STUDENT MANUAL

Adobe®
Illustrator®
(2020): Part 1

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Acknowledgements

PROJECT TEAM

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Notices

DISCLAIMER

TRADEMARK NOTICES

Adobe® Illustrator® (2020): Part 1

About This Course

To meet the demands of individuals and organizations for flexible, reusable, and easily modified visual content, Adobe Systems has created a cadre of applications that collectively provide a scalable, end-to-end solution for nearly every type of visual design project one can contemplate. Called Creative Cloud®, the collection of applications perform specialized design tasks while interoperating among each other to deliver content.

This course focuses on Adobe® Illustrator® (2020), the component within Creative Cloud used to create "drawn" graphics, while enabling its users to integrate content from other domains (such as photo-oriented graphics and animation, which belong to Adobe® Photoshop® and other applications). With Illustrator's many easily used tools, you will discover that not only can you unlock the same creative impulses you've always had as you've picked up a pencil to sketch out an idea, but also capture those multiple ideas and "what ifs" during the creative process in ways that you never imagined. And for those of you who are just embarking on building your creative skills, you will be surprised at "how good" your work will appear, even at the outset of your exploration of the world of graphic design.

This course is a great component of your preparation for the Adobe Certified Associate (ACA) Graphic Design & Illustration Using Adobe Illustrator exam.

Course Description

Target Student

This course is intended for designers, publishers, pre-press professionals, marketing communications professionals, or people switching to a design job or taking on design responsibilities and who need to use Illustrator to create illustrations, logos, advertisements, or other graphic documents.

Course Prerequisites

To ensure your success in this course, you should be familiar with the basic functions of your computer's operating system, such as creating folders, launching programs, and working with windows. You should also have basic Windows application skills, such as copying and pasting objects, formatting text, saving files, and so on.

Familiarity with basic design terminology, such as palettes, color modes, shapes, text, and paths, is highly recommended.

You can obtain this level of skill and knowledge by taking one of the following Logical Operations courses:

- *Using Microsoft® Windows® 10*
- *Microsoft® Windows® 10: Transition from Windows® 7*

Course Objectives

Upon successful completion of this course, you will be able to use Adobe Illustrator (2020) to create illustrations that include graphics and text.

You will:

- Identify the components and capabilities of Illustrator.
- Create basic shapes.
- Create custom paths.
- Create graphics that contain custom text.
- Customize objects.
- Customize basic shapes.
- Prepare documents for deployment.

The CHOICE Home Screen

Logon and access information for your CHOICE environment will be provided with your class experience. The CHOICE platform is your entry point to the CHOICE learning experience, of which this course manual is only one part.

On the CHOICE Home screen, you can access the CHOICE Course screens for your specific courses. Visit the CHOICE Course screen both during and after class to make use of the world of support and instructional resources that make up the CHOICE experience.

Each CHOICE Course screen will give you access to the following resources:

- **Classroom**: A link to your training provider's classroom environment.
- **eBook**: An interactive electronic version of the printed book for your course.
- **Files**: Any course files available to download.
- **Checklists**: Step-by-step procedures and general guidelines you can use as a reference during and after class.
- **Spotlights**: Brief animated videos that enhance and extend the classroom learning experience.
- **Assessment**: A course assessment for your self-assessment of the course content.
- Social media resources that enable you to collaborate with others in the learning community using professional communications sites such as LinkedIn or microblogging tools such as Twitter.

Depending on the nature of your course and the components chosen by your learning provider, the CHOICE Course screen may also include access to elements such as:

- LogicalLABS, a virtual technical environment for your course.
- Various partner resources related to the courseware.
- Related certifications or credentials.
- A link to your training provider's website.
- Notices from the CHOICE administrator.
- Newsletters and other communications from your learning provider.
- Mentoring services.

Visit your CHOICE Home screen often to connect, communicate, and extend your learning experience!

How to Use This Book

As You Learn

This book is divided into lessons and topics, covering a subject or a set of related subjects. In most cases, lessons are arranged in order of increasing proficiency.

The results-oriented topics include relevant and supporting information you need to master the content. Each topic has various types of activities designed to enable you to solidify your

understanding of the informational material presented in the course. Information is provided for reference and reflection to facilitate understanding and practice.

Data files for various activities as well as other supporting files for the course are available by download from the CHOICE Course screen. In addition to sample data for the course exercises, the course files may contain media components to enhance your learning and additional reference materials for use both during and after the course.

Checklists of procedures and guidelines can be used during class and as after-class references when you're back on the job and need to refresh your understanding.

At the back of the book, you will find a glossary of the definitions of the terms and concepts used throughout the course. You will also find an index to assist in locating information within the instructional components of the book. In many electronic versions of the book, you can click links on key words in the content to move to the associated glossary definition, and on page references in the index to move to that term in the content. To return to the previous location in the document after clicking a link, use the appropriate functionality in your PDF viewing software.

As You Review

Any method of instruction is only as effective as the time and effort you, the student, are willing to invest in it. In addition, some of the information that you learn in class may not be important to you immediately, but it may become important later. For this reason, we encourage you to spend some time reviewing the content of the course after your time in the classroom.

As a Reference

The organization and layout of this book make it an easy-to-use resource for future reference. Taking advantage of the glossary, index, and table of contents, you can use this book as a first source of definitions, background information, and summaries.

Course Icons

Watch throughout the material for the following visual cues.

Icon	Description
	A **Note** provides additional information, guidance, or hints about a topic or task.
	A **Caution** note makes you aware of places where you need to be particularly careful with your actions, settings, or decisions so that you can be sure to get the desired results of an activity or task.
	Spotlight notes show you where an associated Spotlight is particularly relevant to the content. Access Spotlights from your CHOICE Course screen.
	Checklists provide job aids you can use after class as a reference to perform skills back on the job. Access checklists from your CHOICE Course screen.
	Social notes remind you to check your CHOICE Course screen for opportunities to interact with the CHOICE community using social media.

1 | Introducing Illustrator

Lesson Time: 1 hour, 30 minutes

Lesson Introduction

Welcome to the world of Adobe® Illustrator®, one of the most powerful tools for creating, editing, and deploying drawn digital graphics!

Before fully launching into the ins and outs of working with Illustrator's many tools to produce high-quality visual content, you will explore some foundational concepts regarding how digital graphics work and how they are used; survey the lay of the land with regard to Illustrator's place within Adobe Creative Cloud; and lastly, take a high-level tour of the main parts of Illustrator's application environment, perform basic navigational tasks, and manipulate a graphical object.

Lesson Objectives

In this lesson, you will:

- Apply design principles in Illustrator.

- Determine the limits and effectiveness of different graphics types.

- Perform basic navigation, zoom, and measurement tasks within the Illustrator user environment.

- Set up and manage a customized user environment.

TOPIC A

Apply Design Principles, Elements, and Graphics Composition

In order to produce the highest quality of work possible in Illustrator, you need to be familiar with the most up-to-date design principles. An understanding of these design elements and how they come together to produce results that are visually appealing as well as informative is crucial.

Adobe Illustrator Overview

Just as artists once picked up a pen, pencil, chunk of charcoal, or paintbrush to create engaging visual images on a blank sheet of paper, today's media developers can use Illustrator to draw graphical design solutions for any online or offline purpose.

Adobe® Illustrator® is part of Adobe's Creative Cloud® suite, which provides end-to-end solutions for digital media developers. Though it is a powerful tool for developing vector graphics, Illustrator CC possesses many essentials that provide interoperability with non-vector graphical media, text, animation, video, and audio across a full spectrum of deployments for end users. With Creative Cloud apps, you can use a pressure-sensitive pen on a Windows® tablet.

You can share Illustrator projects by saving them to your Creative Cloud Library. You can then access the files from another device or share them with other Illustrator users. In the **Libraries** panel menu, select **Collaborate**, then specify the email addresses of those with whom you need to share the files.

Design Principles and Elements

Graphic design is a purposeful, informational, creative process. You can gain a better understanding of the basics of graphic design by studying the elements and principles that govern effective design and page layout.

The following table describes design principles and their definitions.

Design Principle	Description
Emphasis	The part of the design that catches the viewer's attention. Usually the artist will make one area stand out by contrasting it with other areas. The area will be different in size, color, texture, shape, and so on.
Movement	The path the viewer's eye takes through the artwork, often to focal areas. Such movement can be directed along line edges, shape, and color within the artwork.
Balance	The equal distribution of visual weight in a design.
Unity	The feeling of harmony between all parts of the artwork, creating a sense of completeness.
Color	Used to unify, separate, emphasize, and decorate. Color intensity, saturation, shade, and texture can be used to design a page effectively.
White Space	The area on a design that contains no content. When used appropriately, it helps to reduce clutter.
Alignment	Creates order and organization among elements.

Design Principle	Description
Line	A mark with greater length than width. Lines can be horizontal, vertical, or diagonal; straight or curved; thick or thin.
Contrast	Emphasizes or highlights key elements within your design. The greatest contrast is achieved when two elements are total opposites.
Rule of thirds	Allows you to achieve a visually appealing balance by dividing your layout into three equal parts.
Proximity	By grouping similar elements together or in close proximity, you create a relationship among those elements.

Visual Hierarchy

Visual hierarchy is critical in design because it is the basis of communication between the designer and the target audience. Because people generally process things on a visual basis, they tend to see relationships between—and categorize—the things that they see. For this reason, it is important for designers to arrange objects in such a way that they are visually appealing. The following table lists the elements of visual hierarchy.
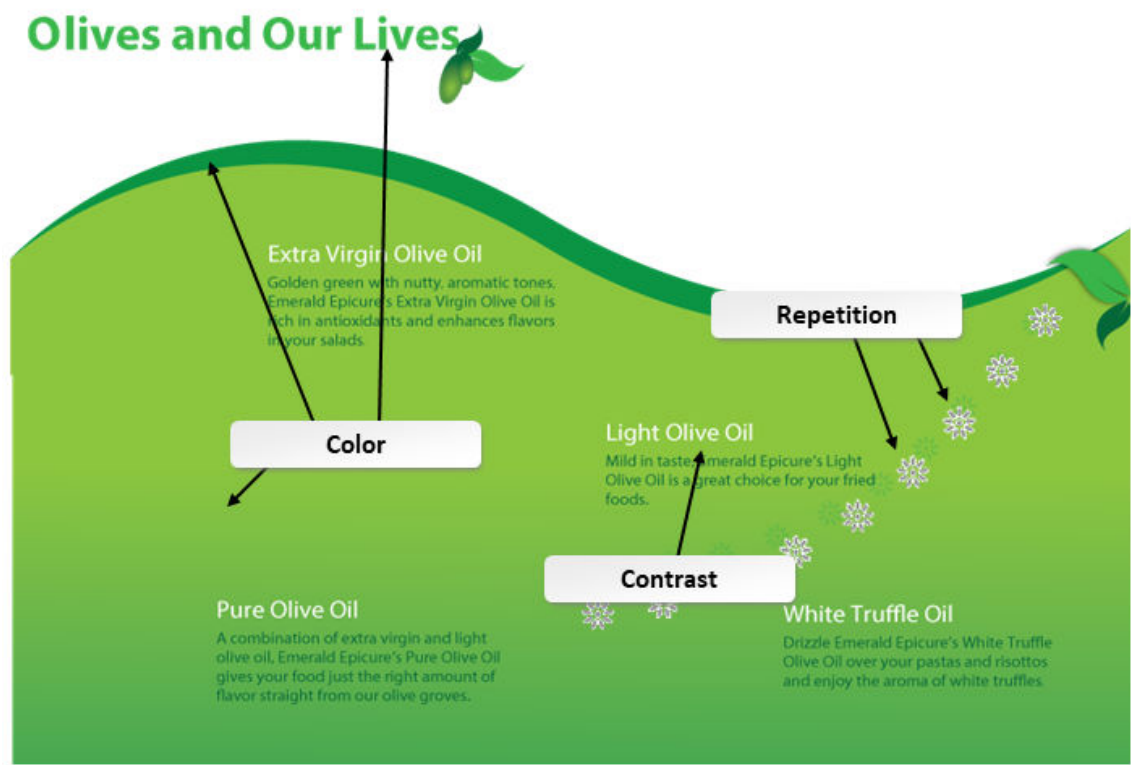
Figure 1–1: Visual hierarchy.

Element	Description
Size	One of the most effective ways to create a visual hierarchy in design. Use size to convey importance, making more important design elements larger and less important design elements smaller.
Color	Color can be used in two ways: as an organizer tool and as a personality tool. Use of color in certain ways can demand attention, bring emotional appeal, affect brand, create symbolism, and classify information.

Element	Description
Contrast	Contrast is used to show the relative importance between different design elements. This can include intense changes between the size of the text or colors used.
Alignment	Use alignment to create order between the various elements on the page. Alignment can come in the form of separate columns or can be more complex, such as where information is positioned on a page to gain attention.
Repetition	Assign meaning to an element compared to other elements on a page by being repetitive in its appearance. This allows the viewer to pay particular attention to those elements that are not repetitious.
Proximity	This is a way to separate elements from each other, and a designer can use proximity to create sub-hierarchies. This is the fastest way to associate content that is similar.
Density and White Space	Finding a balance between packing elements too densely and spacing them out too much is crucial. The key is to ensure the page is not too cluttered, but that the elements retain their relationship to one another.
Style and Texture	Use style and texture on a page to create feeling and, via that feeling, create a hierarchy of the elements.

Guidelines for Applying Design Principles, Elements, and Graphics Composition

> **Note:** All Guidelines for this lesson are available as checklists from the **Checklist** tile on the CHOICE Course screen.

Apply Design Principles, Elements, and Graphics Composition

Graphic design has specific principles and any designer would benefit from following these guidelines:

- Design principles:
  - Utilize all design principles to create the most successful design.
  - Avoid over design by utilizing white space, proximity, and the rule of thirds.
  - When designing several pieces or pages of the same project, use specific elements (such as color, balance, and line) to tie them together and create a consistent look.
  - Use alignment, contrast, and proximity to create depth in a two-dimensional space.
  - Use emphasis and movement to catch the viewer's attention and hold their interest.
- Visual hierarchy:
  - Size conveys importance; important elements should be larger and less important ones smaller.
  - Use of color calls for attention, creating an immediate hierarchy.
  - Contrast helps to show order of importance, which the eye automatically picks up on.
  - Alignment, repetition, and proximity are all ways to position the different elements on your page to create visual hierarchy, informing the viewer how to take in the design.
  - Use of white space can designate the overall "feel" you want the design to take on. A busy design will have a much more dramatic and loud emotional attachment than a minimal and quiet one.
  - Style and texture is another way to add interest and contrast, as well as create a realistic look, if that's what you are going for.

ACTIVITY 1-1

Applying Design Principles, Elements, and Graphics Composition

Data File

C:\092033Data\Introducing Illustrator\Shower Invitation.ai

Scenario

Applying design principles is an essential part of the process, whether it is a web page or an invitation to a party, such as the one shown here.

> **Note:** Activities may vary slightly if the software vendor has issued digital updates. Your instructor will notify you of any changes.

1. Start **Illustrator (2020)**.
   a) Open the Windows **Start** menu.

b) Select **Adobe Illustrator 2020**.
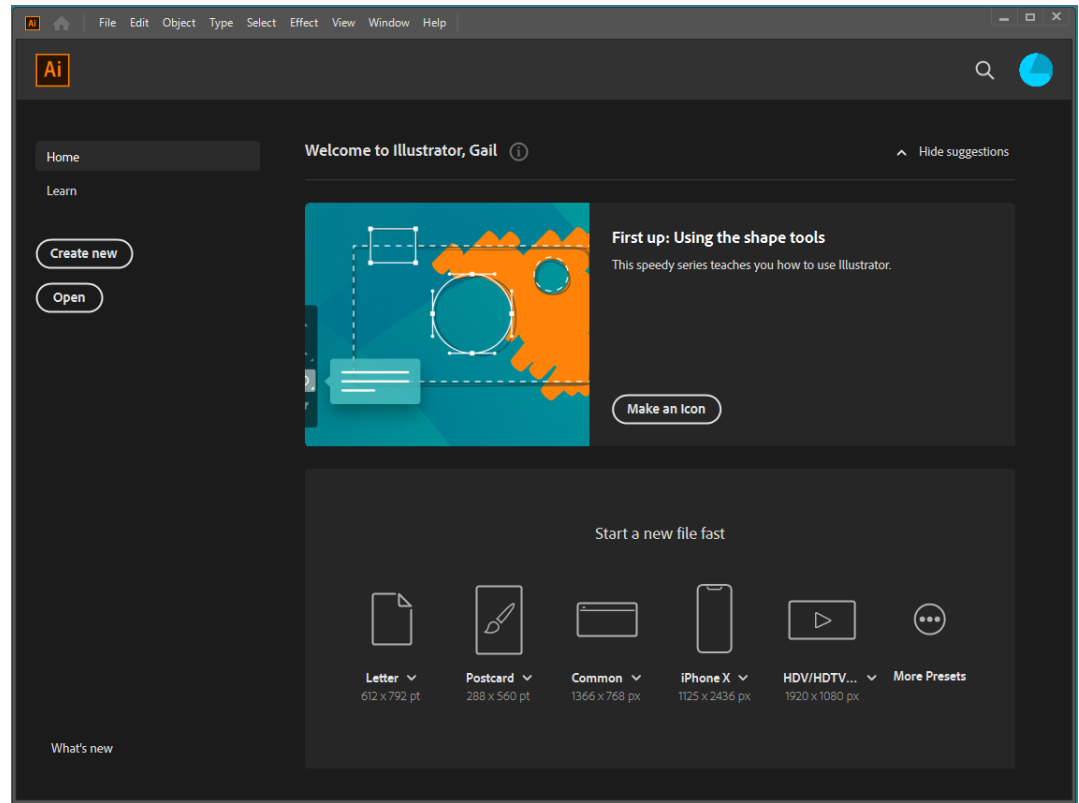
The **Start** workspace is displayed when Illustrator is open and all documents are closed.

2. Open **C:\092033Data\Introducing Illustrator\Shower Invitation.ai**.

a) From the Illustrator **Start** workspace, select the **Open** button.

b) Navigate to **C:\092033Data\Introducing Illustrator\Shower Invitation.ai**.

c) Select **Shower Invitation.ai**.

d) Select **Open**.

e) Maximize the application window, if it's not already maximized.

> **Note:** If you are using a touch-enabled device and are prompted about switching to the **Touch Workspace**, select **Don't Switch**. This will help ensure that the activities in the course work as written.

f) Acknowledge any introductory dialog boxes.

3. Examine the graphic and answer the following questions.

   Which element of the shower invitation immediately catches the viewer's eye? What design elements are used on this object?

4. Do you see any use of movement in the design?

5. What other design principles do you see at play in the invitation?

6. Close the file, discarding any changes.

   a) Select **File→Close**.

   b) If changes have been made to the file, Illustrator will prompt you to save the changes before closing. Select **No** to close the file without saving.

   The **Start** workspace is displayed when no Illustrator documents are open. Recently opened files appear in the **Recent** section of the workspace.

TOPIC B

Evaluate Graphics Scalability

Working in the field of graphical design starts with gaining an understanding of the fundamental principles of digital graphics and the tools that you use to create, modify, and deploy graphics. In this topic, you will assess how different graphics types can be deployed and determine which tools to use.

Raster Graphics

Raster graphics are typically photographic images. The technique used to render raster graphic images is to capture the intended image on a very dense (almost microscopically small) grid representing the image field. Each dot of color on the grid, known as a **pixel**, is assigned a color and intensity. Variations occur across spans of pixels, which the eye perceives (at the macro level) as the rendered image.

Raster graphics have varying resolutions, relating directly to the density of pixels making up the image. Depending upon how dense the image is, sometimes the graphic can be altered effectively; sometimes it cannot. When each pixel has to represent a larger part of the graphic (think of a close-up shot), the original detail of the image is distorted, which the eye detects. This distortion, due to overworked pixels, is called **pixelation**.
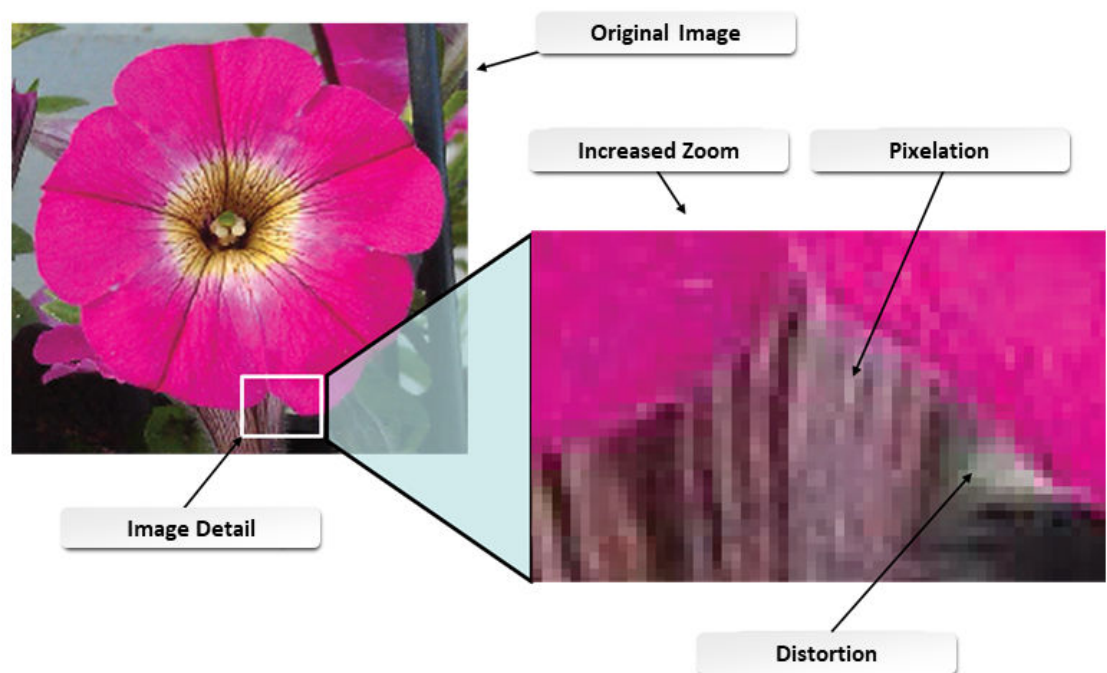
Figure 1–2: Raster graphics, showing pixels and pixelation.

