part of the logo, it might make more sense for them to be in a sublayer:

1. In the **Layers** panel, click down on the “Stars” layer and drag it onto the “Logo” layer:



2. You also have the option of creating a new sublayer by selecting the parent layer and clicking the **Create New Sublayer** icon:

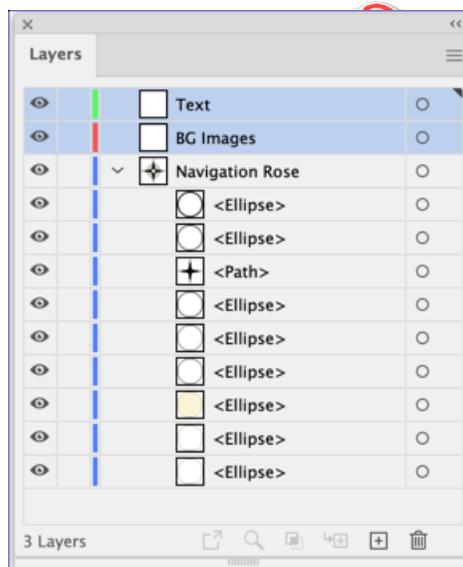


# Exercise 6: Work with Layers

🕒 2 to 5 minutes

In this exercise, you will add new layers to the postcard.

1. If you wish to continue with the postcard you have been working on, open `getting-started/Exercises/postcard.ai` in Illustrator and immediately save the file as `my-postcard.ai` in `organizing-a-project/Exercises`. Alternatively, you can start with the file at `organizing-a-project/Exercises/postcard.ai`, which picks up where we left off in the last exercise, and save the file as `my-postcard.ai`.
2. In the **Layers** panel, double-click the name of the existing layer (probably “Layer 1”) and rename it “Navigation Rose”.
3. Create two new layers: “BG Images” and “Text”.
4. The design will not have changed. The **Layers** panel should now look like this:



Don't worry if your layers are in a different order.

5. Save and close the file.

Our completed version is at `organizing-a-project/Solutions/postcard-1.ai`.



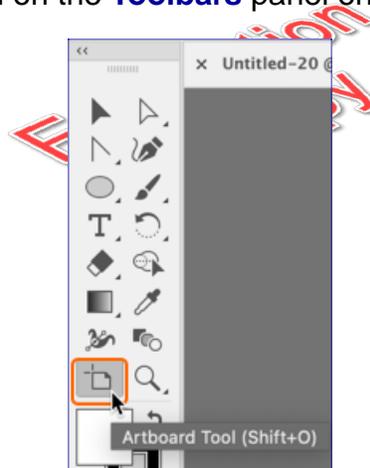
## 3.2. Artboards

Artboards offer the designer multiple options for printable artwork. Each artboard can have a custom name, size, and placement.

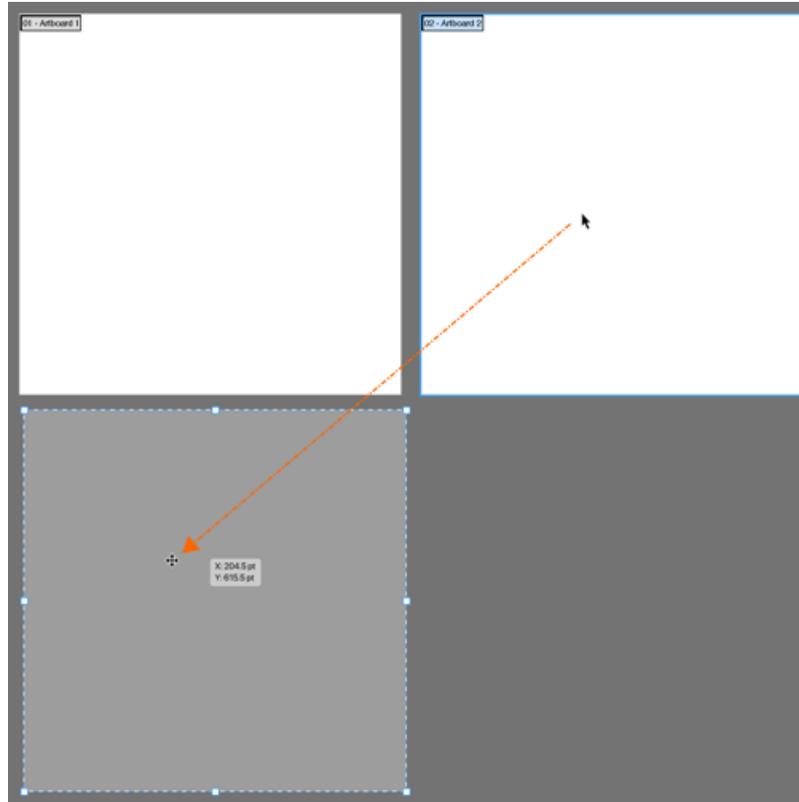
To experiment with artboards, create a new document in Illustrator with two artboards.

### Editing and Moving Artboards

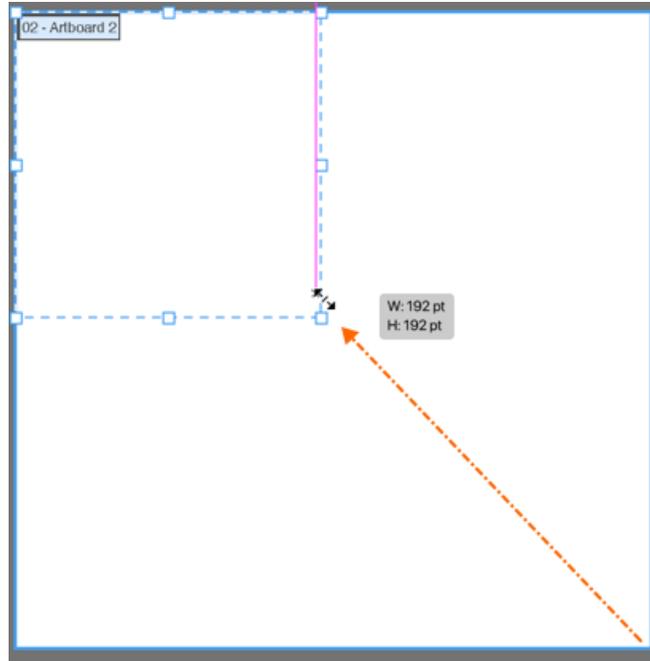
1. Click the Artboard tool on the **Toolbars** panel on the left:



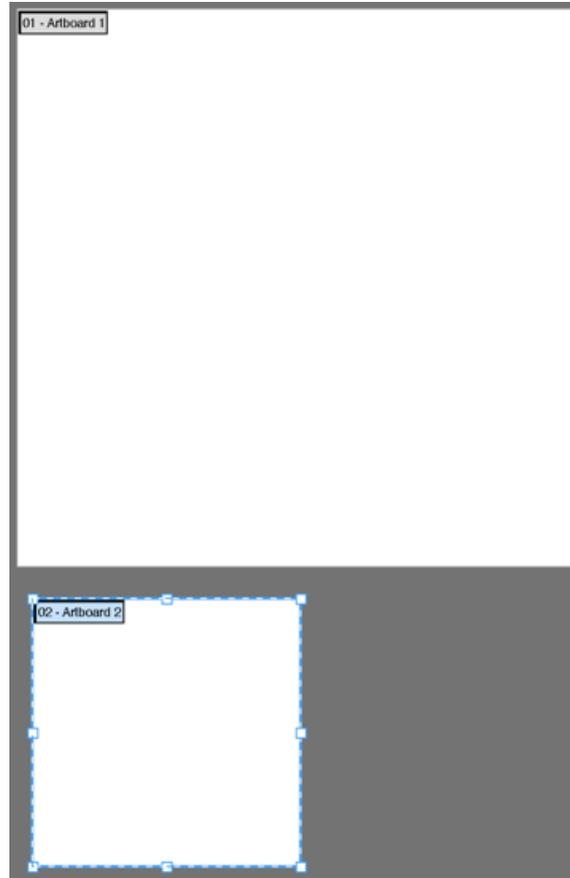
2. Click Artboard 2 and drag it below Artboard 1:



3. Grab the bottom-right handle of Artboard 2 and drag it up and to the left to shrink the artboard:



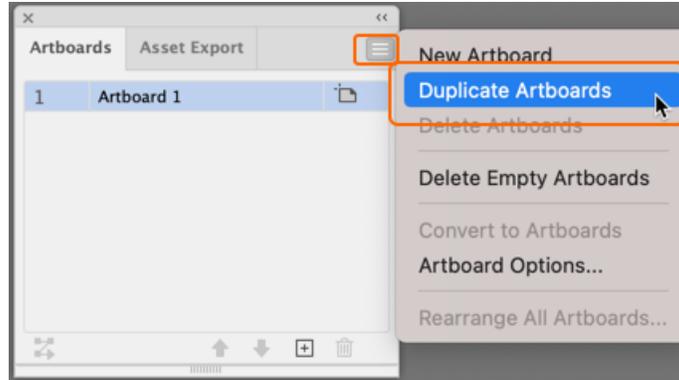
4. The artboards should now look like this:



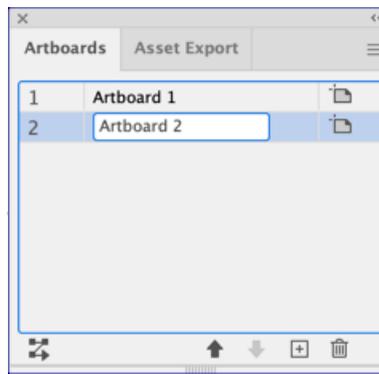
## Working with Duplication of Artboards

Once an artboard has been created and populated with artwork, it can be duplicated. This feature is helpful as it creates an easy way to version a design, making slight or drastic changes to the duplicated artboard.

1. Open `logo-with-stars-layer.ai` from `organizing-a-project/Demos` and immediately save it as `logo-with-stars-layer-2.ai`.
2. From the **Window** menu, select **Artboards** to open the **Artboards** panel.
3. Select Artboard 1 in the **Artboards** panel. Click the menu icon and select **Duplicate Artboards** to create an exact duplicate of the selected artboard:



4. Rename the new artboard by double-clicking the name and entering a new name:



If the artboard takes up the full screen, you can press **Ctrl/Cmd + 1** to show both artboards again.

5. You can now make changes to the new artboard to try different things. We made the bullet narrower, the stroke wider, and tried a different fill color:

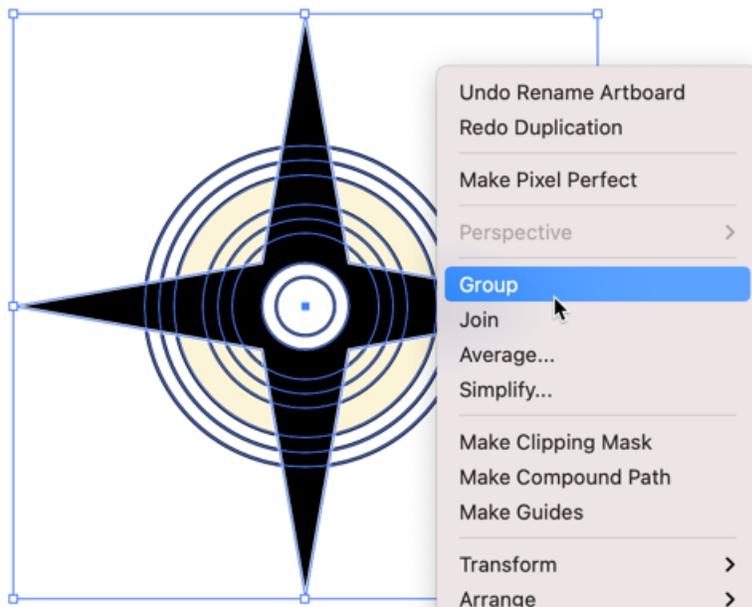


# Exercise 7: Artboards and Duplication

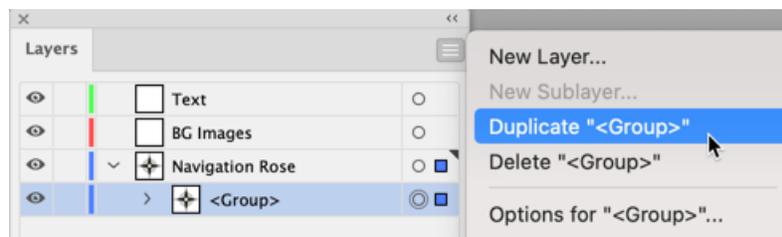
🕒 5 to 10 minutes

In this exercise, you will name artboards and duplicate artwork.

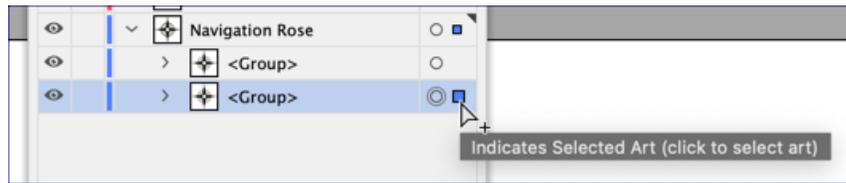
1. Open the file you were working on in the last exercise, which should be named `postcard.ai` or `my-postcard.ai` in the `organizing-a-project/Exercises` folder.
2. Rename the artboard layers: “Front of Postcard” and “Back of Postcard”.
3. Duplicate the Navigation Rose:
  - A. Using the **Group Selection Tool**, select all the shapes that make up the Navigation Rose, then right-click and select **Group** to combine all those shapes into a group:



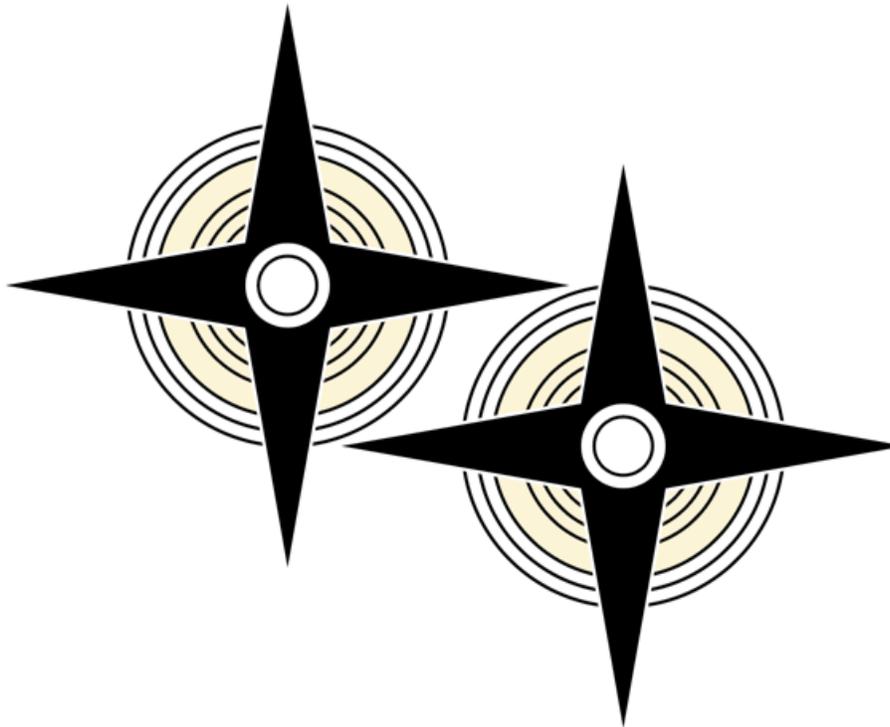
- B. On the **Layers** panel, select the new group under “Navigation Rose”, click the menu icon and select **Duplicate "<Group>"**:



- C. On the **Layers** panel, click to the right of the second group to select all the items in that group:



- D. Click and drag the selected items down and to the right, so that both Navigation Roses are visible:



4. Save and close the file.

Our completed version is at [organizing-a-project/Solutions/postcard-2.ai](#).

## Conclusion

In this lesson, you have learned:

- How to work with layers and sublayers.
- How to organize with layers.
- How to work with artboards.
- How to work with duplication.

**Evaluation  
Copy**

# LESSON 4

## Creating Advanced Illustrations

---

### Topics Covered

- ☑ The **Pencil Tool**.
- ☑ The **Pen Tool**.
- ☑ The Line tools.
- ☑ Selecting and transforming objects.
- ☑ Aligning and positioning objects.
- ☑ Grouped objects.

### Introduction

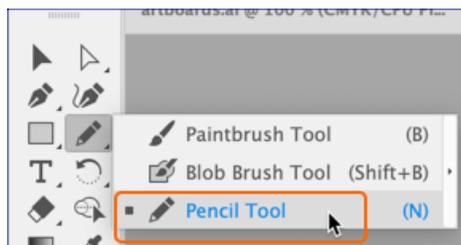
In this lesson, we will explore tools used for drawing more complex shapes and transforming objects.



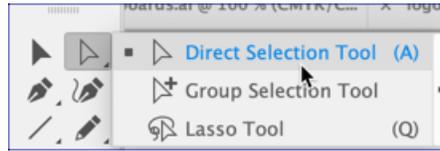
## 4.1. The Pencil and Pen Tools

To experiment with the **Pencil Tool**, create a new document in Illustrator. If you make it 600 pt x 550 pt, it will give you plenty of room to play.

From the **Toolbars** panel, select the **Pencil Tool**, which may be hidden behind the **Paintbrush Tool**:

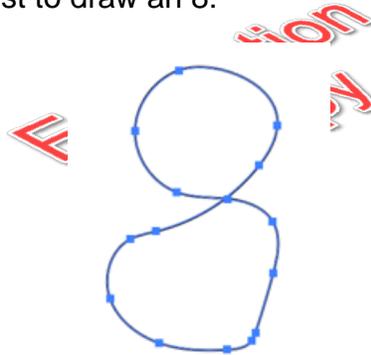


You will also find the **Direct Selection Tool** useful for editing pencil drawings, so note where to find it:

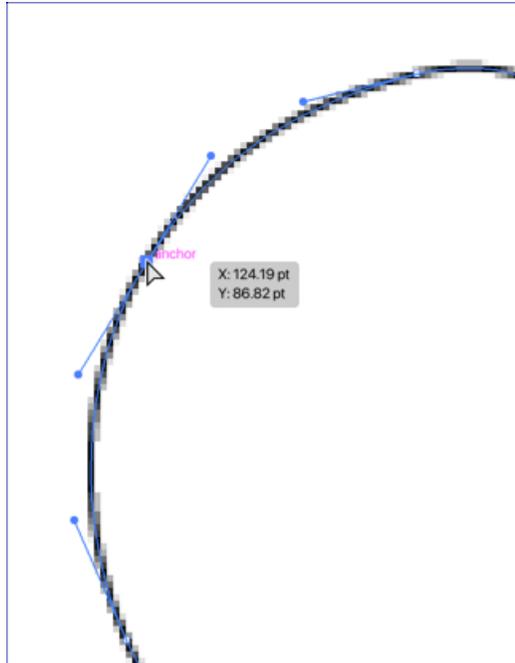


Click anywhere on the artboard and try to draw a **Figure 8**:

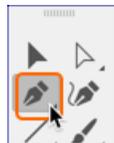
1. Start by doing your best to draw an 8:



2. Zoom in on your 8 to make it easier to edit.
3. Select the **Direct Selection Tool** and click anywhere on the path. The squares on the path are anchors. Click any one of them:



4. Segments will appear with solid circles at each end with the anchor in the center. The solid circles are Bézier handles, which are used to mathematically change the shape of the curve, which is known as a Bézier curve. In addition, the two surrounding anchors will each get a line segment with one Bézier handle. The best way to learn how these work is to play with them. Click any anchor and then click one of the Bézier handles and slowly move it toward the path, away from the path, toward the anchor, and away from the anchor to see how the path changes. You should be able to use these to make the path smoother.
5. The anchors themselves can also be moved. Click an anchor and move it in any direction to modify the path.
6. Anchors can be added and removed with the **Pen Tool**. To try this, first select the **Direct Selection Tool** and click anywhere on the path. Then, select the **Pen Tool**:



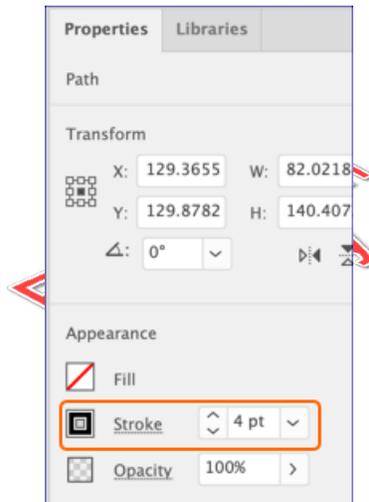
7. Remove any anchor by clicking it with the **Pen Tool**. Before the click, a minus sign will show up to the right of the pen:



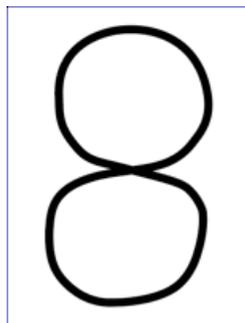
8. Add an anchor by hovering over the path where you want the new anchor and clicking. Before the click, a plus sign will show up to the right of the pen:



9. You can change the width of the stroke in the **Properties** panel after selecting the path with the **Selection Tool**:

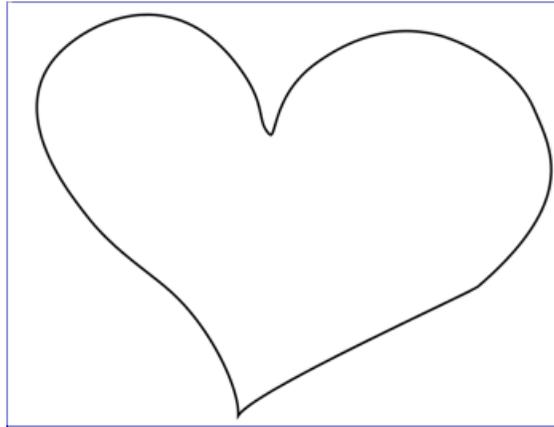


10. Our final figure 8 looks like this:

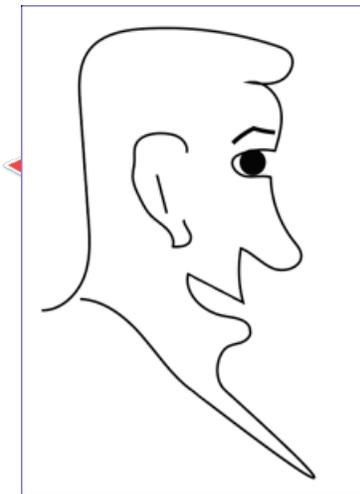


For further practice, try drawing the following shapes:

1. **Heart:** Using the same techniques used to draw the figure 8, try to draw a heart. It can be like the one below or it can be any design of heart you wish:



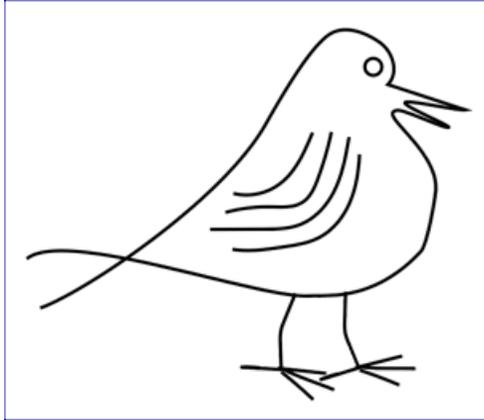
2. **Profile:** Try to draw a profile of a person. It can be like the one below or it can be any design you wish:



A few things to note:

- A. When drawing separate paths (e.g., the ear), you may find it easier to draw the path in a separate area and then drag it to where you want it.
- B. The eyeball is just a circle with a fill.
- C. The eyebrow was drawn with the pen tool. To draw with the pen tool, click and release points to create line segments. Press **Escape** to finish the path.

3. **Bird:**

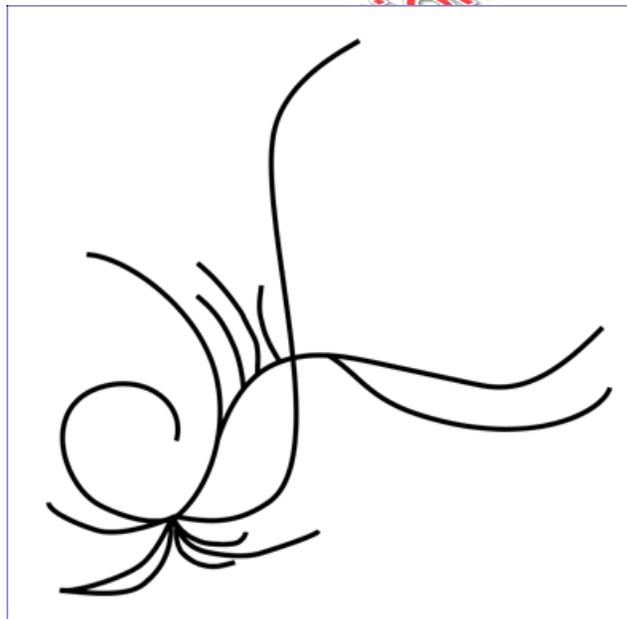


## Exercise 8: Drawing with the Pencil Tool

 5 to 10 minutes

In this exercise, you will draw with the **Pencil Tool** and save a copy of your file.

1. If you wish to continue with the postcard you have been working on, open `organizing-a-project/Exercises/my-postcard.ai` in Illustrator and immediately save the file in `creating-advanced-illustrations/Exercises`. Alternatively, you can start with the file at `creating-advanced-illustrations/Exercises/postcard.ai`, which picks up where we left off in the last exercise, and save the file as `my-postcard.ai`.
2. Create a new layer named “Draw” to draw swirl shapes and other abstract shapes with the **Pencil Tool** in the bottom left of the front of the postcard. Be creative and draw anything you like. Our design, which you can see in `creating-advanced-illustrations/Solutions/postcard-1.ai`, looks like this:



3. Save and close the file.



## 4.2. More on the Pen Tool

As we have seen, the **Pen Tool** can be used to:

- Draw paths.
- Add anchors.
- Remove anchors.

When you draw paths with the **Pen Tool**, you create a series of anchors. You can indicate the positions of Bézier handles creating the curvature of the line segment in between anchors by clicking and dragging to the position of the handle and then moving the mouse to the next anchor point and clicking down.

### Tip: Ctrl/Cmd + Click

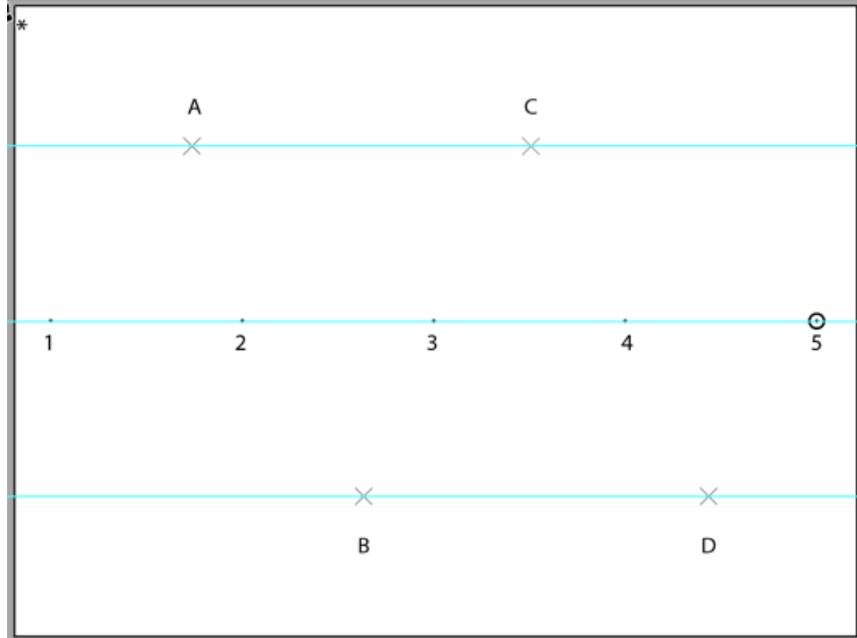
When you finish a path, hold down the **Ctrl/Cmd** key and click the artboard before starting a new path. Look for the asterisk next to the pen: \*. That indicates that you're starting a new path.

Evaluation  
Copy

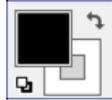
### Moderator Keys

- **Alt** key - Depending on when you use this key, several things may happen.
  - Hold this key down to adjust/change the angle of the Bézier handle.
  - Use the reshape segment  to adjust the path segment.
  - Use with the anchor point tool to pair opposite handles in the case where they can be unpaired.
- **Shift** key - Hold the **Shift** key as you create a point to constrain the angles to 0, 45, and 90 degrees.
- **Ctrl** key - While creating anchor points, this will allow you to drag unequal handles to gain better control over the next curve.
- Space bar - Hold down while closing a path to gain better control by repositioning the closing anchor point.

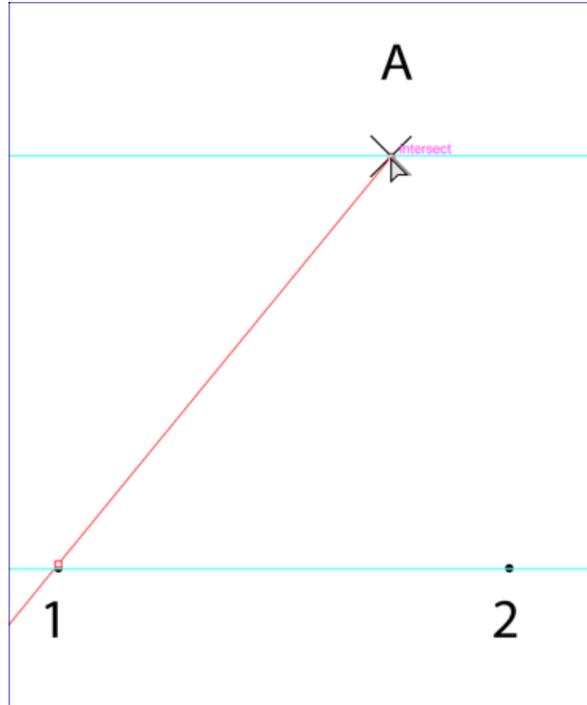
To experiment with the pen tool, open `creating-advanced-illustrations/Demos/pen-tool.ai`:



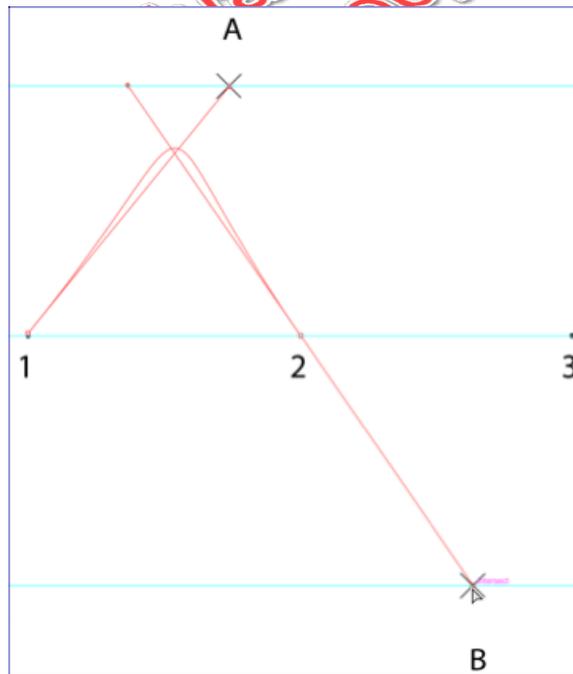
1. Press **Ctrl/Cmd + 0** to fit the artboard in the available space.
2. Close any panels that show up over the artboard.
3. Set the fill to black and the stroke to white:



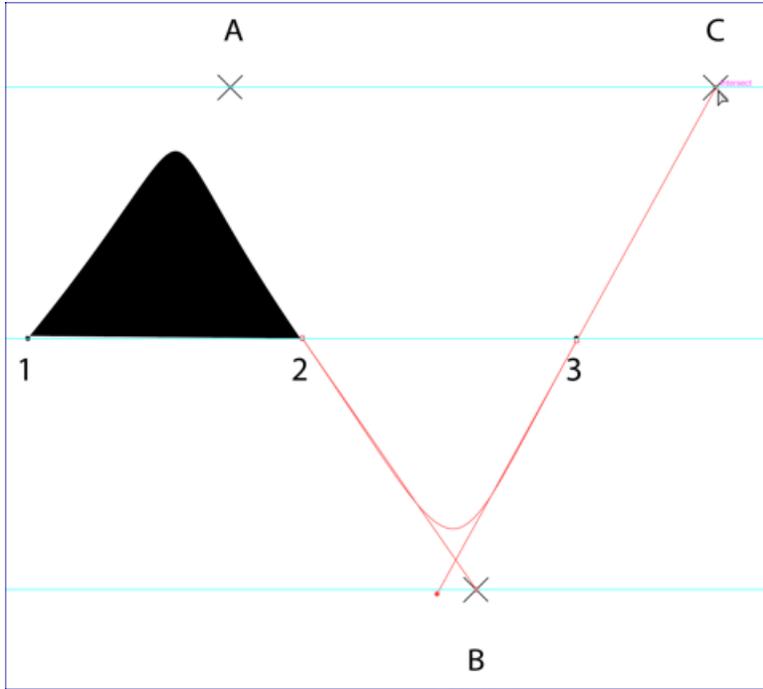
4. Select the **Pen Tool**.
5. Click position 1 anchor, drag to A and release:



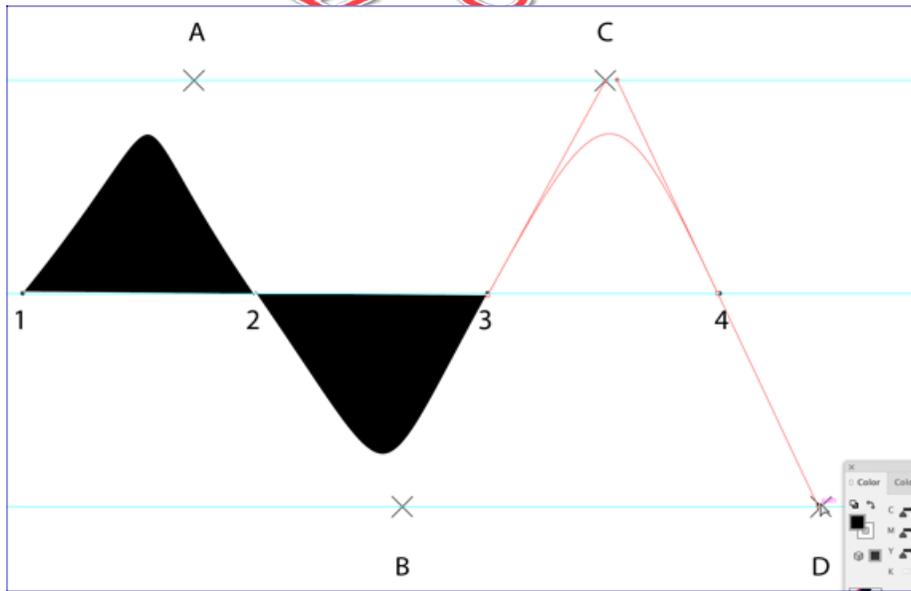
6. Click position 2 anchor, drag to B and release:



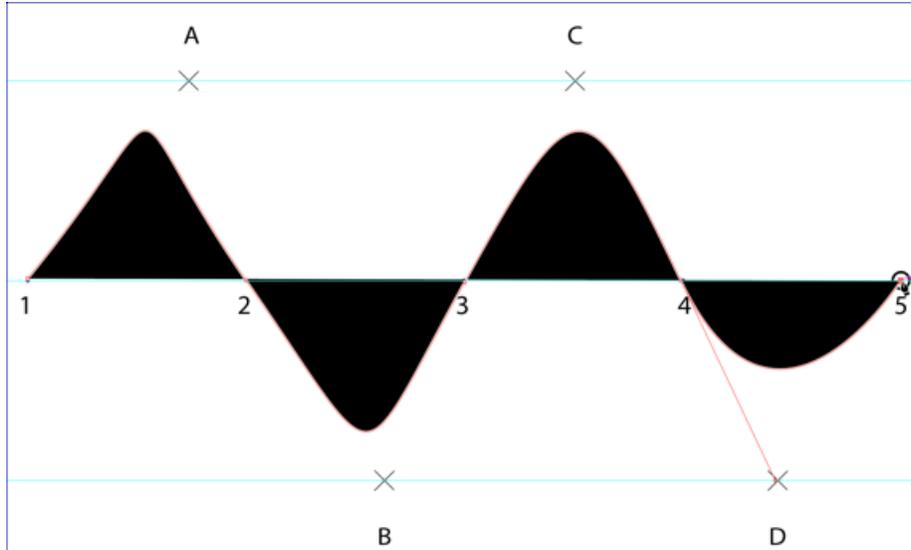
7. Click position 3 anchor, drag to C and release:



8. Click position 4 anchor, drag to D and release:



9. Click position 5 anchor, release and then press **Esc** to stop drawing:

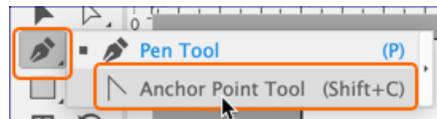


## Editing with Anchor Tools

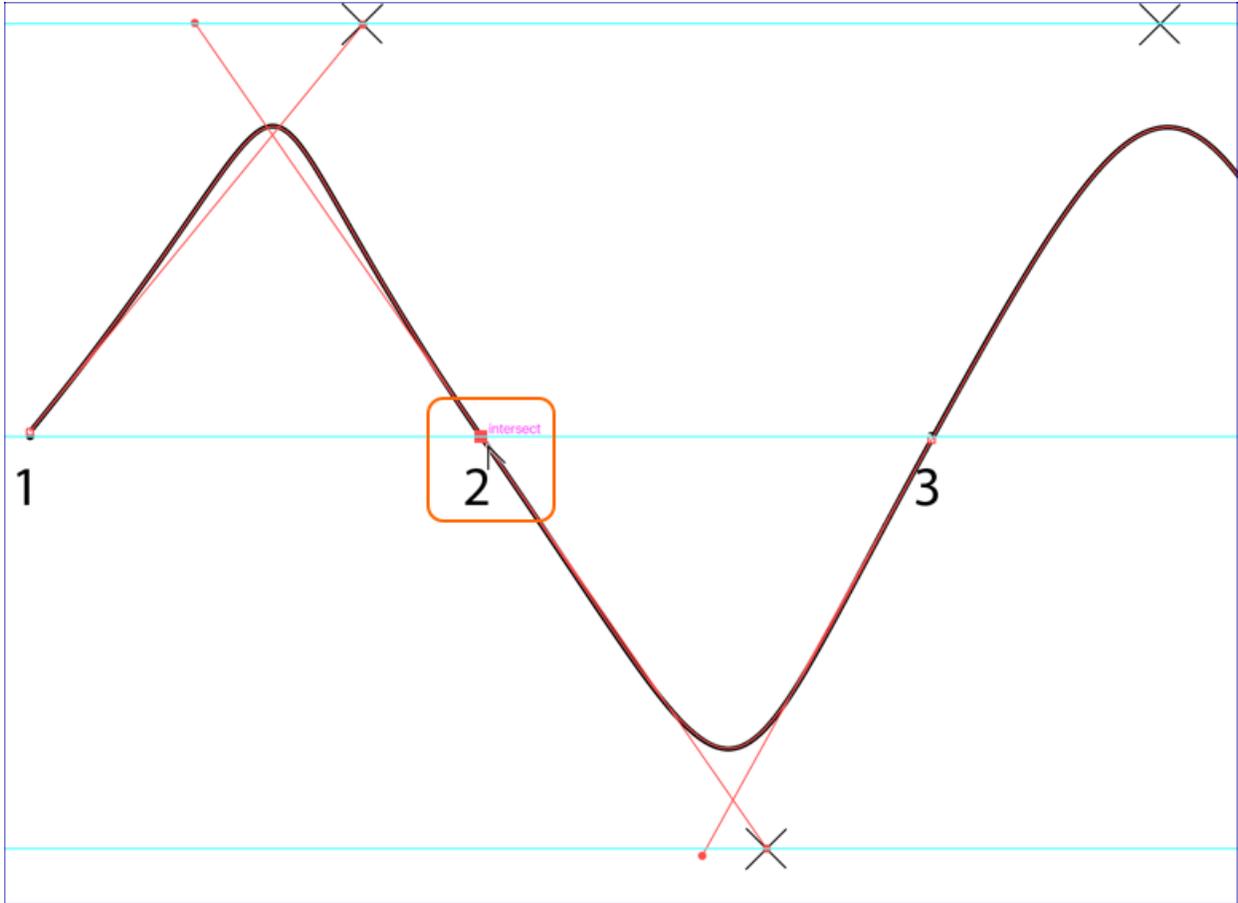
1. Using the **Selection Tool**, click the filled path and swap the fill and stroke:



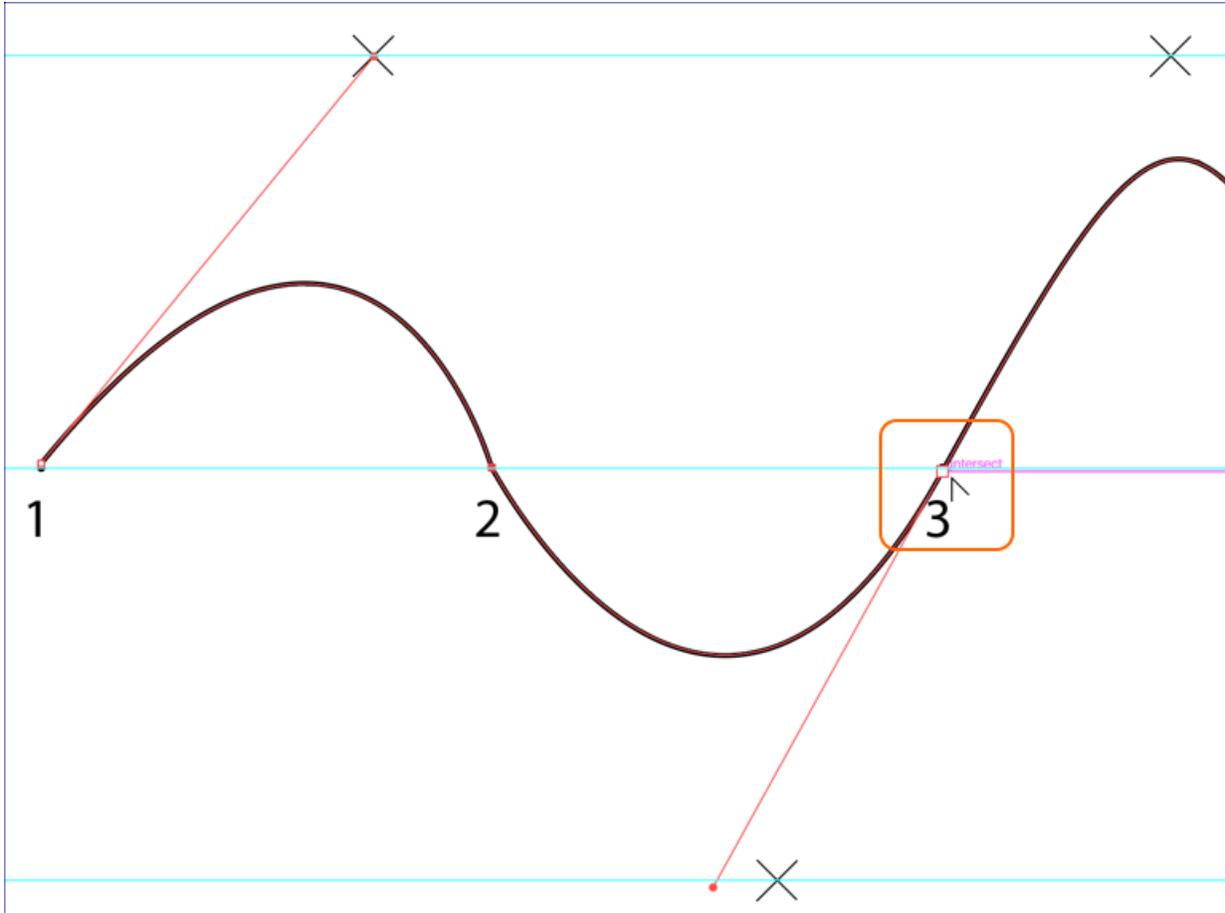
2. Switch to the **Anchor Point Tool**, which is used for modifying the curvature around anchor points:



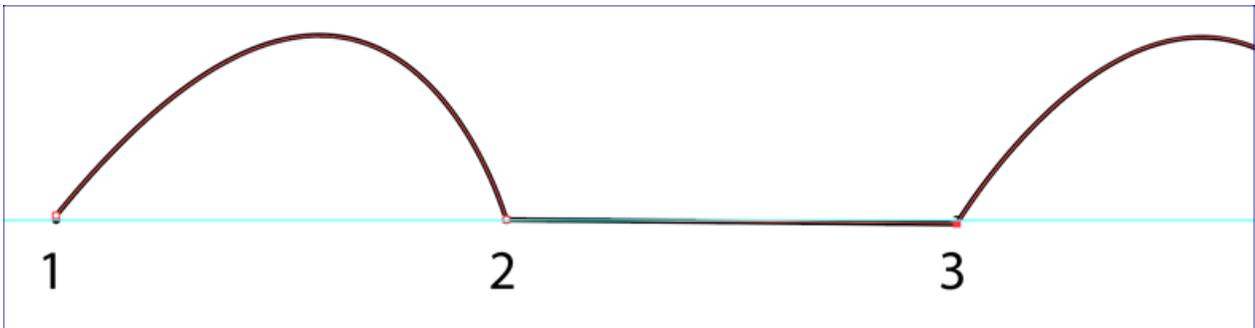
3. Remove the line segment creating the curvature around position 2 by single-clicking the anchor at position 2:



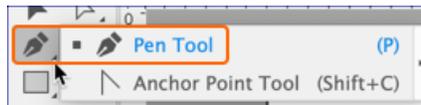
4. Remove the line segment creating the curvature around position 3 by single-clicking the anchor at position 3:



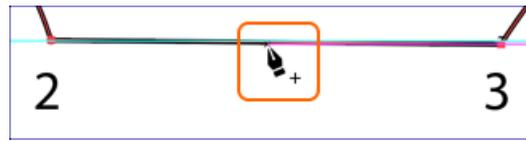
5. The segment between positions 2 and 3 will now be straight, no curves:



6. Switch back to the **Pen Tool**:



7. Click in between positions 2 and 3 to add an anchor point:

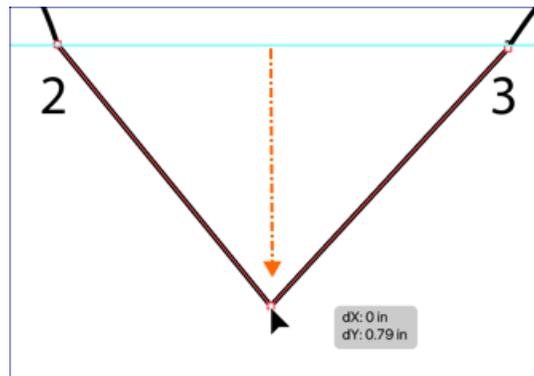


Notice the plus sign that appears to the right of the pen.

8. Switch to **Direct Selection Tool**:

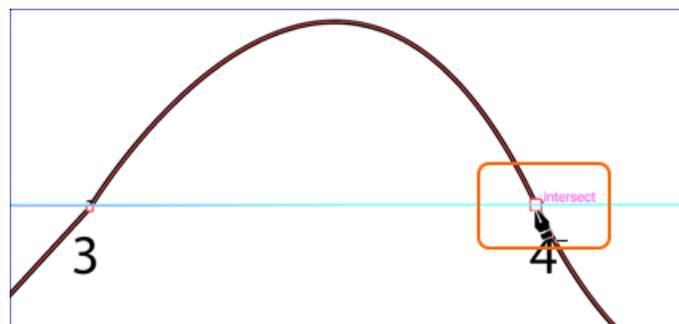


9. Click the path to select it. Then, click and hold the new anchor between positions 2 and 3 and drag downward:

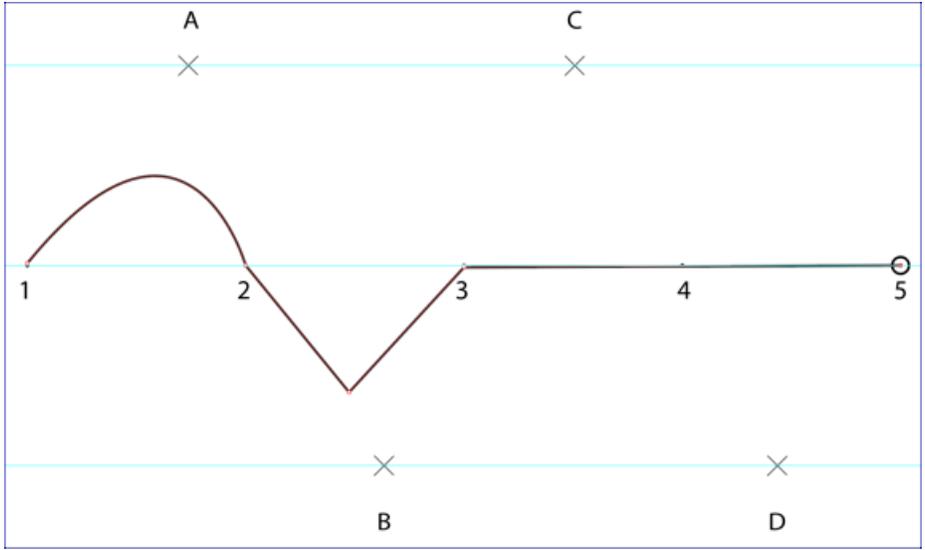


**Tip:** Hold the **Shift** key as you drag down to drag in straight line.

10. Switch back to the **Pen Tool** and click position 4 to remove the anchor:



11. Position 4 anchor point has now been deleted:

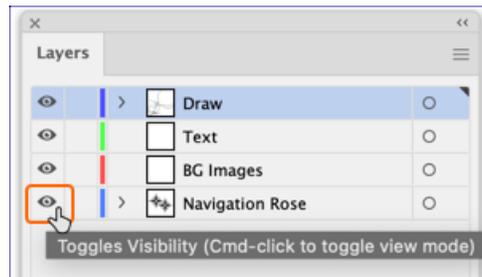


# Exercise 9: Drawing with the Pen Tool

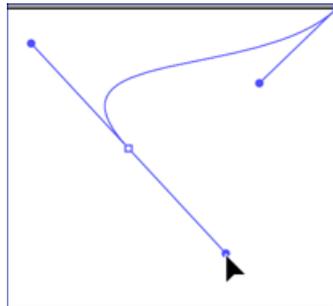
 30 to 60 minutes

In this exercise, you will open a file and draw with the **Pen Tool**. Remember to use **Ctrl/Cmd + Click** to finish one path before starting another.

1. Open `creating-advanced-illustrations/Exercises/my-postcard.ai` in Illustrator.
2. Hide the Navigation Rose layer by clicking the **eye** in the **Layers** panel:



3. Use the **Pen Tool** to create paths in the upper-right corner. Start by clicking down in the upper-right corner of the artboard and dragging, then lifting to set the Bézier handle, move the pen to where you would like to set the next anchor point, click down to set the anchor point and drag to set the next Bézier handle, release. Repeat this process until you have finished the path and then use **Ctrl/Cmd + Click** to finish path. You might start with something like this:

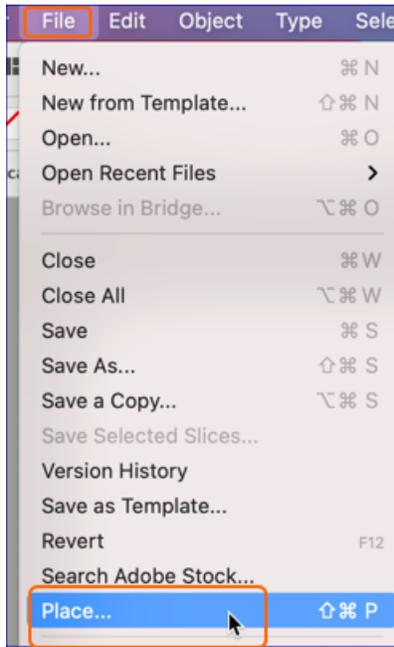


4. Save file.

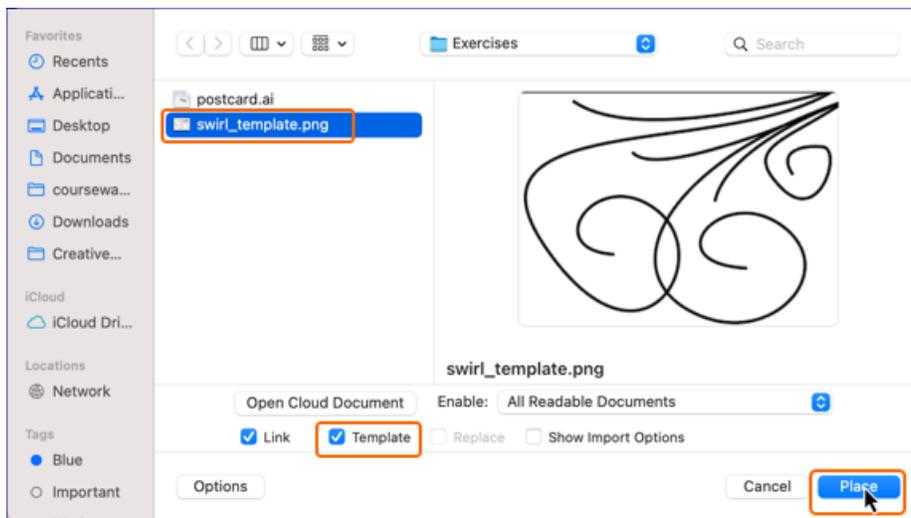
## Tracing a Layer

If you wish, you may try to create a design similar to ours by tracing the PNG file at `creating-advanced-illustrations/Exercises/swirl_template.png`.

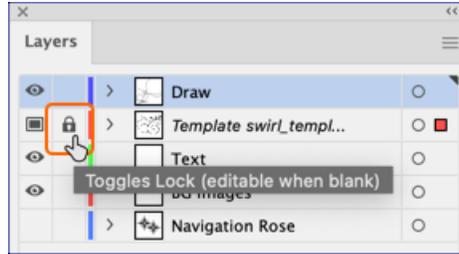
1. Select **File > Place**:



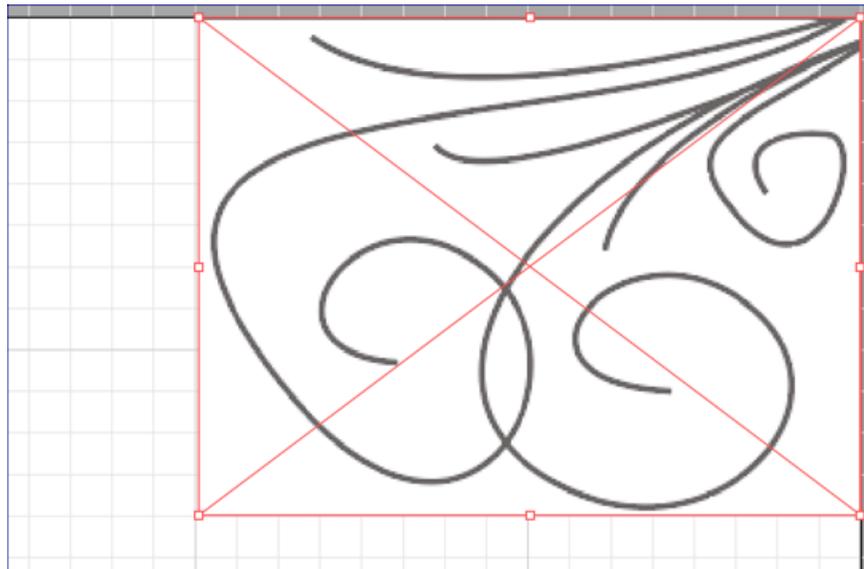
2. Navigate to `creating-advanced-illustrations/Exercises/swirl_template.png`.
3. Make sure that the **Link** and **Template** options are selected to place the PNG file as a linked template:



4. In the **Layers** panel, unlock the **Template swirl\_template.png** layer so you can reposition and resize the artwork if needed:



5. From the **View** menu, select **Show Grid** to show the grid.
6. Using the **Selection Tool**, place the image in the upper-right corner and expand it to the desired area as shown:

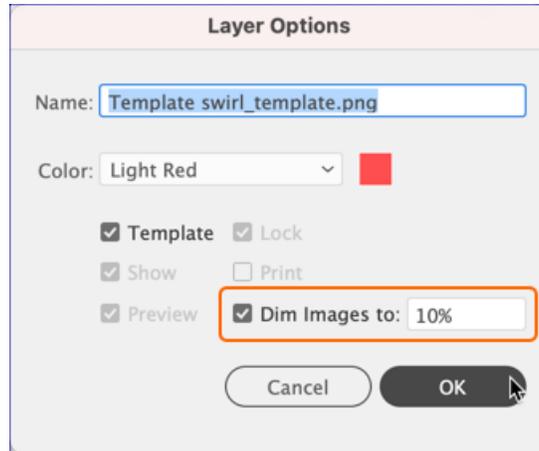


Drag anchors to shrink, expand, and reshape the image:

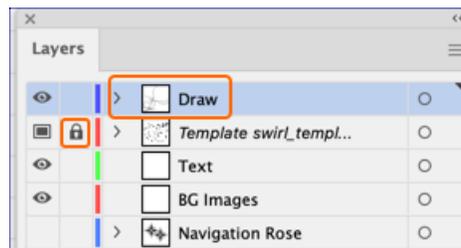


If you want to scale proportionally, hold the **Shift** key down while you drag the anchors.

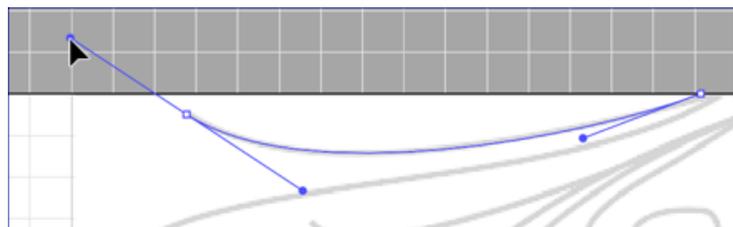
7. Double-click the “Templates swirl\_template.png” layer to open **Layer Options** dialog. Set **Dim Images to** “10%”. This will make it easier to see the paths you draw over the image:



8. Lock the **Template swirl\_template.png** layer and make sure the **Draw** layer is active:



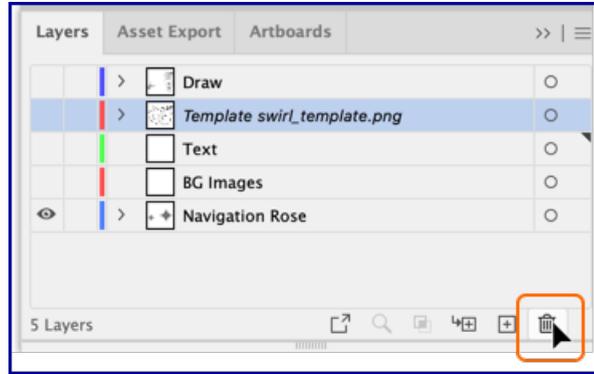
9. Using the template layer as a guide, which is locked so we do not accidentally edit any parts of the original artwork, create the swoop shapes:



If your line is not perfect, that is okay. You can always come back and edit later.

Our solution is at [creating-advanced-illustrations/Solutions/postcard-2.ai](#).

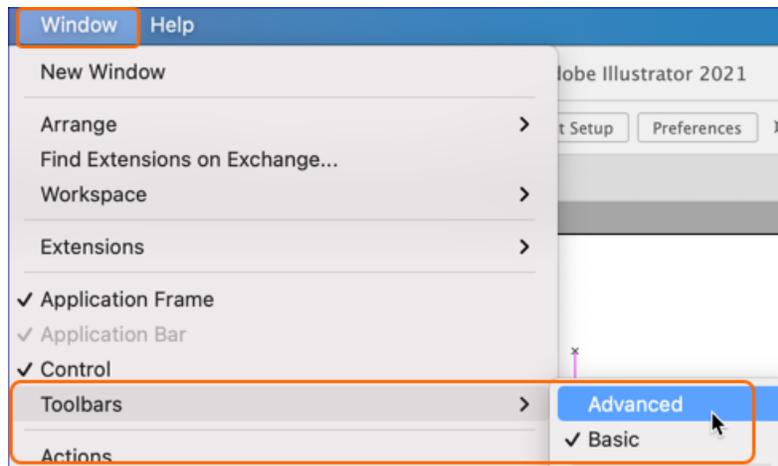
You are welcome to delete the layer containing the swirl template used for tracing:



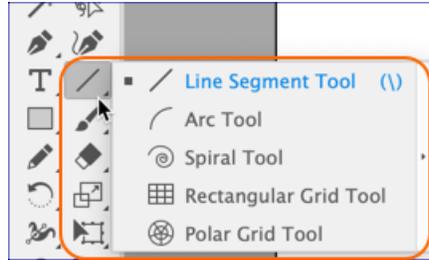
### 4.3. Using the Line Tools

To experiment with the line tools, create a new document in Illustrator. If you make it 600 pt x 550 pt, it will give you plenty of room to play.

There are several drawing tools to create different types of lines. To see these, you need to switch to the **Advanced Toolbar**, which you do by selecting **Window > Toolbars > Advanced**

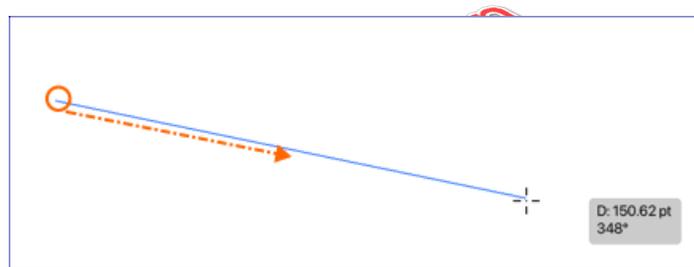


The line tools are behind the **Line Segment Tool**:

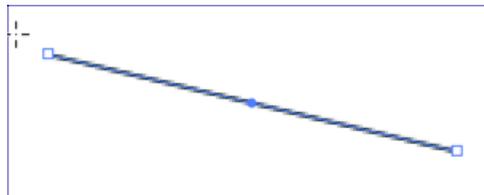


## Line Segment Tool

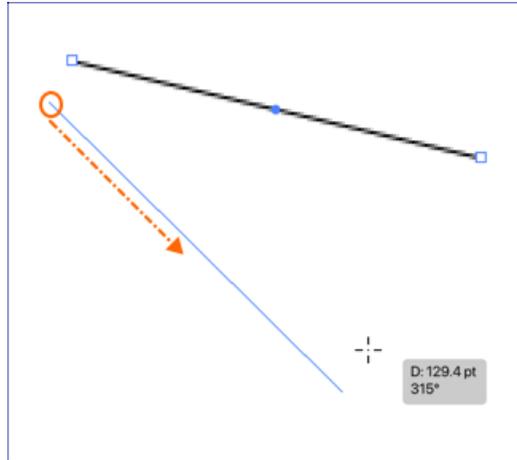
1. Select the **Line Segment Tool**: 
2. Click and drag to draw a line:



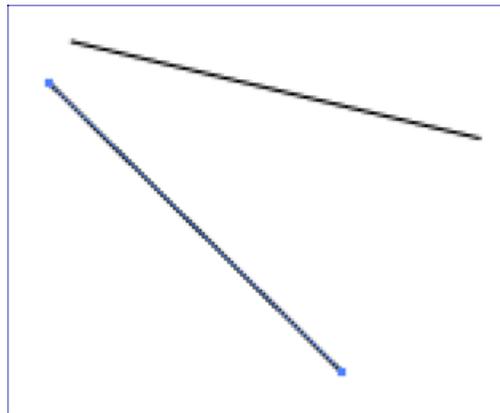
3. Release the mouse to complete the line:



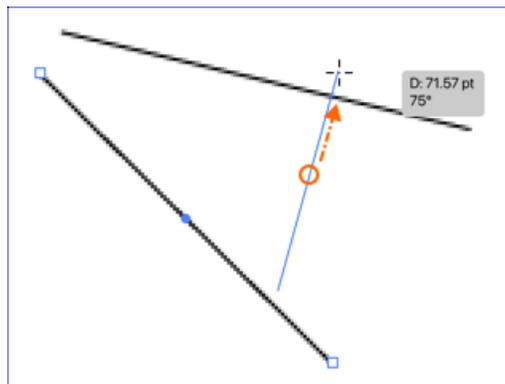
4. To create perfect lines constrained to 0, 45, or 90 degrees, hold down the **Shift** key as you drag:



5. Release the mouse first and then release the **Shift** key to complete the line:

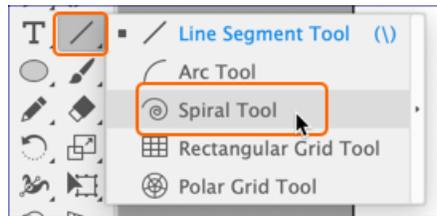


6. To draw a line from the center out, hold down on the **Alt/Option** key while you click and drag:

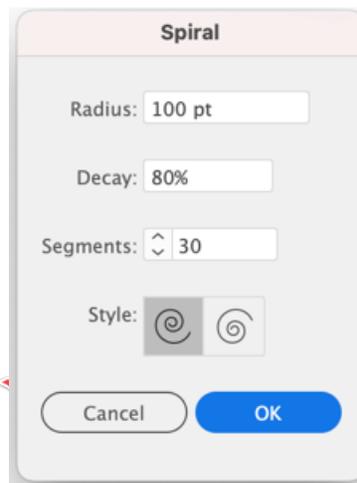


## Using the Spiral Tool

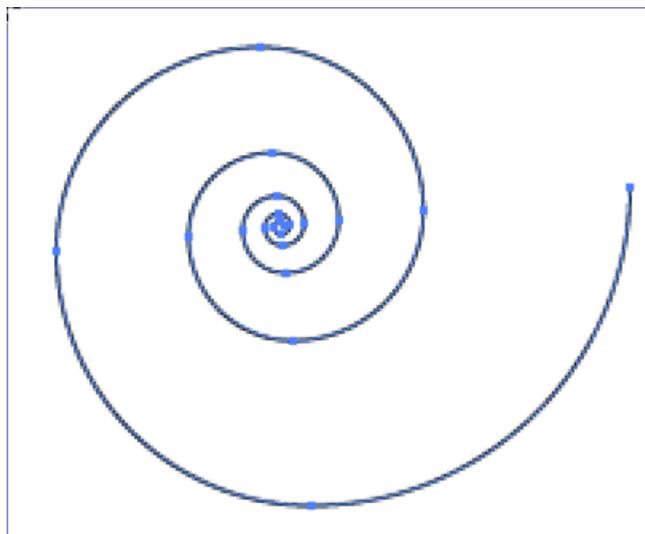
1. Switch to the **Spiral Tool**:



2. Click the drawing area to display options. Type in values and then click **OK**:



The options we have selected will draw this spiral:



Play around with the settings to draw different spirals.

3. You can also click and drag to draw spirals.



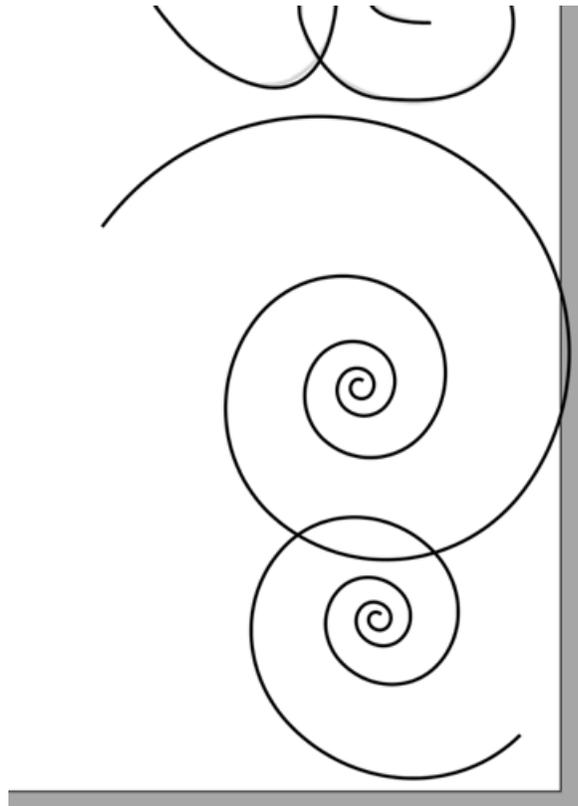
# Exercise 10: Adding Spirals

 5 to 10 minutes

---

In this exercise, you will create swirls with the **Spiral Tool**.

1. Open `creating-advanced-illustrations/Exercises/my-postcard.ai` in Illustrator.
2. Add two or more spirals in the bottom right of the front of the postcard. Ours looks like this:



3. Save and close the file.

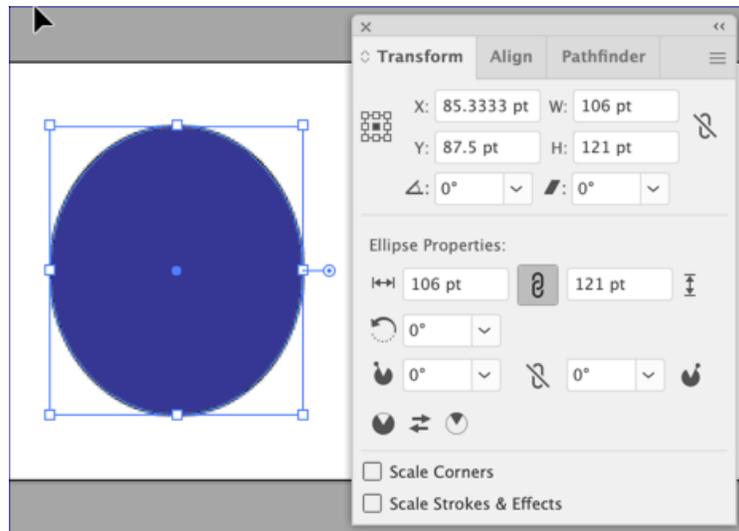
Our solution is at `creating-advanced-illustrations/Solutions/postcard-3.ai`.



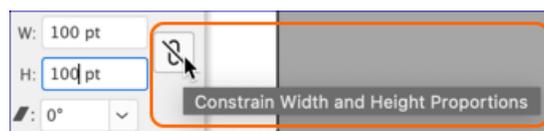
## 4.4. Transforming Objects

To experiment with transforming objects, open `creating-advanced-illustrations/Demos/transforms-1.ai`.