Vector Graphics

Vector graphics are images that rely on the power of computing to form the intended image. Instead of a photographic rendering by a grid of pixels that are independently assigned their color and shade, vector graphics are drawn; the computer records each stroke of the artist's tool to display the intended stroke and color in the visual field. Just as a math student would draw a graph

according to an equation listing points on the curve, computers draw vector graphics according to rules recorded when the graphic was created.
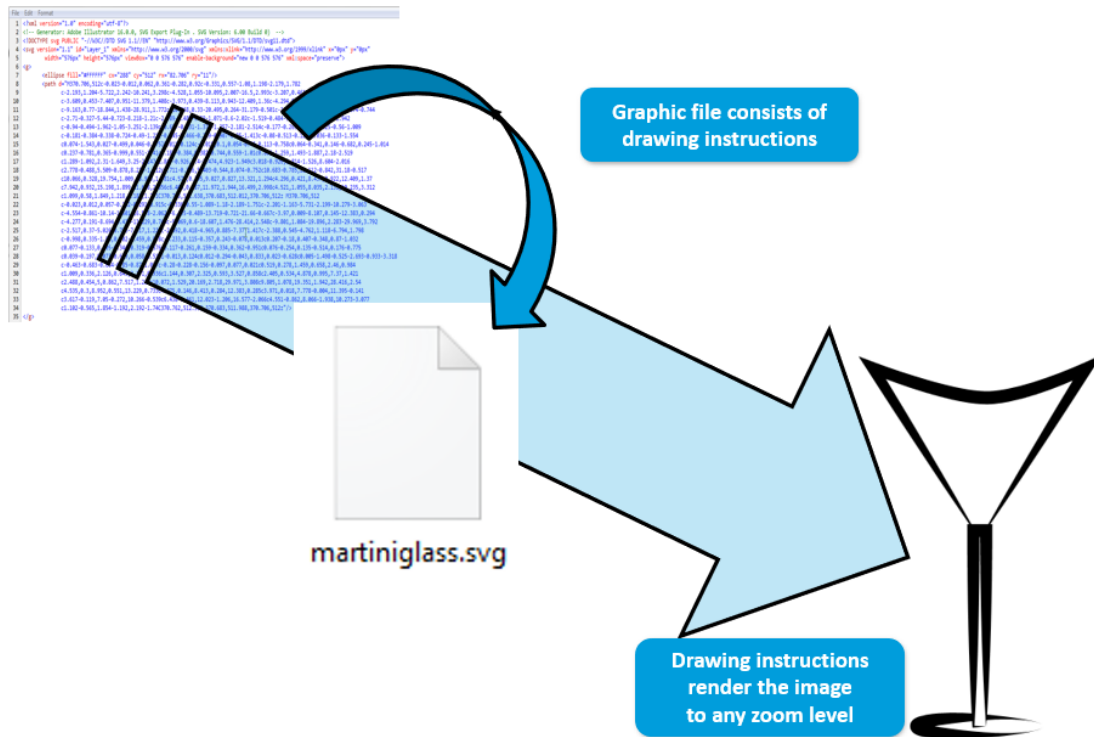
Figure 1–3: Vector graphics, showing pseudo-commands saved to draw an image.

Note: The File Explorer file icon for .SVG files will change based on which app was used to create or open the file.

Strengths and Weaknesses of Raster and Vector Graphics

Raster images form detailed, sharp pictures based upon a "what-you-see-is-what-you-get" capturing mechanism, such as a digital camera, that is far less computationally intensive than the equivalent image rendered as a vector graphic. However, because of pixelation, raster graphics cannot be significantly changed from their original intended size and resolution.

Vector images cannot match the sharpness and detail of raster images, but because they are redrawn every time they are displayed, vector graphics can be transformed to a significantly different size or shape without visual loss and distortion.

Note: Graphics that lose clarity when altered are "lossy" graphics. Graphics that retain their clarity are "lossless" graphics.

Strengths:
- Raster graphics:
  - Good photographic detail
- Vector graphics:
  - Don't pixelate
  - Scale (zoom) well

Weaknesses:
- Vector graphics:
  - Can't be used for photos
- Raster graphics:
  - Don't scale (zoom) well

Figure 1–4: Strengths and weaknesses of raster and vector graphics.

Graphics Standards and Usage

There are many common formats of raster and vector graphics, most of which you can use for both web and print.

	JPEG	TIFF	PNG	GIF	BMP	SVG	AI	VML
Raster?	Yes	Yes	Yes	Yes	Yes	No	No	No
Vector?	No	No	No	No	No	Yes	Yes	Yes
Internet?	Yes	No	Yes	Yes	No	Yes	No	Yes
Print?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Figure 1–5: Raster and vector graphics formats and their uses.

Guidelines for Evaluating Graphics Scalability

Evaluate Graphics Scalability

Sometimes it is difficult to know whether or not you can increase the size of the image without losing quality. Follow these guidelines for evaluating graphics scalability:

- If you cannot tell what type of image it is, zoom in on a specific area so that you can see the presence or absence of pixels.
- Check the file format of the image to find out what type of file it is.
  - If it is an Illustrator, EPS, or TIFF file type, you are likely able to increase the size without any repercussions.
  - If it is a JPG or PNG, you will experience loss of quality when increasing the size.
- If the image is a JPG, try to find it in a higher resolution so that increasing size is not required.
- If possible, create the image in Illustrator. Vector images can increase in size exponentially without losing quality.

ACTIVITY 1-2
Evaluating Graphics Scalability

Data File

C:\092033Data\Introducing Illustrator\Vetting Graphics Scalability.ai

Scenario

You have been asked to vet a composite graphic containing both vector and raster image components that will be used for an upcoming project. You will test the graphic to see how it stands up to being rendered at different levels of detail, identifying which areas of the graphic are raster and which are vector.

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1. Open **C:\092033Data\Introducing Illustrator\Vetting Graphics Scalability.ai**.
   a) From the **Start** workspace, select **Open**.
   b) Navigate to the **C:\092033Data\Introducing Illustrator** folder.
   c) Double-click the **Vetting Graphics Scalability.ai** file to open it.

   > **Note:** If the Search for Adobe Stock window is displayed, close it.

2. Zoom in to four times the normal zoom and evaluate the graphic.
   a) In the lower-left corner of the work area, select the **Zoom** control drop-down arrow.
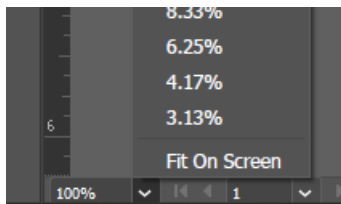
   b) From the **Zoom** list, select **400%**.
   c) Look at the clarity of the drawn vines versus the photograph of the flower.

3. Find a spot in the graphic where the drawn green vines are near an interesting part of the photo and use the **Hand** tool to drag that location to the center of the work area.
   a) Find the part of the image you want to inspect.
   b) Select the **Hand** tool.
   c) If necessary, drag the portion of the graphic to the center of the work area.

4. Double the zoom level several times to examine the graphics.
   a) In the lower-left corner of the work area, from the **Zoom** control's drop-down list, select **800%**.
   b) Look at the clarity of the drawn vines versus the photograph of the flower.

> **Note:** Your instructor will lead the discussion about your findings.

    c) Set the zoom to **1600%** and compare the clarity of the vines and the flower.

    d) Increase the zoom level to **3200%** and compare the clarity.

    e) Finally, increase the zoom level to **6400%**.

5. Close the file without saving changes.

    a) Select **File→Close**.

    b) If prompted to save changes, select **No**.

TOPIC C

Navigate the User Interface

Although you are new to working with Illustrator you may be used to working with the basic controls in other Adobe applications. Illustrator has many familiar tools and some that are unique. The intelligent **Properties** panel streamlines the workflow by giving the user access to the settings and controls—tools, effects, and options—for the task being worked on. In this topic, after reviewing the basic terms used to describe the Illustrator user interface, you will explore basic techniques for navigating, viewing, and manipulating content in a document.

Illustrator User Interface

The following describes the Illustrator user interface and its components.
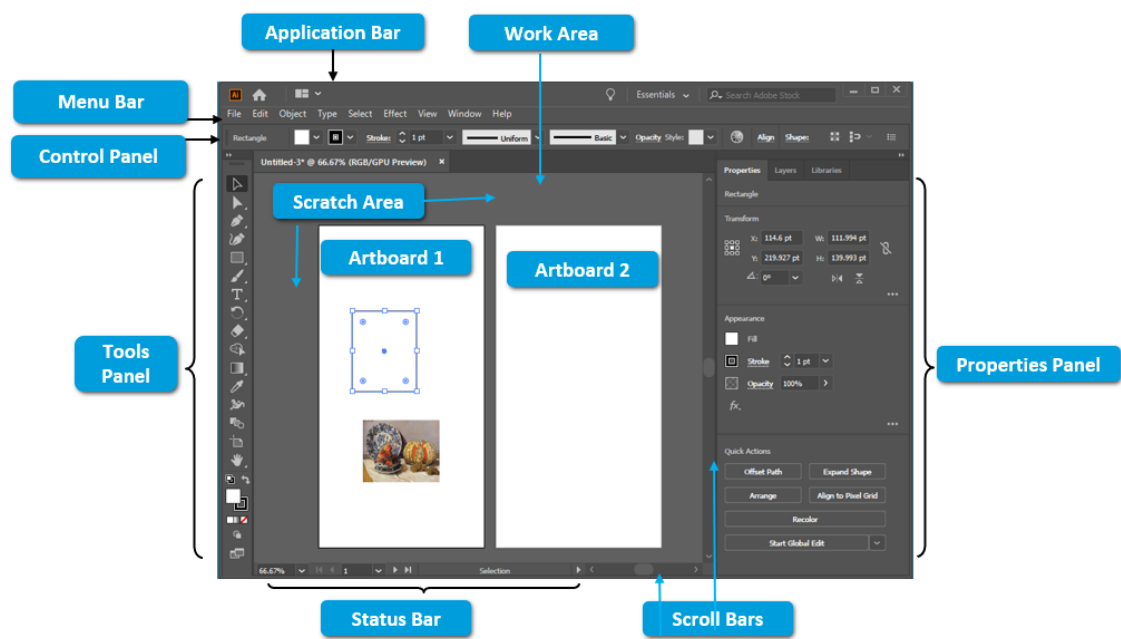
Figure 1–6: Illustrator user interface.

Component	Description
Work area	The region in the center of the user interface where you create your Illustrator files. Open documents can be arranged as a single consolidated window (as shown in the figure), floating in separate windows, or tiled so all documents are visible.
Artboard	The virtual canvas where graphic design work is developed. The work area can contain more than one artboard.
Scratch area	The part of the work area where tools and objects can be "parked" without affecting the artboards.
Properties panel	A dynamic (changing) collection of tools. When you select an object in the work area (a graphic, for example), the tools displayed in the **Properties** panel change to the set most relevant to your work with that object. The **Properties** panel is located on the right side of the application window.

Component	Description
Control panel	Provides quick access to options, commands, and panels that relate to the selected object in the document window.
Status bar	The section of the application window that displays basic information about selected tools, as well as artboard navigation and zoom controls.
Tools panel	The elements that store most of the tools used to develop graphical design projects in Illustrator.
Application bar	A section that, depending on the screen size, might be combined with the **Menu** bar. When separate, this contains the **Home** icon to return to the Illustrator **Start** screen, an **Arrange Documents** drop-down list, access to Illustrator tutorials, access to pre-defined workspaces, and a **Search** box to search **Adobe Stock** or to search for help topics. When combined with the **Menu** bar, it contains these plus the menu.
Menu bar	A section that holds many of the same tools and commands as the **Tools** panel, as well as document- and system-level tools that control the Illustrator work environment and its interoperability with other Adobe Creative Cloud apps and features.

Tools Panel

Illustrator has a wide range of tools on the default **Tools** panel. The tools are arranged in groups by function. However, in your day-to-day use of Illustrator, you will most likely not need access to all of the tools available. Fortunately, Illustrator allows you to create custom tool panels. This not only makes it convenient when working, but it also saves toolbox space that would otherwise be filled with non-essential tools. With the custom **Tools** panel, everything you prefer to use will be at your fingertips, providing easy access and ease of management.

Tools with a small arrow in the lower-right corner of its icon have alternate tools available. For example, the **Shape** tool alternatives are **Rectangle**, **Ellipse**, **Polygon**, **Star**, and **Line Segment**. Click and hold to see the list of alternate tools for a particular tool.
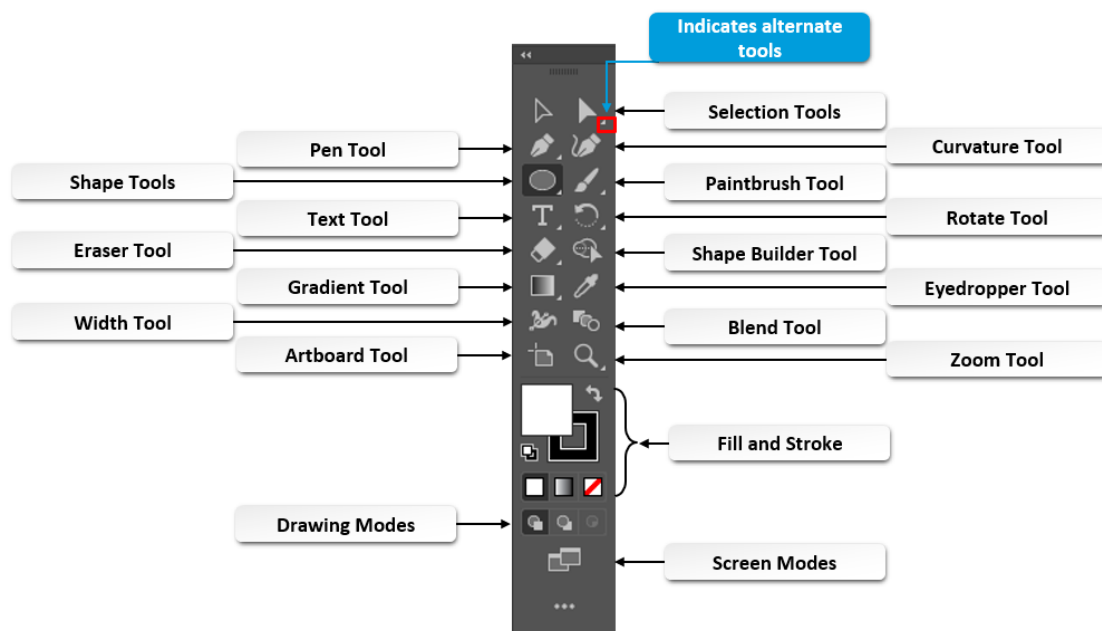
Figure 1–7: The Tools panel.

> **Note:** The default is to show the tools in a single list, but the chevrons at the top of the panel can be selected to show it in two columns. Select the chevrons again to switch back to a single column.

Preferences Dialog Box

The **Preferences** dialog box provides options to customize the look and feel of the Illustrator user interface and specify settings to control common Illustrator preferences such as display of guides and smart guides, hyphenation behavior, choice of scratch disks, units of measurement, and type characteristics. The options in the **Preferences** dialog box are grouped into categories.
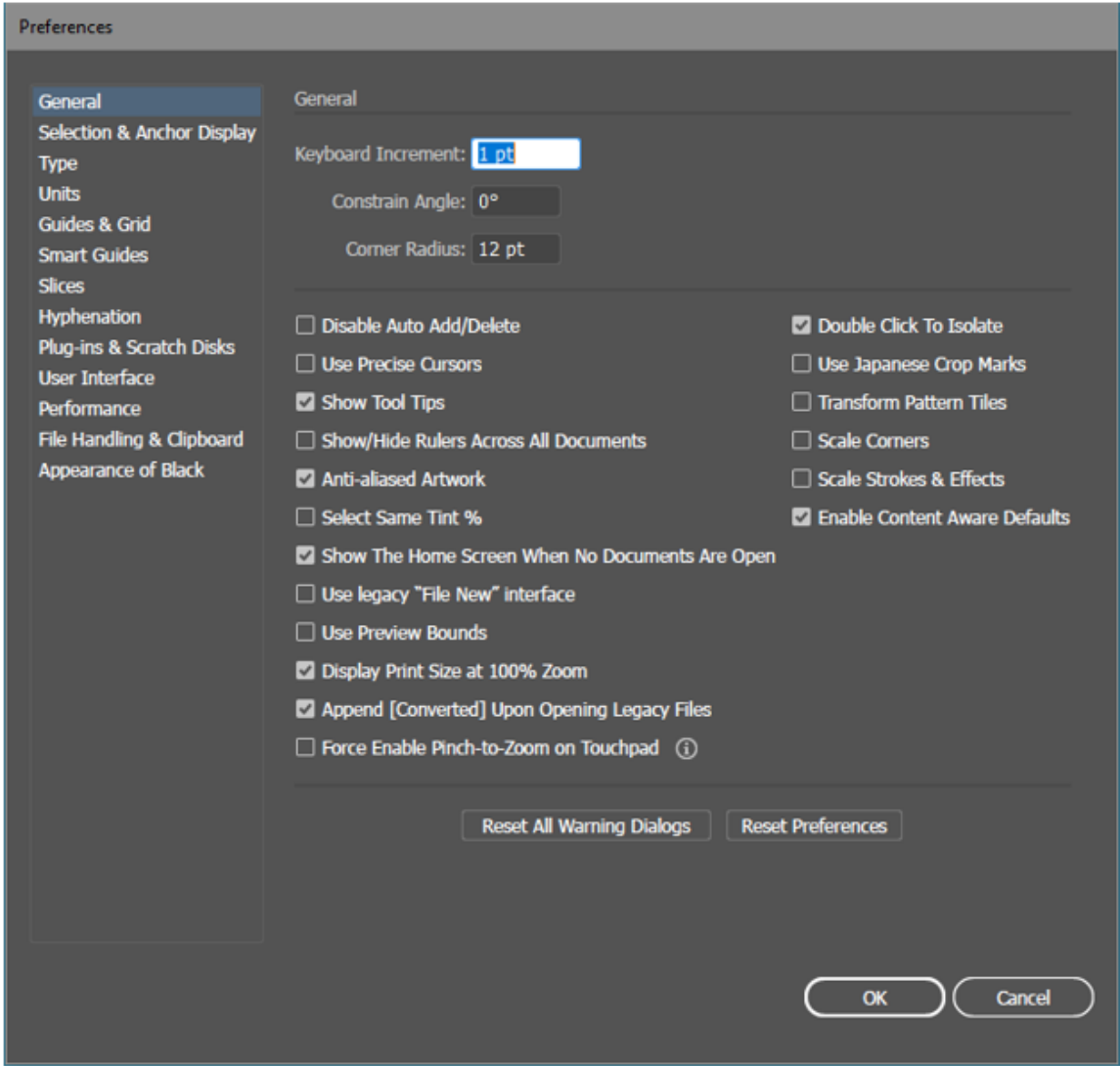
Figure 1–8: General preferences displayed in the Preferences dialog box.

Category	Purpose of Option
General	Controls the keyboard and cursor. Also provides general settings for strokes, effects, pattern tiles, layers, and tool tips.
Selection & Anchor Display	Controls the selection of objects and the display of anchor points and handles.

Category	Purpose of Option
Type	Specifies the display of text, number of recent fonts, and size of font preview.
Units	Sets the unit of measurement for objects, strokes, and text.
Guides & Grid	Specifies display options, such as color and style, for guides and grids.
Smart Guides	Specifies display options, such as color, alignment, and construction angles, for smart guides.
Slices	Specifies settings for creating slices for web graphics.
Hyphenation	Specifies hyphenation settings for the selected language.
Plug-ins & Scratch Disks	Selects plug-ins that are installed and specifies the scratch disks to be used.
User Interface	Sets the brightness level and canvas color of the interface. Also, sets the appearance of documents, panels, and scroll bars.
Performance	Allows for increased graphics performance on computers with a Graphics Processing Unit (GPU).
File Handling & Clipboard	Specifies how linked EPS files and bitmap images are displayed and in which file format clipboard content is copied.
Appearance of Black	Sets the richness of black color for onscreen and print output.
Touch Workspace	Allows you to enable or disable switching to the **Touch Workspace** when the keyboard is detached and to use precise cursors.

> **Note:** The **Touch Workspace** category is only listed if your device is touch enabled.

> Access the Checklist tile on your **CHOICE Course** screen for reference information and job aids on **How to Navigate the User Interface.**

ACTIVITY 1–3
Navigating the User Interface

Data File

C:\092033Data\Introducing Illustrator\Navigating the User Interface.ai

Scenario

As an illustrator, you have used traditional "real" world drawing and painting tools such as watercolors. Now that you are exploring digital illustration, you will take steps to master basic methods for manipulating your work in Illustrator's environment.

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1. From the **Start** workspace, open the file **C:\092033Data\Introducing Illustrator \Navigating the User Interface.ai**.

    a) In the **Start** workspace, select the **Open** button.
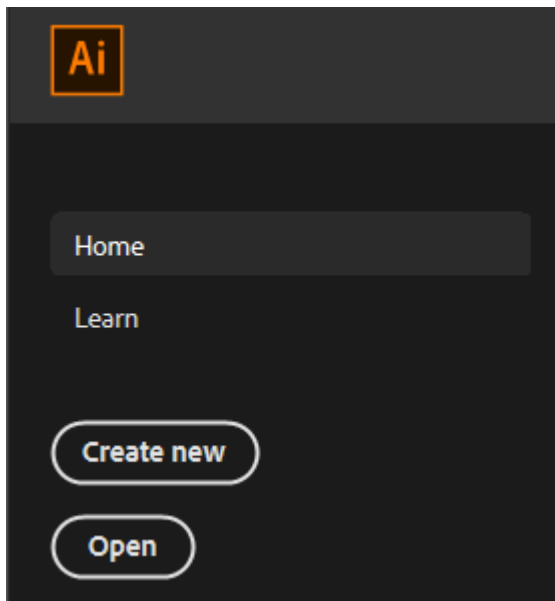
    b) Navigate to the **C:\092033Data\Introducing Illustrator** folder.
    c) Select **Navigating the User Interface.ai**.
    d) Select **Open**.

2. Collapse the **Properties** panel.

    a) Observe the expanded **Properties** panel on the right side of the screen.

    b) Select the **Collapse** icon.

3. Verify that the graphic is 8 inches wide and 6 inches tall.

    a) On the **Status** bar, from the **Zoom** drop-down list, select **66.67%** to display the artboard at two-thirds its actual size.

b) On the **Application** bar, select **View→Rulers→Show Rulers** to display the rulers.
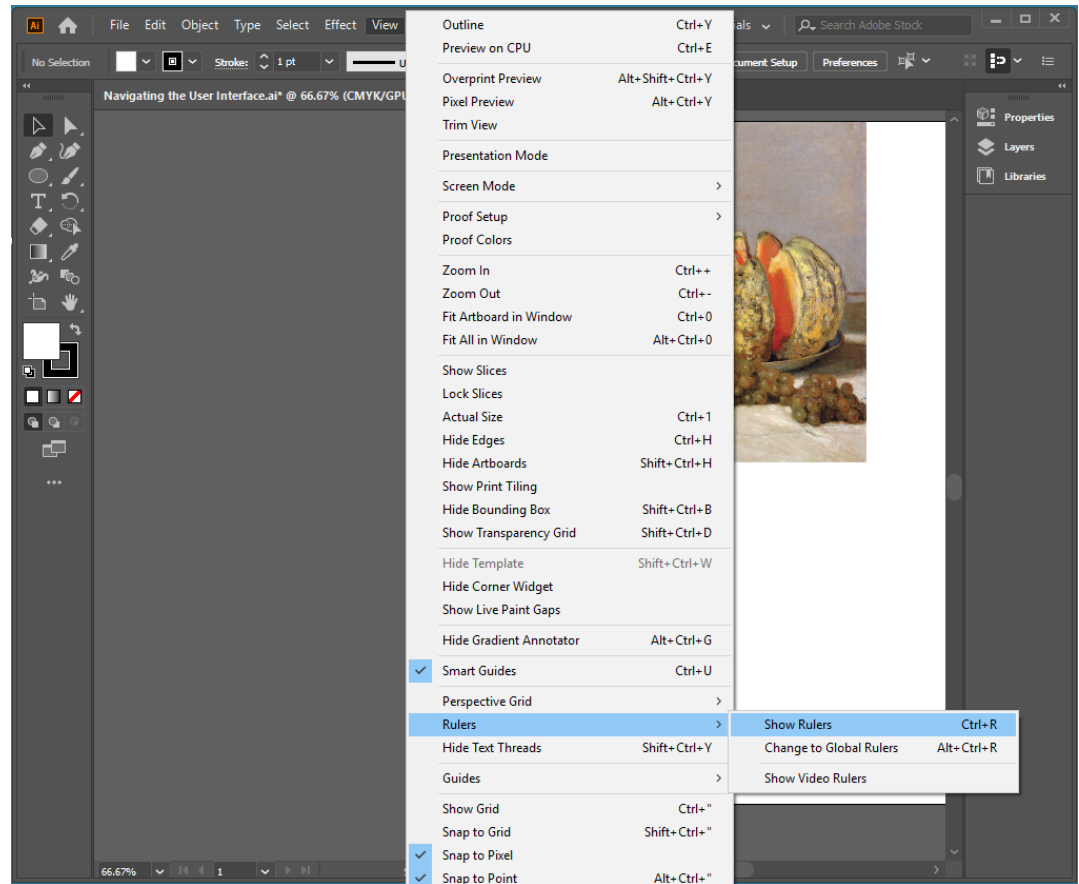
Note: Notice that the upper-left corner of the artboard is where the rulers are set to zero.

c) Using the rulers, measure the approximate length and width of the image. Note that this is done "by eyeing it." In this case, it's not crucial to be precise.

Note: Notice that the artboard is 12 inches tall and 12 inches wide.

4. Set the center of the graphic as its reference point. Then measure the X-Y deltas from that point to the artboard's reference point in the upper-left corner.

a) On the **Menu** bar, select **Window→Transform** to display the floating **Transform** panel.

b) The **Reference Point** tool displays on the left side of the **Transform** panel. If necessary, select the center reference point.
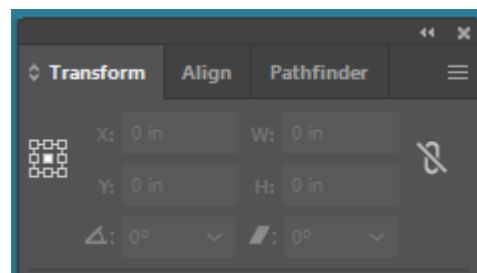
c) On the left, in the **Tools** panel, select the **Selection** tool.

5. Relocate the graphic to other parts of the work area and then observe its position at different zoom settings.

   a) With the **Selection** tool still selected, drag the graphic to another part of the work area. Notice that the X and Y values update in the **Transform** panel to reflect the new location of the graphic.

   b) To precisely locate the graphic in the center of the artboard, in the **Transform** panel, enter *6 in* in the X and Y text fields. Notice the graphic moves to the precise center of the artboard when you press **Enter**.

   c) On the **Status** bar, from the **Zoom** drop-down list, select **50%**.

   d) Try various other zoom levels, observing the effect.

6. Center the graphic on the artboard, enlarge the artboard to fit the work area, and then shrink the artboard to the size of the graphic.

   a) In the **Transform** panel group, select the **Align** panel.

   b) To the right of the **Distribute Spacing** section, from the **Align To** drop-down box, select **Align to Artboard**.

   c) Drag the graphic toward the bottom of the artboard and verify on the **Transform** tab that the X-Y values have changed.

   d) In the **Transform** panel group, select the **Align** tab.

   e) Select **Horizontal Align Center**, to center the graphic horizontally.

   f) Select **Vertical Align Center**, to center the graphic vertically.

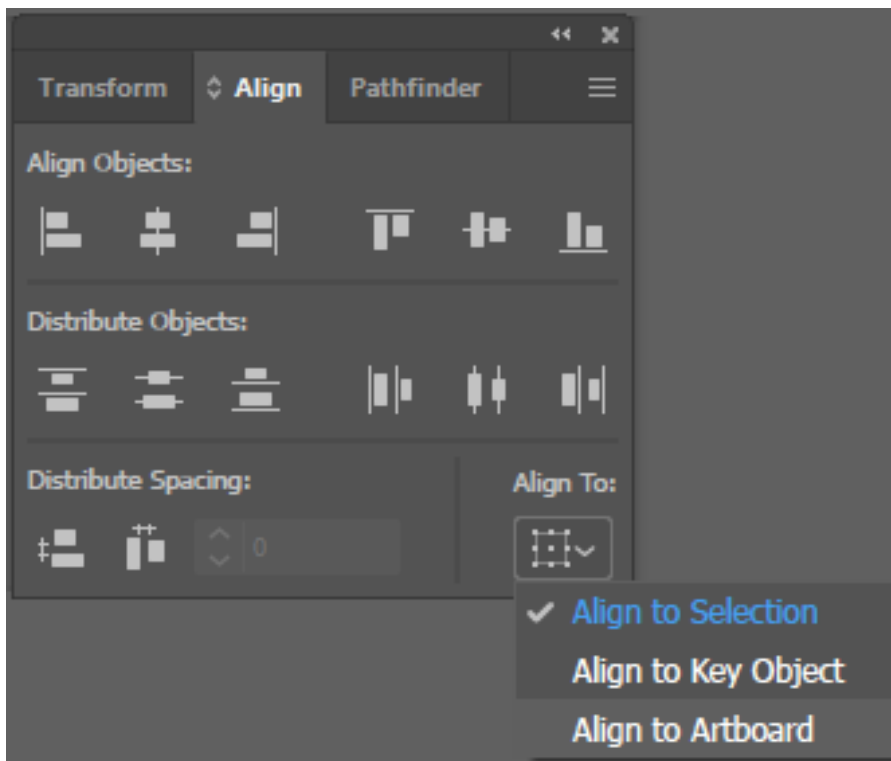   g) On the **Menu** bar, select **Object→Artboards→Fit to Artwork Bounds** to shrink the artboard to the size of the graphic. Observe that any extra white space has disappeared.

7. Save your file as **C:\092033Data\Introducing Illustrator\My Navigating the User Interface.ai**.

a) Select **File→Save As** and navigate to **C:\092033Data\Introducing Illustrator**.
b) In the **File name** text box, enter *My Navigating the User Interface.ai*
c) Select **Save**.
d) In the **Illustrator Options** dialog box, select **OK**.
e) In the upper-right corner of the **Transform** panel group, select the **Close** button.
f) Leave **My Navigating the User Interface.ai** open.

TOPIC D

Customize the User Interface

Adobe Illustrator is incredibly flexible and fits a wide spectrum of professionals in the graphic design, web design, and publishing worlds. Its many tools and environment settings offer myriad possibilities for solving the challenges of graphic design work.

Because of its robust toolsets and environment settings, Illustrator has environmental controls that enable users to manage the availability of tools and define default settings. This means you can handle diverse job tasks without knocking down and rebuilding the virtual shop floor where you do your work.

In this topic, you will customize the Illustrator user interface.

Workspace

A *workspace* consists not only of the areas of the Illustrator user interface where work is performed, but also the combination of currently displayed tool sets and selected environmental settings.

Figure 1–9: The workspace.
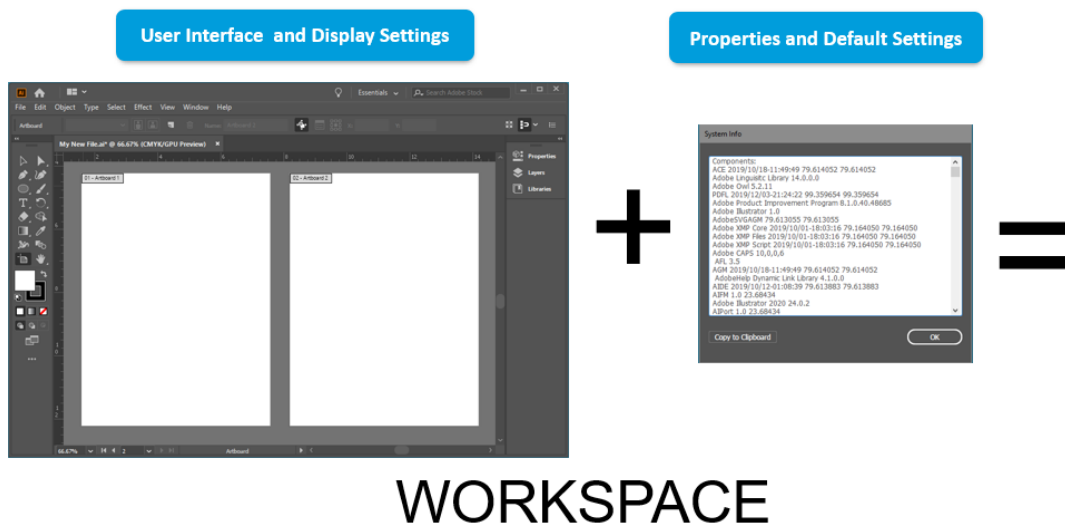
Multiple Workspaces

In Illustrator, you can turn any arrangement of document windows and panels into a workspace and you can have more than one open at the same time. You can save your arrangements of panels and windows as workspaces to be opened at a later time and you can have these multiple workspaces open simultaneously.

Predefined Workspaces

Illustrator's *predefined workspaces* are selectable, job-focused workspace settings consisting of displayed tool sets and defined properties that together form an environment well-suited to performing particular types of tasks. For example, publications professionals who primarily work

with the aesthetics of the printed word would use tools related to character and paragraph styles; a graphic artist specializing in digital painting would need easy access to brushes, colors, and swatches.

Because Adobe's intent in creating predefined workspaces is to offer users a quick and easy way to alter the workspace environment for particular categories of job tasks, selecting a predefined workspace to work in is as easy as selecting a tool from a toolbar.
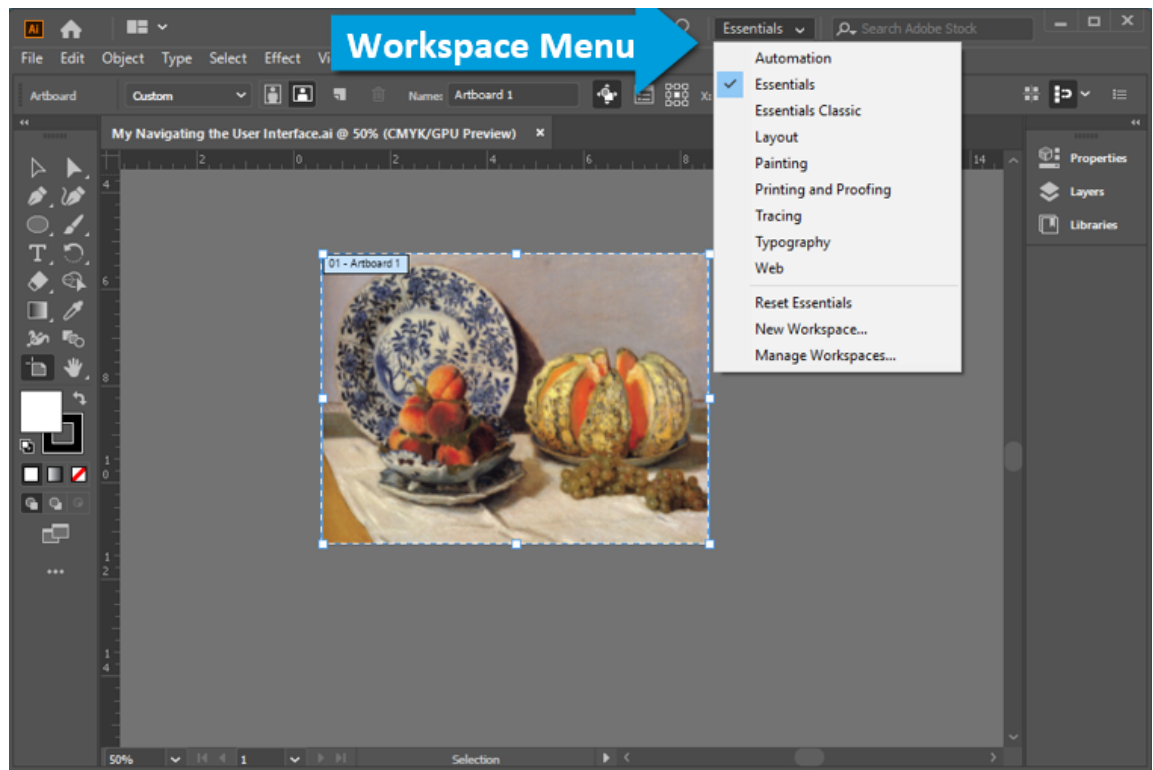
Figure 1–10: Predefined workspaces.

Custom Workspaces

Custom workspaces are uniquely created workspace environments defined by the user. Custom workspaces can be similar to predefined workspaces or completely unique sets of displayed tool sets and environment properties.
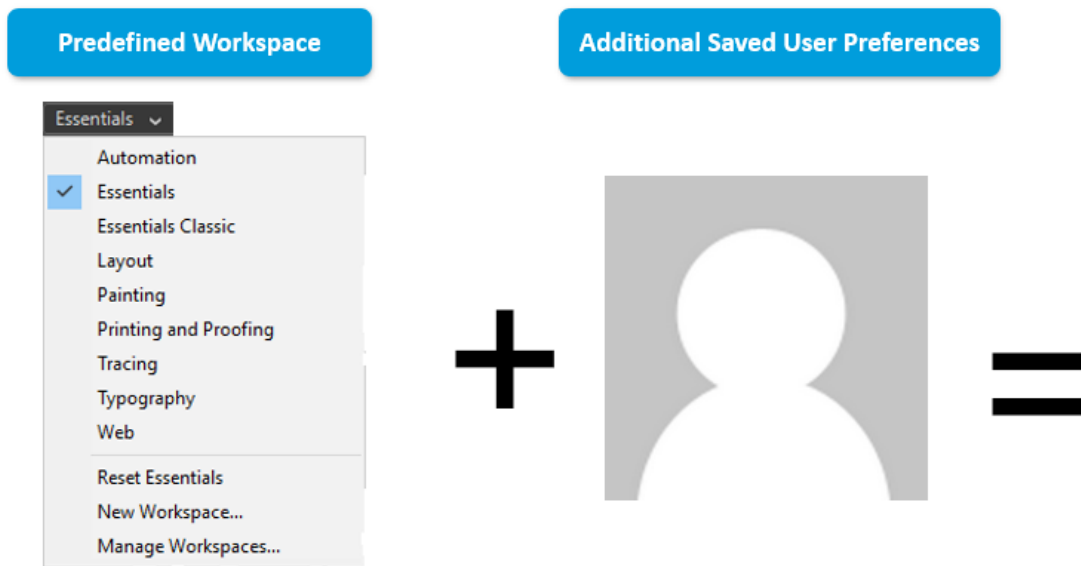
Figure 1-11: Custom workspaces.

Screen Modes

Illustrator's three **screen modes** enable you to quickly alter the work area environment without having to move, hide, and later display individual work area components.

- **Normal Screen Mode:** The displayed environment you normally work with.
- **Full Screen Mode with Menu Bar:** Enlarges the work area by moving the scroll bars to the edge of the screen and hiding the Windows task bar.
- **Full Screen Mode:** Removes all toolbars, panels, and menus, leaving the artboard and the cursor.

The screen mode control is at the bottom of the left **Tools** panel. To return to the default screen display at any time, press the **Esc** key.

Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Customize the User Interface.

ACTIVITY 1–4
Customizing the User Interface

Before You Begin
My Navigating the User Interface.ai is open.

Scenario
You have just received a text-intensive project with a quick turnaround time. Before you dive into the work, you take a few minutes to organize your materials and tools, and modify how Illustrator starts.

---

1. Change the Illustrator work environment to display tools related to character and paragraph formatting.

    a) At the top of the application window, to the left of the **Search** box, select the **Workspace switcher**.
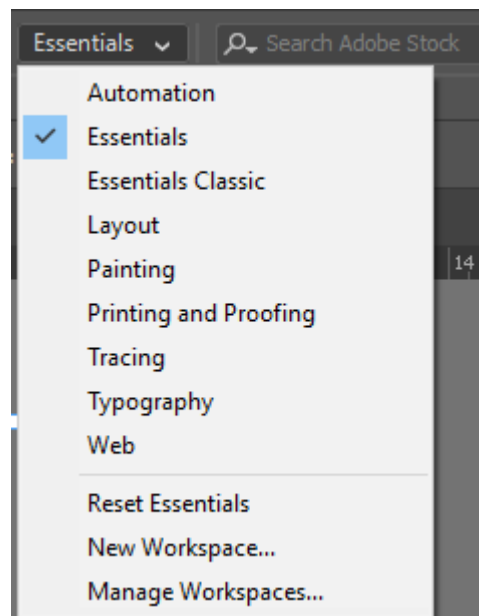
    b) From the list of available workspace items, select **Typography**.
    Tools and panels related to fonts, characters, and paragraphs are displayed along the right side of the work area, and the **Workspace switcher** now displays **Typography**.