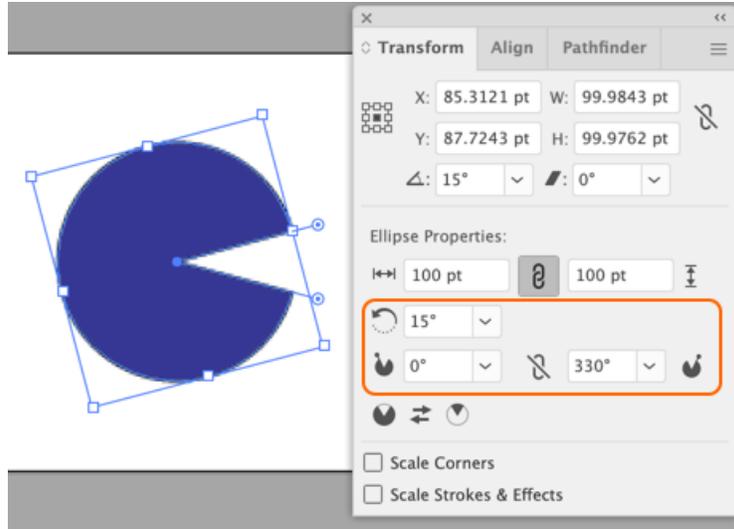
1. Open the **Transform** panel from the **Window** menu.
2. Select the blue ellipse and notice the options shown in the **Transform** panel:



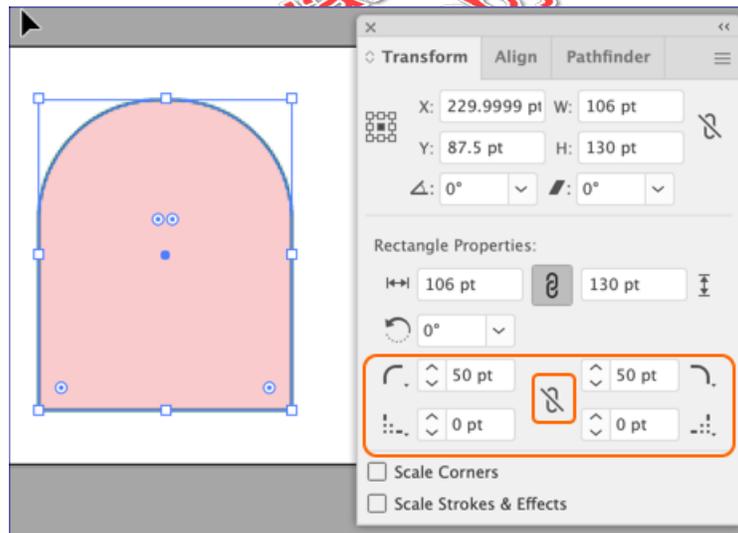
- The **X** and **Y** values are the position of the radius on the artboard.
- The **W** and **H** values are the width and height of the ellipse. Set those both to 100 pt to make a perfect circle.
- Click the **Constrain Proportions** icon so that when the shape is resized, the proportions remain the same:



- Create a Pacman-like figure by setting the **Ellipse Angle** to 15° and the **Pie End Angle** to 330°:

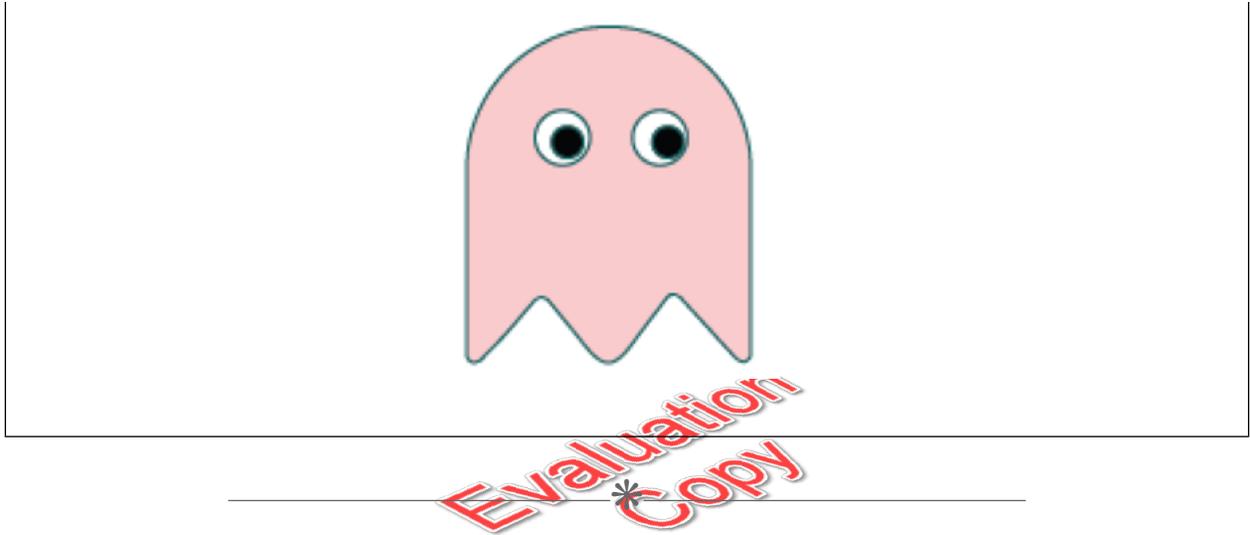


3. Select the pink rectangle and notice that some of the options in the **Transform** panel change.
4. Change the **Corner Radius** values for the top two corners to 50°. You will need to make sure the corner radius values are not linked:



## Ghosts?

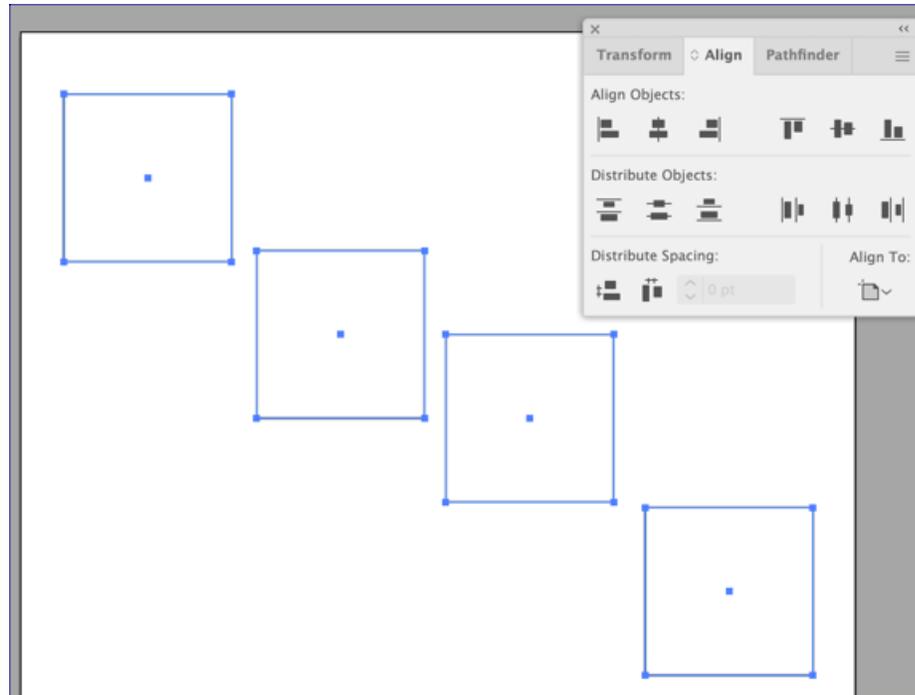
Using your **Pen Tool** skills, you could change that rectangle into a Pacman ghost:



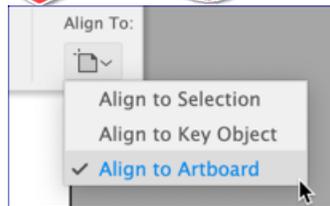
## 4.5. Align and Distribute Objects

Objects can be aligned and distributed on the artboard using the **Align** panel (**Window > Align**). To experiment with transforming objects, open `creating-advanced-illustrations/Demos/align-1.ai`.

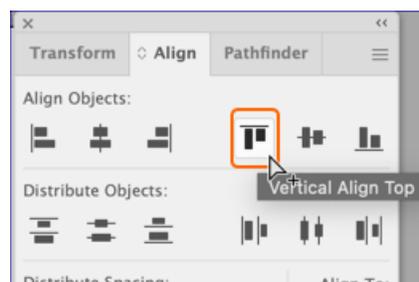
1. Open the **Align** panel from the **Window** menu if it's not already open.
2. Select all four rectangles:



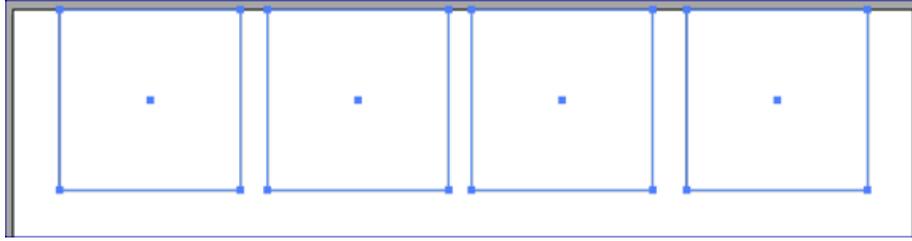
3. Make sure **Align to Artboard** is selected:



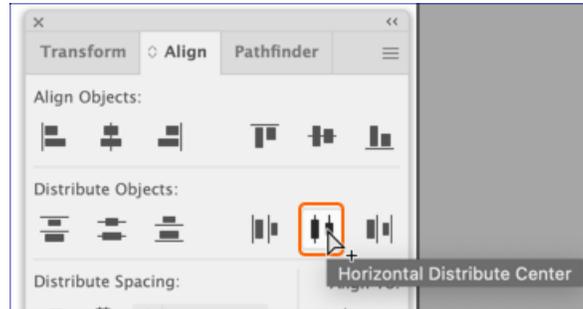
4. Click the **Vertical Align Top** button:



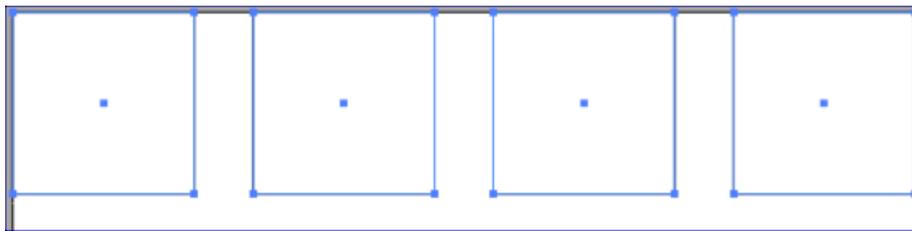
The squares will now be aligned to the top of the artboard:



5. Click the **Horizontal Distribute Center** button:

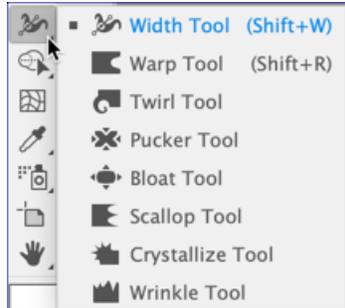


The squares will now be distributed evenly across the top of the artboard:



## 4.6. Tools for Reshaping

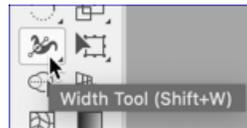
Illustrator has many reshaping tools for altering and distorting objects. A few of the reshaping tools that add character and drama to objects are behind the **Width Tool**:



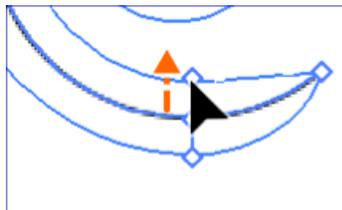
- **Width Tool:** Stroke with variable width.
- **Warp Tool:** Mold objects with cursor motion.
- **Twirl Tool:** Swirl distortions.
- **Pucker Tool:** Deflate objects.
- **Bloat Tool:** Inflate objects.
- **Scallop Tool:** Random curved details.
- **Crystallize Tool:** Random spiked details.
- **Wrinkle Tool:** Wrinkle details.

To experiment with the **Width Tool**, open `creating-advanced-illustrations/Demos/width-1.ai`.

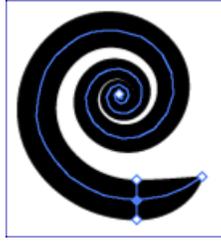
1. Select the **Width Tool**:



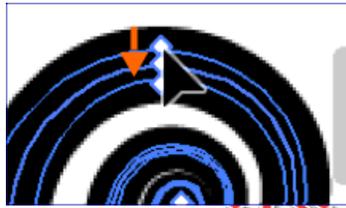
2. Click the bottom part of the spiral and slowly drag out to widen the path:



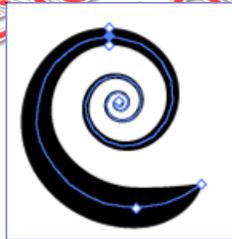
Release the mouse. The spiral will now look something like this:



3. Click the top of the spiral and slowly drag downward to make that part of the path narrower:

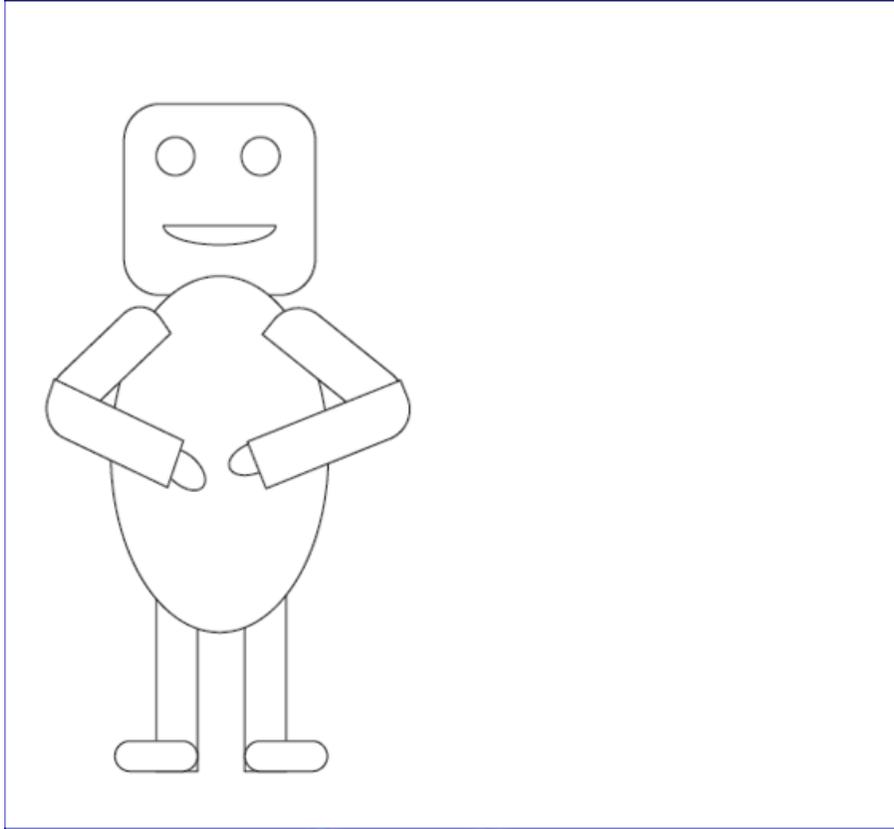


The spiral will now look something like this:

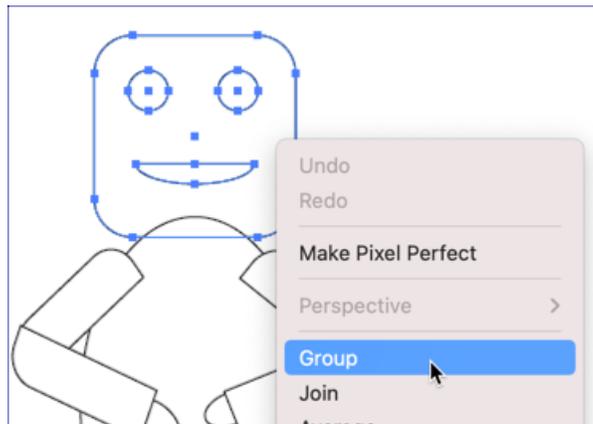


## 4.7. Working with Grouped Objects

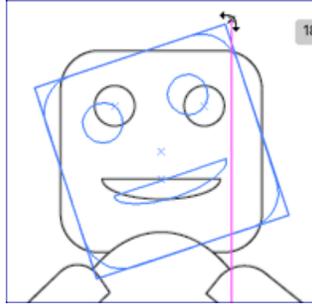
Once we place all of the objects just right, grouping makes sure they remain that way when moved. To experiment with grouping objects, open `creating-advanced-illustrations/Demos/group-1.ai`:



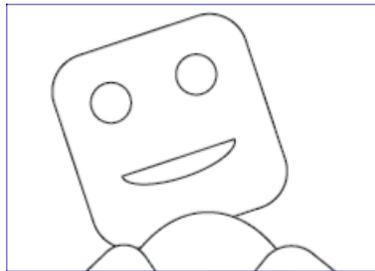
1. To group the robot's head object, select them all (e.g., using the **Group Selection Tool**), right-click, and select **Group**:



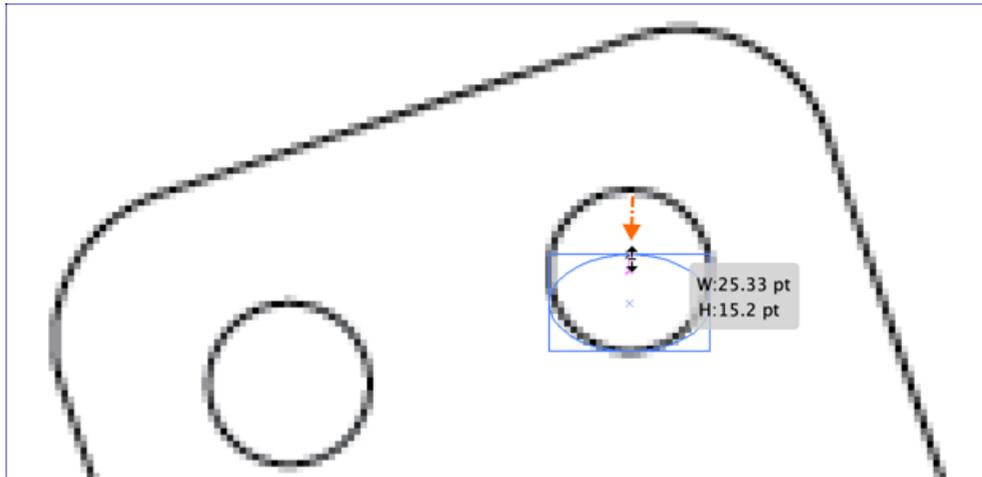
2. All of the shapes in the group move together. To see this, select the head using the **Selection Tool** and rotate it:



Then, move it a little to the left, so it looks like this:



3. To edit an object in a group individually, double-click it. For example, to narrow one of the eyes, double-click it, click the top of the eye, and drag down:



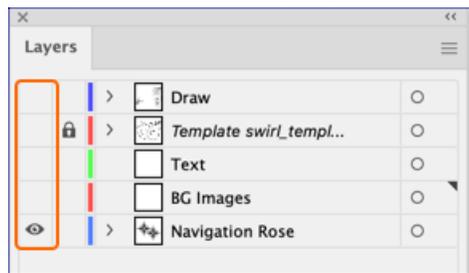
Click anywhere on the artboard to deselect the eye.

# Exercise 11: Manipulate Project Components

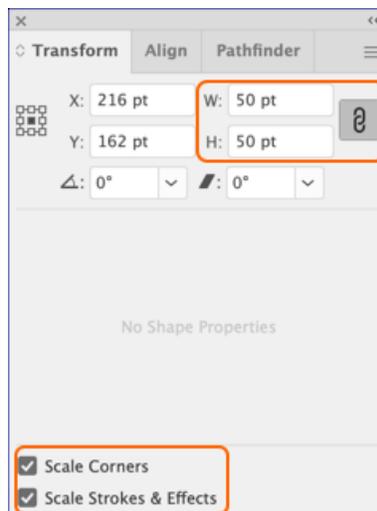
🕒 5 to 10 minutes

In this exercise, you will group and resize sets of shapes and save a copy of your file.

1. Open `creating-advanced-illustrations/Exercises/my-postcard.ai` in Illustrator.
2. On the **Layers** panel, show the “Navigation Rose” layer and hide all the others:

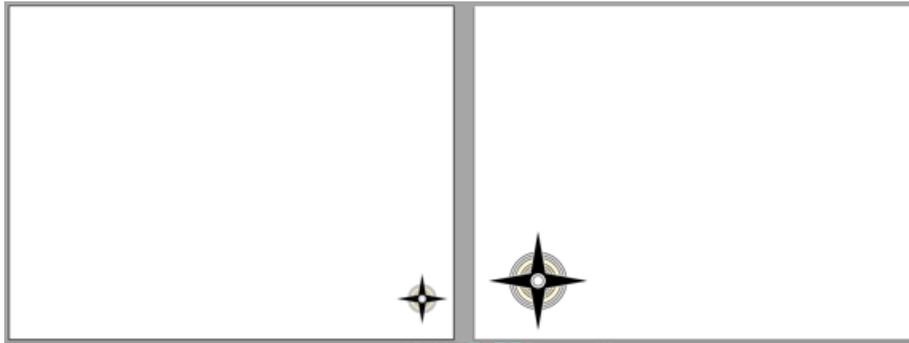


3. We grouped the shapes earlier in the course, so you can now resize them as a group.
4. Resize one to 50 pt by 50 pt of its original size and the other to 100 pt by 100 pt: One way to do this is to select the group by clicking any object in the group, then in the **Transform** panel, which you can open from **Window > Transform** if it's not already open, enter values for **W** and **H**:



Also, make sure the **Scale Corners** and **Scale Strokes & Effects** are checked at the bottom of the transform panel. This will ensure that the lines will be clear when resized.

5. Using the **Selection Tool**, move the smaller group to the bottom right of the “Front of Postcard” artboard and move the larger group to the bottom left of the “Back of Postcard” artboard:



6. When you're done, save and close the file.

## Conclusion

In this lesson, you have learned:

- How to use the **Pencil Tool**.
- How to use the **Pen Tool**.
- How to use the Line tools.
- How to select and transform objects.
- How to align and position objects.
- How to work with grouped objects.



# LESSON 5

## Advanced Management of Shapes

---

### Topics Covered

- Background Images.
- Appearance** panel.
- Pathfinder** panel.
- Shape Builder Tool**.
- Painting and coloring.
- Patterns.
- Gradients and styles.

### Introduction

In this lesson you will add a background image and start to work on the overall appearance of your postcard.

Evaluation  
Copy



### 5.1. Appearance Panel

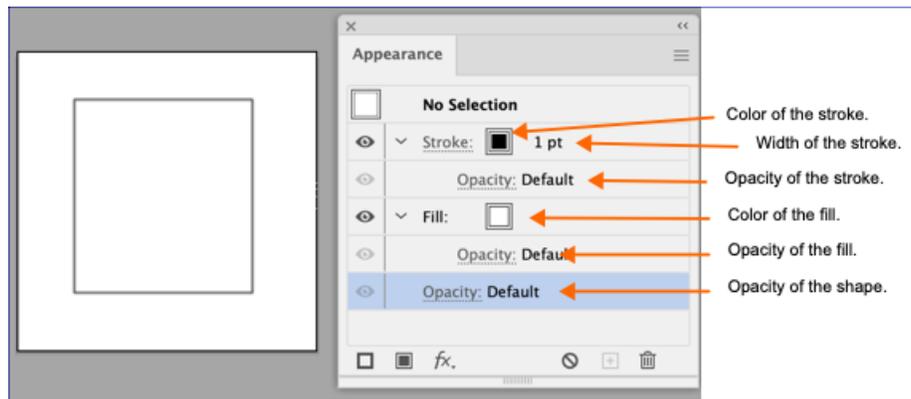
The **Appearance** panel provides options for modifying the appearance of objects. To experiment with the line tools, create a new 200 pt by 200 pt document in Illustrator.

1. On the **Toolbars** panel, set the default fill and stroke:

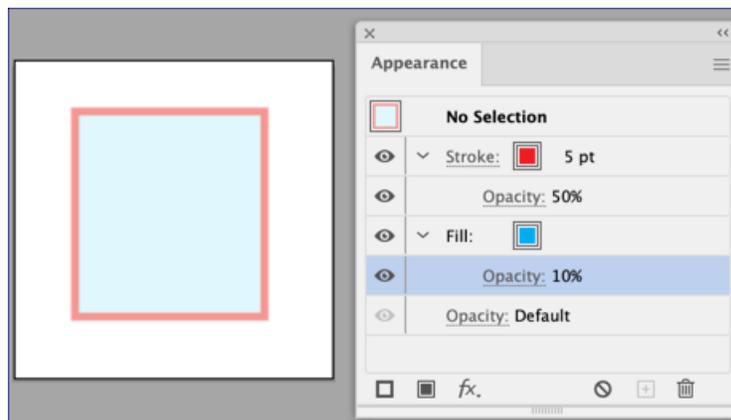


2. Add a rectangle to the artboard.

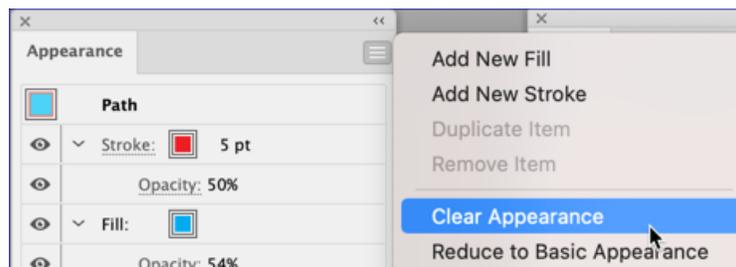
3. Open the **Appearance** panel from the **Window** menu:



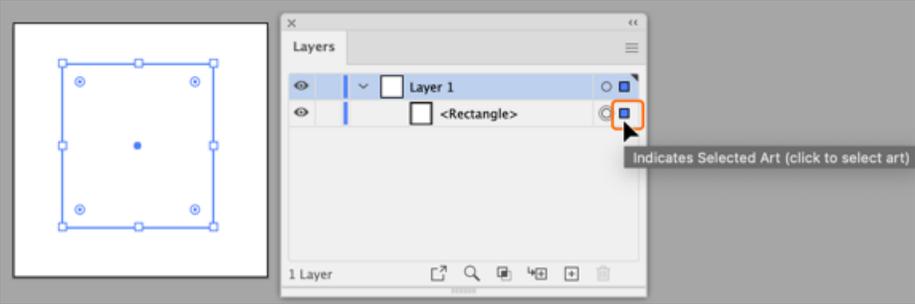
4. Make whatever changes you like. Here's what we did:



5. To remove the stroke and fill, click the **Appearance** panel menu icon, select **Clear Appearance**:



This will make the rectangle disappear. To make it show, click the area shown below in the **Layers** panel:

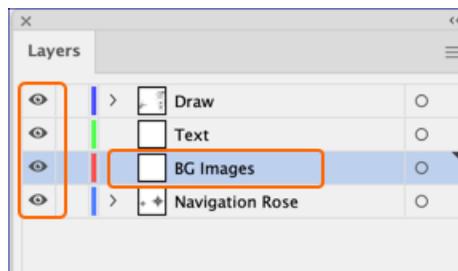


# Exercise 12: Appearance Panel

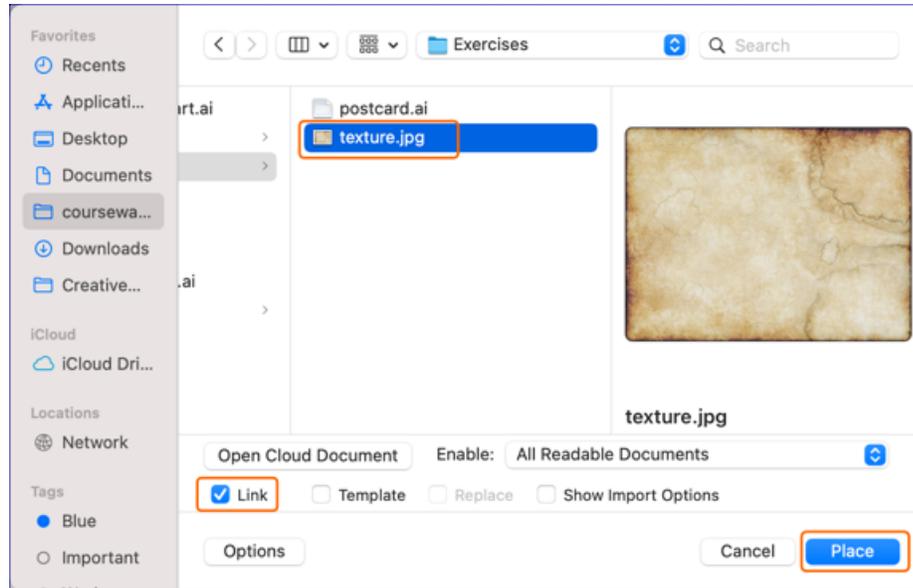
 5 to 10 minutes

In this exercise, you will add a background image to the front and back of the postcard and you will modify the appearance of the background and of some elements on the foreground.

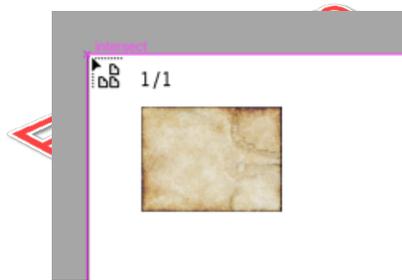
1. If you wish to continue with the postcard you have been working on, open `creating-advanced-illustrations/Exercises/my-postcard.ai` in Illustrator and immediately save the file in `advanced-management-of-shapes/Exercises`. Alternatively, you can start with the file at `advanced-management-of-shapes/Exercises/postcard.ai`, which picks up where we left off in the last exercise, and save the file as `my-postcard.ai`.
2. Open the **Layers** panel, make all layers visible, and select the “BG Images” layer:



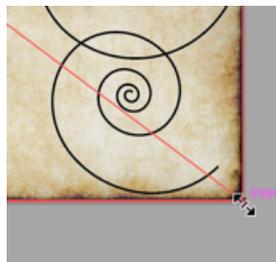
3. From the **File** menu, select **Place...** and choose the `texture.jpg` file in the `advanced-management-of-shapes/Exercises` folder. Make sure the **Link** checkbox is checked, so that the image is linked to the document. Then click **Place**:



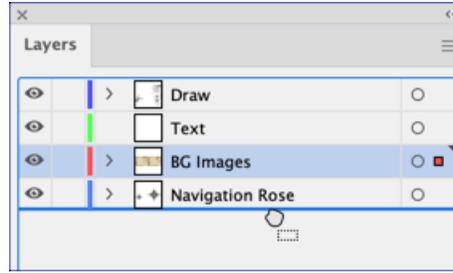
4. Place the image in the upper-left corner of the front of the postcard:



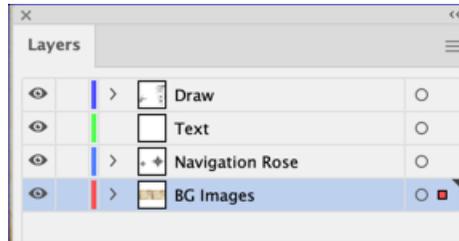
5. Use the lower-right handle of the image to resize it to fit in the artboard:



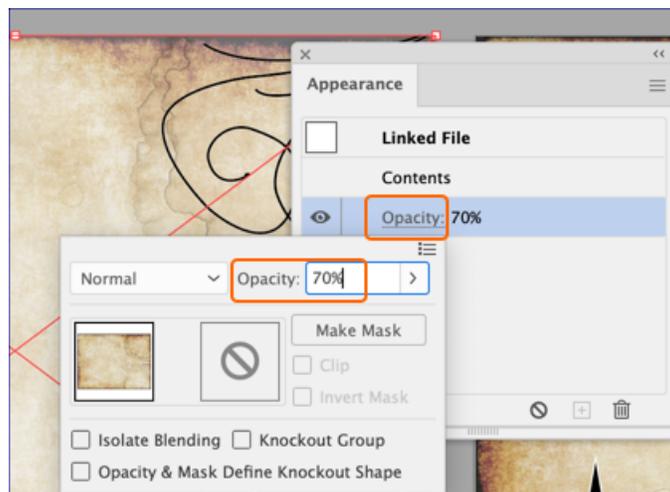
6. Copy the image by selecting it and then selecting **Edit > Copy** (or pressing **Ctrl/Cmd + C**, and then paste it. Drag the pasted copy over to the second artboard.
7. The background layer needs to be behind the other layers. In the **Layers** panel, click and drag the “BG Images” layer to the bottom:



The **Layers** panel should now look like this:

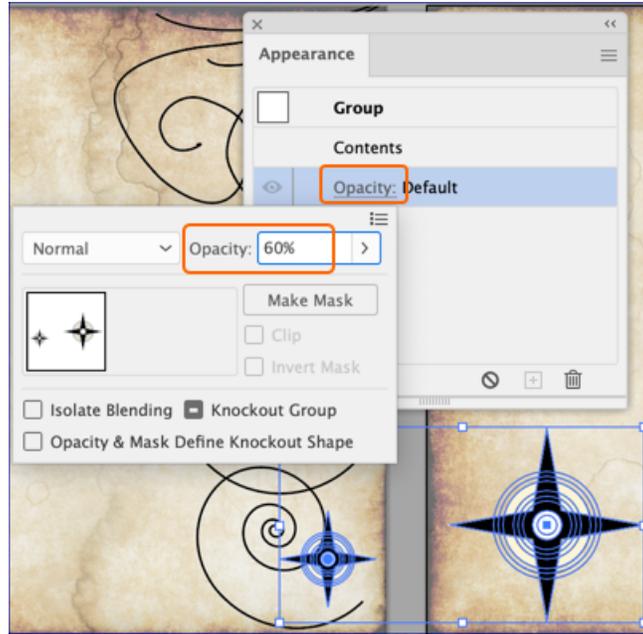


8. If the **Appearance** panel is not showing, select **Window > Appearance** to show it.
9. With the **Selection Tool**, click one of the background images to select it. Then, click **Opacity** in the **Appearance** panel and set the opacity to 70%:



Repeat this for the second background image.

10. Select both “Navigation Rose” groups and set the opacity to 60%:



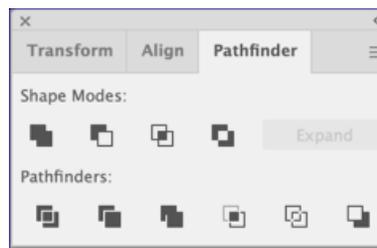
11. Save and close the file.

Evaluating  
Copy

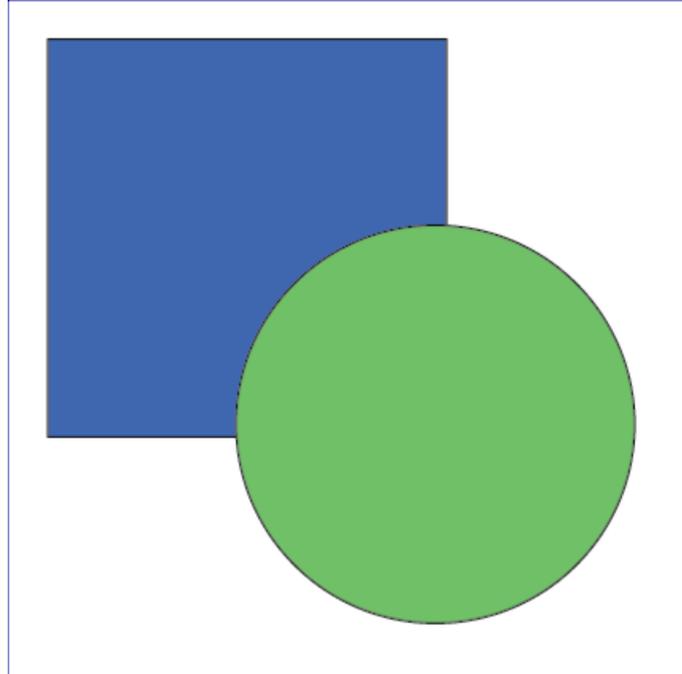


## 5.2. Working with Pathfinder

The **Pathfinder** panel sets the shape modes:

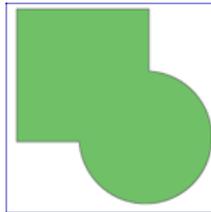


To experiment with the different shape modes, open `advanced-management-of-shapes/Demos/shape-modes.ai`, which contains the following two shapes:



Open the **Pathfinder** panel from the **Window** menu and with both shapes selected, click the different buttons. After seeing the result of each button, undo (**Ctrl/Cmd + Z**) to get back to the original shapes.