2. Create a customized version of the **Typography** workspace called **My Typography** that displays all tools on the left side of the application window.

    a) Select the **Expand Panels** icon located above the **Character** icon.

b) Place the mouse pointer just above the **Character**, **Paragraph**, and **OpenType** panel tabs, and drag the panels to the left until you see a blue line between the **Tools** panel.
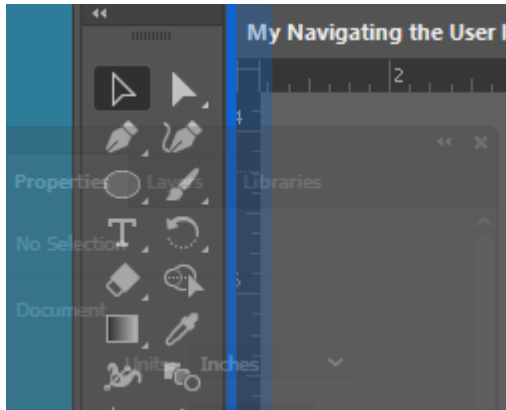
> **Note:** All of the open panels on the right side move to the left.

c) Drop the panels on the blue line.
d) In the **Properties** panel group, select **Collapse to Icons** to collapse the panel, then select it again to display the panel.
e) Collapse the **Character** panel group.
f) Set the screen mode to your liking.

You can use the **Change Screen Mode** button at the bottom of the **Tools** panel and select the desired screen mode or press **F** to toggle to the desired screen mode.

g) From the **Workspace** drop-down list, select **New Workspace**.
h) In the **New Workspace** dialog box, in the **Name** text box, type *My Typography*
i) Select **OK**.
j) Notice that **My Typography** is displayed in the **Workspace switcher**.

3. Reset the **Typography** workspace to its original default state.

a) Select the **Workspace switcher**.
b) From the **Workspace** list, select **Typography**.
The configuration changes you made are still displayed.
c) Select **Typography→Reset Typography**.

The workspace has been reset to the default **Typography** display.

4. Delete the **My Typography** workspace.

a) Select **Workspace→Manage Workspaces**.
b) In the **Manage Workspaces** dialog box, select **My Typography** from the list of workspaces.
c) Verify that **My Typography** is displayed in the gray text box, and then select the **Delete Workspace** button.
d) Select **OK**.
e) Verify that **My Typography** is no longer displayed in the **Workspace** menu.
f) Save and close **My Navigating the User Interface.ai**.

5. Change the brightness of the user interface to a lighter color.

a) Select **Edit→Preferences→User Interface**.

b) From the **Brightness** drop-down menu, select **Light**.
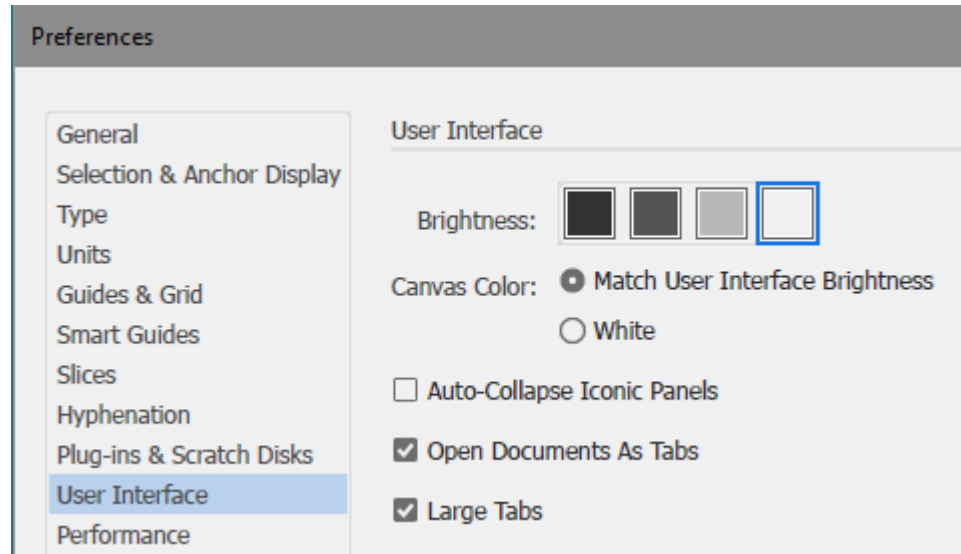
c) Select **OK**.

Summary

In this lesson, you determined the limits and flexibility of using different graphics types; you performed basic navigation, viewing, and measurement tasks; and you customized and managed Illustrator's user interface environment.

As an Illustrator user, how important do you think being able to save and reuse different work environments will be?

What do you think are some of the most important ways to set up the user interface to maximize your productivity?

Note: Check your CHOICE Course screen for opportunities to interact with your classmates, peers, and the larger CHOICE online community about the topics covered in this course or other topics you are interested in. From the Course screen you can also access available resources for a more continuous learning experience.

2 | Creating Documents Containing Basic Shapes

Lesson Time: 1 hour

Lesson Introduction

You've developed some skill moving around the Adobe® Illustrator® user interface and modifying user environment settings, and you've evaluated some graphical content, but a big milestone is still ahead: drawing a multi-part graphic.

Basic shapes are a set of, well, basic geometric shapes you can draw with several different tools. With them, you can build composite graphics of almost limitless possibilities.

In this lesson, you will create a document, draw a composite graphic consisting of several basic shapes, and then save your work.

Lesson Objectives

In this lesson, you will:

• Create documents.

• Save documents.

• Draw basic shapes.

TOPIC A

Create Documents

Creating a basic document, though easy, involves some prior knowledge on your part. What will you do with the document once it's created? How will you use it? Will it become a pattern for other documents you want to create in the future, or just a one-time deal?

In this topic, you will investigate many of the document types you can create in Illustrator, and then create a basic document.

Illustrator Document Types

The *Illustrator document type* you choose depends on its intended purpose.

Document Name	Extension	Purpose
Adobe Illustrator	AI	Creating and finalizing content for specific graphic-design projects; can be made from scratch or from a template.
Illustrator Template	AIT	Setting up foundational work for use in multiple Adobe Illustrator documents; creating Adobe Illustrator documents patterned after the foundational work.
Adobe PDF	PDF	Delivering text and graphical content for display as a word-processing-style document by using the Portable Document Format (PDF).
Illustrator EPS	EPS	Delivering content by using the Encapsulated PostScript® (EPS) file format, which enables the file to be treated as a graphic inside a PostScript file.
SVG	SVG	Displaying the document as a vector graphic by using an open-standard, eXtensible Markup Language (XML)-based, two-dimensional format developed by the World Wide Web Consortium. This allows you to export responsive, scalable SVG files that can adapt to different screen sizes and resolutions. You can roundtrip-edit SVG files that will maintain precise pixel alignment.
SVG Compressed	SVGZ	Displaying the document as a vector graphic by using a compressed version of the SVG graphics format, which can reduce a file's size between 20 and 50 percent.

Illustrator Document Profiles

A *document profile* is a collection of predetermined settings that include the size of the artboard, the number of artboards, the color mode, units of measure, the artboard's orientation, the transparency of the work, and graphical resolution. You can select a blank document preset or select a template.
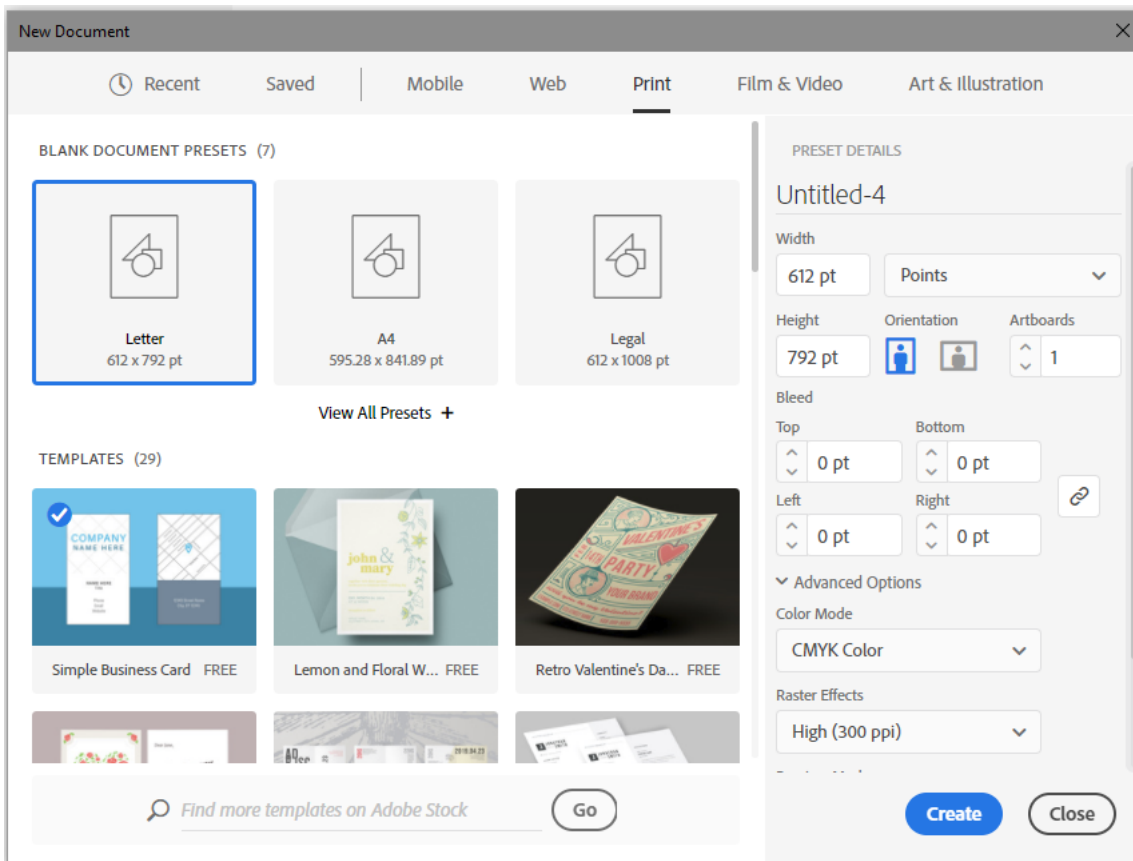
Figure 2–1: Illustrator document profiles.

The following table describes the available profile types and their settings.

Profile Type	Description
Mobile	Sizes the document for mobile devices and gives you a preview of how the document will look in several mobile device interfaces.
Web	Optimizes your work for deployment on the Internet. Several blank document preset sizes are available.
Print	Used to create documents for output on high-end printers. Several blank document preset sizes are available, including **Letter**, **A4**, **Legal**, and **Tabloid**.
Film & Video	Select from presets such as **HDV 720**, **HDV/HDTV 1080**, **4K UHD**, and **8K FUHD**. Templates include overlay graphics for news broadcasts.
Art & Illustration	Several blank preset sizes from postcard and poster sizes to as large as 1920 x 1080. Templates include those with fully editable vector graphics and editable 3D effects.

Artboards

Illustrator documents contain one or more artboards, which act as virtual pages that contain illustrations and layout work. The interior of an artboard is what "prints" when an Illustrator document is deployed. Each artboard is named, either with a generic name created by Illustrator or one you provide.

You can add, delete, realign, and resize artboards; and move or copy objects on one artboard to another. While typically rectangular, artboards can be reshaped to fit any object existing within the work area. In the status bar, the **Artboard Navigation** displays the current artboard and provides a way for you to quickly select artboards.
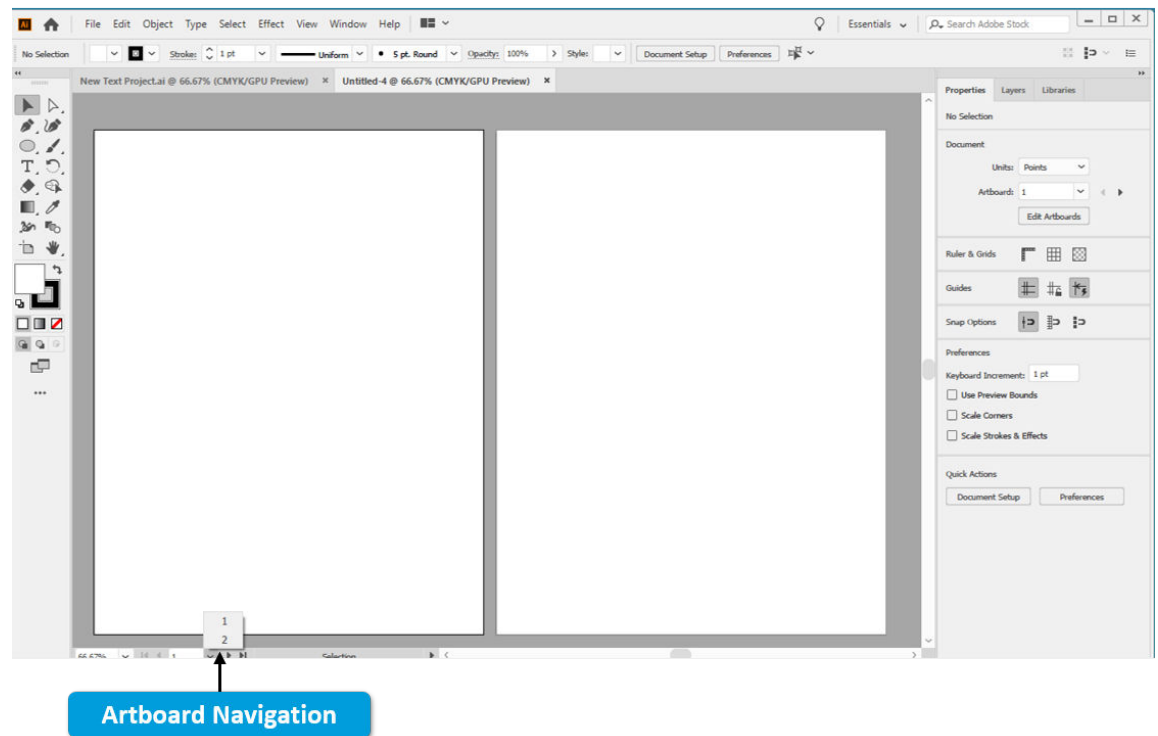
Figure 2-2: Artboards.

Artboards Panel

Located on the right edge of the application window, the ***Artboards panel*** can be used to perform tasks such as renaming, adding, and deleting an artboard, and displaying artboard properties.
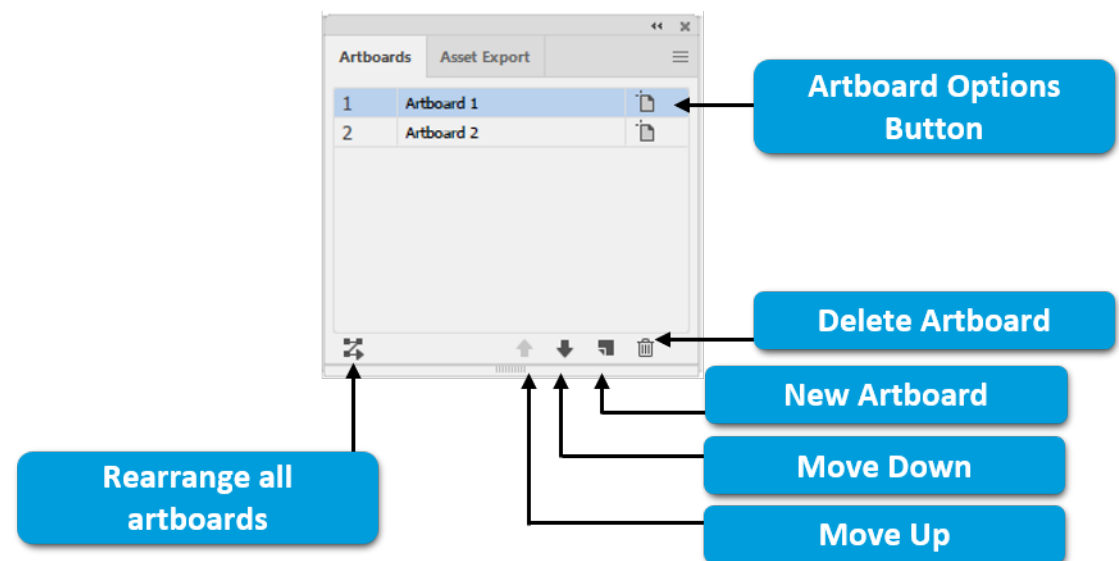
Figure 2-3: Artboards panel.

Artboard Options

Launched from the **Artboards** panel, the **Artboard Options** dialog box contains a collection of properties you can set to perform such tasks as resizing or repositioning an artboard, changing the artboard's orientation, locking the artboard's aspect ratio (proportion of length to width), and displaying the artboard's center mark and cross hairs. Options affect only the currently selected artboard.
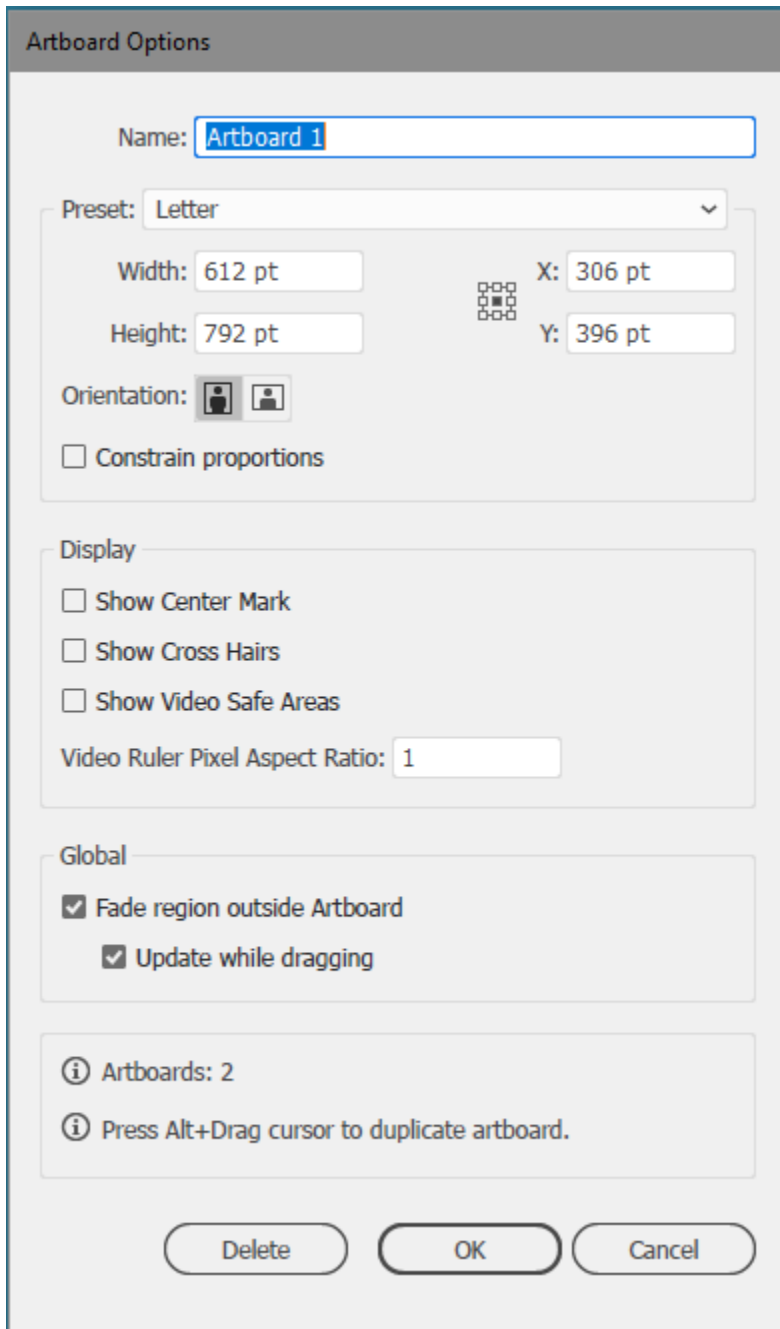
Figure 2–4: Artboard Options dialog box.

Color Modes

Color mode refers to the system used to mix colors from a set of foundational colors:

- **RGB Color Mode:** Used primarily for displaying colors on computer screens and televisions, the RGB color mode mixes red, green, and blue in varying strengths (0 to 255) to create a palette of nearly 17 million colors. The RGB color mode is additive—that is, it starts with black (nothing) and uses color to ultimately get to white.
- **CMYK Color Mode:** Used primarily by the printing industry, CMYK uses cyan, magenta, and yellow inks that are "keyed" to black ink. The CMYK color mode is subtractive—that is, it starts with white (the clean page) and then adds color to ultimately get to black.

Bleed

In printing, the term *bleed* refers to intentionally printing outside the intended edge of the sheet. Typically a small amount of space (one-eighth of an inch), the bleed area provides the printer with an error zone to avoid errors due to unintentional movement or misalignment of paper or small inconsistencies with the print design. By printing over into an area that will be cut off, bleed ensures that the final, trimmed document will have no non-printed areas.

Template Libraries

Template libraries are collections of preset templates Adobe created for use in your day-to-day work in graphic design. They provide you with attractive solutions for a wide variety of graphic design projects, including:

- Brochures, banner ads, business cards, CD cases, T-shirts, and website or DVD menus
- DVD screens, stationery, and website home pages

Smart Guides

Smart guides intermittently appear during the alignment process when you attempt to "eyeball" the alignment of two objects in the work area. Typically, they appear as thin red lines that show edge-to-edge or edge-to-middle relationships between two objects.

When a smart guide appears, it indicates that the edge or center of the object you are moving is aligned with another object.
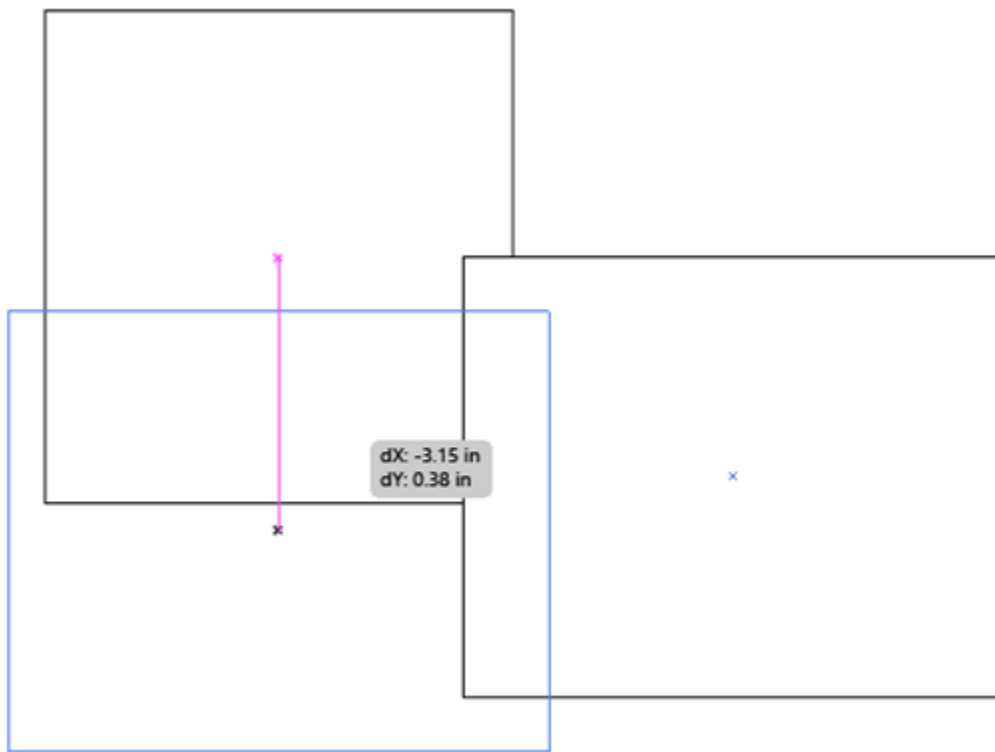
Figure 2–5: Smart guides.

Info Panel

The Illustrator **Document Info** panel enables you to view a wide range of general file information, including:

- Object characteristics
- Custom colors
- Fonts
- Gradients
- Placed art
- Graphic styles

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Create Documents.**

ACTIVITY 2–1
Creating Documents

Before You Begin

No document is open and the **Start** workspace is displayed.

Scenario

You work for the Sea-Zones Greeting Card Company as a card designer. Your department has just made the jump to Illustrator and, as a new user, you have decided to develop some basic documents.

1. Begin the process for creating a document named **Greeting Cards**.

   a) From the **Start** workspace, select the **Create New** button to open the **New Document** dialog box.

   b) In the **New Document** dialog box, under **PRESET DETAILS**, select **Untitled-#**, then type *Greeting Cards*

   > **Note:** You will name the document now but save it later.

2. Enter properties necessary to display three artboards in a row.

   a) Change the **Artboards** property to *3*

   b) Select the **More Settings** button.

   You might need to scroll down to see the button.

   c) Select the **Arrange by Row** button 🔜 to arrange the artboards by row.

3. Enter properties necessary to size the artboards at 4-inches wide by 6-inches tall with a portrait orientation and zero bleed.

   a) If necessary, from the **Units** drop-down list, select **Inches**.

   b) In the **Width** box, type *4* and in the **Height** box, type *6*

   c) Verify that the **Orientation** property is **Portrait**.

   Orientation: [ ] [ ]

   d) Verify that all bleed values are **0**.

Top	Bottom	Left	Right	
Bleed: 0 in	0 in	0 in	0 in	🔗

4. Set the **Advanced** property settings as necessary.

   > **Note:** You might have to expand the **Advanced** properties to see them.

   a) In the **Advanced** section, verify that **Color Mode** is set to **CMYK**.

b) Verify that **Raster Effects** is set to **High (300 ppi)**.
c) Verify that **Preview Mode** is set to **Default**.

5. Finish creating the new document.
   a) Verify that your settings match those shown in the graphic.

More Settings

Name: Greeting Cards
Profile: [Custom]
Number of Artboards: 3
Spacing: 0.28 in   Rows: 1
Size: [Custom]
Width: 4 in   Units: Inches
Height: 6 in   Orientation:
            Top   Bottom   Left   Right
Bleed: 0 in   0 in   0 in   0 in

▼ Advanced
Color Mode: CMYK
Raster Effects: High (300 ppi)
Preview Mode: Default

Templates...   Create Document   Cancel
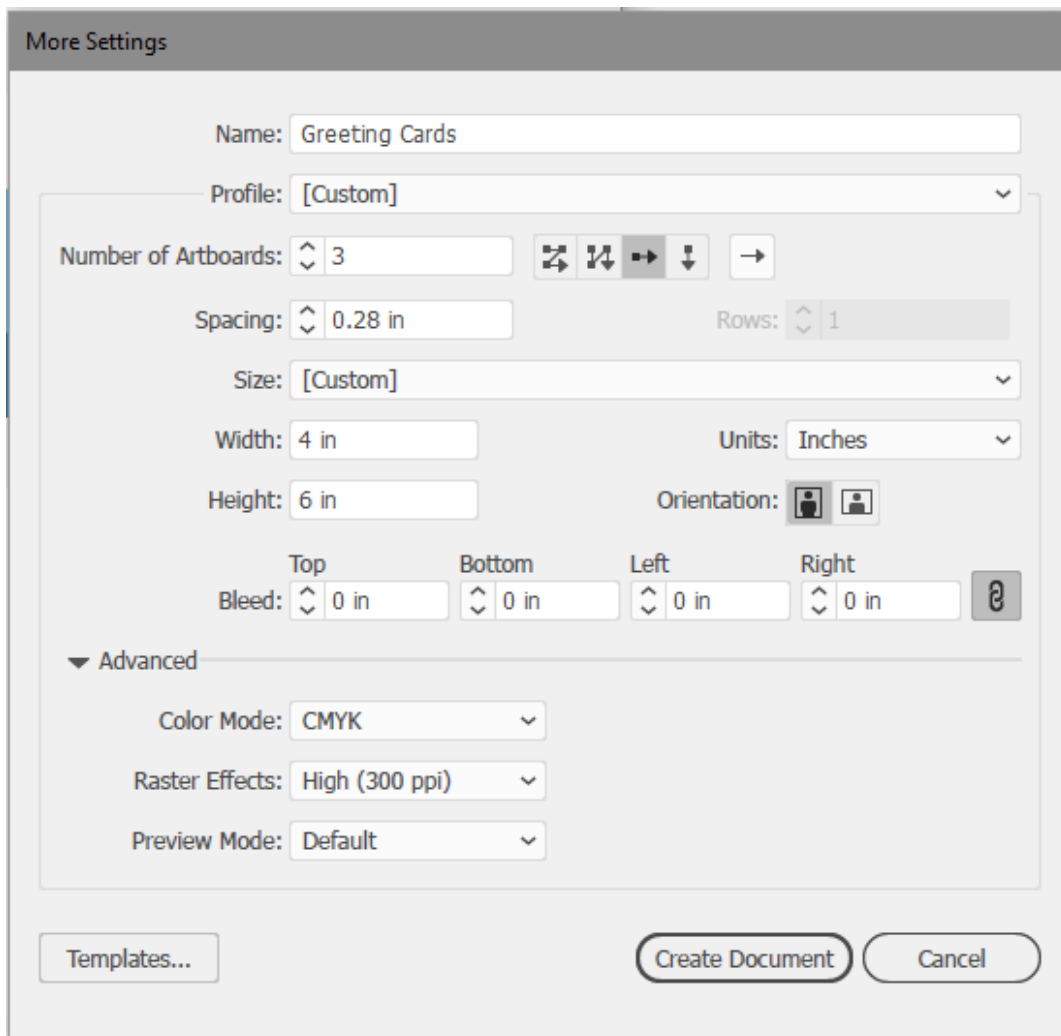
   b) Select **Create Document**.

6. Set the user workspace to **Typography**.
   a) At the top of the application window, select the **Workspace switcher**.
   b) Select **Typography**.
   c) Select **Workspace switcher→Reset Typography** to ensure that the default settings are in use.

7. If necessary, set the preferences to inches.
   a) On the **Menu** bar, select **Edit→Preferences→Units**.

b) In the **Preferences** dialog box, on the left side, verify that **Units** is selected, and in the **Units** section, from the **General** drop-down box, select **Inches**.
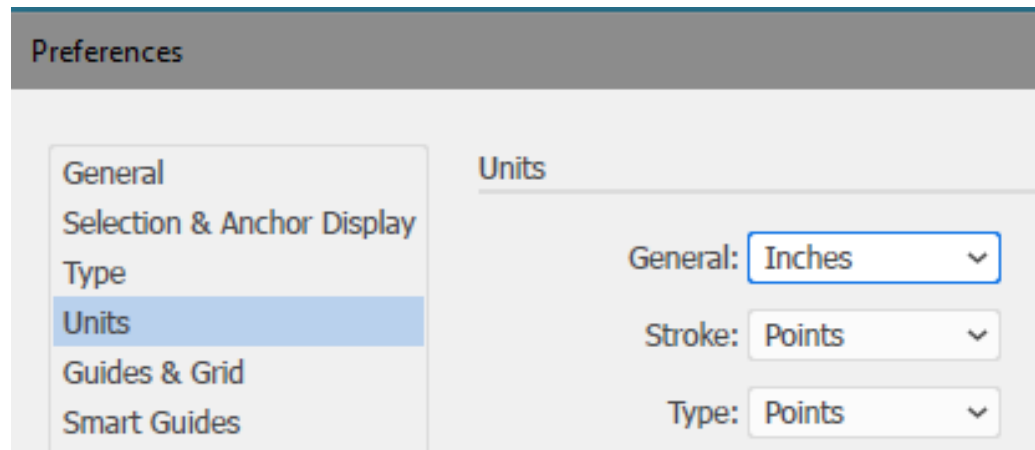
c) Select **OK** to close the dialog box.

8. Name the three artboards **Tall**, **Wide**, and **Note**.

a) On the right, at the bottom of the collapsed panels, select the **Artboards** icon to display the **Artboards** panel.

b) In the **Artboards** panel, double-click the text **Artboard 1**.
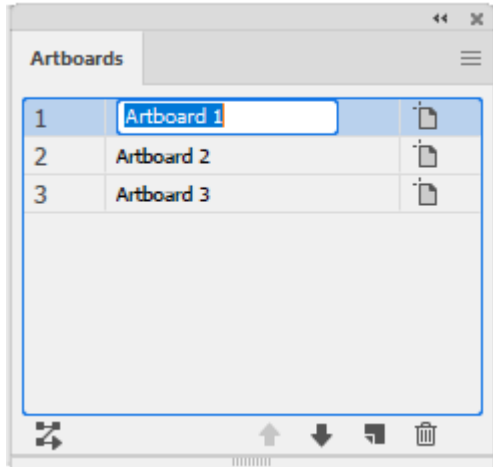
c) Type *Tall* and then press **Enter**.
d) Change the name of **Artboard 2** to *Wide*
e) Change the name of **Artboard 3** to *Note*

9. Resize the **Wide** artboard to **6** inches wide by **4** inches tall and the **Note** artboard to **3** inches wide by **2** inches tall.

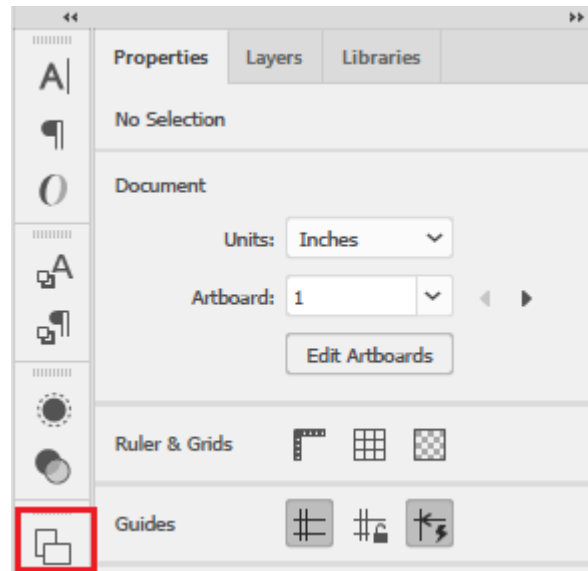a) In the **Artboards** panel, for the **Wide** artboard, select the **Artboard Options** button to display the **Artboard Options** dialog box.
b) Change the **Orientation** property to **Landscape**.
c) Verify that **Width** is set to **6 in**.
d) Verify that **Height** is set to **4 in**.
e) Set the **X** axis to **7.25 in**.
f) Verify that the **Y** axis is set to **3 in**.
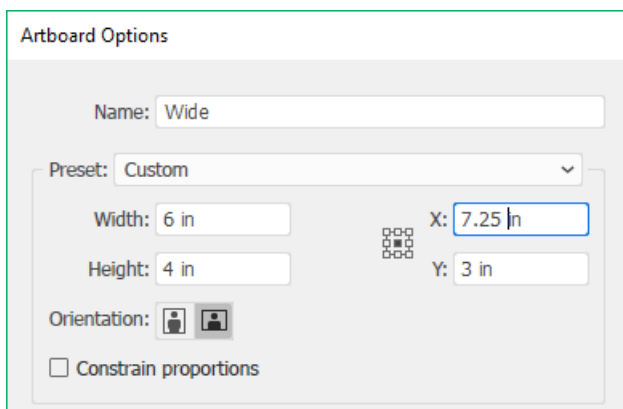
g) Select **OK**.
h) For the **Note** artboard, change the **Orientation** property to **Landscape** and change its **Width** to *3 in* and its **Height** to *2 in* then set the **X** axis to *12 in* and verify that the **Y** axis is set to *3 in*
i) Select **OK**.

10. Realign the artboards so that they all line up across the top and have about an inch of space between them.

a) If necessary, reset the document zoom to 100 percent or lower, so you can see all three artboards on the screen as well as an adequate amount of scratch area.

b) If necessary, select the **Selection** tool.

c) In the **Properties** panel, under **Quick Actions**, select **Document Setup** to display the **Document Setup** dialog box.

d) Select **Edit Artboards**.

e) Drag the **Wide** artboard and the **Note** artboard to the right to provide ample space between all three artboards.

f) Align the **Wide** artboard to the **Tall** artboard until you see a dynamic horizontal alignment guide appear along the top edge of both artboards.

g) Align the **Note** artboard with the **Wide** artboard by using the same dynamic guide technique.
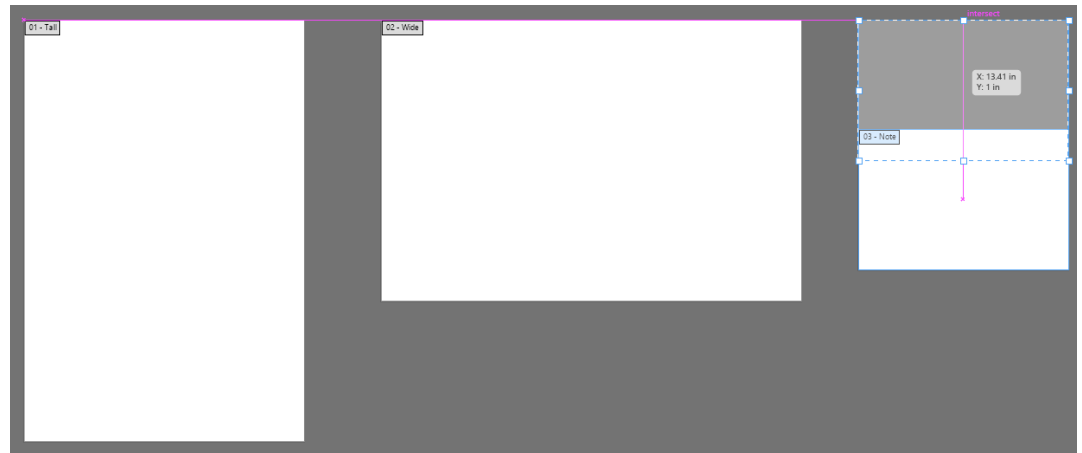
h) Select the **Selection** tool to deselect the artboards.

11. Leave your newly created document open so you can save it in the next activity.

TOPIC B

Save Documents

You've named your document but realize that you still haven't saved your work. Having a command of Illustrator's document properties and saving options will enable you to save your documents so that they are put to the use you intended. In this topic, you will save documents.

Document Import

Importing a file into Illustrator is a straightforward process and there are a few ways to accomplish this task. One is to select **File→Open** and choose the file you wish to open. If you want to open a file you recently had open, then you can select **File→Open Recent Files**. You can also open files directly from **File Explorer** in Microsoft® Windows® by double-clicking its icon, and in the Apple® OS X® by dragging the icon to the Illustrator application.

There are times when instead of opening a file to work with in Illustrator, you want to import a file into a document in which you are already working. To do this, simply select **File→Place**. This will allow you to import PDF, Photoshop, EPS, JPEG, and various text files directly into a new layer in your document.

Saving Options

You can save a file for later user. Illustrator has several *saving options*:

*   **Save As** enables you to save the current document as a new file having any number of alterations to its document type, name, and other document-level properties.
*   **Save** enables you to save changes within the current document and does not create a new document.
*   **Save a Copy** enables you to save a copy of the file. The copy has the current settings and content. It is not opened in Illustrator, and the original file remains open for editing. This makes it easy to return to your original settings and content if you decide you don't like the changes you made.
*   **Save as Template** enables you to create a template file that can be used as the basis for creating other Illustrator documents.
*   **Save Selected Slices** enables you to save *slices* from the current document as separate objects.

You can save in the following formats:

*   Adobe Illustrator
*   Adobe PDF
*   Illustrator EPS
*   Illustrator Template
*   SVG
*   SVG Compressed

Document Properties

Document properties, more commonly known as **Illustrator Options**, refers to document-level properties you can set when you first save a document. They include:

*   **Version:** The version of Illustrator to which you want to make the file compatible. Use this option in situations where you must develop work for existing projects created with previous versions of Illustrator.

- **Subset fonts:** Each font you use, such as Arial, Calibri, or Adobe Garamond, has hundreds of characters; depending upon your work, sometimes you will use many characters and many fonts, and sometimes, very few. Font-heavy work can increase the size of Illustrator documents because all the characters for all the fonts used in the document are embedded within the Illustrator document file. By using the **Subset fonts** property, you can set a rule that causes Illustrator to embed only the characters used, which helps to reduce file size.
- **Create PDF Compatible File:** Saves a PDF equivalent of the document and embeds it to enable the file to be compatible with other Adobe applications.
- **Include Linked Files:** Finds files linked to the Illustrator file and embeds them.
- **Embed ICC Profiles:** Causes the document to be color-managed.
- **Use Compression:** Compresses PDF-related information within the Illustrator file; can slow down the file saving process.
- **Save each artboard to a separate file:** Saves multiple files (a file for each artboard and a master file with all the artboards). Content in contact with an artboard is saved to that artboard's separate file.
- **Transparency** options: Used to determine the treatment of transparent objects if the file is saved in an Illustrator format earlier than the 9.0 release.
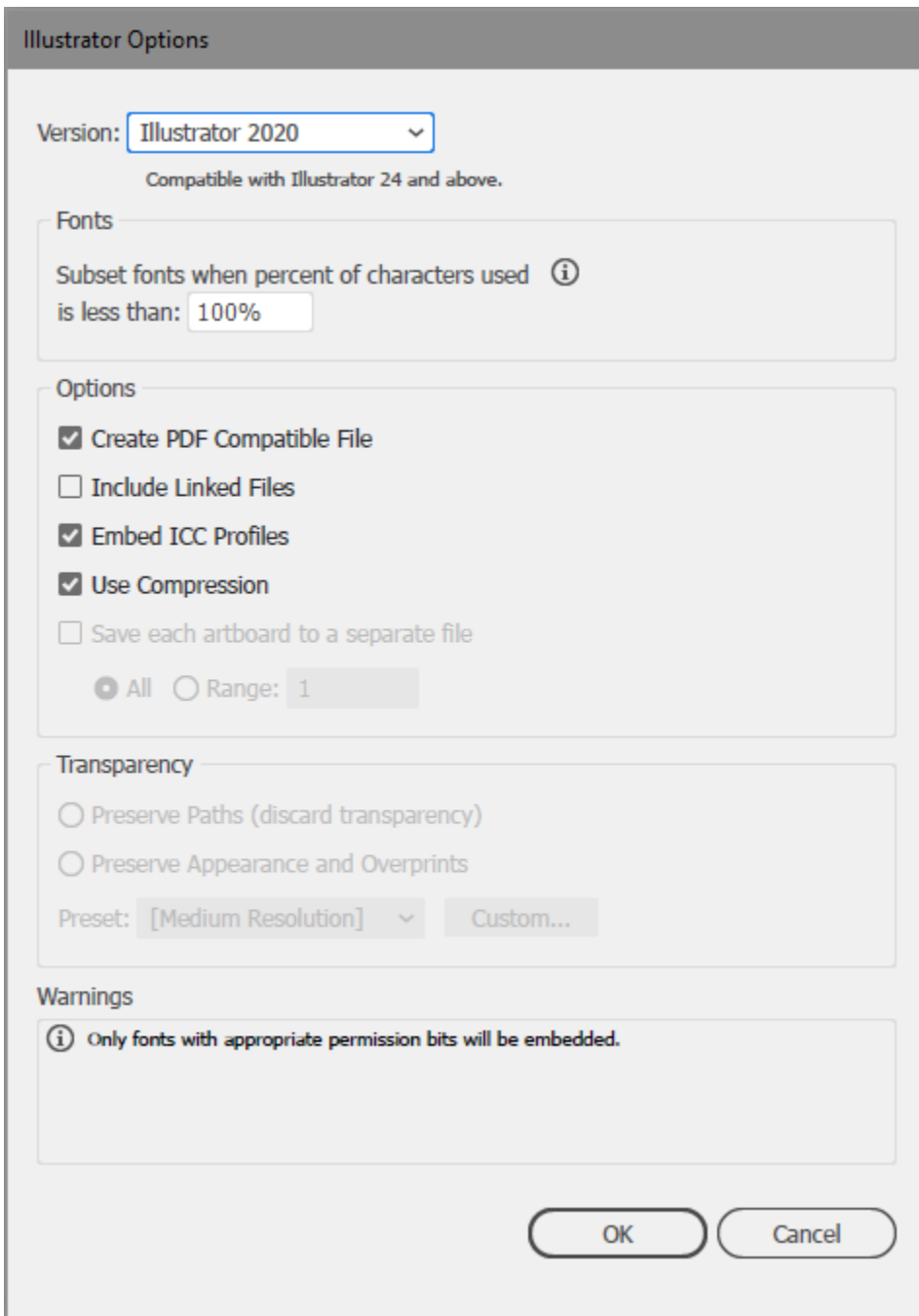
Figure 2-6: Document properties in the Illustrator Options dialog box.