1. The **Unite** button combines the two shapes using the fill of the front shape:



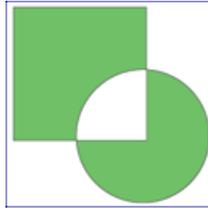
2. The **Minus Front** button removes the front shape and leaves only what is left of the back shape:



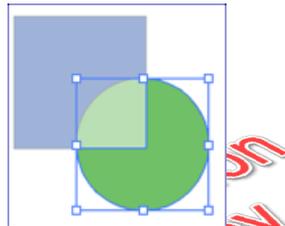
3. The **Intersect** button leaves only the portion of the shapes that are intersecting and keeps the fill of the shape in front:



4. The **Exclude** button remove the portion of the shapes that are intersecting:



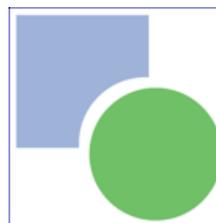
5. The **Divide** button breaks the shape along the paths of the outlines. After clicking the **Divide** button, it may not appear that anything has changed. Double-click any part of the shape to see that there now three shapes:



Drag the shapes apart to see that they are indeed separate:



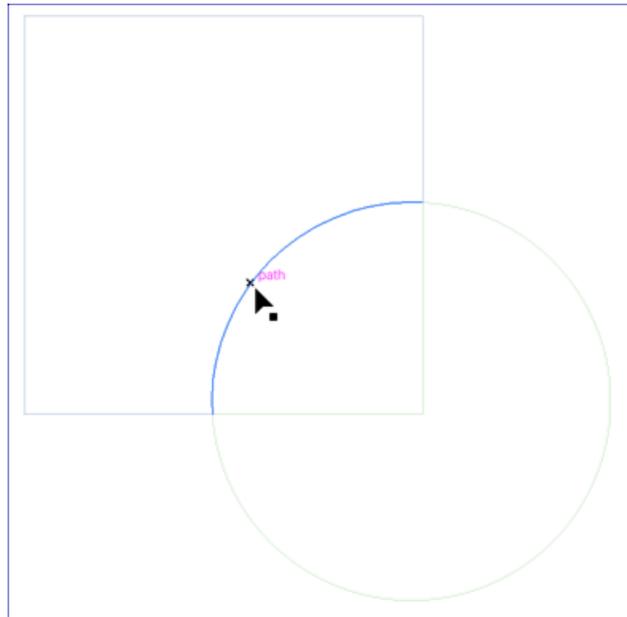
6. The **Trim** button breaks the shapes along the path of the outline of the front shape. Like with **Divide**, after clicking the **Trim** button, it may not appear that anything has changed. Double-click and drag one of the shapes to see that there are two new shapes:



7. The **Merge** button works almost identically to the **Trim** button.
8. The **Crop** button leaves only the portion of the shapes that are intersecting and keeps the fill of the shape in back:



9. The **Outline** button removes all but the outlines of the shapes, creating paths from the outlines:

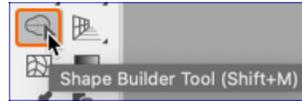


10. The **Minus Back** button removes the back shape and leaves only what is left of the front shape:

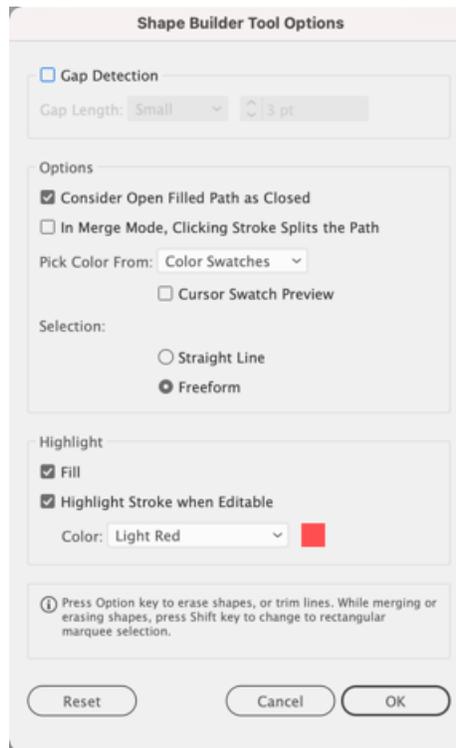


## 5.3. Working with Shape Builder Tool

The Shape Builder tool helps you combine and merge shapes together in one easy motion:



The options are shown in the screenshot below and can be opened by double-clicking the tool:

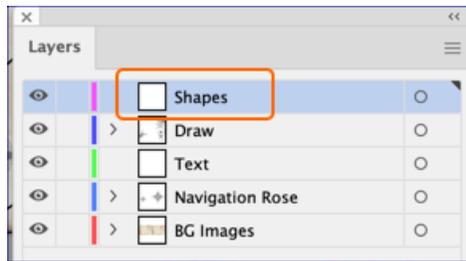


# Exercise 13: Path and Shape Builder Tools

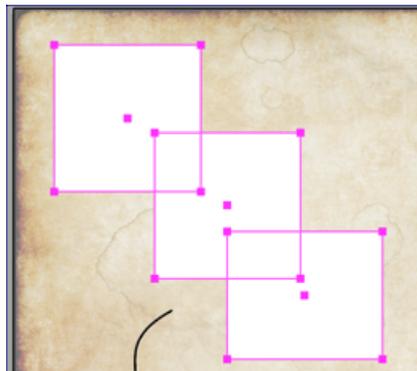
 5 to 10 minutes

In this exercise, you will use the **Shape Builder Tool**.

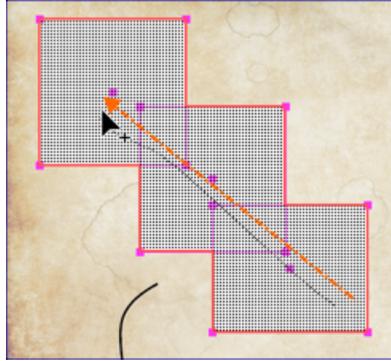
1. Open advanced-management-of-shapes/Exercises/my-postcard.ai in Illustrator.
2. Create a new layer and name it “Shapes.”:



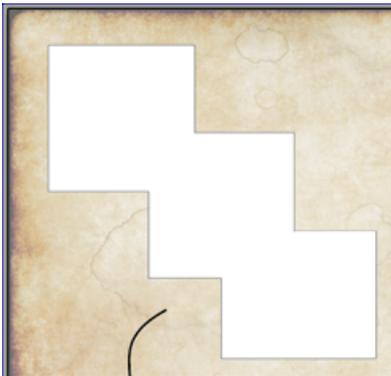
3. Create three rectangle shapes:



4. With the three shapes selected, drag the **Shape Builder Tool** through them to unite them:



5. The new shape is ready:



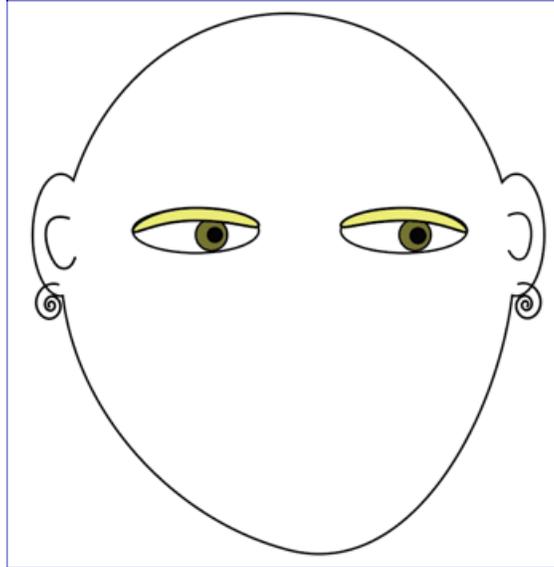
Soon, we will add a pattern to the shape.

6. Save and close the file.

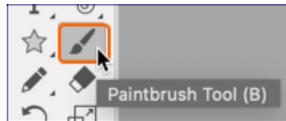


## 5.4. The Paintbrush Tool

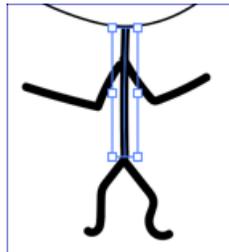
The **Paintbrush Tool** is used for painting illustrations. To experiment with the **Paintbrush Tool**, open `advanced-management-of-shapes/Demos/paintbrush-1.ai`, which contains the following illustration:



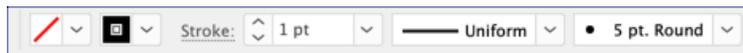
1. Select the **Paintbrush Tool** from the **Toolbars** panel:



2. Start by painting a stick figure body from the chin down. This screenshot shows a body (selected) with two arms and two legs, each of which is separate path:



3. Notice the lines are smooth paths. Select any one of them and look at the **Path** settings at the top of Illustrator:



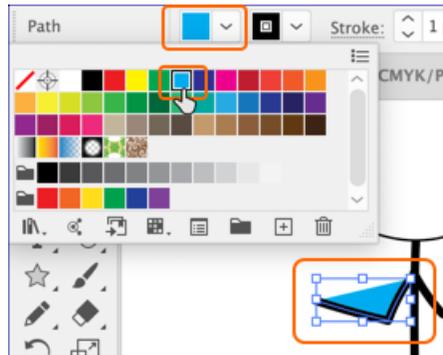
By default:

- A. There is no fill.
- B. The stroke is 1 pt and black.
- C. The variable width profile is uniform.

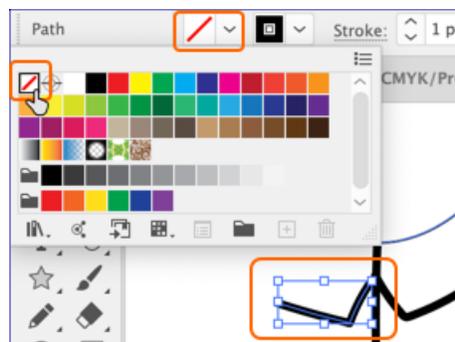
D. The brush definition is 5 pt. Round.

The *weight of the stroke* is the weight of the path itself, while the *brush definition* indicates how much paint will show up around that path.

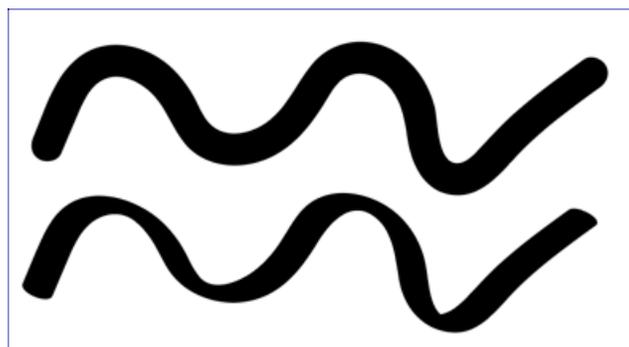
4. To see how the fill works, select a path that has some shape to it (e.g, isn't just a straight line) and change the fill. Here we show one arm with an aqua fill:



To remove the fill, select None (the red slash) as the fill:

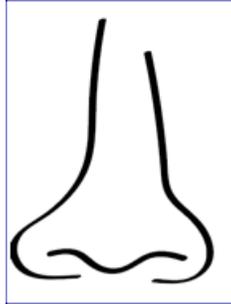


5. Notice the difference between a round brush (top) and an oval brush (bottom):

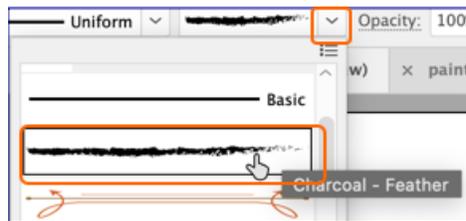


The curves in the oval brush flatten out.

6. Select an oval brush and draw a nose. Ours looks like this:



- Illustrator includes many different brushes. Select the Charcoal - Feather brush:



And use it to draw eyebrows and maybe a mustache. Perhaps something like this:



- Using the same brush, but playing with the stroke weight and the variable width profile, add some hair. Here's what we did:



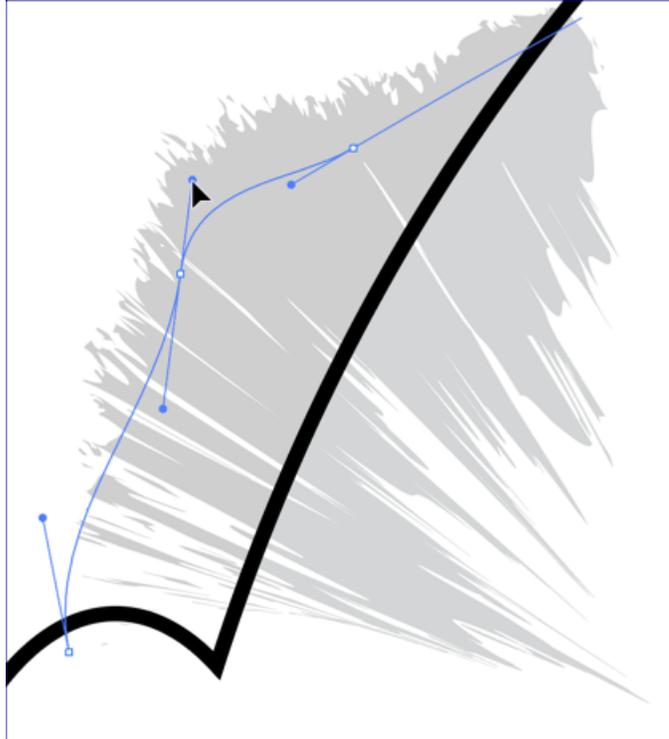
The side tufts use these settings:



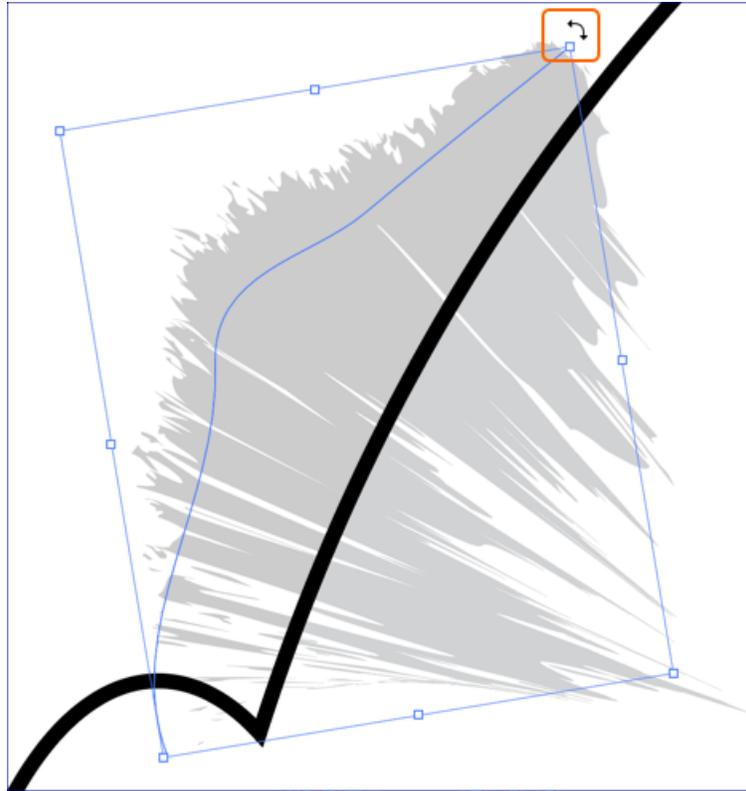
And the top uses these settings:



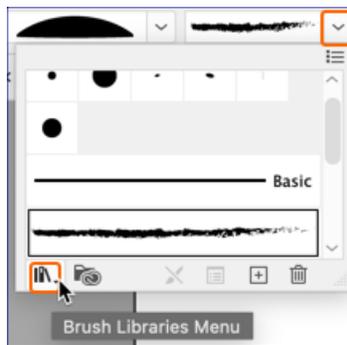
- To modify a path, select it with the **Direct Selection Tool**. In the following screenshot, the opacity is decreased to 20% to make it easier to see the path:



Just as with any path, you can change it by adding and removing anchors (with the **Pen Tool**) and adjusting the Bézier handles. You can also select the path with the **Selection Tool** and reshape or rotate it:



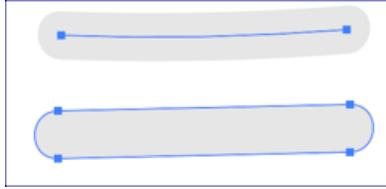
10. You can find many predefined brushes under the Brush Library Menu:



Feel free to play around.

## Blob Brush

The **Blob Brush Tool**, located behind the **Paintbrush Tool**, is similar to the **Paintbrush Tool**, but with the **Blob Brush Tool** paths are created around the stroke with the fill between the paths. Compare the following paths:



The top path was drawn with the **Paint Brush Tool** and the bottom path was drawn with the **Blob Brush Tool**.

Use the **Blob Brush Tool** to draw an oval mouth. Then apply the settings in the bar at the top of Illustrator. We used these settings:



You can manipulate the shape using the **Direct Selection Tool**. Here's our mouth:



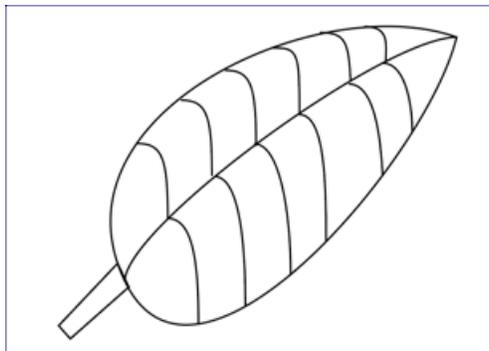
Our complete drawing is at [advanced-management-of-shapes/Demos/paintbrush-2.ai](#).

Evaluation  
Copy

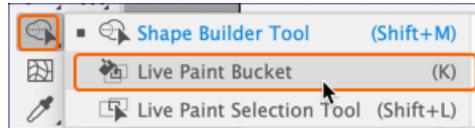
## 5.5. Live Paint

Live Paint is an easy way to color drawings. It allows you to use many of the vector tools but treats them as if they are on the same flat surface.

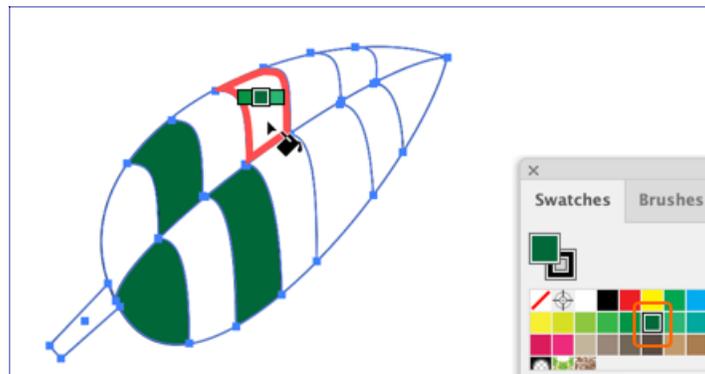
The **Paintbrush Tool** is used for painting illustrations. To experiment with the **Live Paint**, open [advanced-management-of-shapes/Demos/leaf-1.ai](#), which contains the following illustration:



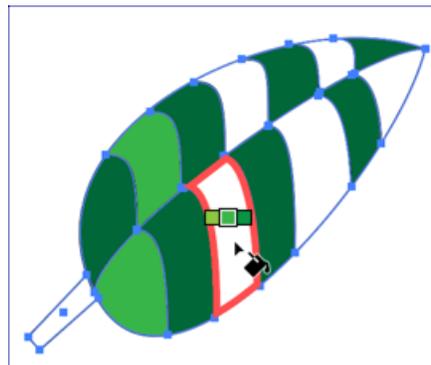
1. Select the whole leaf (e.g., using the **Group Selection Tool**).
2. Select **Live Paint > Make** from the **Object** menu at the top of the screen.
3. On the **Toolbar**, select **Live Paint Bucket** from behind the **Shape Builder Tool**:



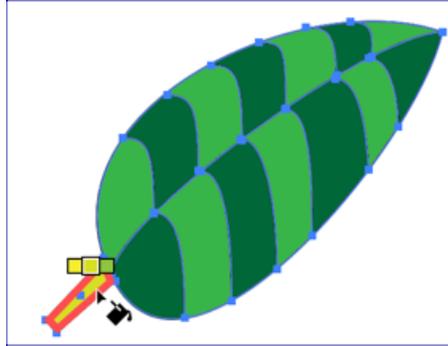
4. Open the **Swatches** panel from the **Window** menu, if it's not already open, and select a shade of green.
5. Click in the parts of the leaf to color them in:



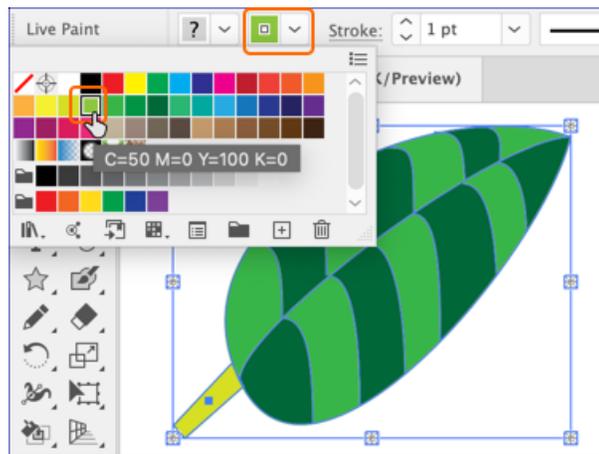
6. Choose another shade of green to color alternate leaf parts:



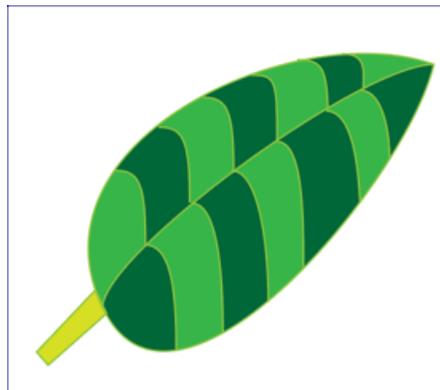
7. Choose a shade for the stem:



8. Select the entire leaf and set the stroke color to a pale green:



9. The leaf is complete:



Our complete drawing is at [advanced-management-of-shapes/Demos/leaf-2.ai](#).



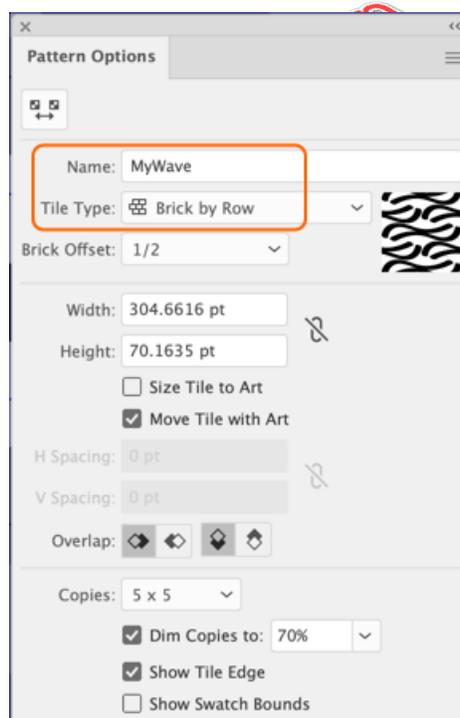
## 5.6. Creating Patterns

Patterns can be simple or complex. In this section, you will create and use custom patterns.

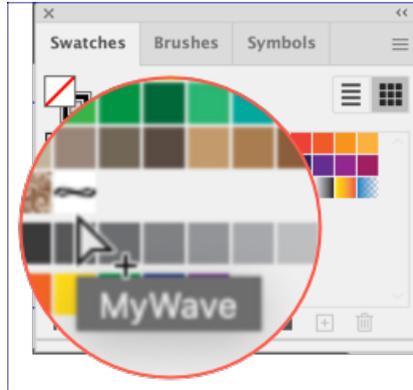
1. Open `advanced-management-of-shapes/Demos/simple-pattern.ai` and select the artwork. Then, select **Pattern > Make** from the **Object** menu. You will get a notification similar to the following:



2. Name the pattern and set the **Tile Type** to "Brick by Row":



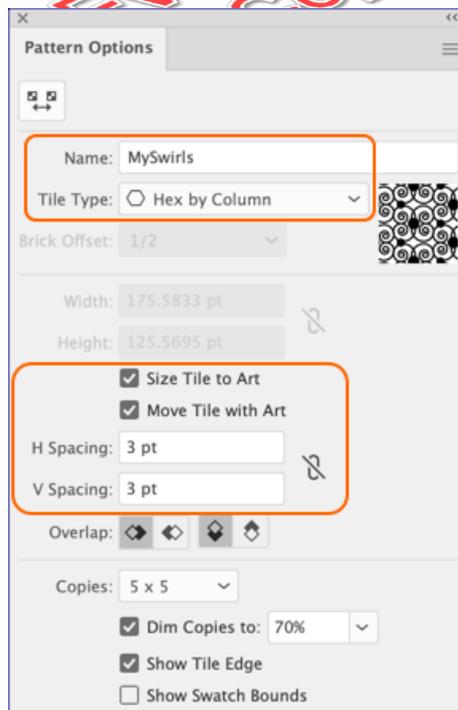
3. The new pattern is now in the **Swatches** panel:



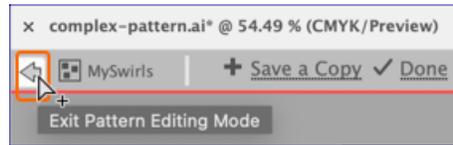
4. Save and close the file.

## Creating a Complex Pattern

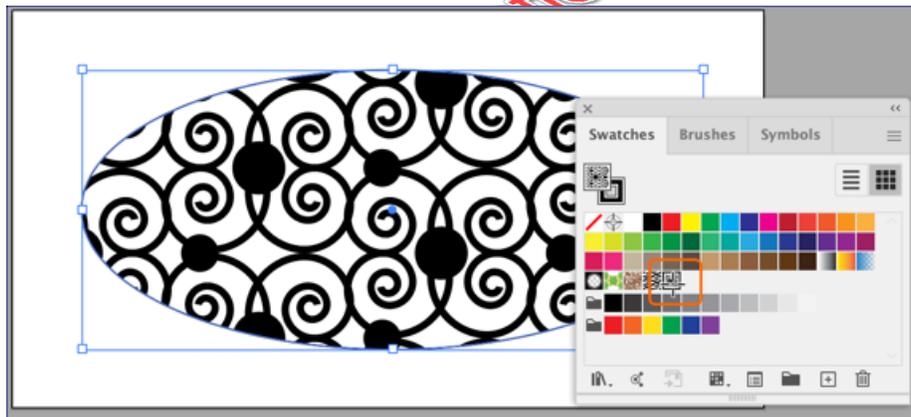
1. Open `advanced-management-of-shapes/Demos/complex-pattern.ai` and select the artwork. Then, select **Pattern > Make** from the **Object** menu.
2. Name the pattern, set the **Tile Type** to “Hex by Column”, check both **Size Tile to Art** and **Move Tile with Art**, and adjust the H(horizontal) and V(vertical) spacing to 3 pt:



3. The new pattern is now in the **Swatches** panel.
4. Click the **Exit Pattern Editing Mode** button to exit pattern editing:



5. Test out the new pattern by drawing a shape on the artboard and applying the pattern to it from the **Swatches** panel:

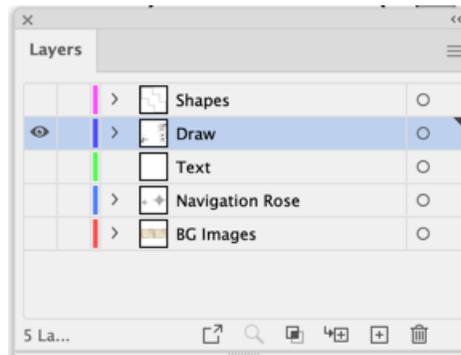


# Exercise 14: Brushes and Patterns

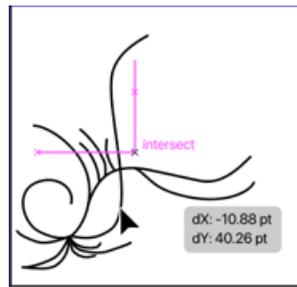
 5 to 10 minutes

In this exercise, you will change the paths to be artistic and create a new pattern out of the spirals.

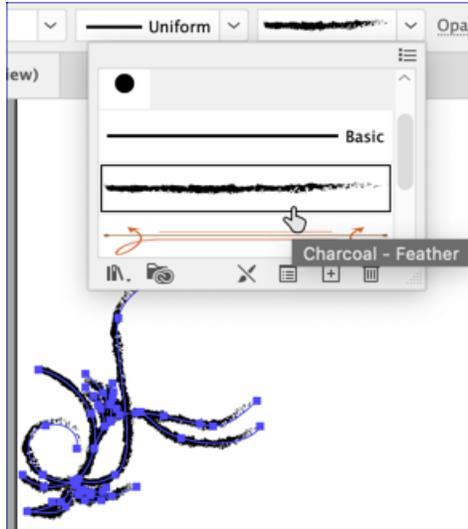
1. Open `advanced-management-of-shapes/Exercises/my-postcard.ai` in Illustrator.
2. Open the **Layers** panel, hide all layers except the “Draw” layer, and select the “Draw” layer:



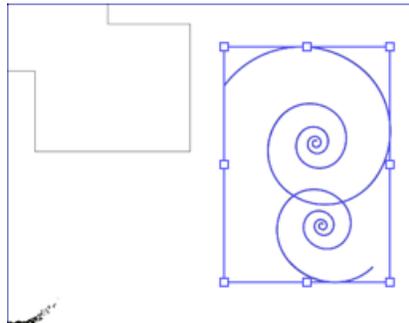
3. Select the paths you drew with the **Pencil Tool** and drag them to the lower left of the front of the postcard (if they're not already there):



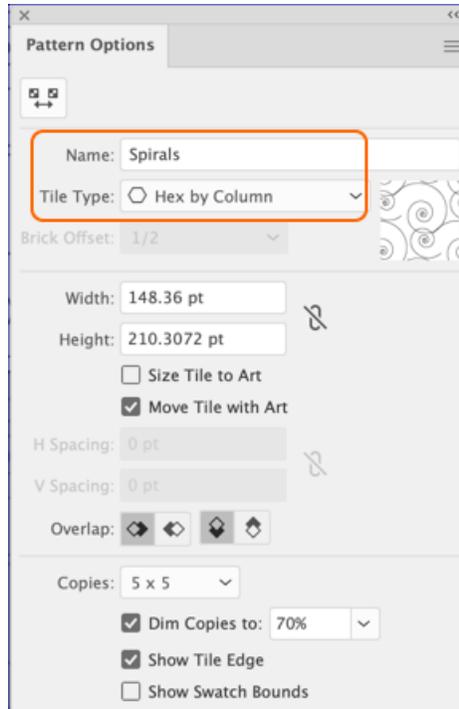
4. Select a brush definition to add some style:



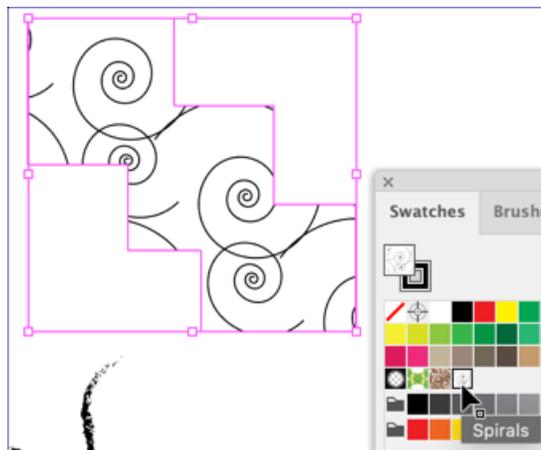
5. Make and apply a pattern from the spirals:
  - A. Unhide the “Shapes” layer.
  - B. Select the spiral paths and resize them so that the width of the bigger spiral is about the same as the width of the bottom rectangle:



- C. With the spiral paths selected, select **Object > Pattern > Make** and then set these pattern options:



- D. Exit pattern editing.
- E. Select the complex shape you made from the rectangles and apply the new pattern:

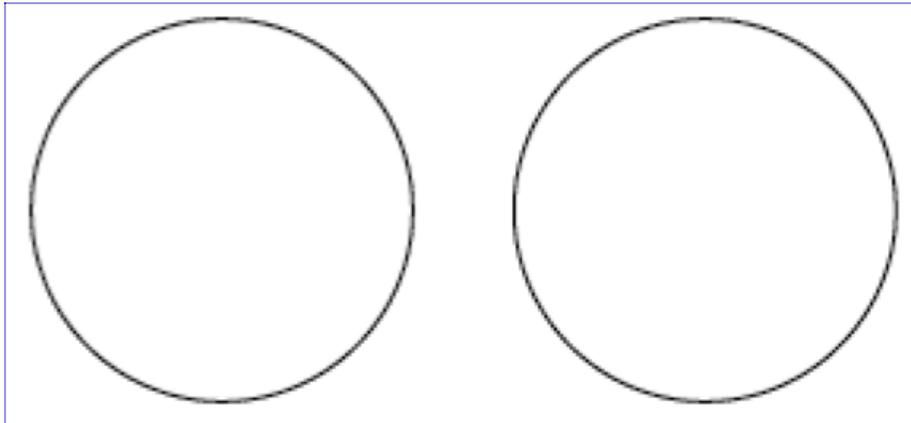


- 6. Save and close the file.