Document Export

When you want to export your Illustrator file to a file format other than those available in the **Save As** box, you can do so via **File→Export→Export As**. Then from the **Save as type** drop-down list, select one of the following:

- AutoCAD Drawing or AutoCAD Interchange File
- BMP
- CSS
- Enhanced Metafile
- Flash

- JPEG
- Macintosh PICT
- PNG
- Photoshop
- SVG
- TIFF
- Targa
- Text
- Windows Metafile

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Save Documents.**

ACTIVITY 2-2
Saving a Document as a Template

Data File
C:\092033Data\Creating Documents Containing Basic Shapes\Greeting Cards Layout.ai

Before You Begin
The new document with three artboards is open.

Scenario
Now that you have created card blanks for the three main card sizes your company makes, you're ready to save the document as a template to make it reusable as a pattern for subsequent card development projects.

1. Verify that your new document with the three artboards is open.

2. Save your new document as a template named *My Greeting Cards Template.ait*

   a) On the **Menu** bar, select **File→Save as Template** to display the **Save As** dialog box.
   b) Observe the default location for template files.

      Usually, you would save the template to the default Adobe Illustrator templates folder, but for class purposes, you will save it to your data folder for this lesson.
   c) Navigate to the **C:\092033Data\Creating Documents Containing Basic Shapes** folder.
   d) From the **Save as type** drop-down list, verify that **Illustrator Template (*.AIT)** is selected.
   e) In the **File name** text box, select the existing text and then type *My Greeting Cards Template*
   f) Select **Save** to save the file as a template.
   g) Select **File→Close** to close the file.

3. Create a new document from your template, name it **Greeting Cards From Template**, and then save it as a regular Illustrator document.

   a) On the **Application** bar, select **File→New from Template** to display the **New from Template** dialog box.
   b) Navigate to the **C:\092033Data\Creating Documents Containing Basic Shapes** folder.
   c) In the files list, select **My Greeting Cards Template.ait**.
   d) Select **New** to display the new document.
   e) On the **Application** bar, select **File→Save As** to display the **Save As** dialog box.
   f) In the **File name** text box, select the generic "Untitled" document name and type *My Greeting Cards From Template*
   g) Observe that **Save as type** indicates the document format is a regular Adobe Illustrator file format.

File name:	My Greeting Cards From Template
Save as type:	Adobe Illustrator (*.AI)
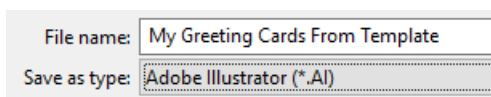
   h) Select **Save**.
   i) In the **Illustrator Options** dialog box, select **OK** to accept the default options and save the file.

j) Close the file.

TOPIC C

Draw Basic Shapes

Illustrator has a set of drawing tools you can use to draw basic geometrical shapes you can combine and modify into more complicated composite drawings of infinite variety. In this topic, you will draw basic shapes.

Basic Shapes

Basic shapes are geometric objects you can draw on an artboard with specialized tools. Each shape is closed; that is, its border defines an interior region within the shape that sets the region apart from the visual field in which the shape exists.

Why have tools dedicated to drawing closed geometric shapes? Using the computational power of your computer and Illustrator to keep track of measuring straight lines, accurately drawing angles, resizing, and moving closed geometric objects helps tremendously to ease the "burden of technique" you would otherwise have to spend time mastering to yield only basic visual results.
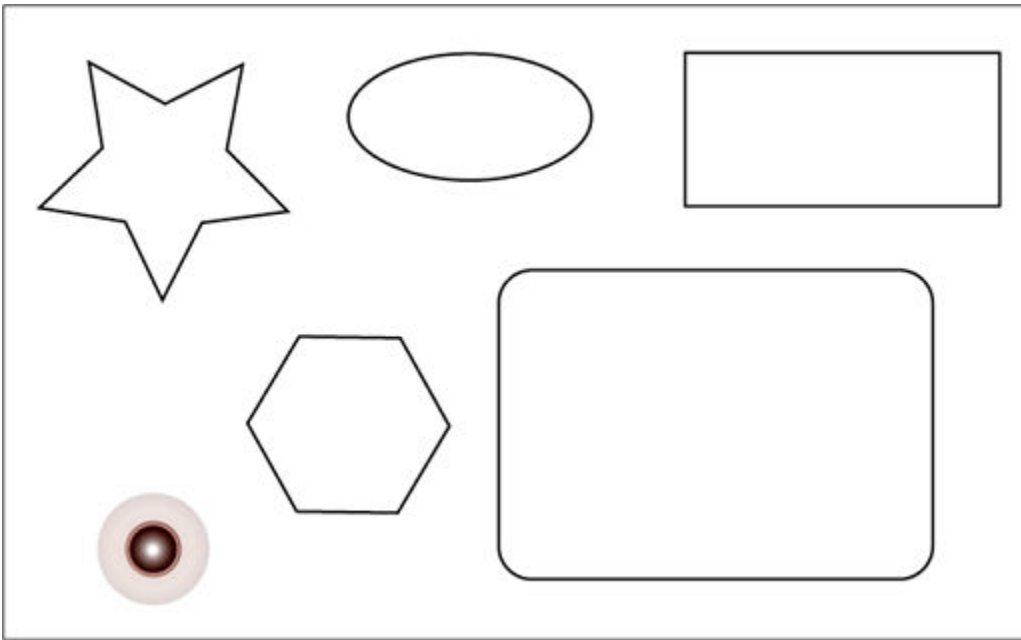
Figure 2–7: Basic shapes.

Shape Tools

Illustrator has several *shape tools* you can use to draw basic shapes. Shape tools are located under a single tool button in the toolset on the left side of the application window. The appearance of the button changes to indicate the currently selected basic shape the tool will draw. And, the tools that are displayed depend on the workspace you are using. For instance, the **Essentials Classic** workspace contains the following tools.

- **Rectangle**
- **Rounded Rectangle**
- **Ellipse**
- **Polygon**
- **Star**
- **Flare**

> **Note:** You can draw squares and circles with the **Rectangle** and **Ellipse** tools by holding down the **Shift** key as you draw.

> **Note:** To learn more about creating basic shapes, check out the Spotlight on **Customizing Basic Shapes** presentation from the **Spotlight** tile on the CHOICE Course screen.

Shaper Tool

Drawing shapes with the **Shaper** tool will transform rough shapes you draw into perfect geometrical shapes, such as a perfect circle, a triangle, an ellipse, a rectangle, or a square. Just like shapes you created with the shape tools, you can edit the shapes created by the **Shaper** tool, moving them or recoloring, combining, enlarging, or shrinking them, and more.
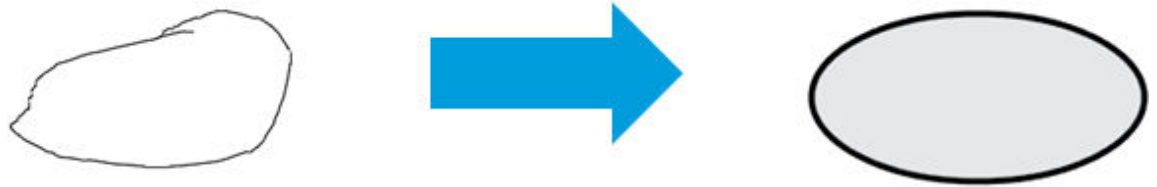
Figure 2–8: The Shaper tool reshapes a rough sketch into a perfect geometric shape.

Advanced Essentials Toolbar

The **Shaper** tool is not displayed on the **Essentials** toolbar when it is displayed with **Basic** tools. Switch the toolbar to **Advanced** to see the **Shaper** tool. Select **Edit Toolbar** (the three dots at the bottom of the panel) then select the panel menu and select **Advanced**. Another option is to switch to the **Essentials Classic** workspace. Alternatively, you can drag the **Shaper** tool from the **All Tools** list onto the **Basic Essentials** toolbar or use the keyboard shortcut **Shift+N**.

Figure 2–9: Drag the Shaper tool onto the Basic toolbar or switch to the Advanced toolbar.

Drawing Modes

You can use Illustrator's three ***drawing modes*** to add new graphical content to the current work project without needing to move or "draw around" that existing work to get the desired effect:

- **Draw Normal:** Tools draw later work on top of earlier work.
- **Draw Behind:** Tools draw later work behind earlier work.
- **Draw Inside:** Tools draw inside closed objects but not outside in the larger unenclosed visual field.

The **Drawing Modes** button is located at the bottom of the **Tools** panel on the left side of the user interface. If the toolbar is displayed in **Basic** mode, the currently selected drawing mode icon is displayed. If the toolbar is displayed in **Advanced** mode, all three drawing mode icons are displayed, with the currently selected one highlighted.
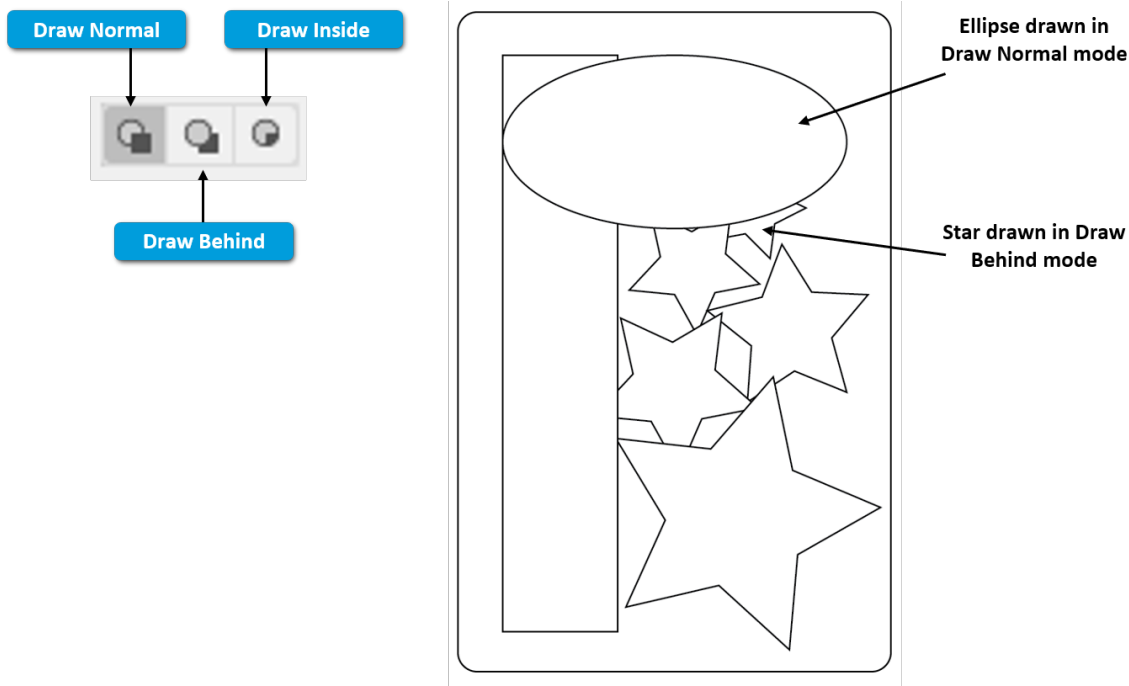
Figure 2–10: Artwork quickly drawn by using Illustrator's drawing modes.

Access the Checklist tile on your **CHOICE Course** screen for reference information and job aids on **How to Draw Basic Shapes.**

ACTIVITY 2–3
Drawing Basic Shapes

Data File

C:\092033Data\Creating Documents Containing Basic Shapes\Greeting Cards Template.ait

Scenario

Your company is considering a line of inexpensive cards that display different messages. You will utilize the template that you just made containing the three standard card blanks.
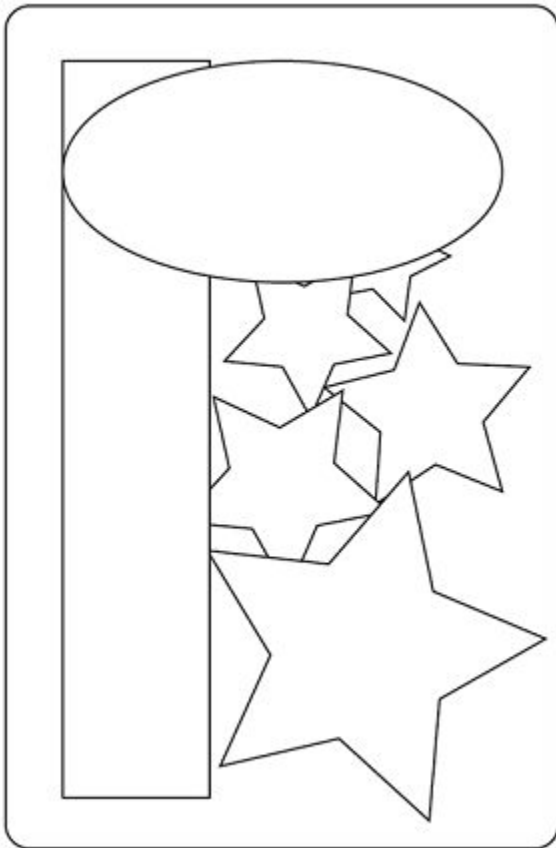
| | **Note:** Refer to the image presented here as you draw the basic shapes in this exercise. |

---

1. Create an Illustrator document from your greeting card template, and then maximize the appearance of its **Tall** artboard in the work area.

   a) Select **File→New from Template**.
   b) In the **New from Template** dialog box, navigate to **C:\092033Data\Creating Documents Containing Basic Shapes**, then select **Greeting Cards Template.ait** and select **New**.
   c) Switch to the **Essentials Classic** workspace.

    d) From the **Artboard Navigation** drop-down list, select the **Tall** artboard.

    e) From the **Zoom** control drop-down list, select **Fit On Screen**.

2. Draw a 1-inch-wide by 5-inch-high rectangle going down the left side of the artboard, about one-half inch from the artboard's edges.
    a) If necessary, display the rulers by selecting **View→Rulers→Show Rulers**.
    b) In the left **Tools** panel, select the **Rectangle** tool. If the **Rectangle** tool is not visible, select and hold the **Shape** tool button to display a fly-out tool selection menu and then select the **Rectangle** tool.
    c) Use the rulers to help you position the mouse pointer and drag in the artboard to draw the 1-by-5-inch rectangle.
    d) If necessary, use the **Selection** tool to reposition or resize the rectangle.

3. Draw a 3-inch-wide by 1.5-inch-high ellipse and then, using the dynamic guides, position the ellipse so that its edges align with the rectangle.
    a) In the left **Tools** panel, select and hold the **Rectangle** tool button to display a fly-out tool selection menu, and then select the **Ellipse** tool.
    b) Position the mouse pointer at the upper-left corner of the rectangle, and then drag down and to the right to draw the 3-by-1.5-inch ellipse.
    c) If necessary, use the **Selection** tool to reposition or resize the ellipse.

4. Under the ellipse and to the right of the rectangle, draw a series of five cascading stars that get larger as they get to the bottom. Stars higher in the cascade should appear behind the stars below them; at the top, they should be partially hidden behind the ellipse and rectangle.
    a) Use the **Selection** tool to select the **Rectangle**. Do NOT select **Draw behind**. Leave the **Drawing Mode** set to **Normal**.

> **Note:** Drawing normal or behind is relative to whatever item is currently selected (in this case the rectangle) before you draw a new shape.

    b) In the left **Tools** panel, select and hold the **Ellipse** tool button to display a fly-out tool selection menu, and then select and hold to select the **Star** tool.
    c) Draw the first star. Observe that it appears in front of the rectangle.

> **Note:** You have observed drawing a shape in front of another shape. You will now delete the star you just drew, and redraw it behind the rectangle.

    d) Select and delete the star you just drew.
    e) On the left side of the user interface, at the bottom of the **Tools** panel, select the **Draw Behind** button.
    f) At the base of the artboard, draw a star that spans the area between the rectangle and the right edge of the artboard.

> **Note:** Stars are drawn from their center, not the corner. Position your mouse pointer accordingly.

    g) Draw four additional smaller stars above the first star you drew, resulting in a total of five stars.

h) Observe that, as you draw, the new stars appear behind previously drawn stars as well as the ellipse and the rectangle.

i) If necessary, adjust the stars by selecting the **Selection** tool, selecting a star on the artboard, and then dragging the handles on the selection box to scale. Hold **Shift** to maintain proportions while dragging. Hovering over a corner of the selection box will display the rotation cursor, allowing you to click and drag to rotate a shape.

> **Note:** Rotate the stars to your liking, but leave right and bottom margins.

5. Draw a rounded rectangle behind your work. The edge of the rectangle should be just in from the edge of the artboard.

a) In the left **Tools** panel, select and hold the **Star** tool button to display a fly-out tool selection menu, and then select the **Rounded Rectangle** tool.

b) If necessary, reset the zoom.

c) Starting in one corner of the artboard, drag to the opposite diagonal corner to drag a rounded rectangle.

d) If necessary, use the **Selection** tool to resize the rounded rectangle. The rounded rectangle will be on top of the other rectangle.

6. Change back to **Draw Normal** mode and then save your work as *My Basic Shapes.ai*

a) On the left side of the application window, at the bottom of the **Tools** panel, select the **Draw Normal** button.

b) Select **File→Save As** to display the **Save As** dialog box.

c) Navigate to the **C:\092033Data\Creating Documents Containing Basic Shapes** folder.

d) In the **File name** text box, type *My Basic Shapes.ai*

e) Select **Save**. In the **Illustrator Options** dialog box, accept the default settings and select **OK**.

f) Select **File→Close** to close the file.

> **Note:** To learn more about creating new shapes, check out the Spotlight on **Creating New Shapes from Basic Shapes** presentation from the **Spotlight** tile on the CHOICE Course screen.

Summary

In this lesson, you created and saved documents containing composite graphics made up of basic geometrical shapes. By acquiring basic drawing and document creation skills, you can begin the process of developing vector graphics possessing limitless variety and artistic expression.

How is Illustrator's management of naming and saving documents similar to or different from what you have experienced with other software applications?

Do you think it would be better to have some additional basic shapes available? If so, which ones?

Note: Check your CHOICE Course screen for opportunities to interact with your classmates, peers, and the larger CHOICE online community about the topics covered in this course or other topics you are interested in. From the Course screen you can also access available resources for a more continuous learning experience.

3 | Creating Documents Containing Customized Paths

Lesson Time: 30 minutes

Lesson Introduction

As an artist, you know that the pen is a mighty tool. You can use it in ways that freely express your intentions, but does that same freedom exist in the world of digital vector graphic development? The **Pen** tool works much like the real thing, and in many respects, it is an advance over manual drawing tools. In this lesson, you will learn how to draw custom paths with the **Pen** tool.

Lesson Objectives

In this lesson, you will:

- Draw paths.

- Modify paths.

TOPIC A

Draw Paths

Drawing straight lines is a basic step toward becoming adept with drawing in Adobe® Illustrator®. The **Pen** tool, used for drawing straight lines (and curved lines), can be used to outline a shape. In this topic, you will draw straight lines.