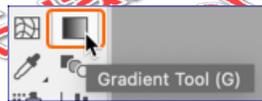


## 5.7. Using Gradient Tools

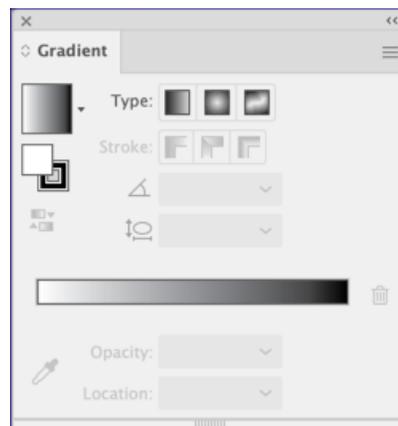
Use the **Gradient Tool** and the **Mesh Tool** to create complex color blends. The **Mesh Tool** provides more options for creating and customizing complex blends. To experiment with gradient and mesh, open `advanced-management-of-shapes/Demos/gradient-1.ai`, which contains two empty circles:



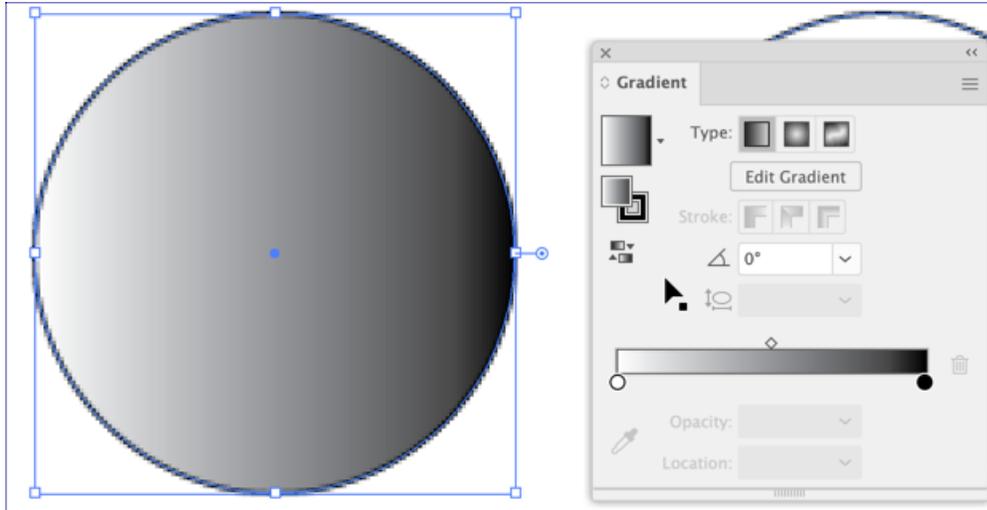
1. Select the **Gradient Tool** from the **Toolbars** panel:



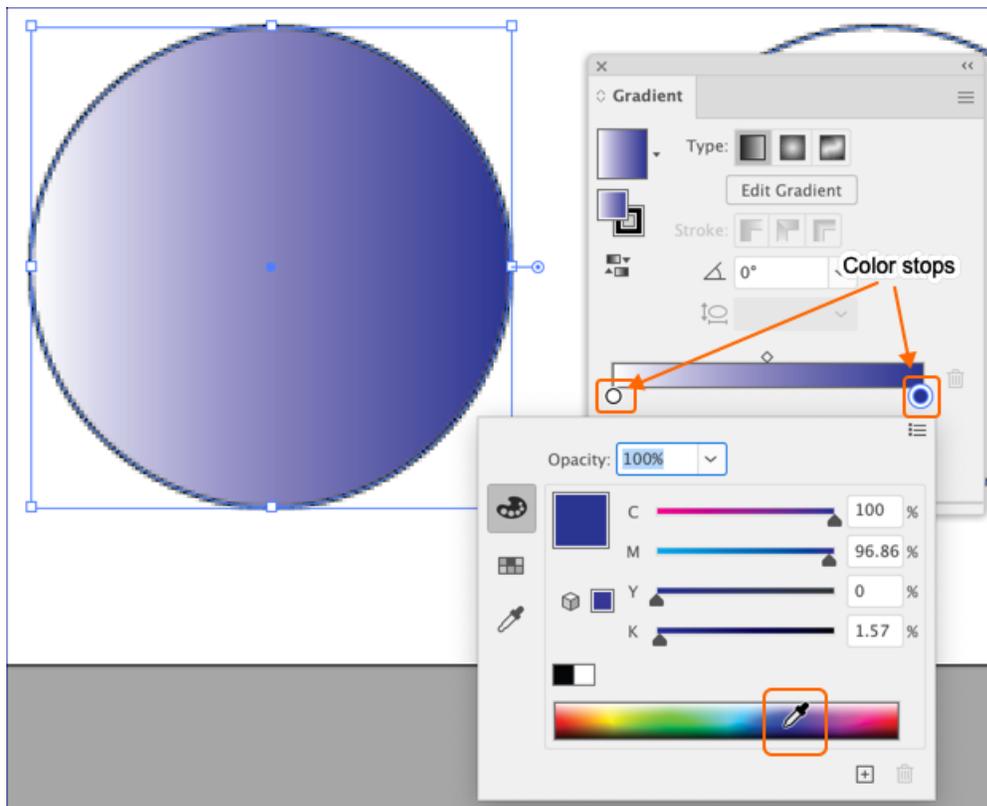
2. Open the **Gradient** panel from the **Window** menu:



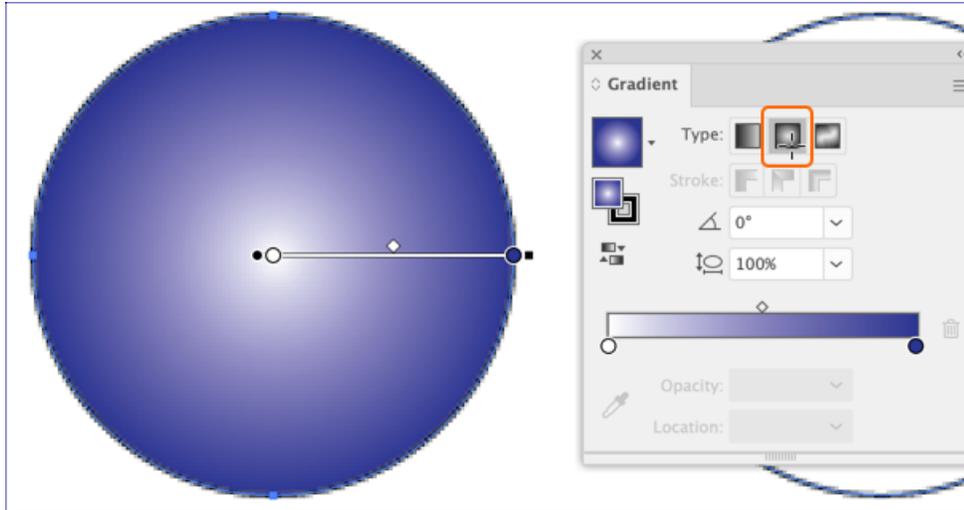
3. Select the circle on the left and then click the **Gradient** panel. The circle will get a black and white gradient:



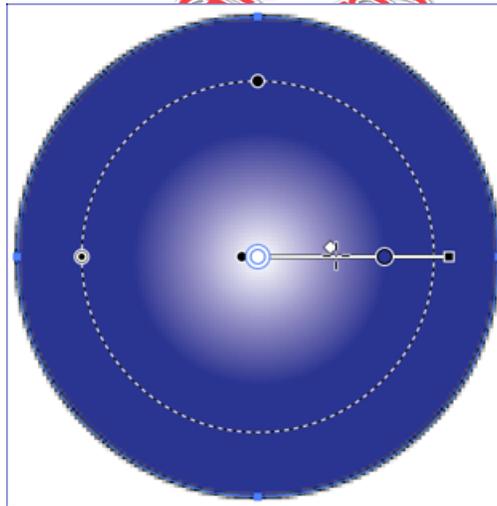
4. In the **Gradient** panel, double-click the right color stop (the circle below the **Gradient Slider**). This will bring up a color-setting dialog. Select a color:



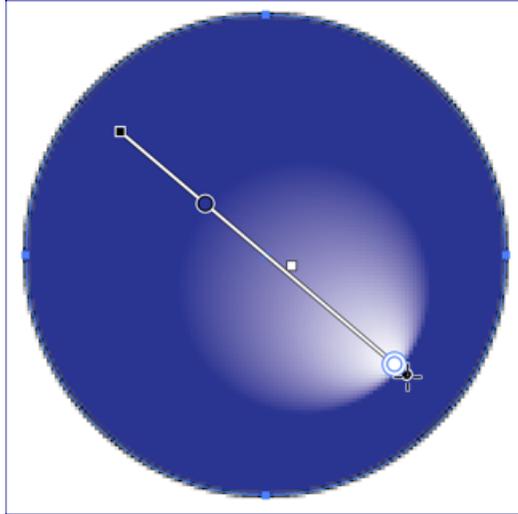
5. The default is a linear gradient, meaning the gradient changes in a single direction. To have the gradient change from the inside out, click the **Radial Gradient** button:



6. Modify the size and shape of the gradient by adjusting handles:



7. Change the center point by clicking a location in the shape:

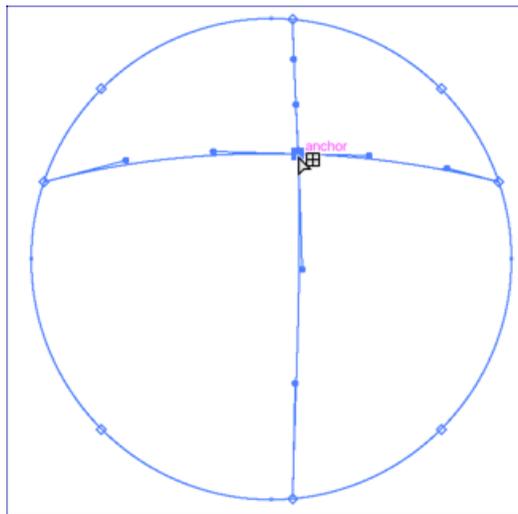


## The Mesh Tool

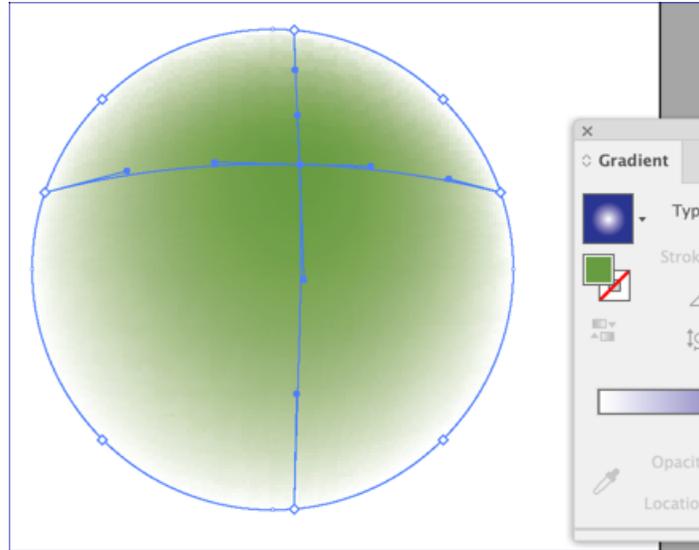
1. Select the **Mesh Tool** from the **Toolbars** panel:



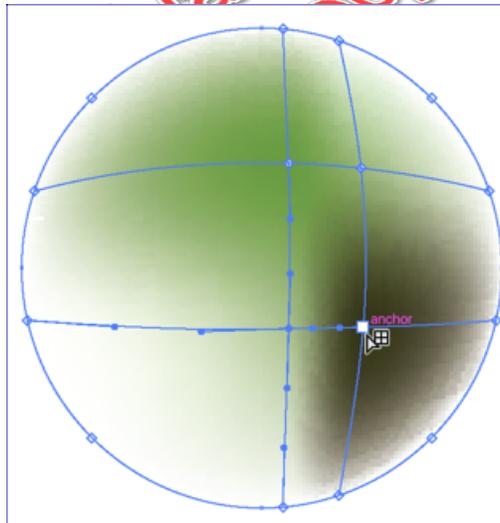
2. Click the circle on the right to add an anchor point:



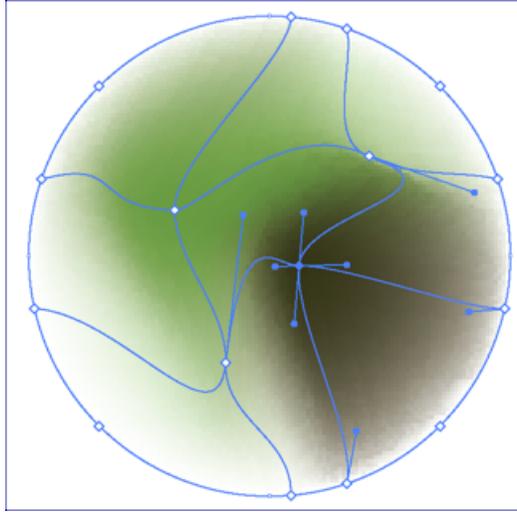
3. Choose a color to apply. We chose a medium green



4. Click again to add another anchor point and choose another color. We chose a darker green:



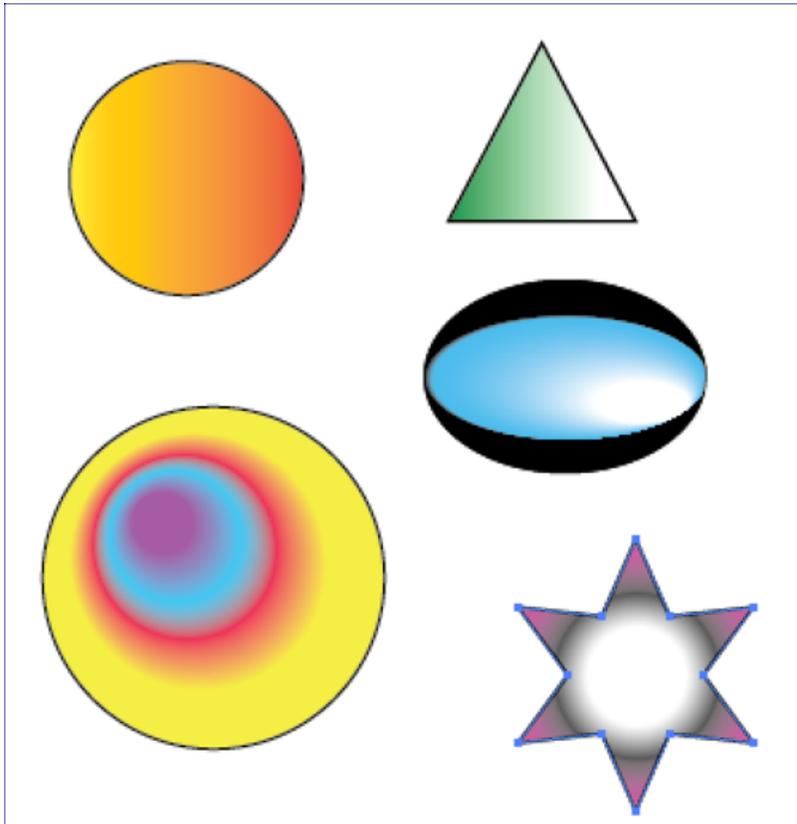
5. You can then use the **Direct Selection** tool and the **Pen Tool** to move, add, and remove anchor points and to adjust the Bézier handles:



# Exercise 15: Gradients

🕒 15 to 25 minutes

This is an open-ended exercise. Create a new file and play around with gradients. If you like, you can try to create the ones shown here (from [advanced-management-of-shapes/Solutions/gradients.ai](#)):

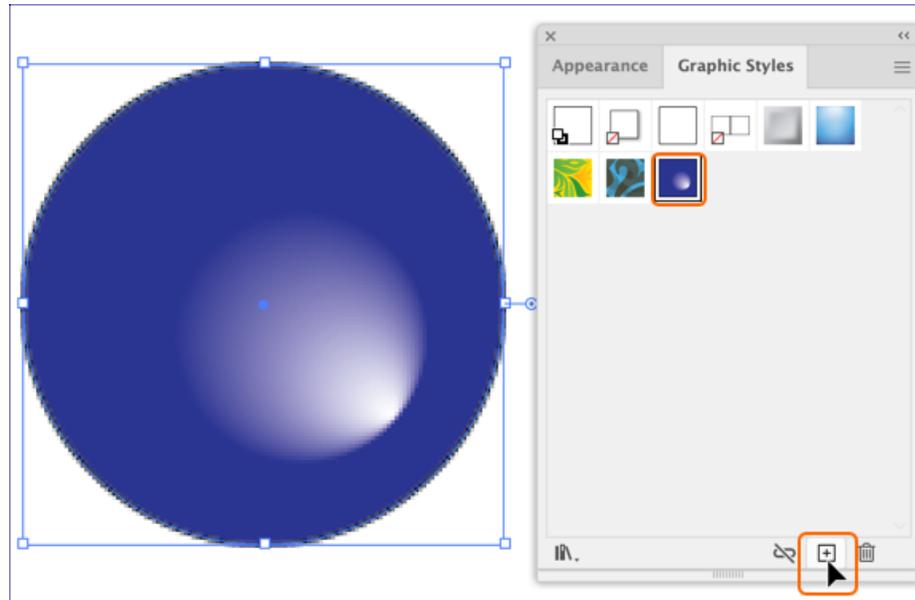


## 5.8. Working with Graphic Styles

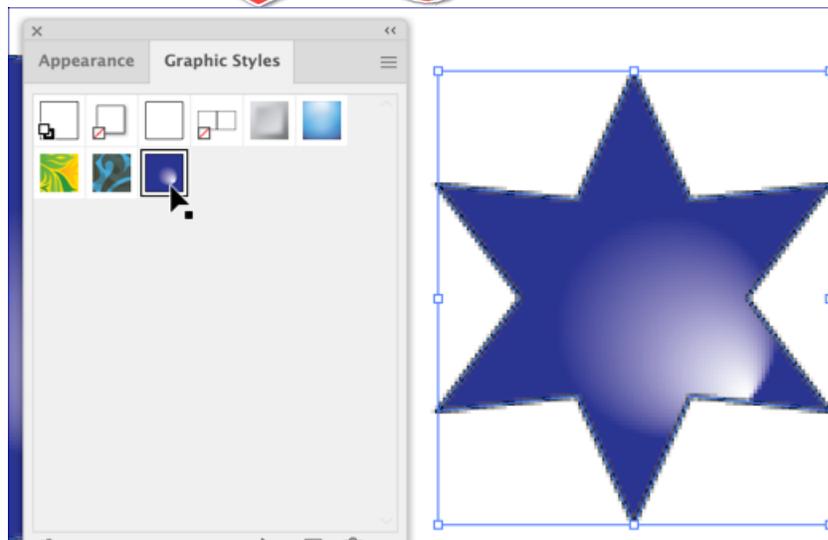
When you create a style you like, you can add it to the **Graphic Styles** panel so that you can apply it to other shapes. To experiment with graphic styles, open [advanced-management-of-shapes/Demos/graphic-styles.ai](#), which contains the blue sphere we created earlier and a six-sided star.

1. Open the **Graphic Styles** panel from the **Window** menu.

2. Select the blue sphere.
3. Click the plus sign at the bottom of the **Graphic Styles** panel to add the sphere as a new style:



4. Select the star and click the new graphic style to apply it to the star:



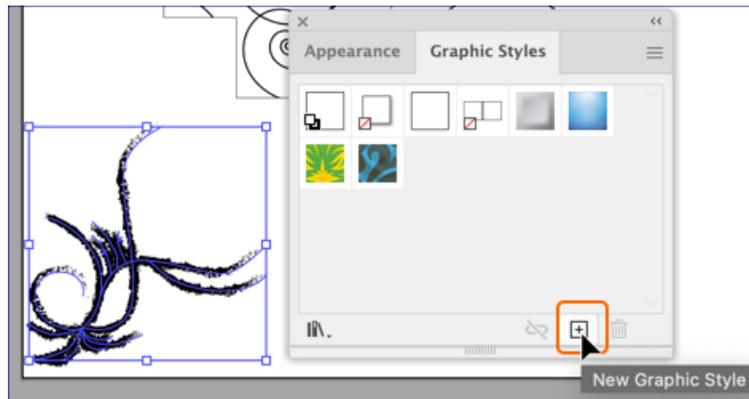
5. Our completed graphic is at [advanced-management-of-shapes/Demos/graphic-styles-2.ai](#).

# Exercise 16: Styles

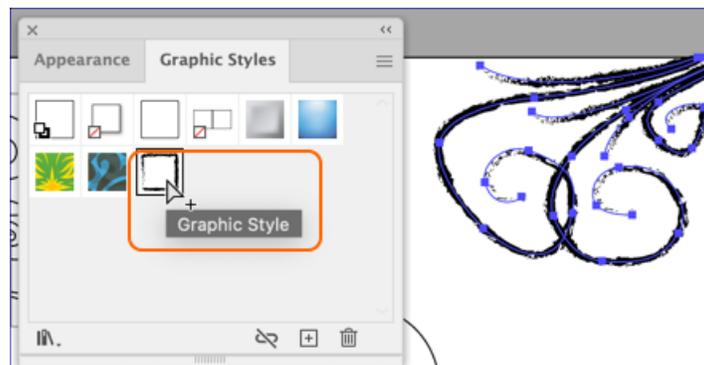
🕒 2 to 5 minutes

In this exercise, you will select existing art and create a graphic style for use later.

1. Open advanced-management-of-shapes/Exercises/my-postcard.ai in Illustrator.
2. Select the path in the lower left and use it to create a style. Double-click the new style square and named it “artistic”:



3. Apply it to the paths in the upper right.



4. Save and close the file.

## Conclusion

In this lesson, you have learned:

- How to work with **Appearance** panel.
- How to work with **Pathfinder** panel.
- How to work with **Shape Builder Tool**.
- How to work with painting and coloring.
- How to work with patterns.
- How to use gradients and styles.

Evaluation  
Copy



# LESSON 6

## Working with Type

---

### Topics Covered

- Text.
- Styles.
- Tab stops.
- Hidden characters.
- Working with glyphs.
- Converting type to outlines.

Evaluation  
Copy

### Introduction

Images are only a part of projects we build in Illustrator. Type or text is also a large part. We will explore the options for working with type in this lesson.

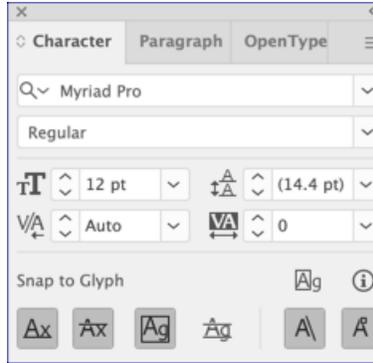


## 6.1. Working with Type

To begin working with type, select **Window > Type** to open the various type panels.

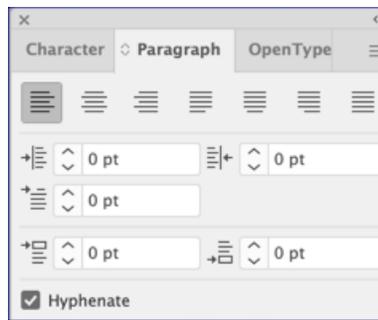
### ❖ 6.1.1. Create Text

To open the **Character** panel, select **Window > Type > Character**. The **Character** panel offers options to choose a font, size, leading, kerning, and tracking:



When text is selected, any changes will be applied to the highlighted text.

The **Paragraph** panel offers options to choose the alignment, indents and spacing:

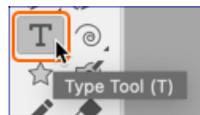


When any part of the paragraph is selected, any changes will be applied to the entire paragraph.

The default when creating objects with the type tools is to have Illustrator fill the object with placeholder text. The text will retain the font and size attributes that were previously used. You can remove this text and replace it with your own. It is useful to keep it in place if you are not yet ready for content, but wanting to apply formatting.

To experiment with the **Type Tool**, create a new document in Illustrator. If you make it 600 pt x 550 pt, it will give you plenty of room to play. You may wish to save this document, so that you can use it later in the lesson.

1. Select the **Type Tool** from the **Toolbars** panel:



2. Single-click to place a line of default text:

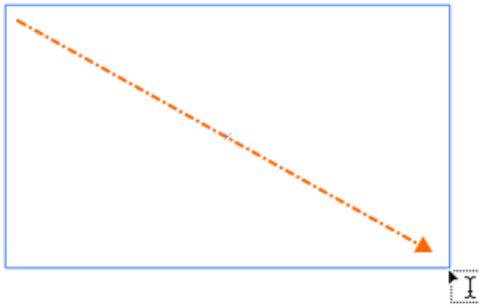
Lorem ipsum

You can then type over the default text:

Sample Title

Or you could leave the text as placeholder.

3. Click and drag to create a new area to type:



The result:

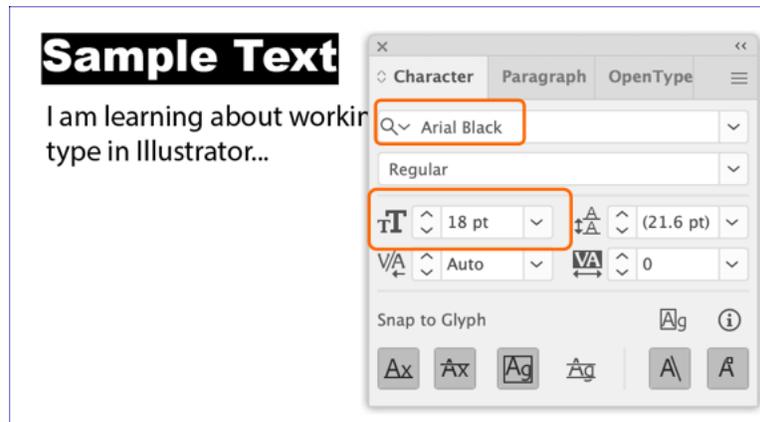
evaluation  
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exercitation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo

You can then type over the default text:

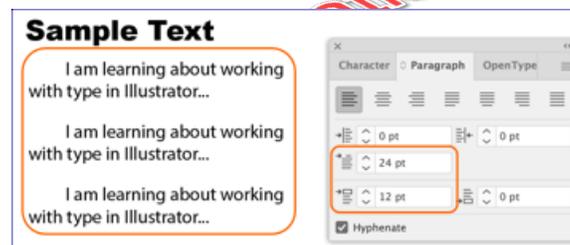
Sample Text  
I am learning about working with type in Illustrator...

Or you could leave the text as placeholder.

4. Highlight the text “Sample Title” and change the font and size in the **Character** panel:



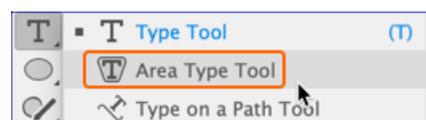
5. Select the paragraph text and in the **Paragraph** panel set the first line indent and space before a paragraph:



## The Area Type Tool

The **Area Type Tool** fills an area with text.

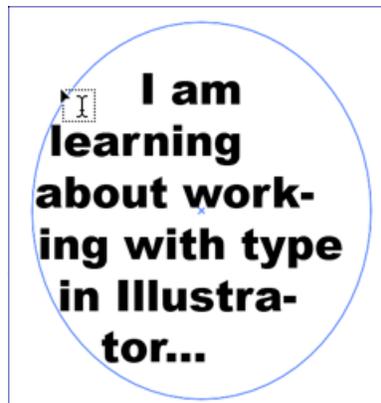
1. Draw an ellipse.
2. Select the **Area Type Tool**, which is behind the **Type Tool**:



3. Click the edge of the circle and notice it gets filled with default text:



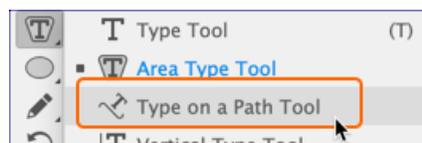
4. Type over the default text:



## The Type on a Path Tool

The **Type on a Path Tool** makes it easy to enter text along a path.

1. Draw a path using the **Pen Tool** or **Pencil Tool**.
2. Select the **Type on a Path Tool**, which is behind the **Type Tool**:



3. Click the path and notice it gets filled with default text:



4. Type over the default text:



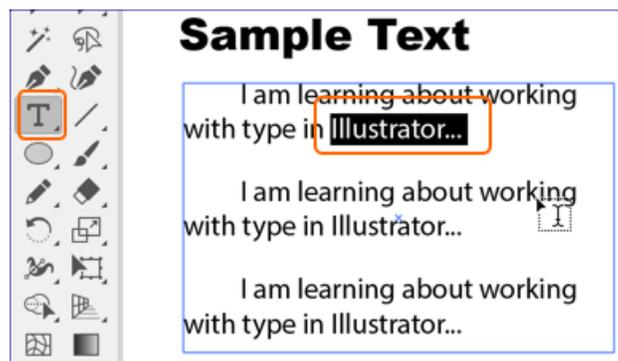
5. When you have deselected the text, you'll see the text without the path:



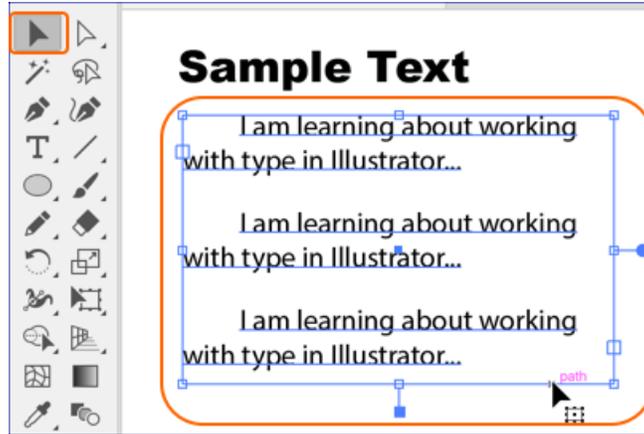
## 6.2. Format Text

You can apply formatting to individual pieces of text or entire text boxes.

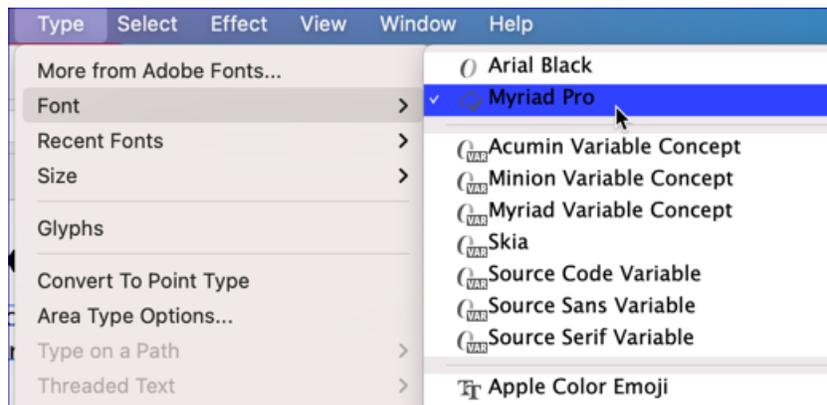
1. Select a piece of text using the **Type Tool** to apply changes to just that text:



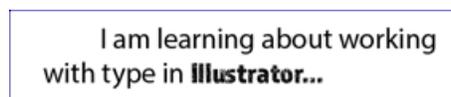
2. Use the **Selection Tool** to select the text box to apply formatting to the entire text box:



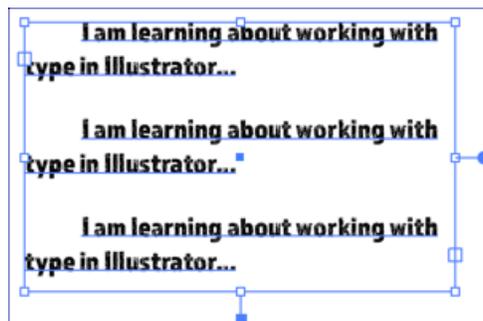
3. Select **Type > Font** from the menu at the top of Illustrator to choose the font to apply:



4. Applied to a word:



5. Applied to text box:

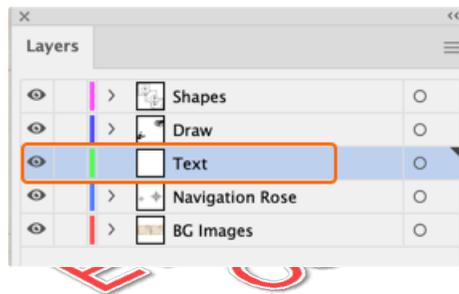


# Exercise 17: Creating Types of Text

🕒 15 to 25 minutes

In this exercise, you will create a single title and a threaded paragraph and add type along a path.

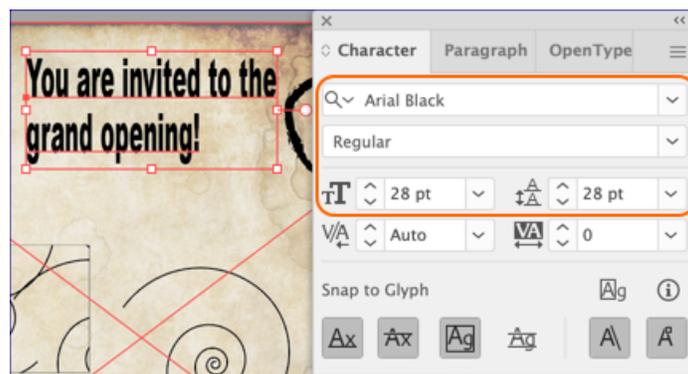
1. If you wish to continue with the postcard you have been working on, open `advanced-management-of-shapes/Exercises/my-postcard.ai` in Illustrator and immediately save the file in `working-with-type/Exercises`. Alternatively, you can start with the file at `working-with-type/Exercises/postcard.ai`, which picks up where we left off in the last exercise, and save the file as `my-postcard.ai`.
2. Make sure the “Text” layer is selected in the **Layers** panel:



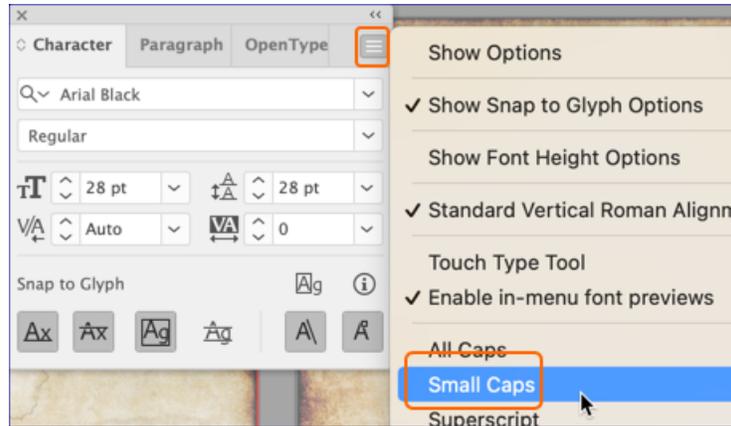
3. With the **Type Tool** selected, click the top front of the postcard and type:

You are invited to the grand opening!

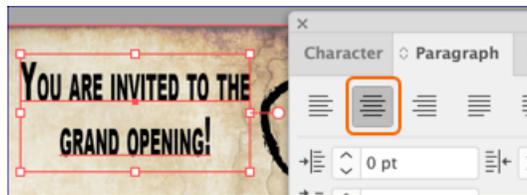
Choose formatting from the **Character** panel:



4. From the callout menu, select **Small Caps**:



5. From the **Paragraph** panel, select center:



You may need to adjust the position of the text box after centering the text.

Next, create a text box with more information about the event:

1. With the **Text Tool** selected, draw a text box:

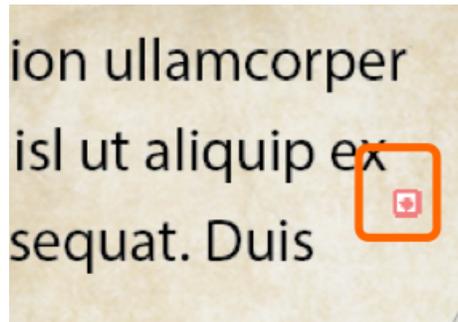


You can leave the default text or enter whatever text you like. You can also format the text however you like. We used the following formatting:

- Font: Myriad Pro, 12pt Regular

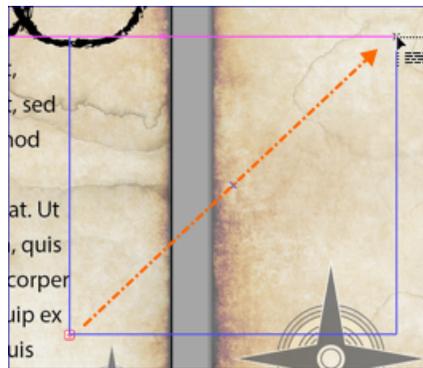
- Leading: 18pt  18 pt
- Paragraph alignment: Left
- No Small Caps

2. Notice the small red plus sign at the bottom right of the text box:

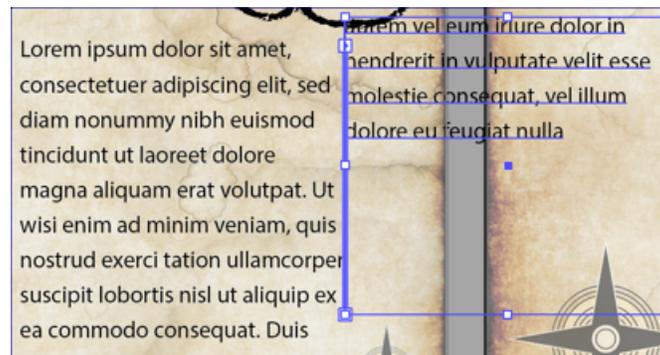


This indicates that there is more text.

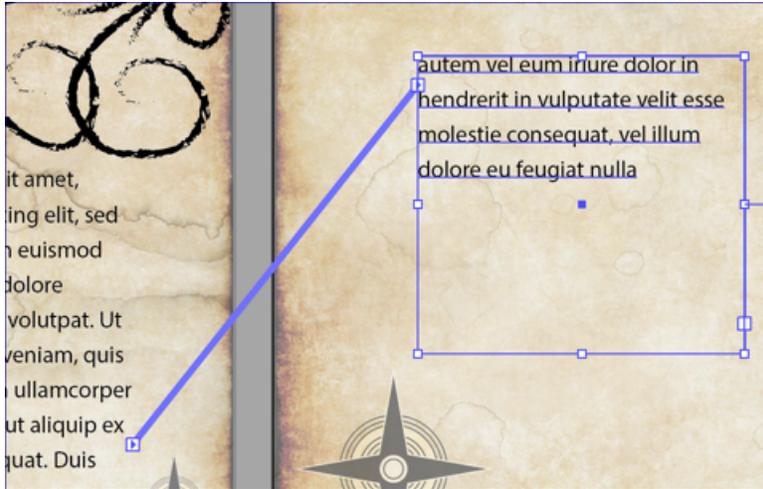
3. Click the plus sign and drag to the upper right to draw a second text box:



4. The text is now threaded and will flow into the second text container:

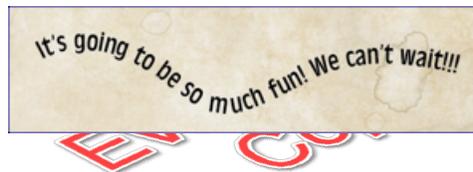


5. With the **Selection Tool**, drag the second text box to the back of the postcard:



As you change the text, the overflow text will wrap into this second box.

6. Finally, draw a path to type along with the **Type on a Path Tool** using whatever font style you like. Here is what we did:



7. Save and close file.



## 6.3. Working with Styles

Once you decide on a look and feel for your text, you will be best served to create reusable styles to easily apply the look and feel of your text throughout the entire project. These styles can be loaded and used in other Illustrator projects as well.

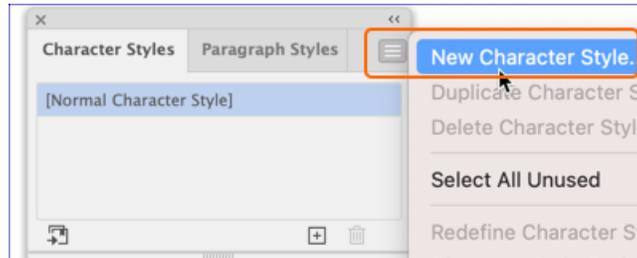
To experiment with character and paragraph styles, create a new document in Illustrator. If you make it 400 pt x 400 pt, it will give you plenty of room to play. Alternatively, you can use the document you used to experiment with type.