Paths

Similar to lines drawn with a pencil or strokes created by a brush or a pen, *paths* are straight and curved lines drawn with Illustrator's drawing tools. Paths are considered shapes; though they typically do not have an interior area, they interact seamlessly with Illustrator's basic shapes and can be used to build sophisticated shapes with closed interiors.

The **Pencil** tool allows you to draw curves more accurately. You can draw straight lines, extend paths, and close paths. You can use presets to create smooth paths with fewer points, as well as more precise renditions of actual strokes. The **Brush**, **Blob Brush**, and **Smooth** tools also have this capability.

Figure 3-1: Closed and open paths.

Path Components

Paths vary widely in appearance but possess similar *path components*:
- Anchor points give structure to the path line.
- Line segments make up any single continuous line between two anchor points.
- Bezier curve controls consist of a guide line that is always at a point of tangency to a smooth anchor point. The two ends of the guide line can be lengthened and rotated to alter the bend and scope of the curve.

Selected Path Tools

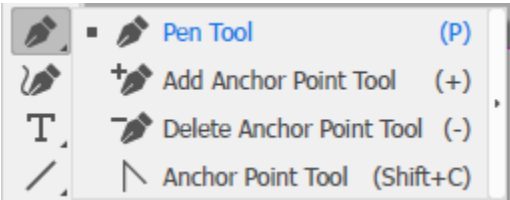The **Pen** tool fly-out menu includes tools to manipulate a path's anchor points.

Figure 3–2: Pen tools.

|	
	Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Draw Paths.

ACTIVITY 3–1
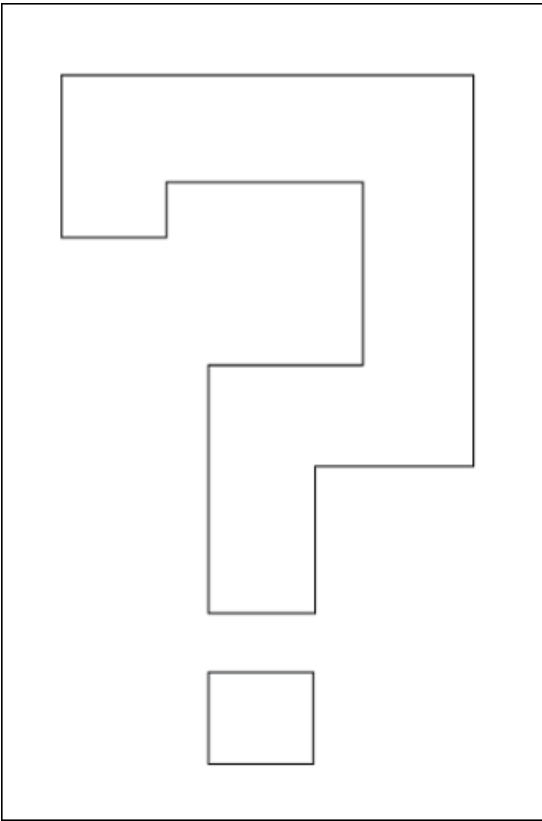### Drawing Paths

Data File

C:\092033Data\Creating Documents Containing Customized Paths\Greeting Cards Template.ait

Scenario

You have been asked to create a card designed for someone who wants to get in contact with a friend. You come up with the theme "What's Up?" and start designing a simple graphic: a question mark.
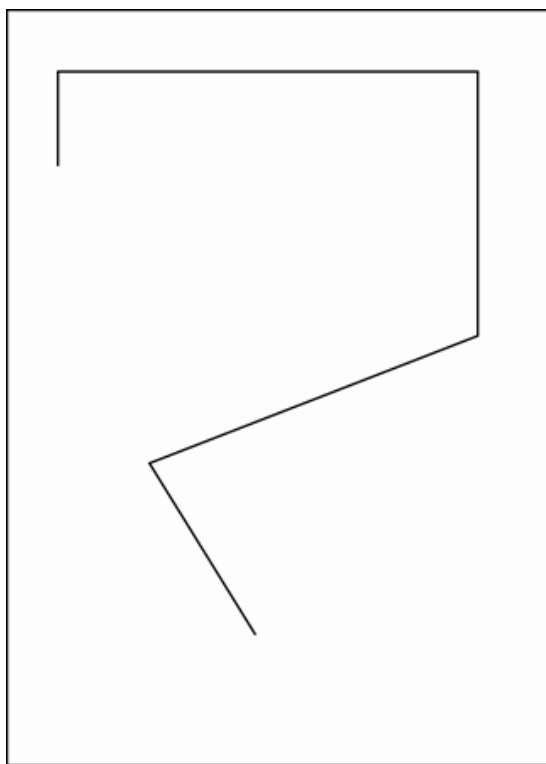
Note: Refer to the image presented here as you draw the paths in this exercise.

---

1. Create a new file from **Greeting Cards Template.ait**.

   a) On the **Application** bar, select **File→New from Template**.
   b) Navigate to the **C:\092033Data\Creating Documents Containing Customized Paths** folder and select **Greeting Cards Template.ait**.
   c) Select **New** to create a document from the template.

2. Maximize the display of the **Tall** artboard in the work area.

   a) With the **Selection** tool, select the **Tall** artboard.
   b) From the **Zoom** control drop-down list, select **Fit On Screen** to maximize the **Tall** artboard in the work area.

3. With the **Pen** tool, draw the right-angle question mark.

   a) In the left **Tools** panel, select the **Pen** tool.
   b) To draw the question mark line, start anywhere on the question mark you feel comfortable and click in the artboard to create your first anchor point. Click again to create a second anchor point, and a line is created between the two points. Continue to click to create anchor points, defining the question mark line.

c) To close the path, select the first anchor point.
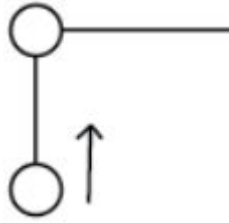
> **Note:** Be sure to make use of the dynamic smart guides to make right angles as you work. Your work does not have to be exactly like the image shown; an approximation is fine. In addition to the dynamic guides, you may also hold **Shift** while laying down anchor points, which will constrain the line to perfectly horizontal or vertical.

d) Select the **Selection** tool and click an open area of the artboard to deselect the path.
e) Select the **Pen** tool and draw a closed rectangle under the question mark to form the question mark period. Be sure to close the path by selecting the first anchor point.

4. Save your file in the current lesson folder as **My Whats Up.ai**.

a) On the **Menu** bar, select **File→Save As** to open the **Save As** dialog box.
b) Navigate to the **C:\092033Data\Creating Documents Containing Customized Paths** folder.
c) In the **File name** box, enter *My Whats Up.ai* and select **Save**.
d) In the **Illustrator Options** dialog box, select **OK** to accept the default options and save the file.
e) Close all files.

TOPIC B

Modify Paths

You have created a basic rough draft of drawn lines (paths) but aren't sure how to "tweak things" to get your intended look and feel. Knowing how to put curves in, take them out, and move them around can transform the simple outline of drawn paths into a finished product. In this topic, you will modify paths.

Anchor Points

Anchor points are structural locations that define the shape of a path. Anchor points split the path up into segments. You can then bend or straighten each segment to achieve the desired effect.

Every path has at least two anchor points: one at the beginning of the path, and the other at the end. You can add and remove anchor points to achieve a design goal; the more anchor points you add, the more segments you create, and thus, the finer and more detailed your level of control. Corners are now "live." You can edit and re-edit the corners of shapes and paths visually by using on-art controls or by entering values in the **Corners** dialog box or the **Control** panel.

Anchor points and the **Direct Selection** tool make path segment reshaping easy. You can fluidly drag path segments into any shape you wish.
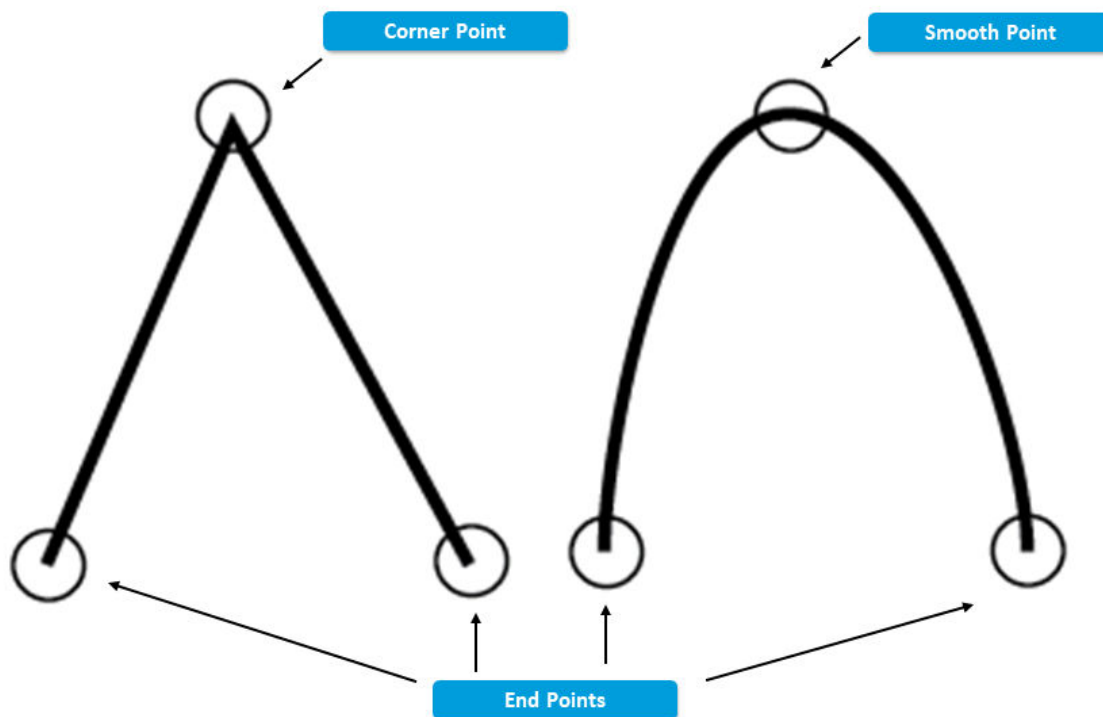

Figure 3–3: Types of path anchor points.

Bezier Curves

Bezier curves are used to generate curved lines in graphic design software applications. In Illustrator, you adjust the curves by using control bars, which thread tangentially through anchor points on the curve. Adjusting the control bar length affects the segment's radius of the curvature; rotating the control bar changes or reverses concavity and convexity.
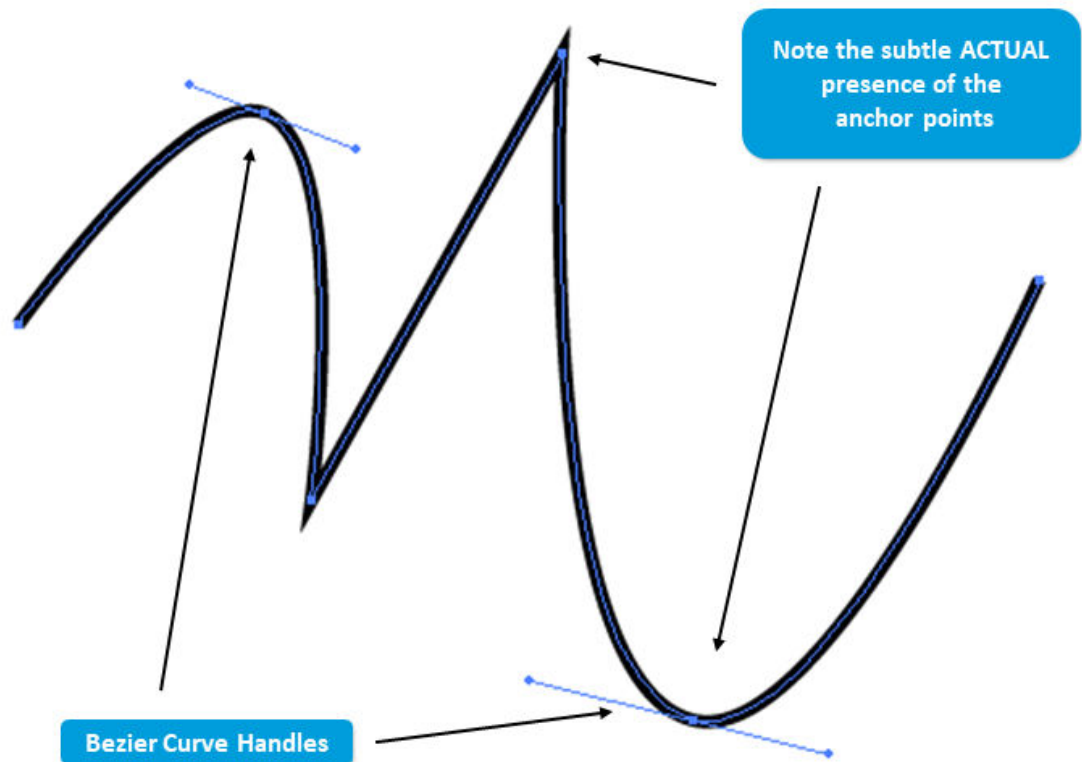
Figure 3-4: Bezier curves.

The Effect of Anchor Points on Bezier Curve Paths

Anchor points can greatly affect the appearance of a Bezier curve path:

- Corner points are non-continuous, "pointed" places of transition from one segment to another.
- Smooth points are continuous, "non-pointed" places of transition.
- End points exist at the beginning and end of the path.

On the **Pen** tool fly-out menu, the **Convert Anchor Point** tool converts corner points to smooth points, and vice versa. Because most anchor points affect two segments, you can convert both sides of the point or just one side.

Path Formatting

There are two main categories of path formatting:

- Stroke: The path's appearance, including its width, texture, and transition.
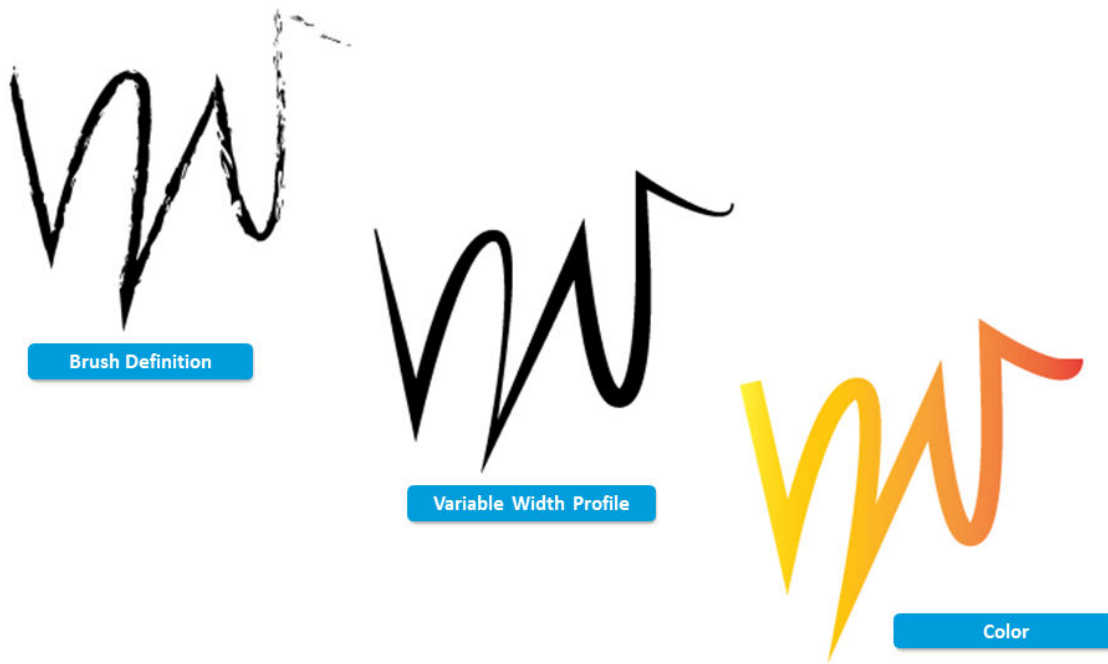- Color: A single color or multicolored pattern applied to the path.

Figure 3–5: Formatted paths.

Path Formatting Tools

In the **Essentials** view, you can use the **Properties** panel's *path formatting tools* to make stylistic changes to paths. To display the path formatting tools, use the **Selection** tool to select a path. The **Properties** panel gives you access to all the formatting options for the selected object. Some of the most commonly used tools include the following:

- The **Fill** tool is located in the **Appearance** panel. This tool is a drop-down list of colors you can choose from to apply color to the path.
- The **Stroke** tool is located in the **Appearance** panel. This tool allows you to change the stroke size of the path.
- The **Arrows and Dashes** tool can be accessed from the **Stroke** panel. This tool allows you to apply arrows and change the path to a dashed line.
- The **Brush Definition** tool is located in the **Appearance** panel. It is also available in the **Brushes** panel. This tool is available if the **Paintbrush** tool is selected. It enables you to apply a brush thickness and style to a path. If the **Pen** tool is selected, the **Brush Definitions** are not shown in the **Appearance** panel.
- The **Width Profile** tool is located in the **Stroke** panel. This tool enables you to select sophisticated width profiles that, when applied to the path, give the path elaborate variations in stroke width.
- The **Stroke Weight** tool is located in the **Appearance** panel. This tool enables you to change the thickness of a path.

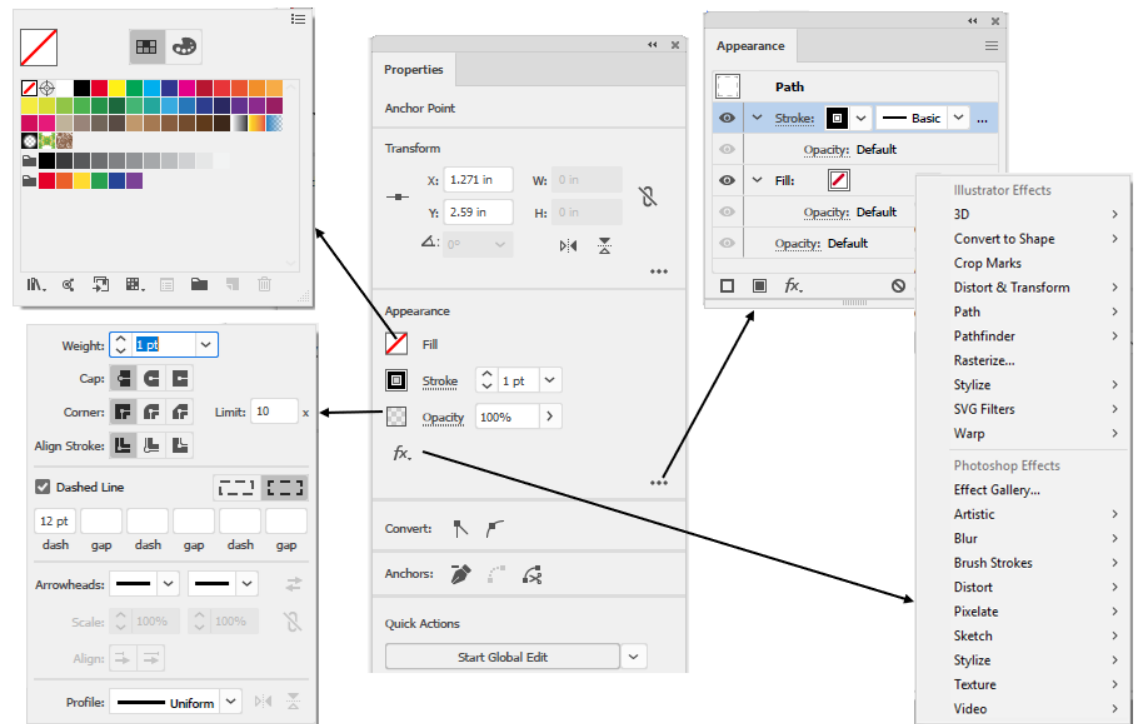Additional tools are available for formatting paths as shown.

Figure 3-6: Path formatting tools.

> **Note:** To learn more about stroke weights, check out the Spotlight on **Using Stroke Weight and Profiles to Alter Brush Strokes** presentation from the **Spotlight** tile on the CHOICE Course screen.

Split Paths

Sometimes you want to split a path in two. You can do this either at an anchor point or along a segment of a path, anywhere along the path. It is important to remember that:

- If the path you are splitting is closed, you will need to split it at two separate points.
- The new paths that are created will keep the settings of the original path.