### Character Styles

1. Open the **Type > Character Styles** panel from the **Window** menu:



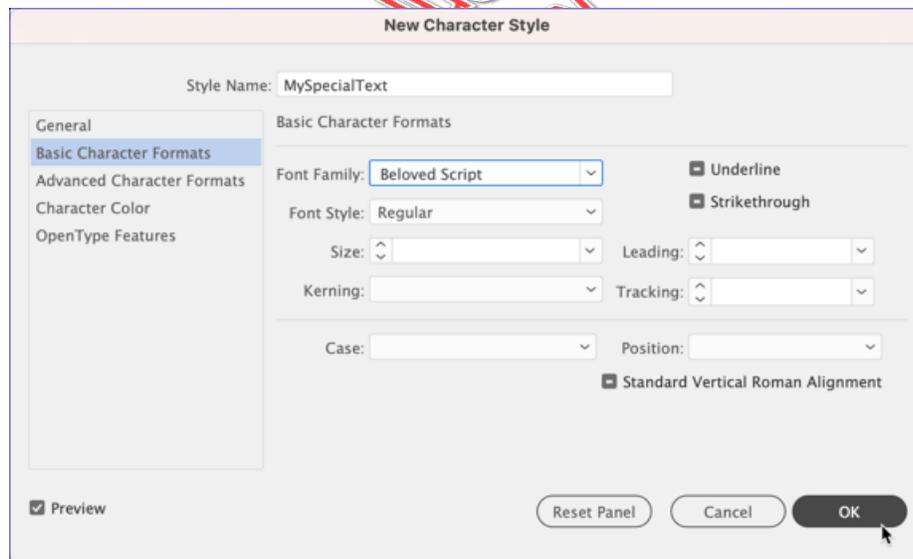
2. Click **New Character Style** from the **Character Style** panel menu:



You can also click the **Create New Style** button at the bottom of the panel:



3. Name the style **MySpecialText** and set the attributes:

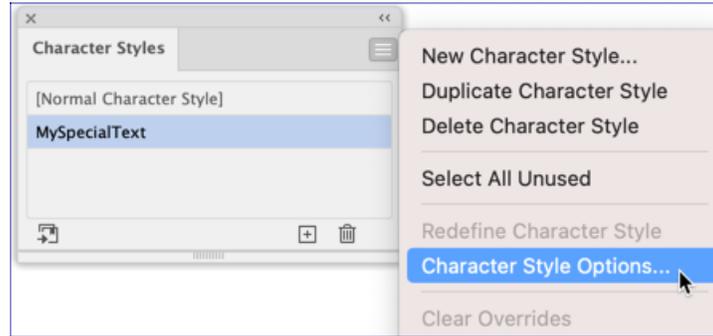


You can choose any styles you like.

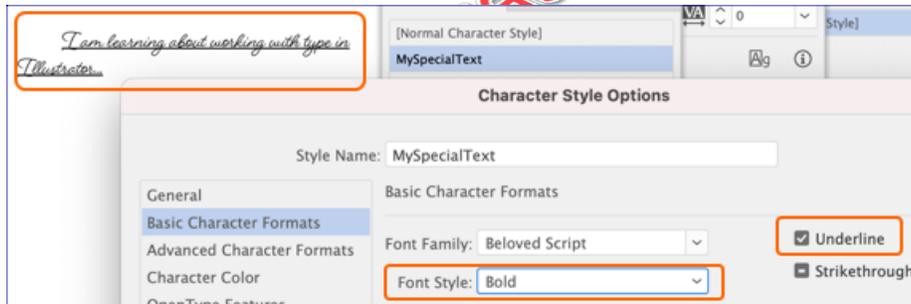
4. Highlight and select the characters you wish to apply the style to and use the **Character Styles** panel to apply by clicking the name **MySpecialText**:



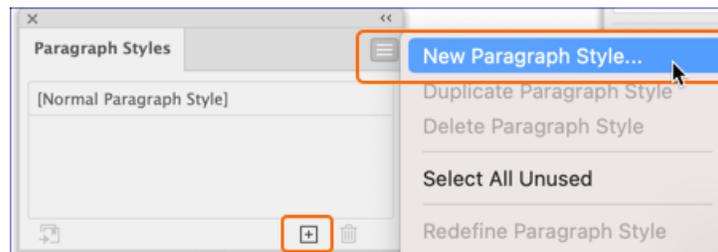
5. To edit the style, choose **Character Style Options** from the menu:



6. As you edit the style, you will see the text using that style change:



You can modify paragraph styles in the same way from the **Paragraph Styles** panel:



# 6.4. Using Tab Stops

Tab stops are used to align text. To experiment with tab stops, open `working-with-type/Demos/tab-stops-1.ai`, which lists the team members of the **Fierce Five** – the 2012 U.S. gymnastics team:

| <b>First Name</b> | <b>Last Name</b> | <b>Email</b>         |
|-------------------|------------------|----------------------|
| Gabby             | Douglas          | gdouglas@example.com |
| McKayla           | Maroney          | maroney@example.com  |
| Aly               | Raisman          | araisman@example.com |
| Kyla              | Ross             | kross@example.com    |
| Jordyn            | Wieber           | jwieber@example.com  |

The current list is difficult to read. We will fix it by adding tab stops, so it looks like this:

| <b>First Name</b> | <b>Last Name</b> | <b>Email</b>         |
|-------------------|------------------|----------------------|
| Gabby             | Douglas          | gdouglas@example.com |
| McKayla           | Maroney          | maroney@example.com  |
| Aly               | Raisman          | araisman@example.com |
| Kyla              | Ross             | kross@example.com    |
| Jordyn            | Wieber           | jwieber@example.com  |

- 1. To see the placement of the tabs in the text, select **Type > Show Hidden Characters**:



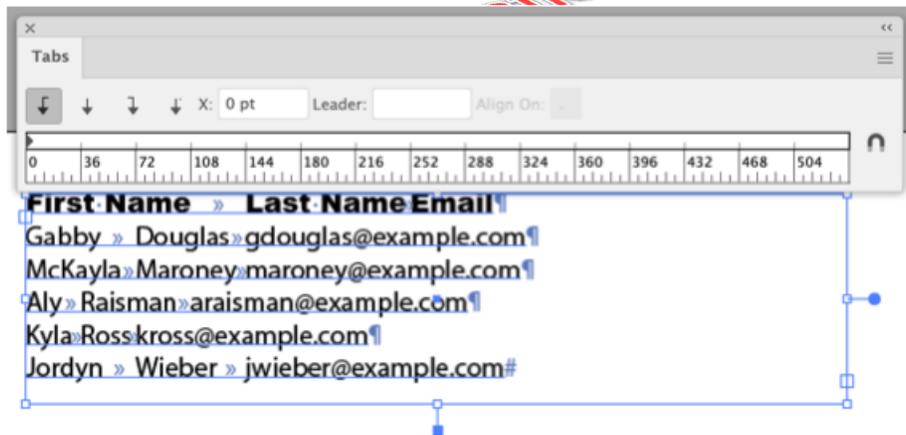
The tabs will be marked with >> symbols:

**First Name » Last Name Email**  
 Gabby » Douglas » gdouglas@example.com  
 McKayla » Maroney » maroney@example.com  
 Aly » Raisman » araisman@example.com  
 Kyla » Ross » kross@example.com  
 Jordyn » Wieber » jwieber@example.com#

- To open the **Tabs** panel, select **Window > Type > Tabs**. It most likely will not open in a useful position above the text box. You can position it by selecting the text box (with the **Selection Tool**) and clicking the magnet on the lower right of the **Tabs** panel:

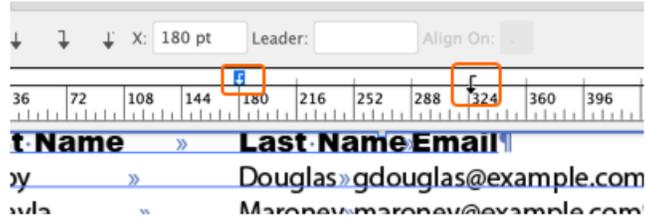


The **Tabs** panel will now be positioned above the text box:

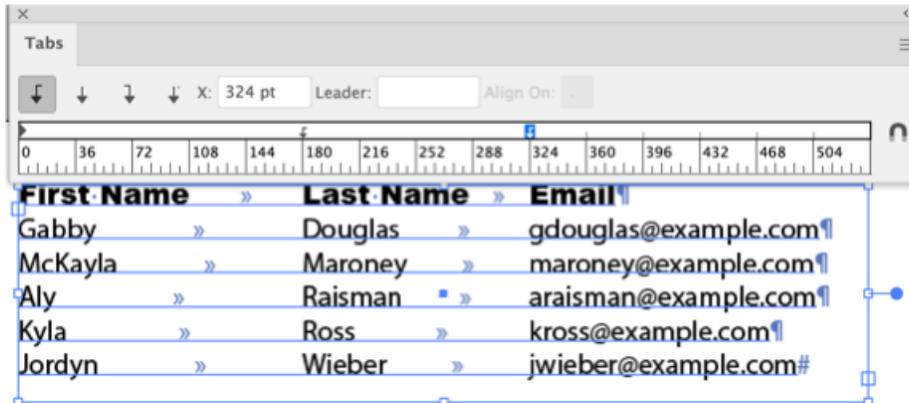


Note that if you select the text box before opening the **Tabs** panel, the panel will position itself properly when it opens.

- The four down arrows are different types of tabs. The first one is the **Left-Justified Tab**. It is the one you will use most often. Make sure it is selected and then click the ruler to place tab stops at the positions you want the last name and email columns to begin. The screenshot below shows the first tab stop placed at 180 pt from the left, and the second tab stop about to be placed at 324 pt from the left:



After placing both tab stops, the text will look like this:



4. You may now hide the tabs by selecting **Type > Show Hidden Characters** again.

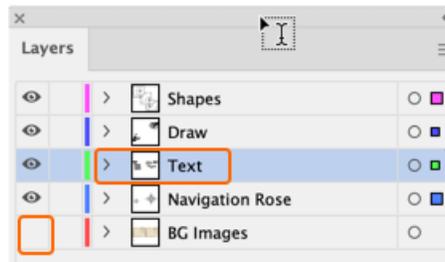
Our finished document is at [working-with-type/Demos/tab-stops-2.ai](http://working-with-type/Demos/tab-stops-2.ai).

# Exercise 18: Styles and Tabs

🕒 15 to 25 minutes

In this exercise, you will create and apply styles and set tab stops.

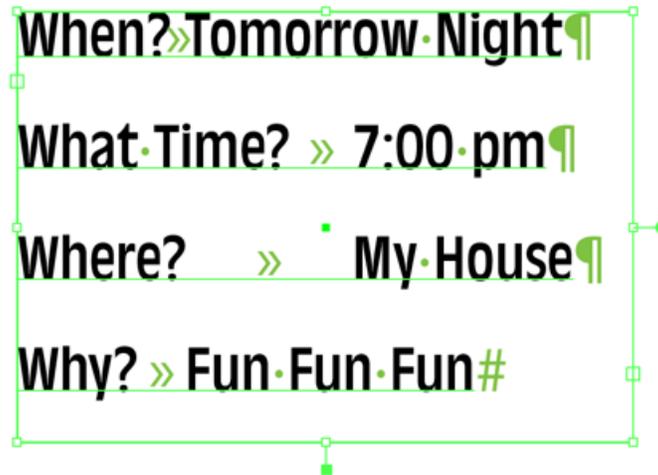
1. Open `working-with-type/Exercises/my-postcard.ai` in Illustrator to pick up where you left off.
2. Make sure the “Text” layer is selected in the **Layers** panel and hide the “BG Images” layer to make it easier to see:



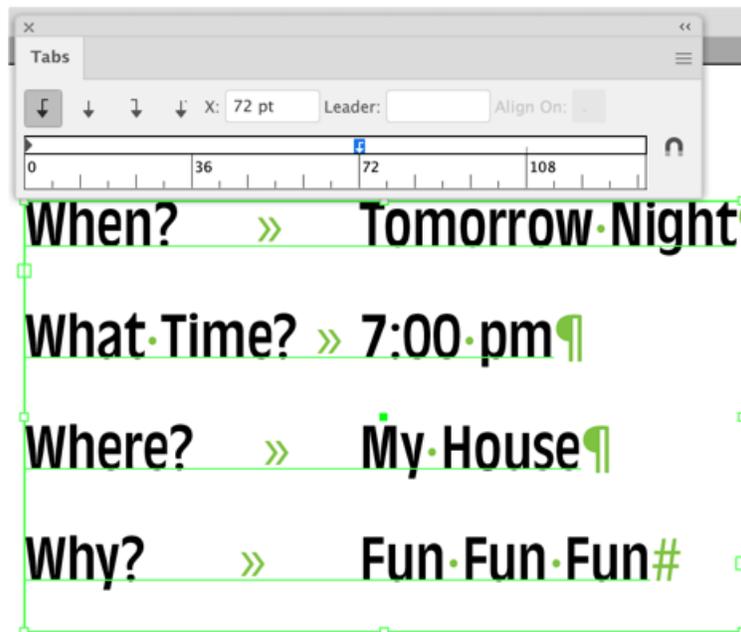
3. Select **Type > Show Hidden Characters** so you can see tab characters.
4. In the upper right of the back of the postcard, add a new text box with the following text:

```
When? Tomorrow Night  
What Time? 7:00 pm  
Where? My House  
Why? Fun Fun Fun
```

Place tabs between the questions and responses:

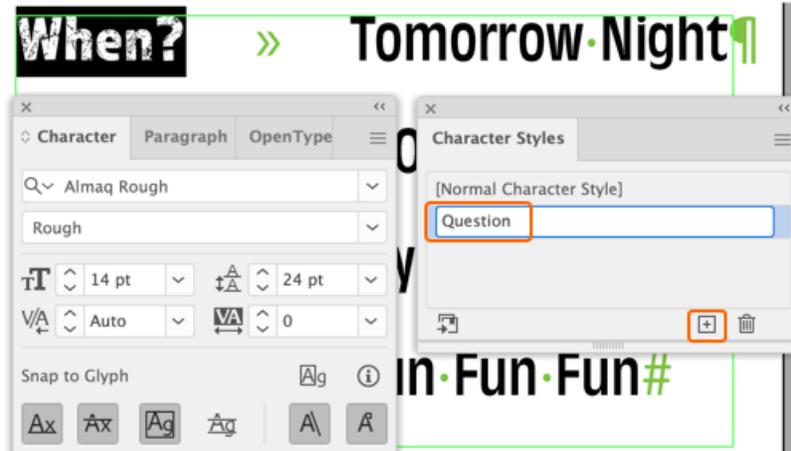


5. Add a tab stop to align the response in the text box:

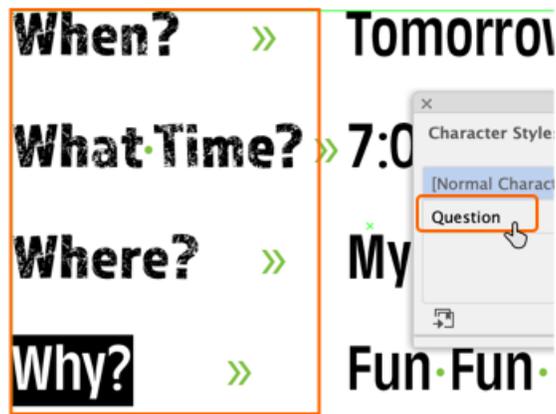


If not all the lines get aligned correctly, try selecting all the text and re-adding the tab stop.

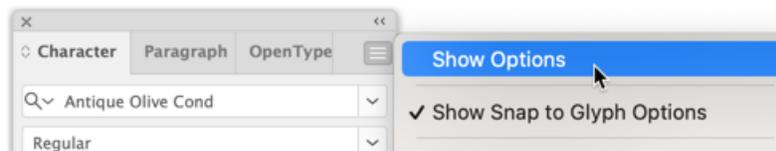
6. Select the text “When?” and style it using the **Character** panel. Then, create a character style named “Question” from the style you just created by clicking the plus sign on the **Character Styles** tab:



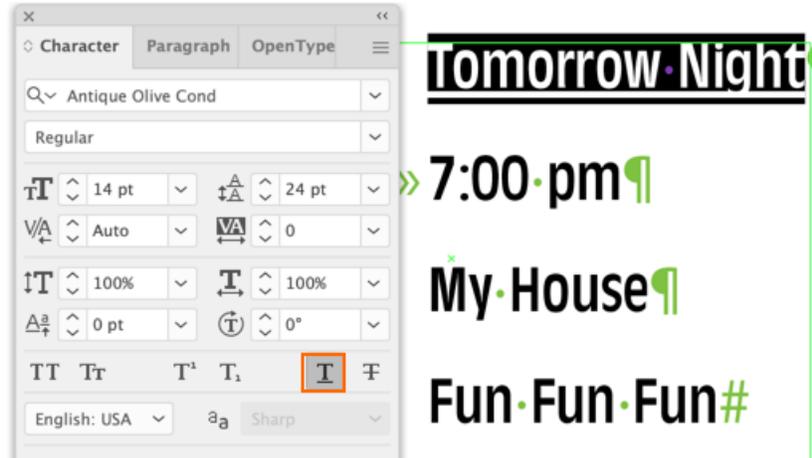
7. Apply the “Question” style to the other questions:



8. Repeat the process for an “Response” style. If you don’t see all the style options you want, select **Show Options** from the menu on the **Character** panel:



For example, we needed to do that to see the underline option:



9. When you're done, save and close the file.

Our solution is at [working-with-type/Solutions/postcard-2.ai](#).



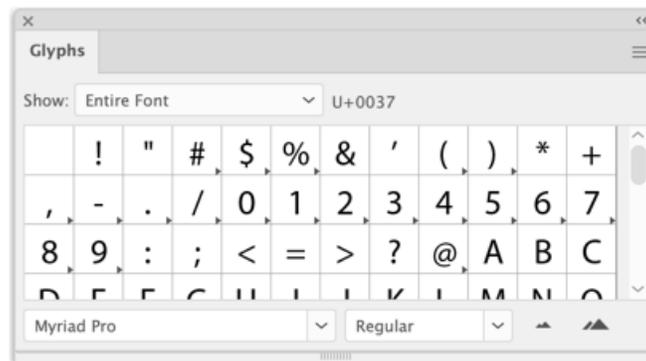
## 6.5. Working with Glyphs

Evaluation Copy

Glyphs are special characters such as a pictograph that are built into most fonts. Select **Window > Type > Glyphs** to bring up a panel to help you work with the options available to that font. They are broken out by category.

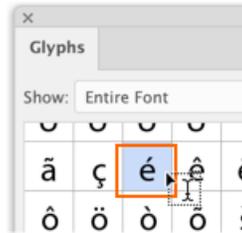
To add a glyph:

1. Select **Window > Type > Glyphs**:



2. Double-click a glyph to place it at the current insertion point:

Bézier



## 6.6. Converting Type to Outlines

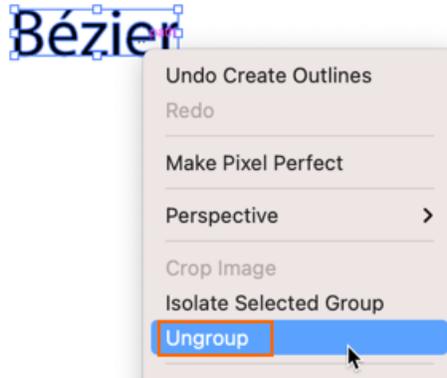
When a project is sent to another user who may need to view or print the artwork, issues may arise. If the user doesn't have the fonts we do, the look and feel may be ruined as Illustrator will replace the font with one available. One solution is to convert type to outlines.

This process will make the type into shapes that appear to be just like the font; however, they are not editable once they are converted. Please make sure to always keep an original file with the fonts in place, and create a copy of the file to convert to outlines.

To create outlines:

1. With the text object selected, select **Create Outlines** from the **Type** menu.
2. The text will be converted to a set of shapes in a group:

3. Right-click and select **Ungroup**:



4. Select a letter:



5. The text has been converted to shapes. Move, rotate, change shape, etc. to create a unique look:



Here's the result:

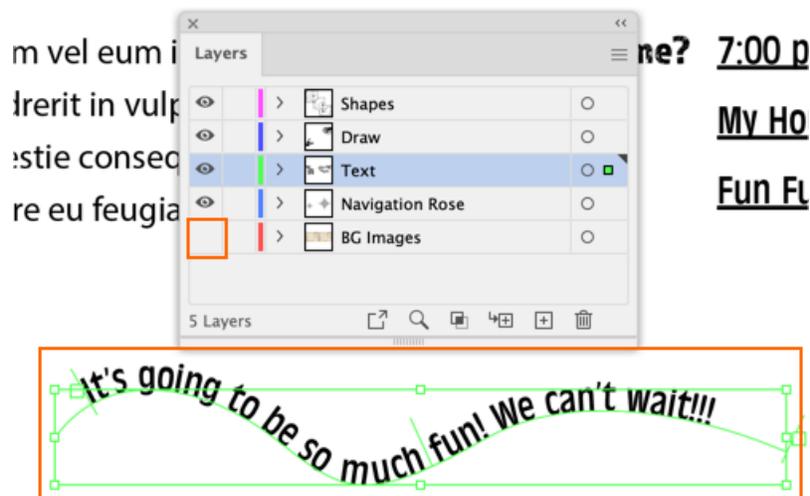


# Exercise 19: Type to Outlines

🕒 5 to 10 minutes

In this exercise, you will convert text to outlines.

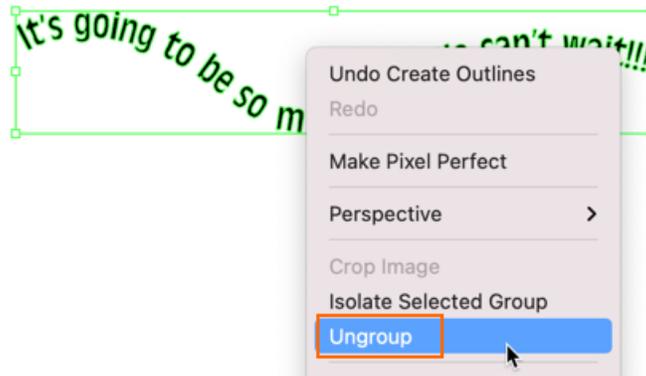
1. Open `working-with-type/Exercises/my-postcard.ai` in Illustrator.
2. Hide the “BG Images” layer and select the text along the path on the back of the postcard:



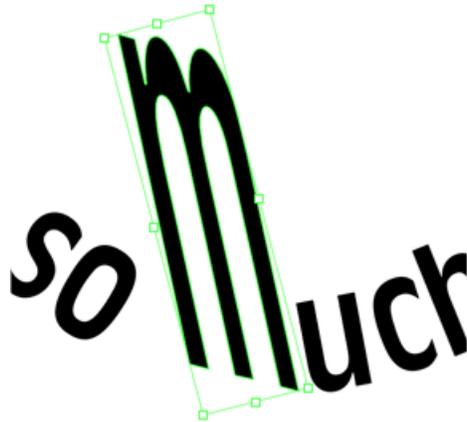
3. Select **Create Outlines** from the **Type** menu. The text should now look like this:



4. Right-click and select **Ungroup**:



5. Select and modify one or more letter shapes:



6. When you're done, save and close the file.

Our solution is at [working-with-type/Solutions/postcard-3.ai](#).

## Conclusion

In this lesson, you have learned:

- How to work with text.
- How to work with styles.
- How to show hidden characters and set tab stops.
- How to work with glyphs.
- How to convert type to outlines.

# LESSON 7

## Managing Project Components

---

### Topics Covered

- Reusing design elements.
- Sharing color themes.
- Imported and threaded text.
- Importing styles and artwork.
- Managing linked and embedded components.

### Introduction

In this lesson, you will learn to manage the components that make up a project, so that you can reuse them throughout the project and in other projects.



## 7.1. Project Components

### ❖ 7.1.1. Reusing Design Elements

There are many ways to reuse elements of a project. Illustrator supports the use of libraries, which store color themes, graphics, and other useful components. The library can then be shared with others and is a great tool to keep a consistent look even when multiple designers are working on a project together.

#### Adobe Account

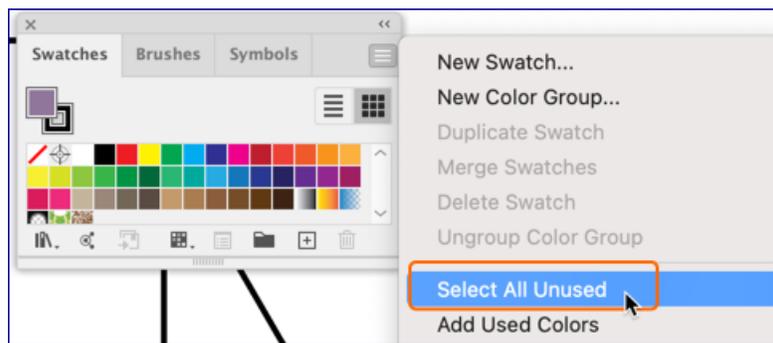
To work with libraries, you must have an Adobe account.

To experiment with libraries, create a new document in Illustrator. If you make it 600 pt x 550 pt, it will give you plenty of room to play. You may wish to save this document, so that you can use it later in the lesson.

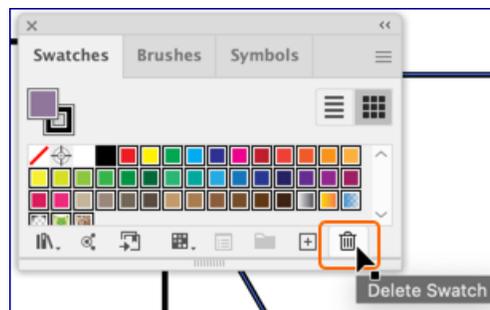
## Clean Swatches

Before we get started with libraries, let's clean out the unused swatches:

1. From the **Window** menu, select **Swatches**.
2. On the **Swatches** panel, from the menu in the upper right, click **Select All Unused**:

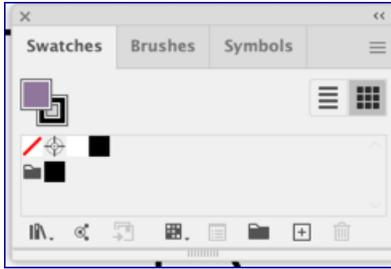


3. Click the **Delete Swatch** button (the trash can) in the lower right:



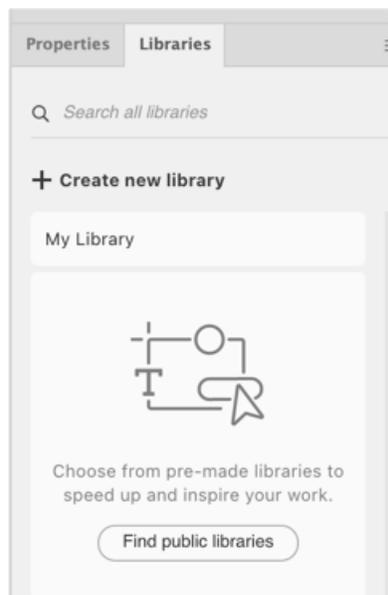
If you receive a warning, click **OK** to confirm you wish to delete the selected swatches.

4. The **Swatches** panel is now cleared and ready to add your colors without the clutter of all of the default colors:

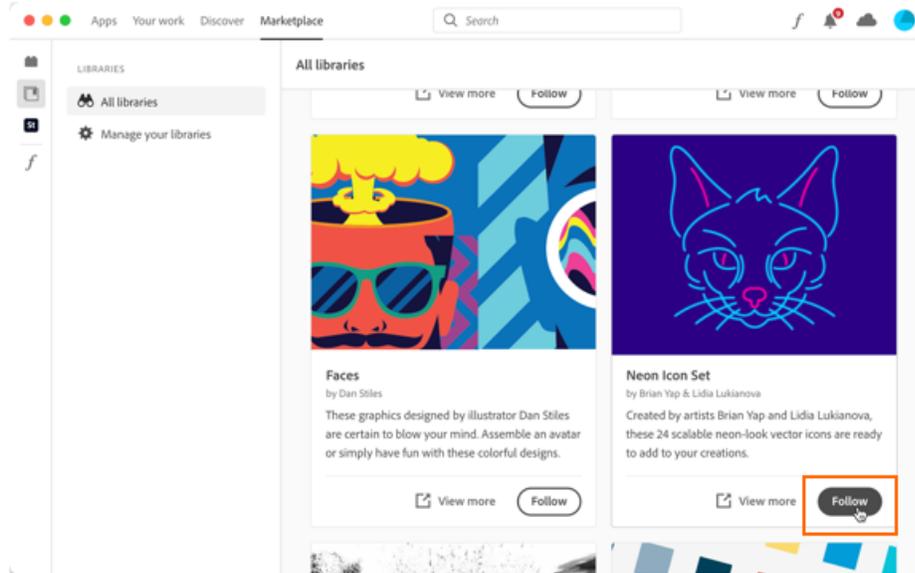


## Using a Public Library

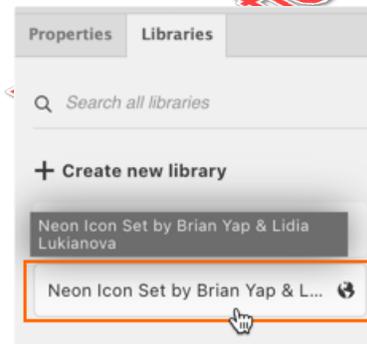
1. From the **Window** menu, select **Library**. The look will depend on how you have used your Adobe account in the past, but it will look something like this:



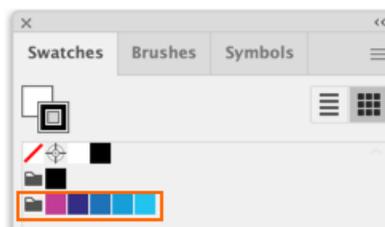
2. Click the **Find public libraries** button to find public libraries. These libraries are free to use with your Adobe account. Pick one you like and click the **Follow** button:



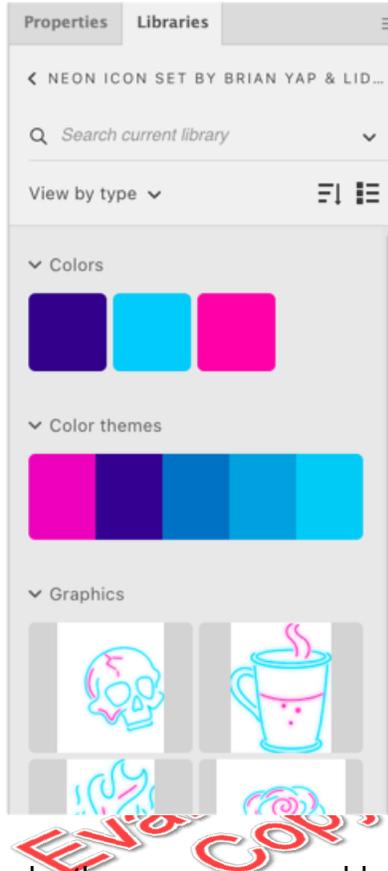
3. Close the public libraries. You will see the new library in your **Library** panel:



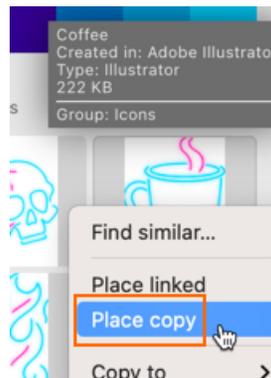
4. The colors are now loaded:



5. Click the library name to see its assets:

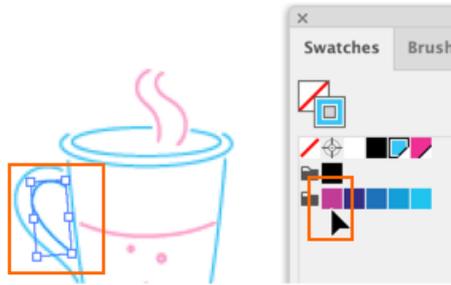


6. If the library includes color themes, you can add a theme to your swatches
7. Right-click an asset in the library and select **Place copy**:



This will allow you to make modifications to the drawing.

8. Click the artboard to place the asset.
9. Using the **Selection Tool**, select a path from the asset you added. You may need to ungroup or double-click to select a path within a group. Then select a color from the **Swatches** panel to change the color of the path:



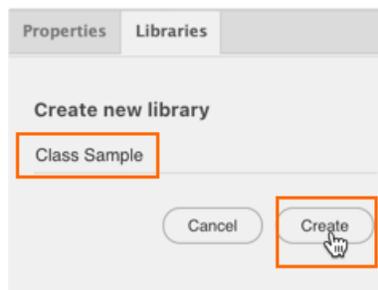
10. You can further manipulate the paths and color however you see fit. Have fun!

## Creating Your Own Library

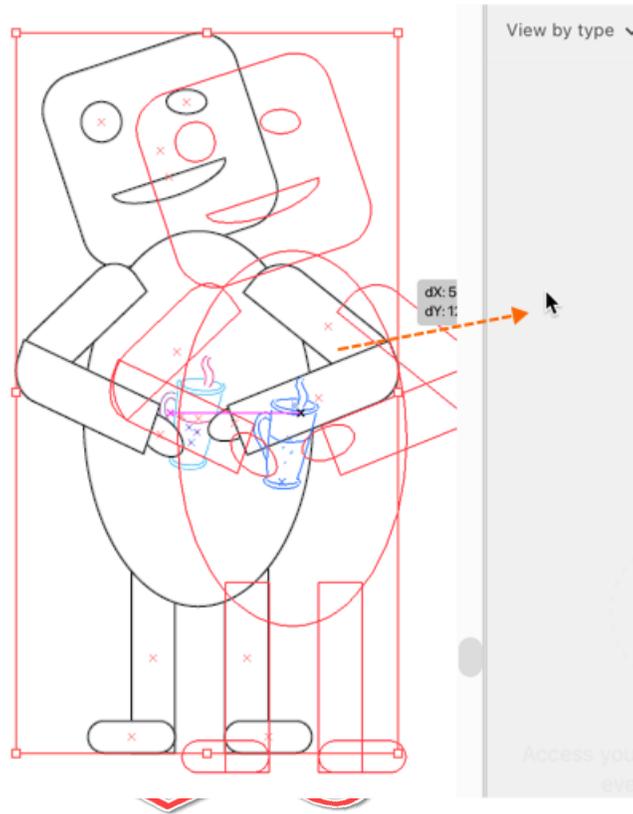
1. Select **Create new library** from the **Library** panel menu:



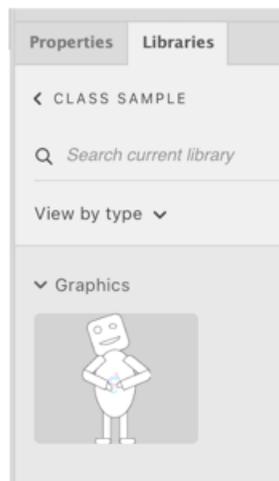
2. Name the library:



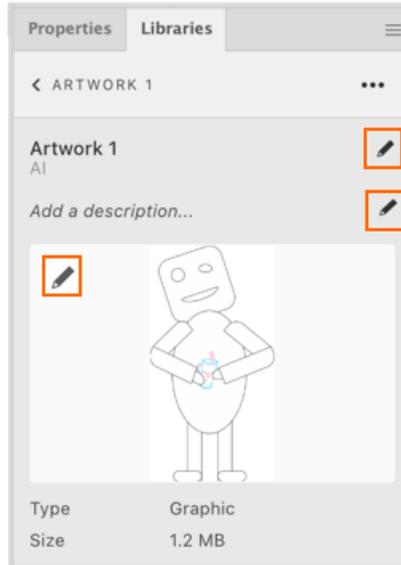
3. Draw something and drag and drop it onto your library:



4. The artwork is now loaded as a graphic item:

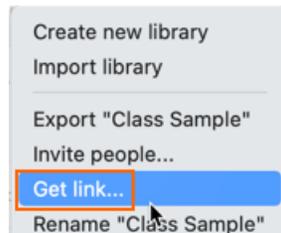


5. Double-click the item in the library to be given the option to edit:

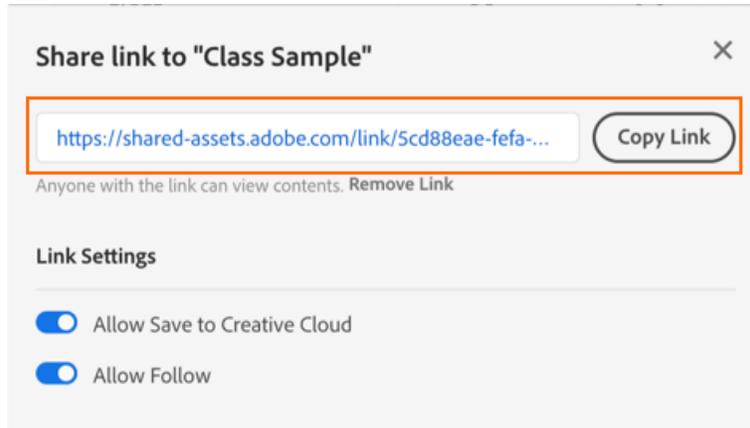


This will give you options to rename the item, add a description, and open the source document allowing you to make changes to the item in the library.

6. You can share your library. Select the library you would like to share, then select **Get link...** from the **Library** panel menu:



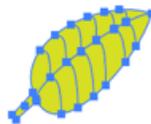
7. The link is ready to be shared:



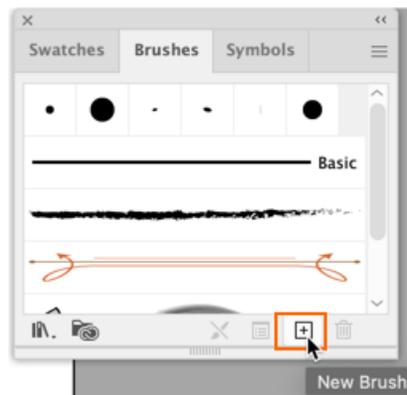
## 7.2. Custom Art Brush

To create a custom image-based brush:

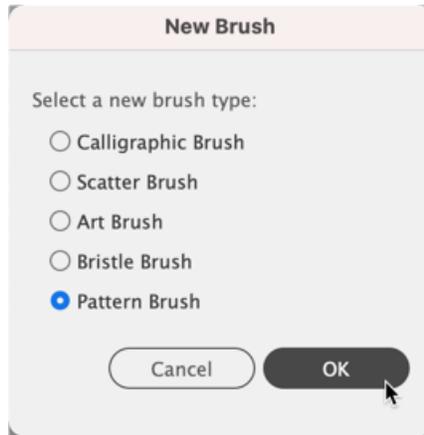
1. Open managing-project-components/Demos/leaf-brush-1.ai and select all of the artwork with the **Group Selection Tool**:



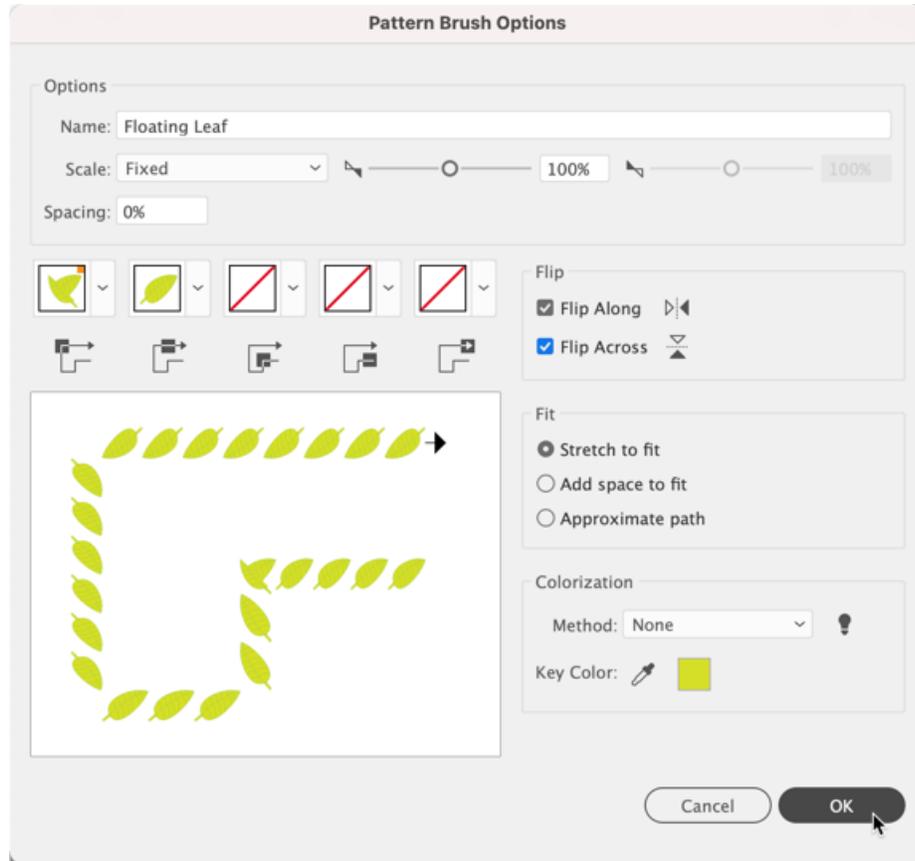
2. On the **Brushes** panel (**Windows > Brushes**), click the **New Brush** button:



3. Choose the type, in this case, **Pattern Brush**, and click **OK**:



4. Set the following options:
  - Name the brush “Floating Leaf”.
  - Select **Stretch to Fit** stroke length under **Fit**.
  - Set the **Colorization** method to **None**, which will keep the original colors.
  - Select **Flip Along** and **Flip Across** under **Flip**.
  - Click **OK**.



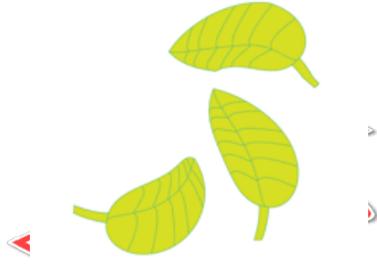
5. Switch to the **Paintbrush Tool**:



6. Make a stroke:



And here's the result:



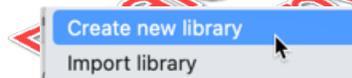
7. Feel free to play around with other settings and brushes.

# Exercise 20: Reuse

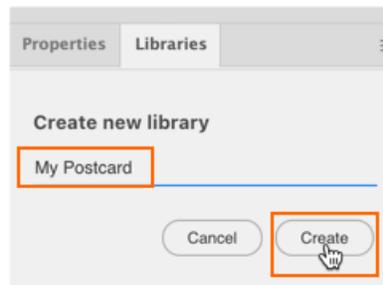
 5 to 15 minutes

In this exercise, you will create a new library and add items to it, save a copy of your file. You will need to be logged into your Adobe account. If you do not have one, you can skip this exercise.

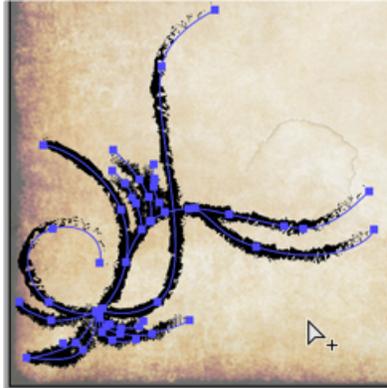
1. If you wish to continue with the postcard you have been working on, open `working-with-type/Exercises/my-postcard.ai` in Illustrator and immediately save the file in `managing-project-components/Exercises`. Alternatively, you can start with the file at `managing-project-components/Exercises/postcard.ai`, which picks up where we left off in the last exercise, and save the file as `my-postcard.ai`.
2. Select **Create new library** from the **Library** panel menu:



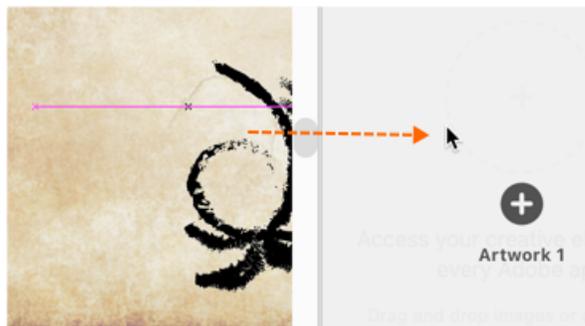
3. Name the library:



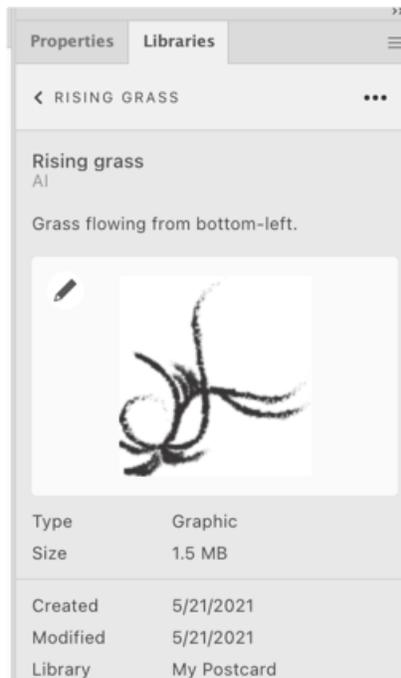
4. Using the **Group Selection Tool**, select the paths in the lower left of the front of the postcard:



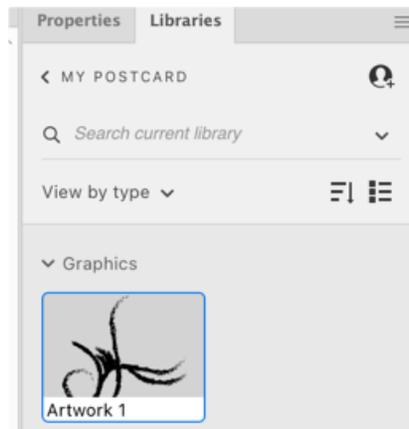
5. Drag the paths into the library:



6. Add a name and description:



7. The paths are now a graphic that can be reused



8. Feel free can drag other images and pieces into the library as well.
9. Save and close the file.

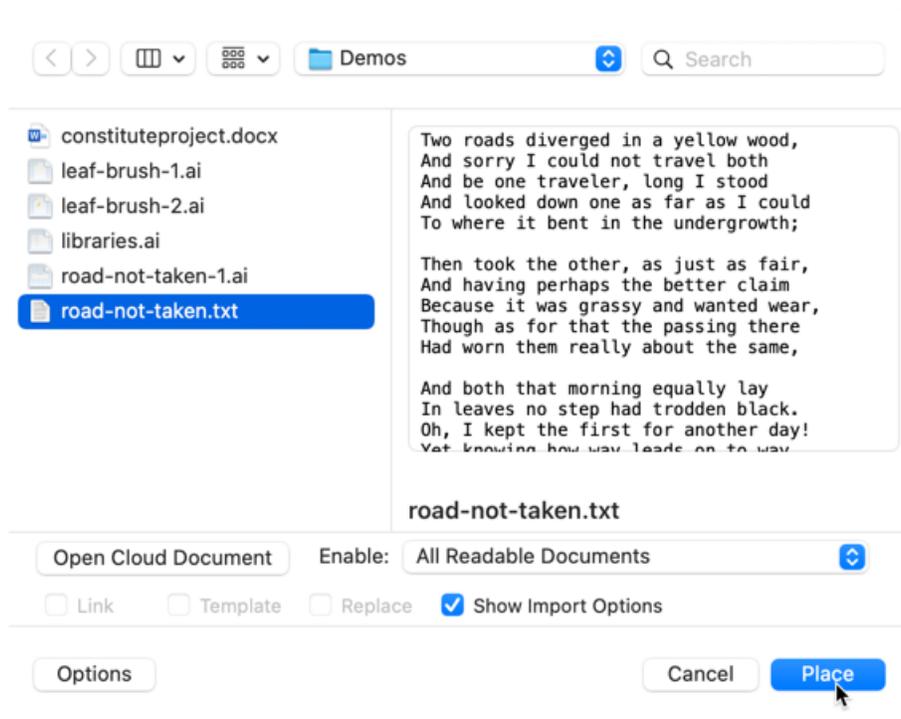
Evaluation  
Copy



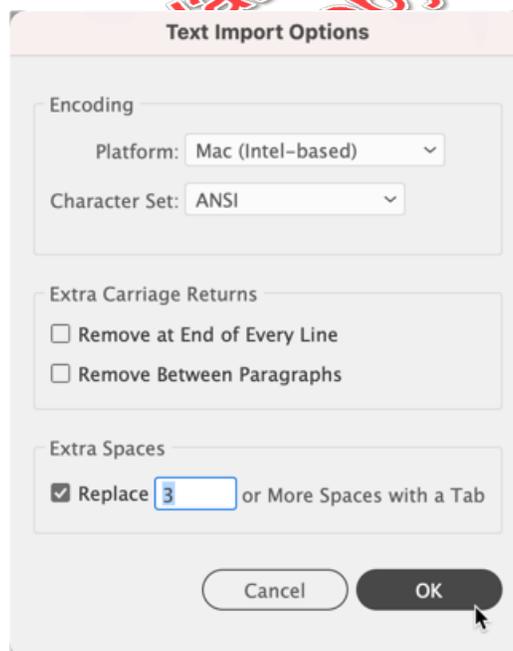
## 7.3. Import Text and Thread Text Frames

In this section, you will learn how to import text from an external document.

1. Open `managing-project-components/Demos/road-not-taken-1.ai` in Illustrator.
2. Select **File > Place** and navigate to `managing-project-components/Demos/road-not-taken.txt`.
3. Click **Place**. You can also choose to view the import options noting that each file type can have different options:

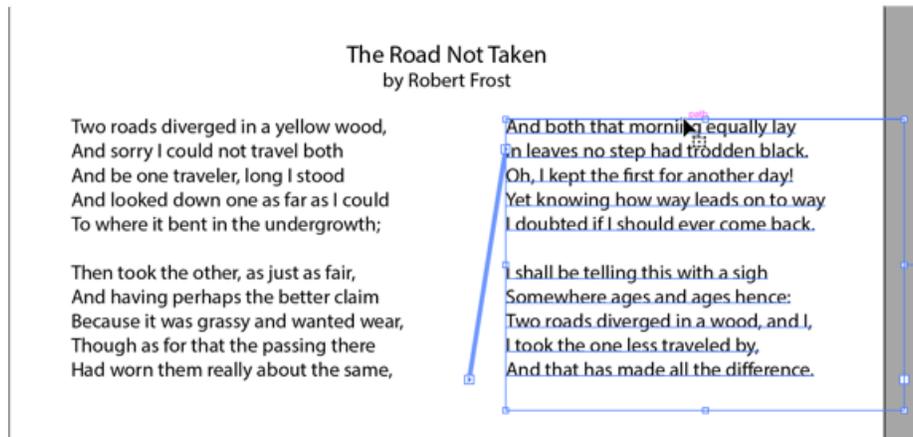


4. Set the options and click **OK**:



5. Drag to draw a container for the text. If the text doesn't fit, you may need to flow the remaining text into another text container. Double-click the overflow text icon

(the plus sign) in the lower right to create another text equally-sized text box then drag it to align it properly:



You may need to resize the font (using the **Character** panel) to get it to fit correctly.

6. Save the file.

Evaluation  
Copy

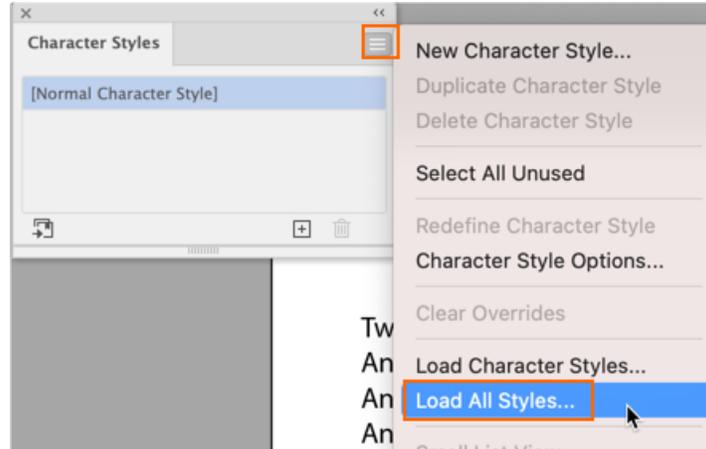


## 7.4. Import Styles

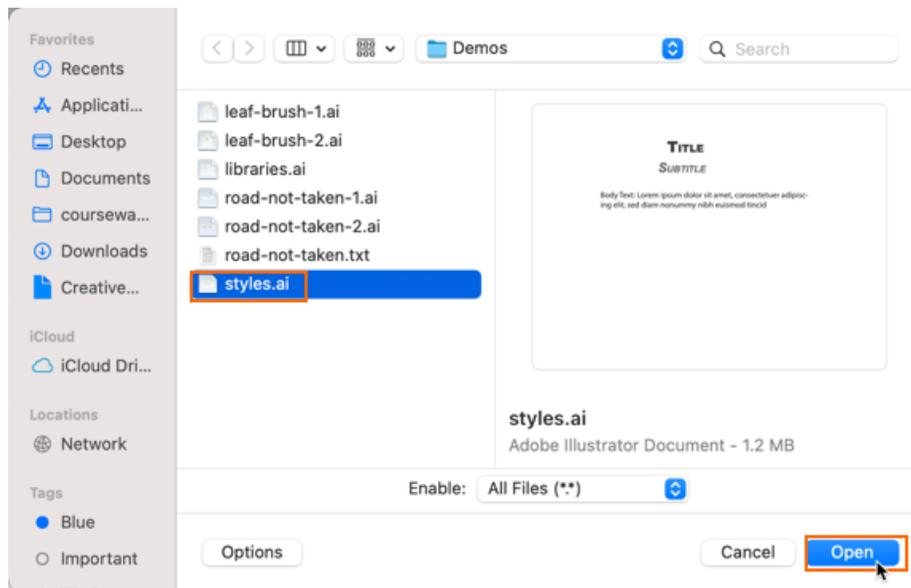
Text styles can also be reused from file to file. Note that changes to the original file we are borrowing the styles from will not have an effect on the file we load them into.

To load styles:

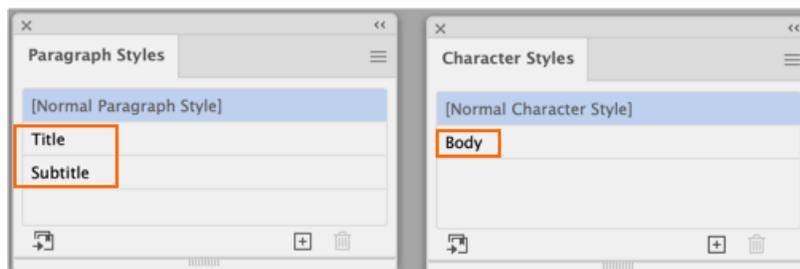
1. Open `managing-project-components/Demos/road-not-taken-1.ai` in Illustrator if it's not still open.
2. Go to **Windows > Type > Character Styles**. Select **Load All Styles** from the **Character Styles** menu:



3. Locate managing-project-components/Demos/styles.ai and then click **Open**:



4. The new character and paragraph styles are now loaded and ready to go:



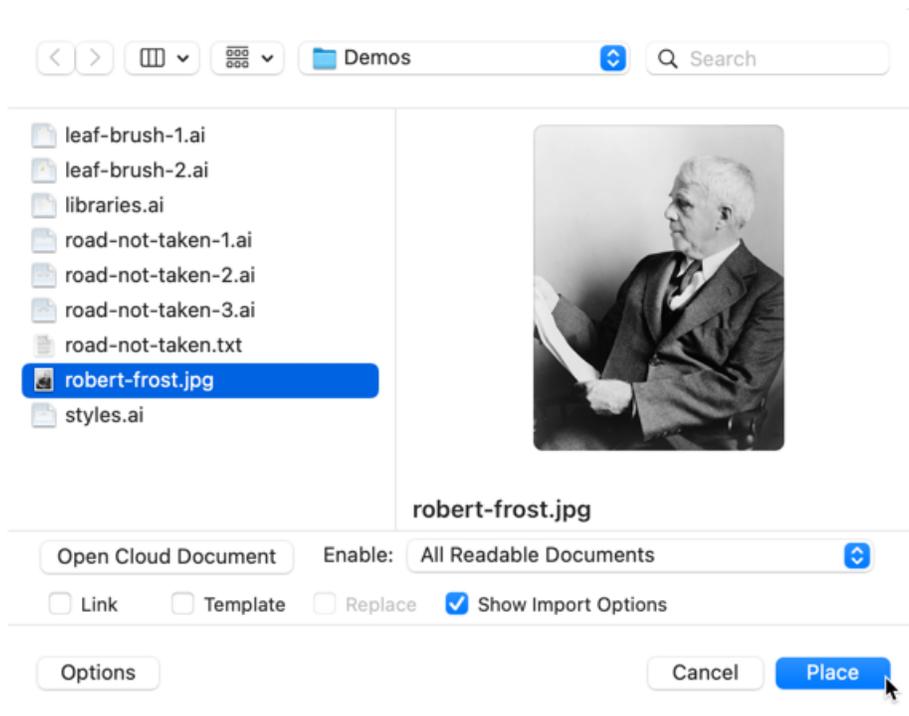
5. Apply the character and paragraph styles to the title, subtitle, and body in the document.
6. Save the file.



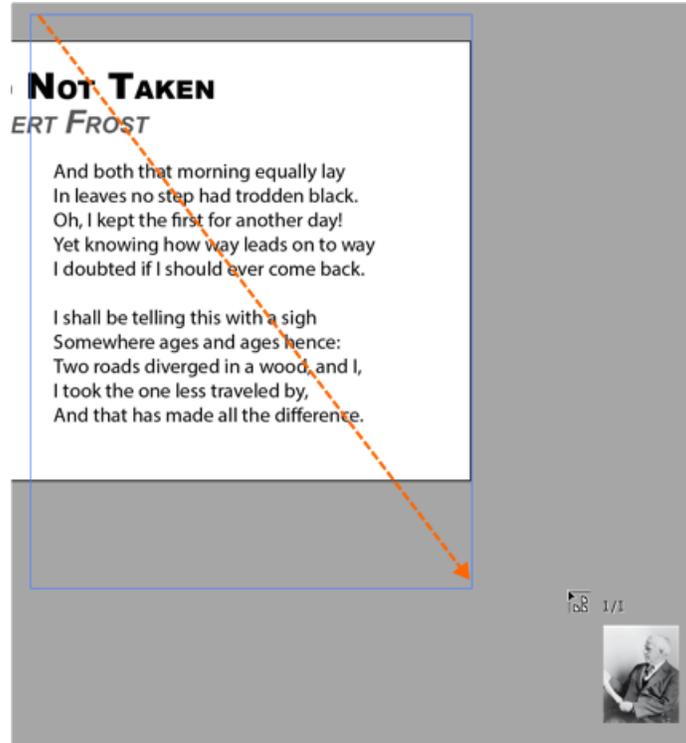
## 7.5. Import Artwork

Often we have artwork that has been created in another source that we would like to use in our project.

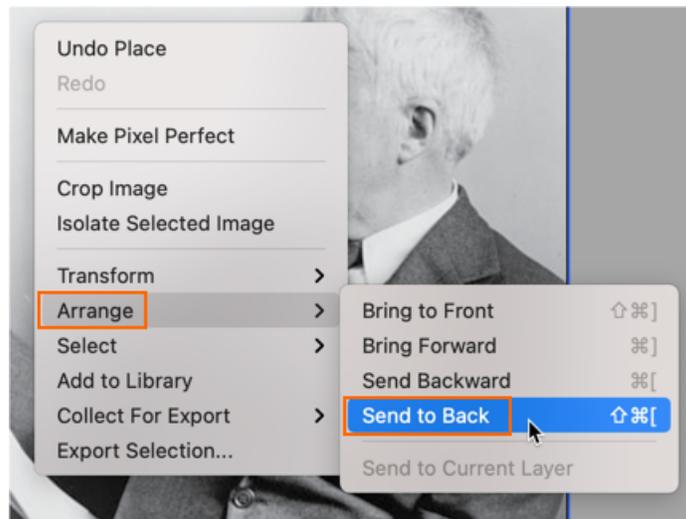
1. Open `managing-project-components/Demos/road-not-taken-1.ai` in Illustrator if it's not still open.
2. Select **File > Place**. Select `robert-frost.jpg` and click **Place** button:



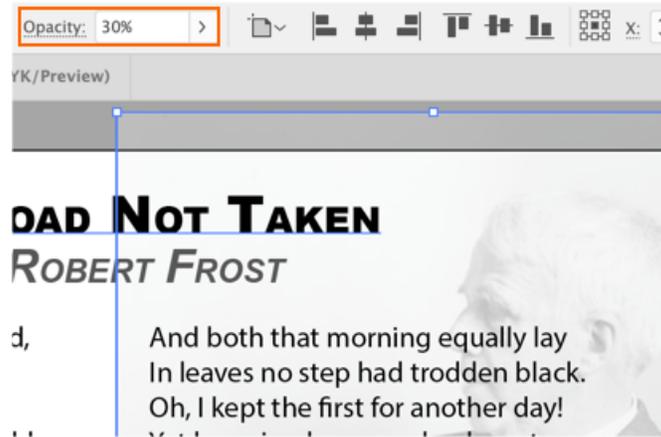
3. Drag to draw a container for the image:



4. Right-click to arrange and send to back:

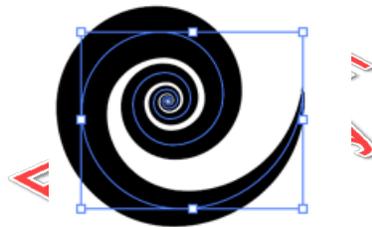


5. The artwork is now behind the text. Set the opacity to 30% to make the text more readable:

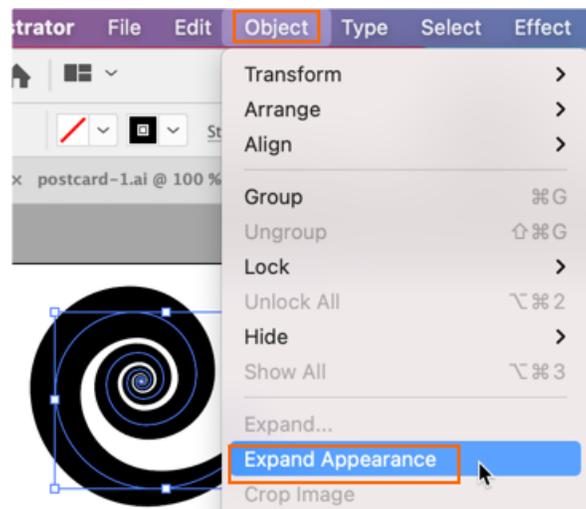


To expand objects and appearance:

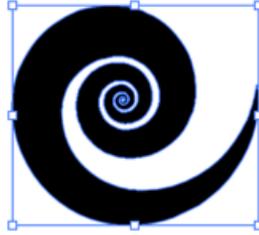
1. Open managing-project-components/Demos/swirl.ai and select the swirl in the upper left:



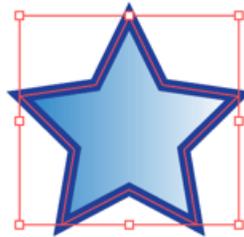
2. From the **Object** menu select **Expand Appearance**:



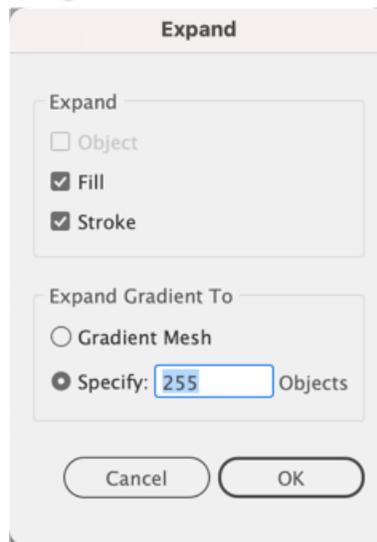
3. The swirl art is now a closed shape:



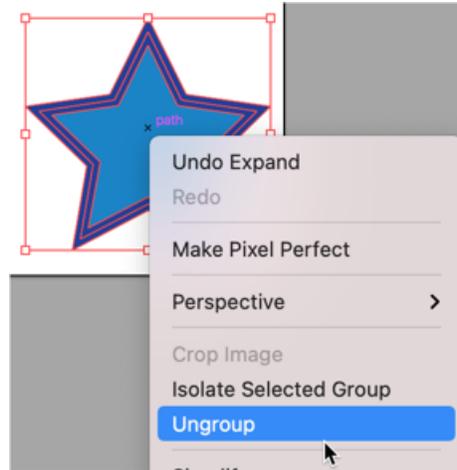
4. Select the star in the lower right. It is a basic shape with a gradient fill and a wide stroke. We want these to be two separate objects:



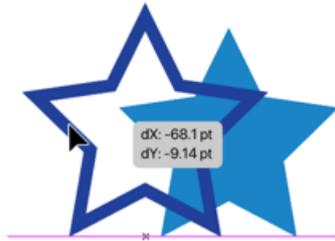
5. From the **Object** menu select **Expand**. The **Expand** options appear. Leave the default options selected and click **OK**.



6. Right-click the star and choose **Ungroup**:



7. The star is now two separate shapes. You can drag the former stroke away from the former fill:

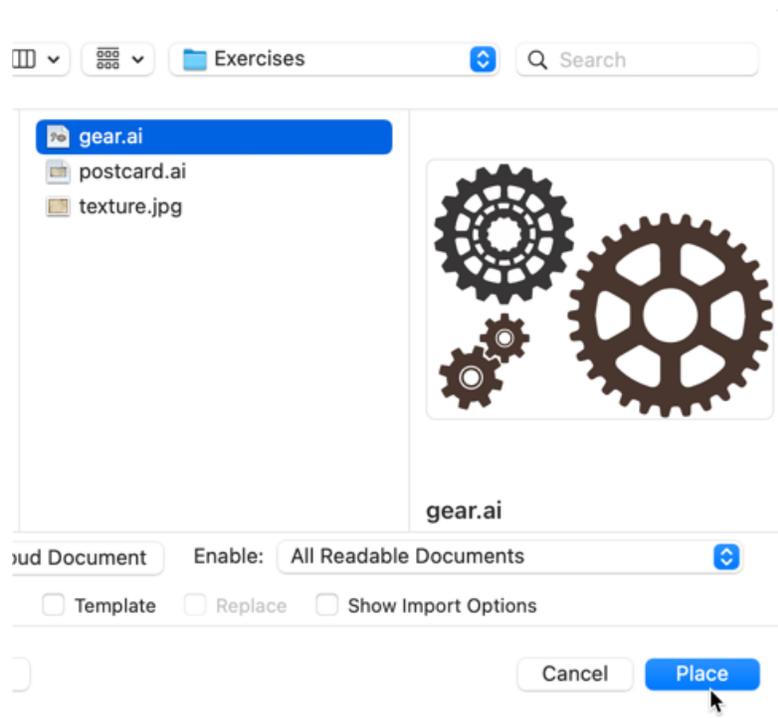


## Exercise 21: Import

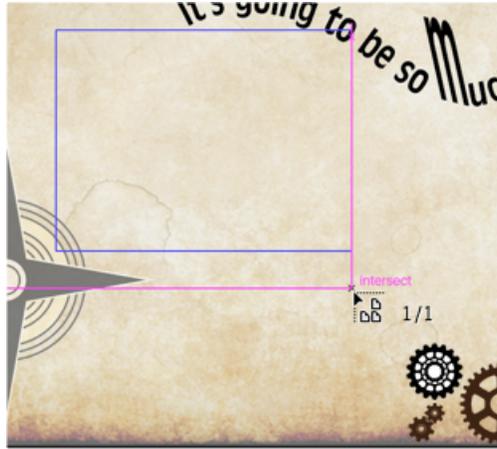
 5 to 10 minutes

In this exercise, you will add an image in your postcard.

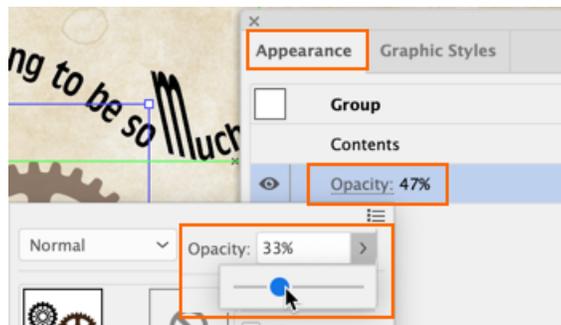
1. Open `managing-project-components/Exercises/my-postcard.ai`.
2. Select **File > Place**, navigate to `managing-project-components/Exercises/gear.ai` and click **Place**:



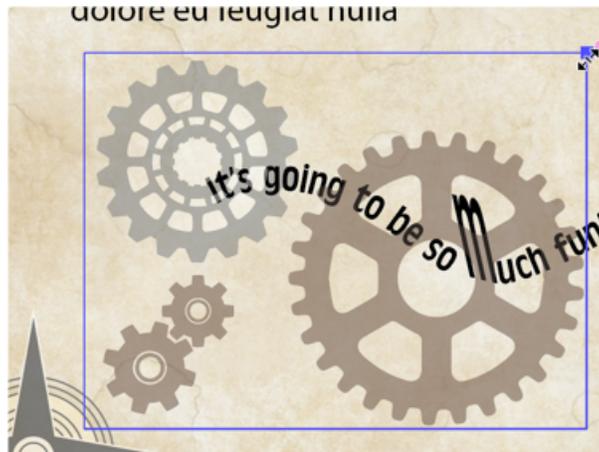
3. Drag to create a container for the image on the back of the postcard:



4. Use the **Appearance** panel to set the opacity:



5. Use the **Selection Tool** to size and move the gears:



6. Save and close the file.



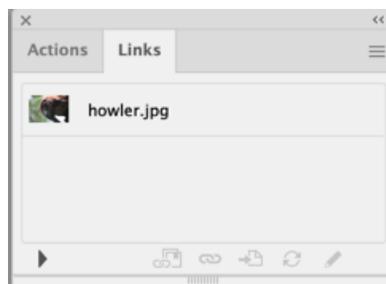
## 7.6. Manage Linked and Embedded Project Components

When a project or linked files within it get moved to a new folder, the linked elements, usually images, can get disconnected. To see how this happens and how to fix it:

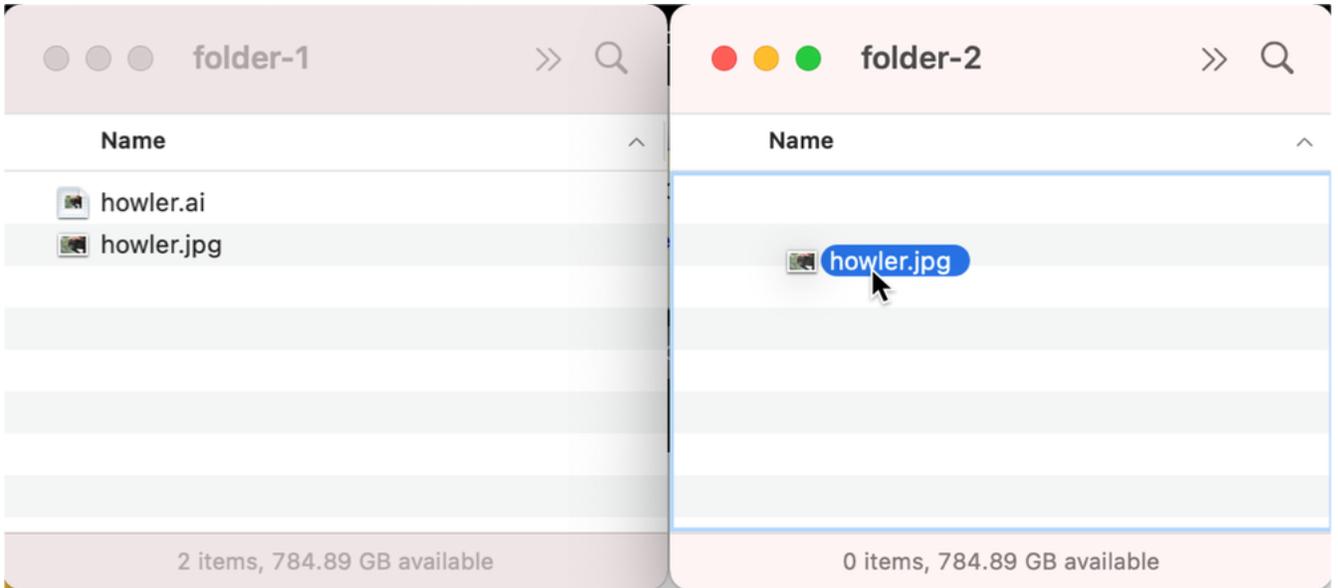
1. Open `managing-project-components/Demos/folder-1/howler.ai` and notice that the howler monkey loads correctly:



2. Open the **Links** panel from the **Window** menu to verify that the image is linked:



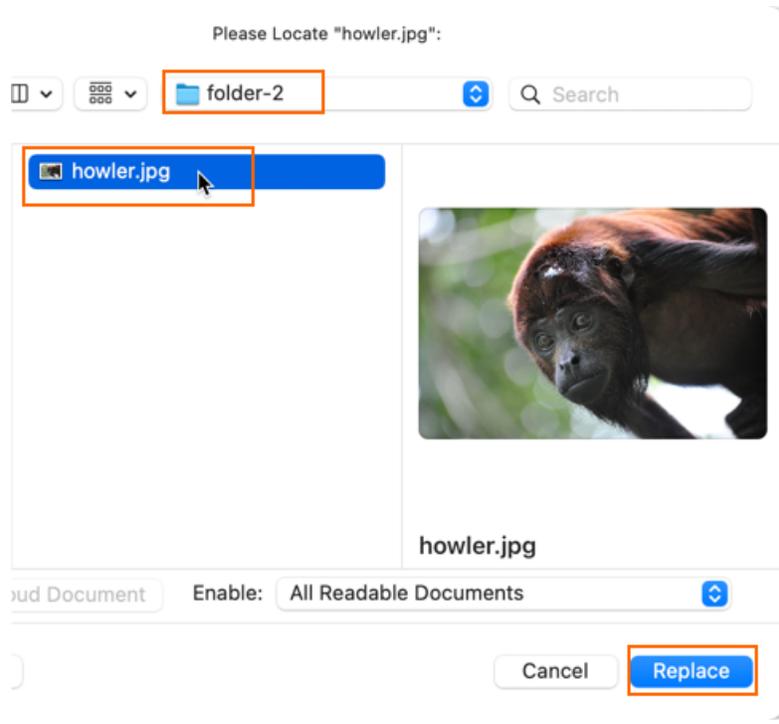
3. Close `howler.ai`.
4. On your file system, navigate to `managing-project-components/Demos`, create a new subfolder called `folder-2`, and drag `howler.jpg` from `managing-project-components/Demos/folder-1/` to `managing-project-components/Demos/folder-2/`:



5. Re-open managing-project-components/Demos/folder-1/howler.ai. You will get a warning that Illustrator cannot find the image. Click **Replace**:



6. Find the the new location of the image and click **Replace**:



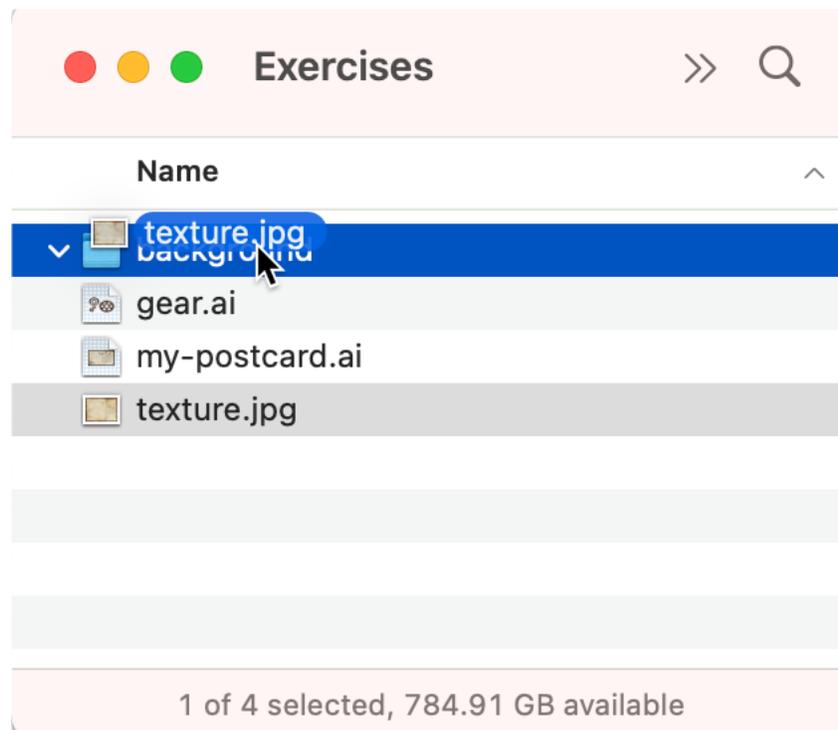
The image should now load correctly.

# Exercise 22: Working with Linked Content

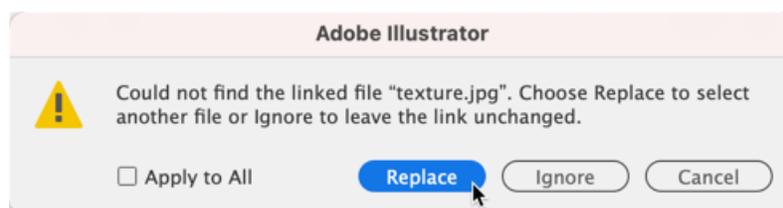
🕒 15 to 25 minutes

In this exercise, you move the linked background image into a background folder and then relink it.

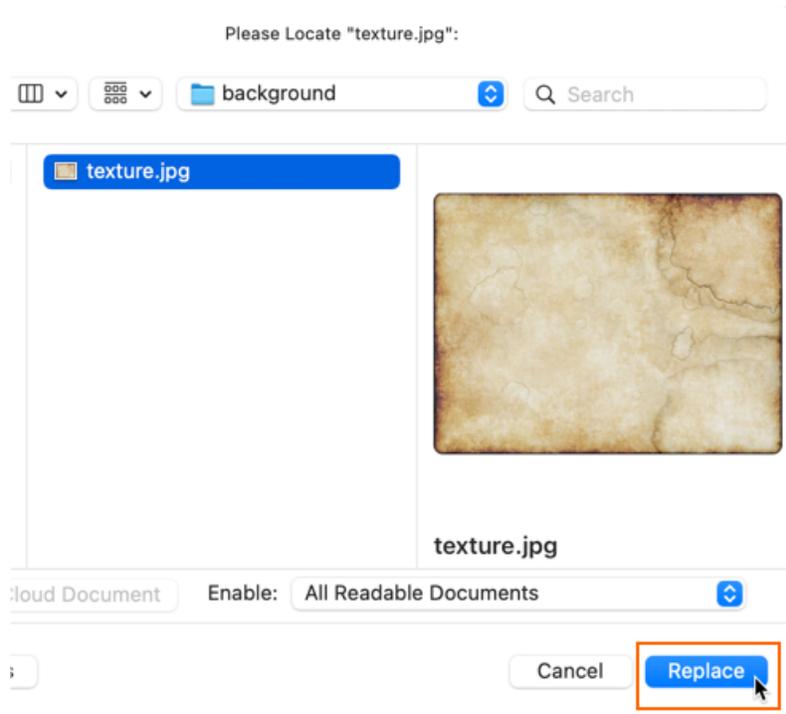
1. On your file system, navigate to `managing-project-components/Exercises`, create a new subfolder called `background`, and move `texture.jpg` into the new folder:



2. Open `managing-project-components/Exercises/my-postcard.ai`. You will get a warning that Illustrator cannot find the image. Click **Replace**:



3. Find the the new location of the image and click **Replace**:



The background image should now show up.

4. Save and close the file.

## Conclusion

In this lesson, you have learned:

- How to reuse design elements.
- How to share color themes.
- How to work with imported and threaded text.
- How to import styles and artwork.
- How to manage linked and embedded components.

# LESSON 8

## Sharing Your Project

---

### Topics Covered

- Proofing and preparing a project.
- Printing and exporting.
- Packaging a project.

### Introduction

In this lesson, you'll learn how to wrap up a project and share it with others.

Evaluation  
Copy

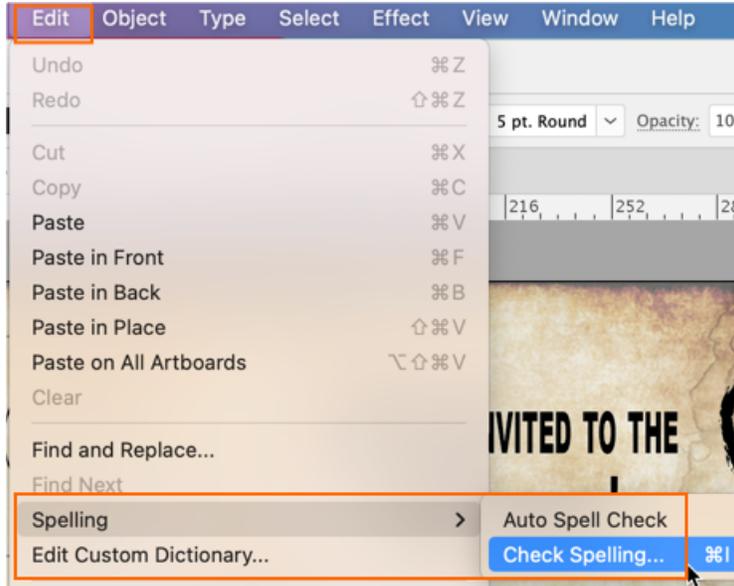
---

## 8.1. Proofing Your Project

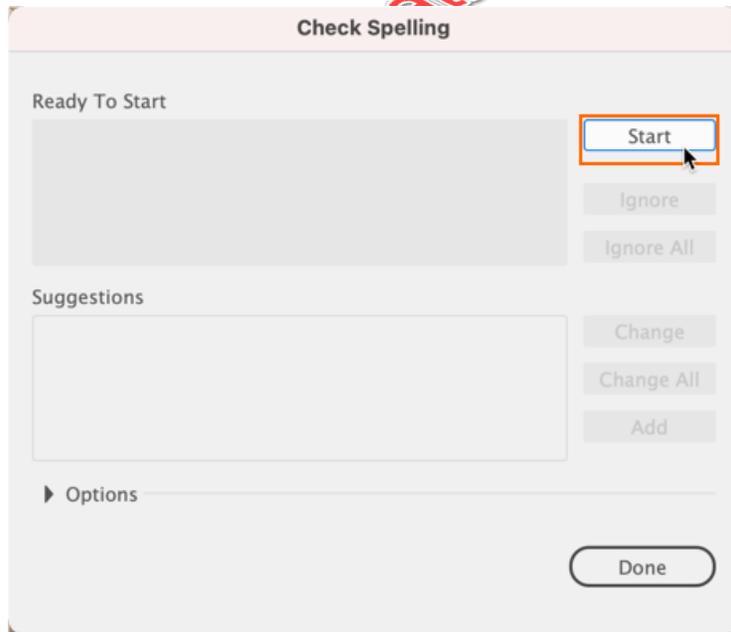
### ❖ 8.1.1. Spell Check

Running a spell check is an important final step before sharing your file. You can change or ignore the words that were flagged as possible misspellings.

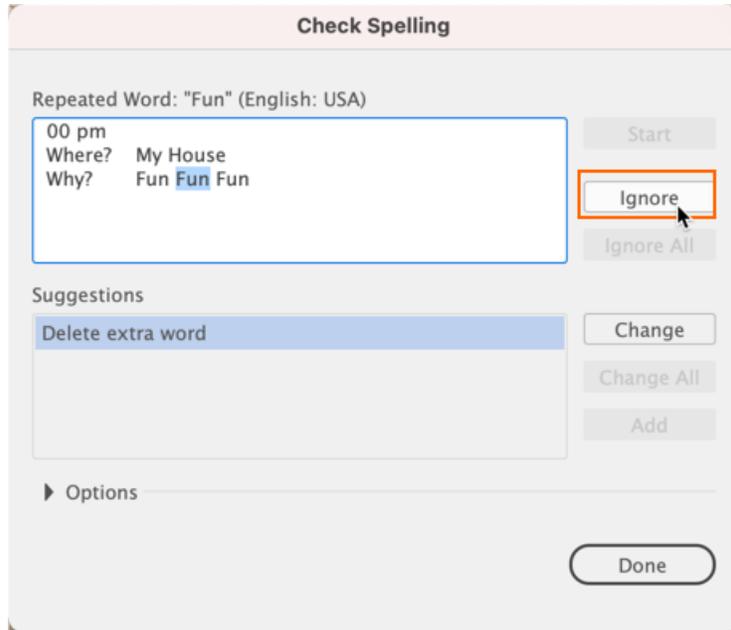
1. Open `managing-project-components/Exercises/my-postcard.ai` to continue with the postcard you have been working on in Illustrator and immediately save the file in `sharing-your-project/Exercises`.
2. Select **Edit > Spelling > Check Spelling...**:



3. Click **Start** to begin the spell check:



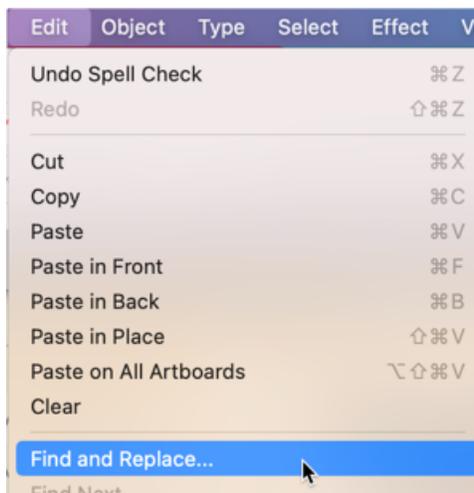
4. When misspelled words or other oddities are found, you can decide to **Ignore** or **Change**:



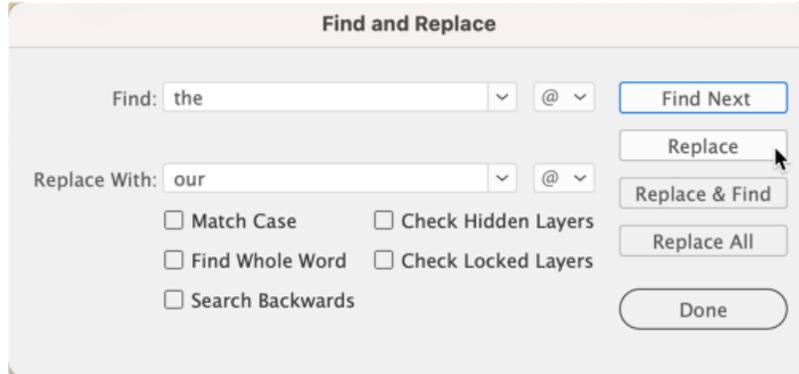
5. Click **Done** when spell check is complete.

## ❖ 8.1.2. Find and Replace

1. Select **Edit > Find and Replace**:



2. Type in the word to find and the word to replace. Click **Find**:



Then click **Replace** to replace the found word.

3. Click **Done** when you're finished.



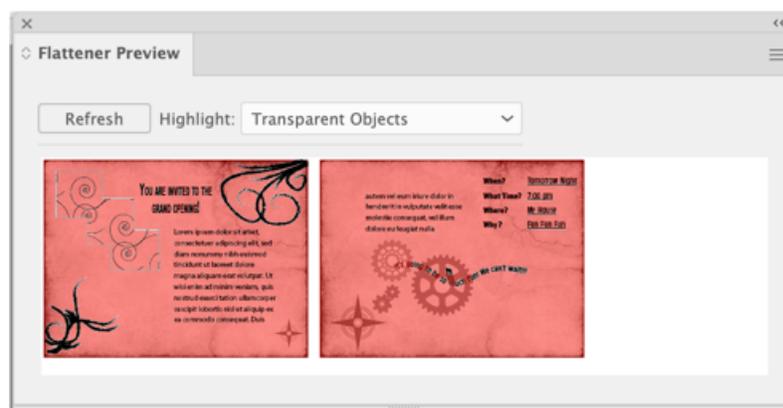
## 8.2. Preview Project

Previewing a project before printing or sharing with others is another important step to ensure the artwork is ready for final output.

### The Flattener Preview

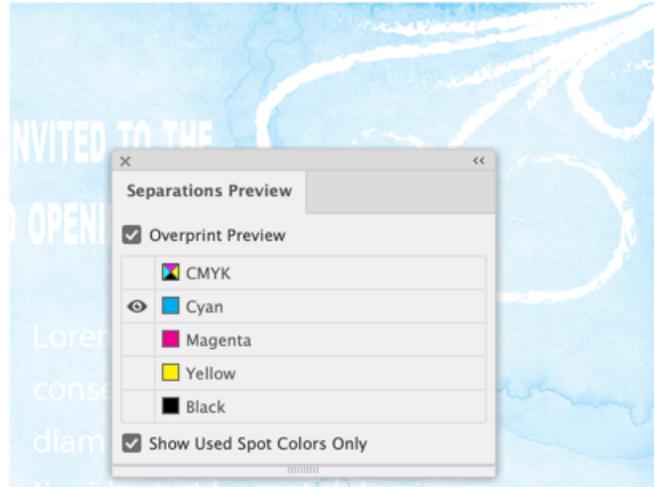
The **Flattener Preview** allows you to view objects that are transparent that may not render well in all formats. It also allows you to apply settings to those objects.

Select **Window > Flattener Preview**. Click the **Refresh** button:



## The Separations Preview

The **Separations Preview** makes it possible to see how the color plates cyan, magenta, yellow, and black interact in print. Select **Window > Separations Preview**:



Save and close your file.

## Exercise 23: Proof

 5 to 10 minutes

---

In this exercise, you will spell check and use flattener preview.

1. Open `sharing-your-project/Exercises/postcard.ai` in Illustrator. In this exercise, do not use your `my-postcard.ai`.
2. Run spell check.
3. View **Flattener Preview**.
4. Save file and continue working with this file.

*Evaluation  
Copy*

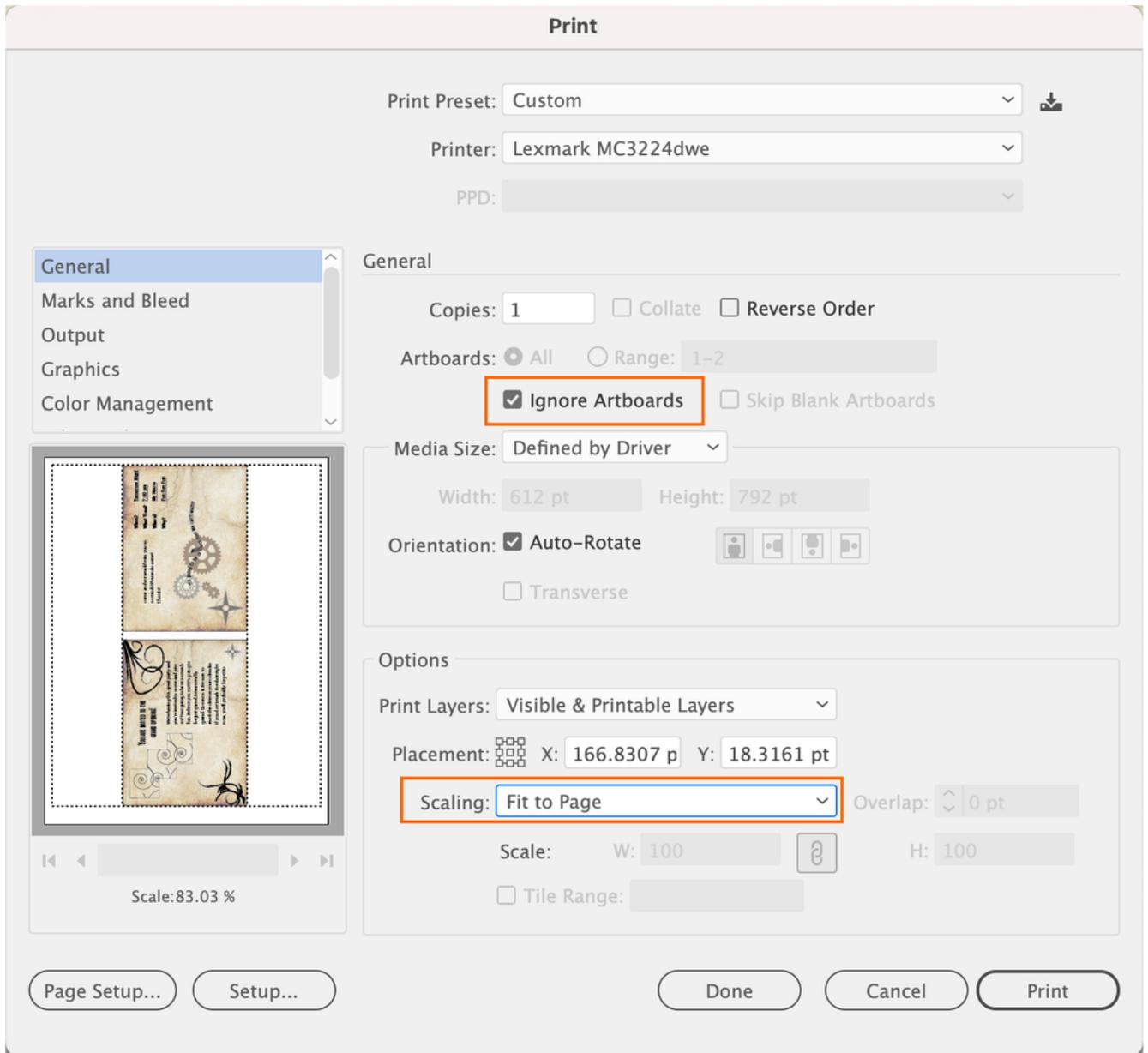
---

### 8.3. Printing

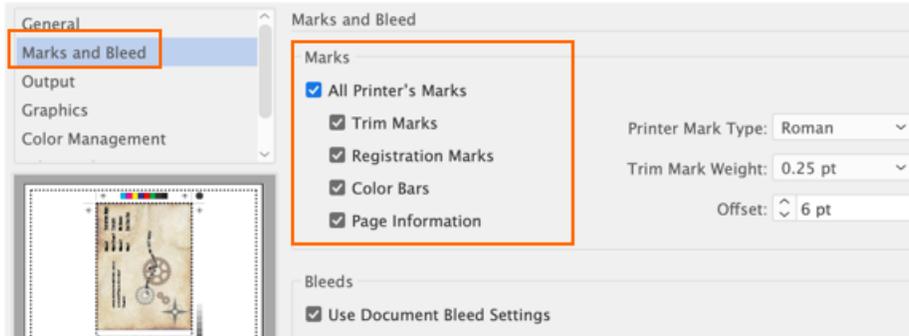
Printouts are used for an ink and paper check or the final output.

To print:

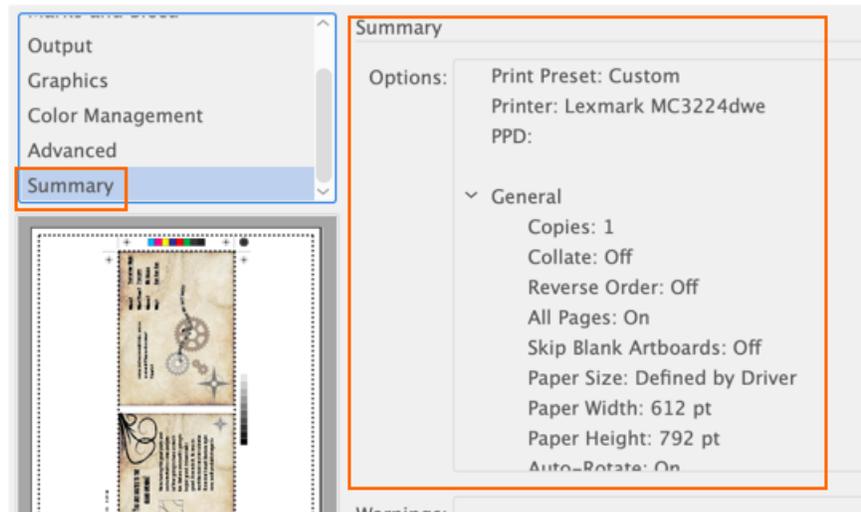
1. Select **File > Print**. The **Print** dialog box gives you control over many aspects of the file:



2. To fit everything on a single page, check **Ignore Artboards** and set **Scaling** to **Fit to Page**.
3. Select **Marks and Bleed** category and place a check the box next to **All Printer's Marks**:



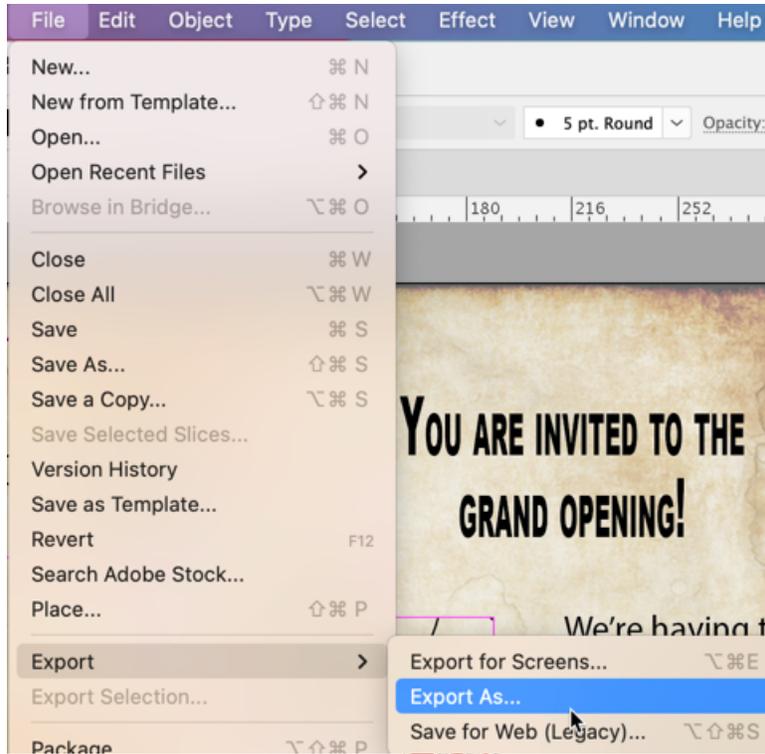
4. The **Summary** displays all of the choices. Click **Done** to save the settings or **Print**:



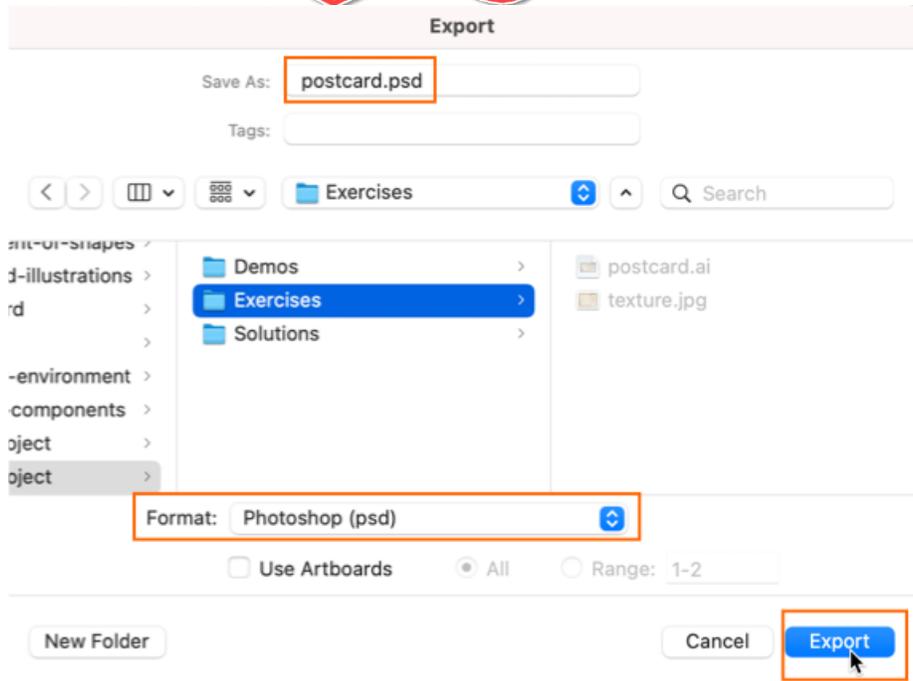
## 8.4. Export Options

Projects built in Illustrator often are part of other larger projects. You can export the artwork into other formats by selecting **File > Export**.

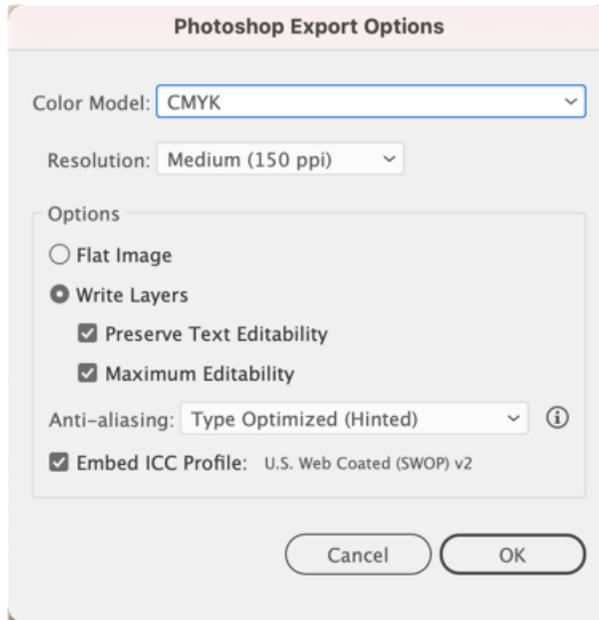
1. Select **File > Export > Export As...**:



2. Choose a format and click **Export**:



- Each type will have a set of options. Click **OK**:



The file will be converted and saved.

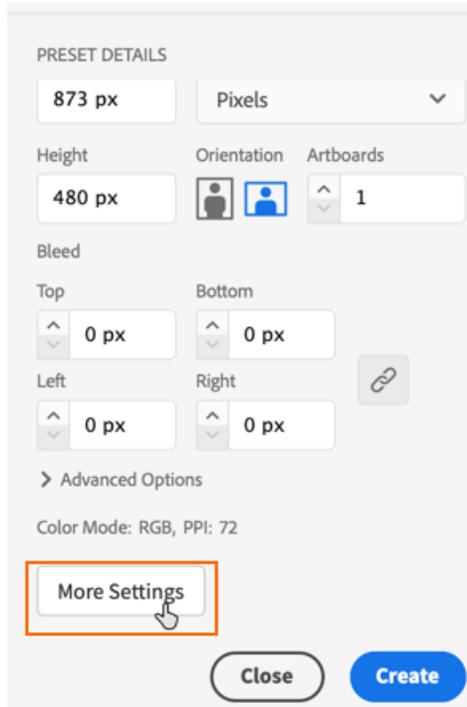
- Save and close sharing-your-project/Exercises/postcard.ai.



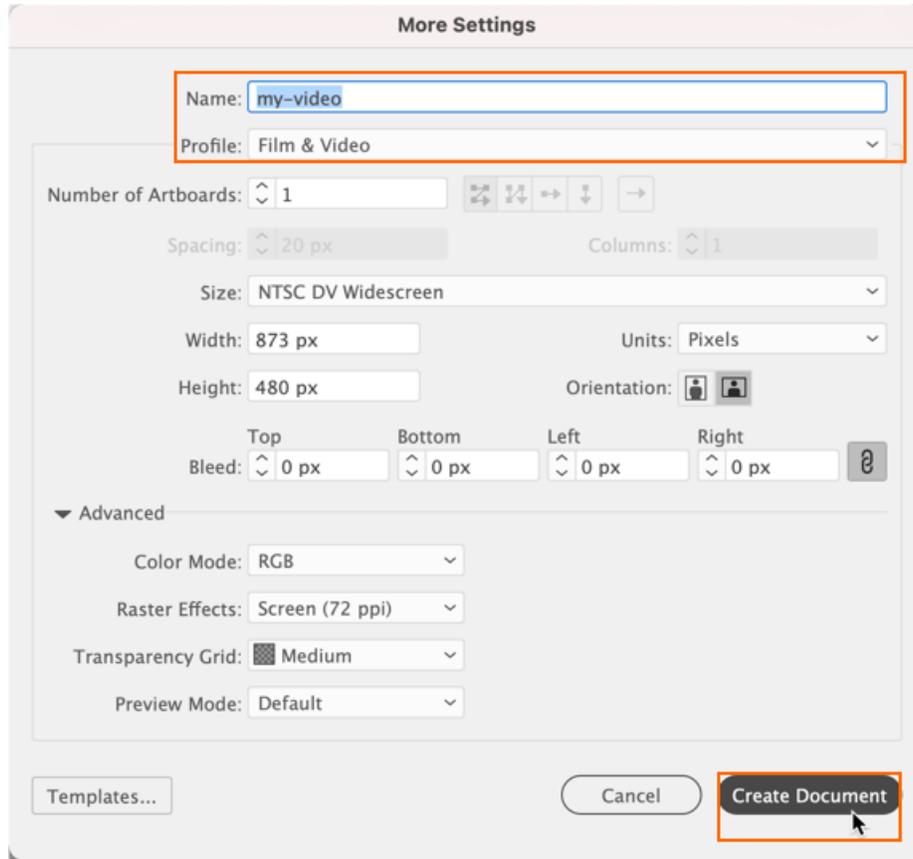
## 8.5. Save for Video

Illustrator can be used to develop materials for video output. To create a video-friendly document:

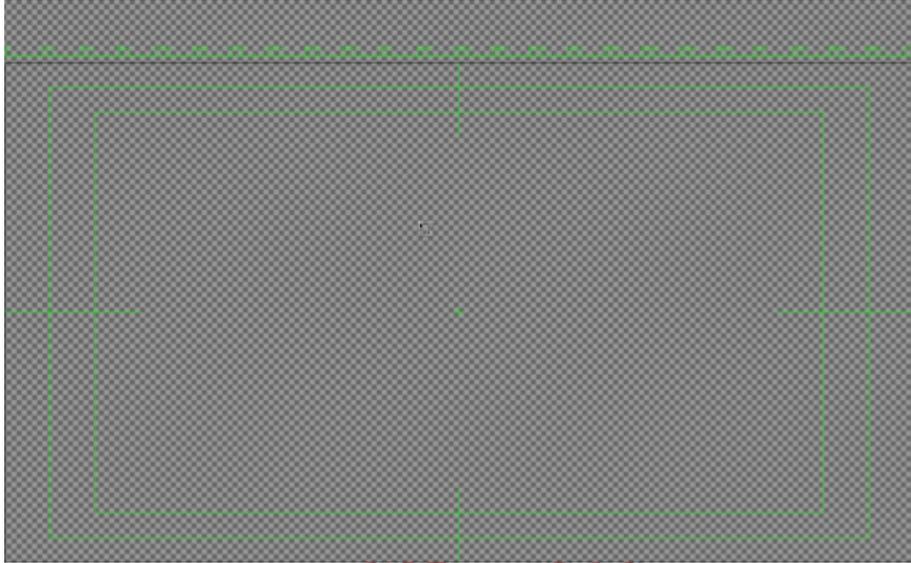
- File > New**. Click **More Settings**:



2. Name the document and choose **Film and Video** from **Profile**. Set the size, color mode, and other options. Click **Create Document**:



3. The document is now ready to use. Note you will want to respect the Action-safe area and the Title-safe areas when creating your art:

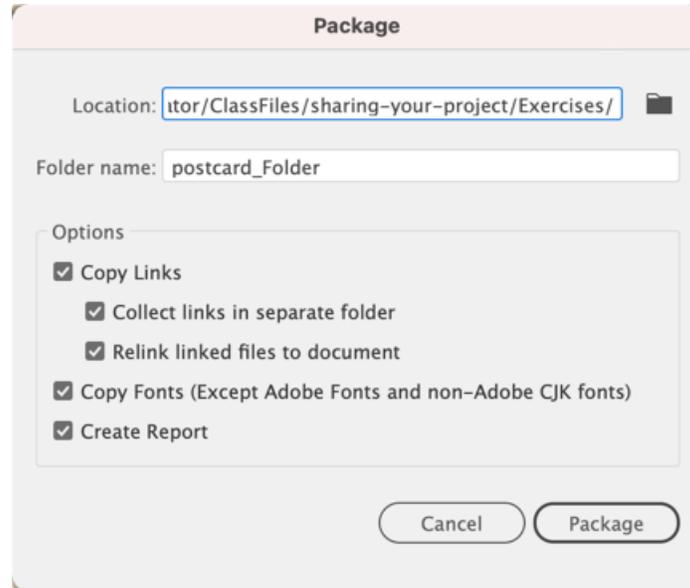


## 8.6. Package a Project

When another user needs an editable copy of the Illustrator file, the package feature will include all linked assets as well as the original file.

To package a project:

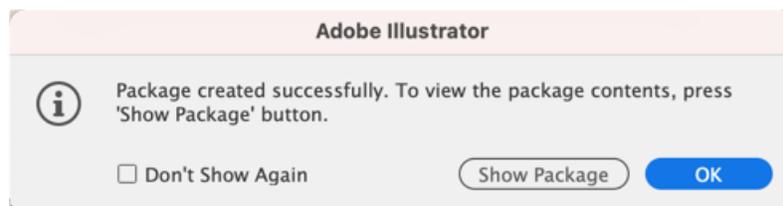
1. Open `sharing-your-project/Exercises/postcard.ai`.
2. Select **File > Package** and click **Package**:



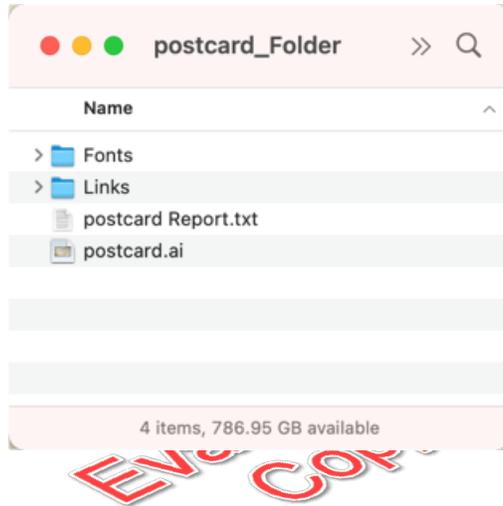
3. Warnings may appear; read and click **OK**:



4. The package created successfully; click **Show Package** or **OK**:



5. The contents of the package folder are shown below:



## Conclusion

In this lesson, you have learned:

- How to proof and prepare a project.
- How to print and export.
- How to package a project.