To split a path, you can either use the **Scissors** tool and cut anywhere along the path, or select an anchor point and use the **Cut Path At Selected Anchor Point** button.
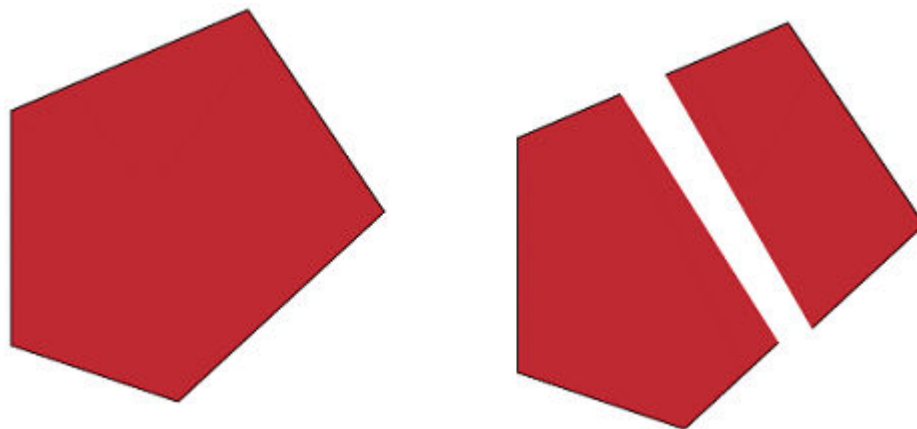

Figure 3-7: Split paths.

Erase Artwork

There are times when you want to edit the paths you have created. The **Eraser** tool, which is located in the **Tools** panel, will allow you to erase vector objects and paths, and it works very much the same way a real eraser works. When you want to edit a path, you can select the segment of path to edit and then drag the **Eraser** tool over that section of the path to erase it.
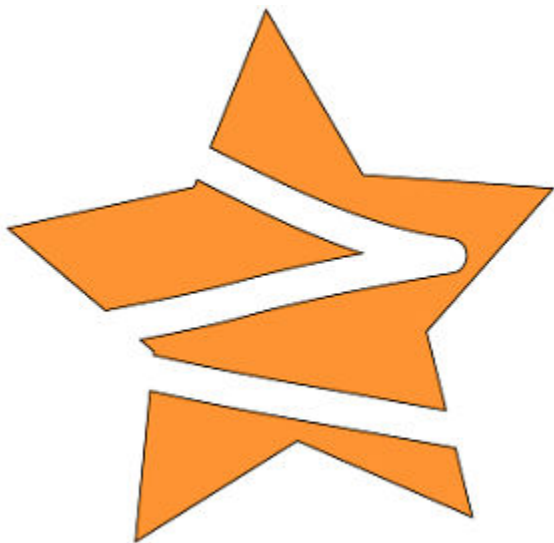
Figure 3-8: Erase artwork.

	Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Modify Paths.

ACTIVITY 3-2
Modifying Paths

Data File

C:\092033Data\Creating Documents Containing Customized Paths\Whats Up.ai

Before You Begin

The **Essentials Classic** workspace is selected.

Scenario

Now that you have "roughed in" the question mark for your What's Up card, it's time to add some shape and give it some expressive style. Use the following image as a reference during your activity.
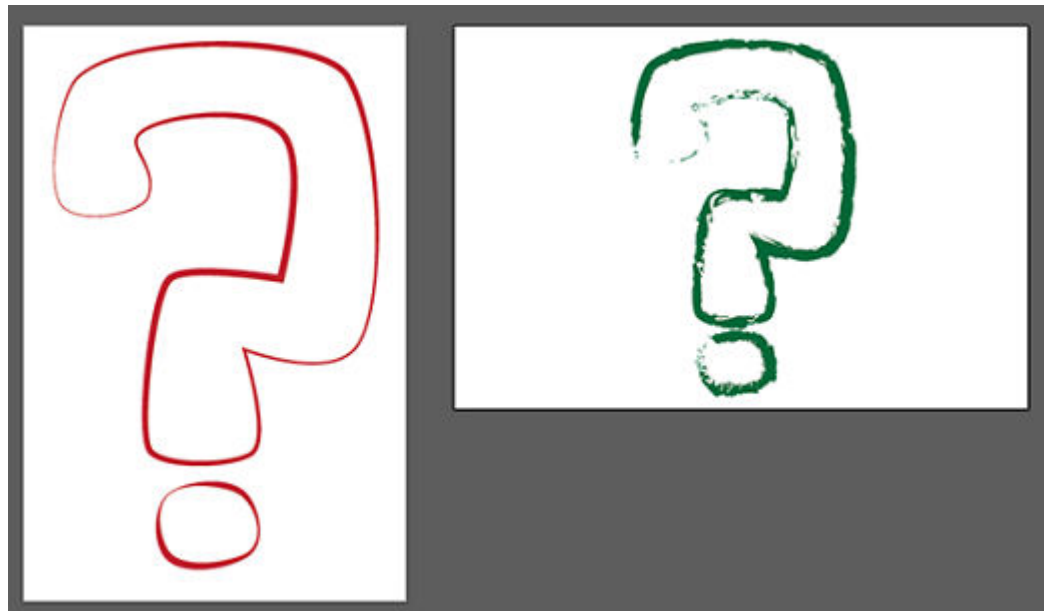
1. Navigate to **C:\092033Data\Creating Documents Containing Customized Paths** and open **Whats Up.ai**.

2. Convert all of the anchor points in the entire question mark and period image to smooth points.

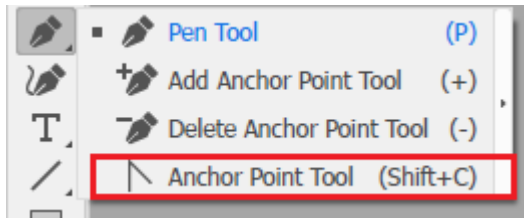a) In the left **Tools** panel, select and hold the **Pen** tool to display the tool flyout menu. Select the **Anchor Point** tool.


b) On the first artboard, on the path (question mark outline), select any anchor point.

c) In the **Properties** panel, select the **Convert selected anchor points to smooth** button.

d) Observe that the anchor point becomes a curve rather than an angle.

e) Convert all of the other anchor points in the image to smooth points, including the question mark dot.

3. Drag a path segment to alter it.

a) Deselect the entire question mark.

b) In the left **Tools** panel, select the **Direct Selection** tool. (If the **Tools** panel is displayed as one column, it is the second tool.)

> **Note:** Be sure to select the **Direct Selection** tool and not the regular **Selection** tool.

c) Click anywhere on the path to select a line segment bounded by two anchor points that have their Bezier curve handles displayed.

d) Drag the Bezier curve handles to modify the curves.

e) Drag on the anchor points to move them, as desired.

f) Continue to modify the question mark paths, modifying the Bezier curves and anchor points until you have a shape you like.

> **Note:** Notice that the Bezier curve handles move with you and change length and orientation as you drag.
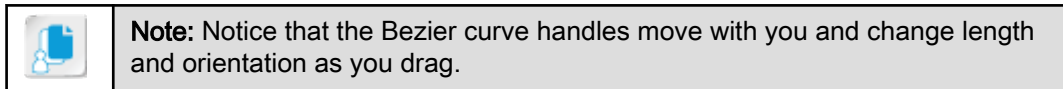
4. Format the question mark with an attractive color and variable width profile.

a) From the left **Tools** panel, select the **Selection** tool.

b) Drag from the top-left corner of the artboard to the lower-right corner, dragging a selection rectangle around both question mark paths. A selection rectangle appears around both paths.

c) In the **Properties** panel, in the **Appearance** section, from the **Stroke Weight** drop-down list, select a heavier stroke (between 5 pts and 12 pts) to make the variable width profile more prominent.

d) In the **Properties** panel, select the **Stroke** icon to display a set of swatches.
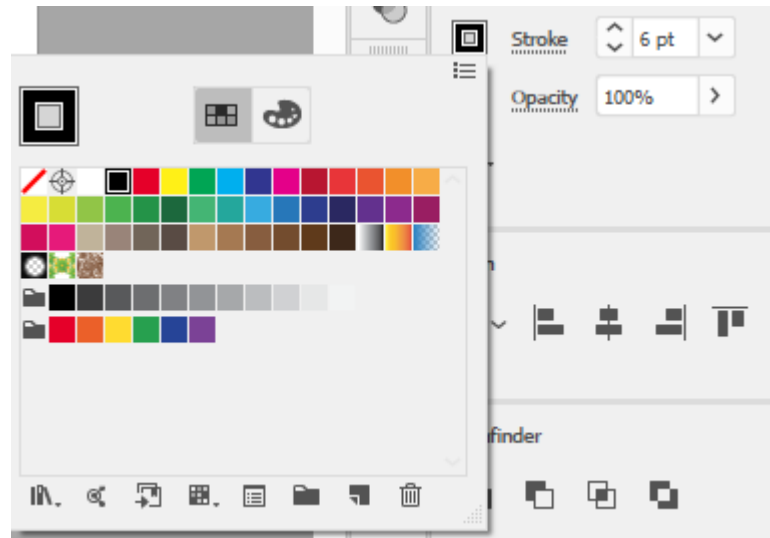
e) Select any color you like to apply it to the paths.

f) In the **Properties** panel, in the **Appearance** section, select the word **Stroke**.

g) From the **Profile** drop-down list, select a variable width stroke of your choice.
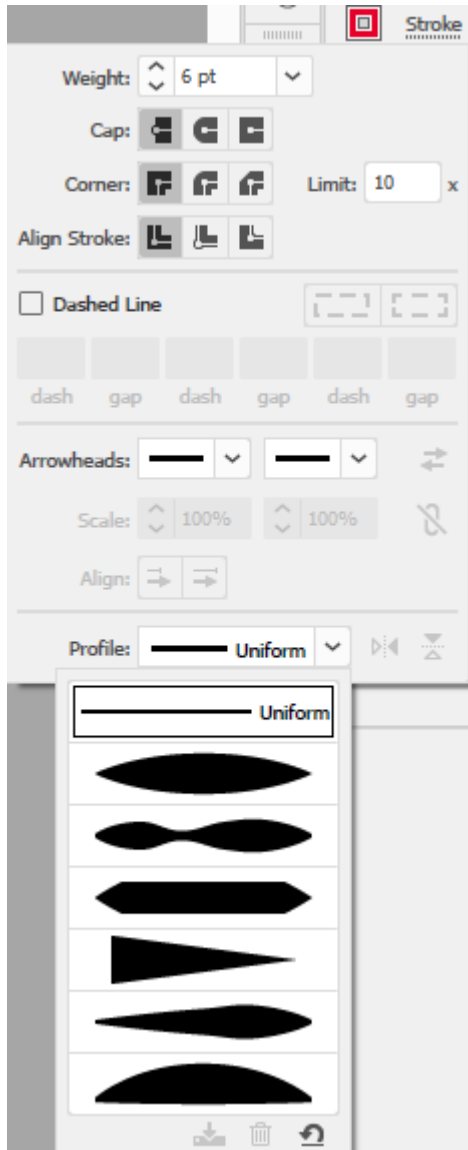
h) Observe the effect on the line around the question mark.

5. Copy your work to the **Wide** artboard, resize the paths, and then format it by selecting a brush definition.

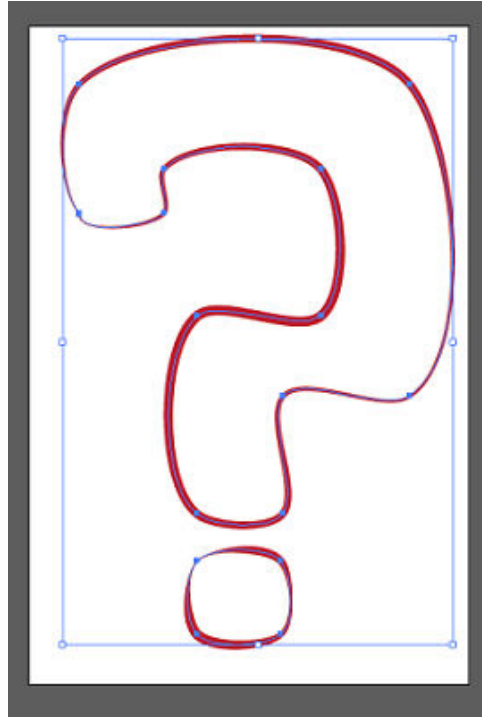a) If necessary, from the **Zoom** drop-down list, select **100%** so you can see two artboards in the work area.

b) If necessary, with the **Selection** tool, select all the paths on the **Tall** artboard.

c) Right-click and then select **Group** to group the paths together.

d) Press **Ctrl+C** to copy the grouped object to the clipboard.

e) Press **Ctrl+V** to paste the grouped object into the work area.

f) Drag the object to the **Wide** artboard.

It will be larger than the artboard, but you will adjust the size in the next step.

g) From the left **Tools** panel, select the **Hand** tool [icon] and drag in the work area to center the **Wide** artboard in the work area.

6. Resize the paths and change the brush definition.

a) If necessary, with the **Selection** tool, select the question mark paths on the **Wide** artboard to display the selection rectangle around the paths.

b) Press and hold the **Shift** key while you drag one of the corner points of the selection rectangle to resize the paths.

c) Resize the paths until they just fill the artboard, holding **Shift** to maintain the proportions of the question mark.
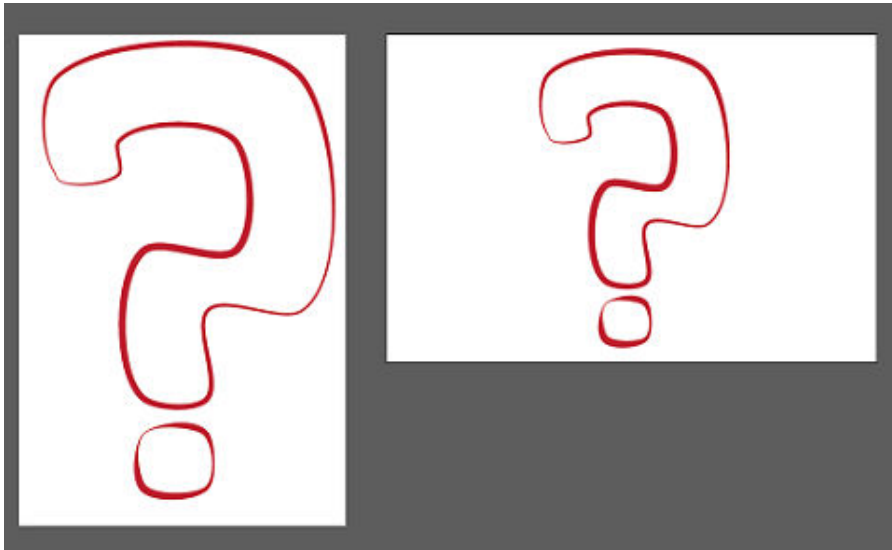
d) In the **Control** panel, from the **Brush Definition** drop-down list, select a brush definition of your choice.

e) If it's difficult to see the new definition, in the **Control** panel, from the **Stroke Weight** drop-down list, increase the point size of the stroke.

7. Change the stroke color.

a) In the **Tools** panel, double-click the **Stroke** button to open the **Color Picker** dialog box.

b) In the **Color Picker** dialog box, select a new color of your choice and select **OK**.

8. In the **C:\092033Data\Creating Documents Containing Customized Paths** folder, save your file as *My Curved Whats Up.ai* and, in the **Illustrator Options** dialog box, select **OK**.

9. Close all open files.

Summary

In this lesson, you drew custom paths with the **Pen** tool and then modified the shape of paths as well as their color and stroke. With the **Pen** tool "in your toolkit" as a beginning digital graphic artist, you can now not only create open and closed paths, but also format them in a variety of ways.

In comparing your use of the Pen tool to the way you sketch out a graphic design project by hand, how is the process similar or different?

What other tool might be important to use during the editing phase of your work when modifying paths?

> **Note:** Check your CHOICE Course screen for opportunities to interact with your classmates, peers, and the larger CHOICE online community about the topics covered in this course or other topics you are interested in. From the Course screen you can also access available resources for a more continuous learning experience.

4 | Creating Graphics Containing Customized Text

Lesson Time: 1 hour, 30 minutes

Lesson Introduction

Not only is Adobe® Illustrator® a powerful tool for creating vector graphics, but it is also effective in handling text in a variety of engaging, artful ways. In truth, much of what graphic designers do depends upon the interplay of the "wordlessness" of art and the words on the page to create compelling messages for an intended audience. In this lesson, you will create graphics that contain custom text.

Lesson Objectives

In this lesson, you will:

- Insert text in an Illustrator document.
- Flow text along a closed circular path.
- Insert bounded and threaded text.
- Create, apply, and then modify text styles at the paragraph and character levels.
- Insert special typographical characters.

TOPIC A

Insert Text

Working with text in the world of digital graphic design begins with the basics—getting it on the page. Illustrator has multiple tools you can use to meet that goal. In this topic, you will insert text and place it on an artboard.

Text Type Effects

Illustrator includes several *text type effects*:

- Horizontal type is presented horizontally in an unbounded visual field.
- Area type is presented horizontally and bounded within the area formed by a closed path, such as a rectangle or an ellipse.
- Vertical type is presented vertically in an unbounded visual field.
- Vertical area type is presented vertically and bounded within the area formed by a closed path, such as a rectangle or an ellipse.
- Type on a path is horizontal type flowing along a path.
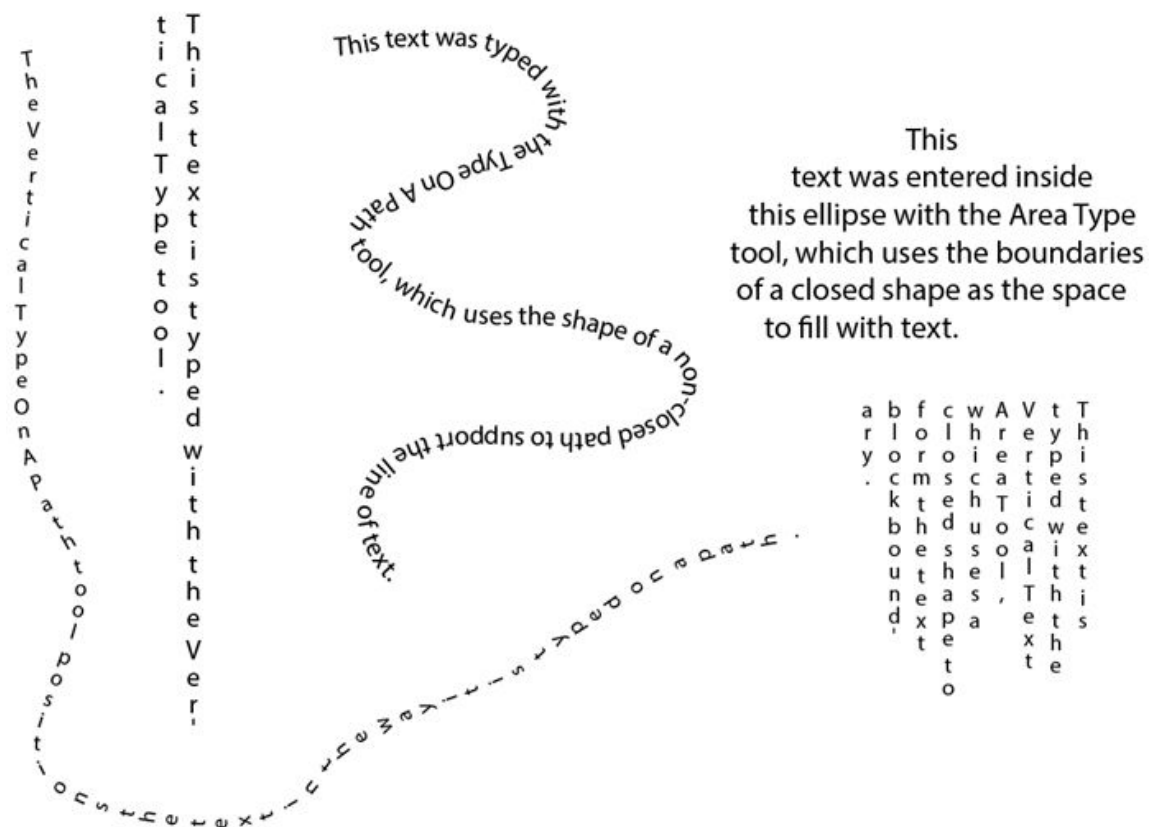- Vertical type on a path flows vertically along a path.

Figure 4-1: Text type effects.

Text Type Tools

Tools used for entering text type effects are available in the **Tools** panel, in the **Type** tool fly-out menu. Selecting the arrow on the flyout menu changes from icon plus text in a vertical list to just icons shown horizontally in a floating window. This is useful if you need to frequently switch between tools, or switch between other tools and one of the **Type** tools.
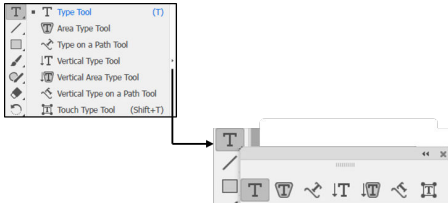
Figure 4–2: Text Type tools.

Text Formatting

Text formatting refers to alterations you make to the standard, default appearance of text. Illustrator includes most common text formatting options:

- Font family, font style, font size
- Leading, kerning
- Tracking for selected characters
- Vertical scale, horizontal scale
- Baseline shift
- Rotation
- All caps, small caps
- Superscripts, subscripts
- Underline, strike-through

Tools for formatting text can be accessed in the **Control** panel , the **Properties** panel, and the **Character** panel.

Figure 4–3: Text formatting tools.

Fonts

A *font* is a collection of characters, including letters, numbers, and symbols, that share certain visual characteristics such as size, weight, width, and style.

Calibri 13 pt. Bold

Book Antiqua 16 pt.

Myriad Pro 20 pt. Italics

Myriad Pro 20 pt. Bold

Figure 4–4: Fonts.

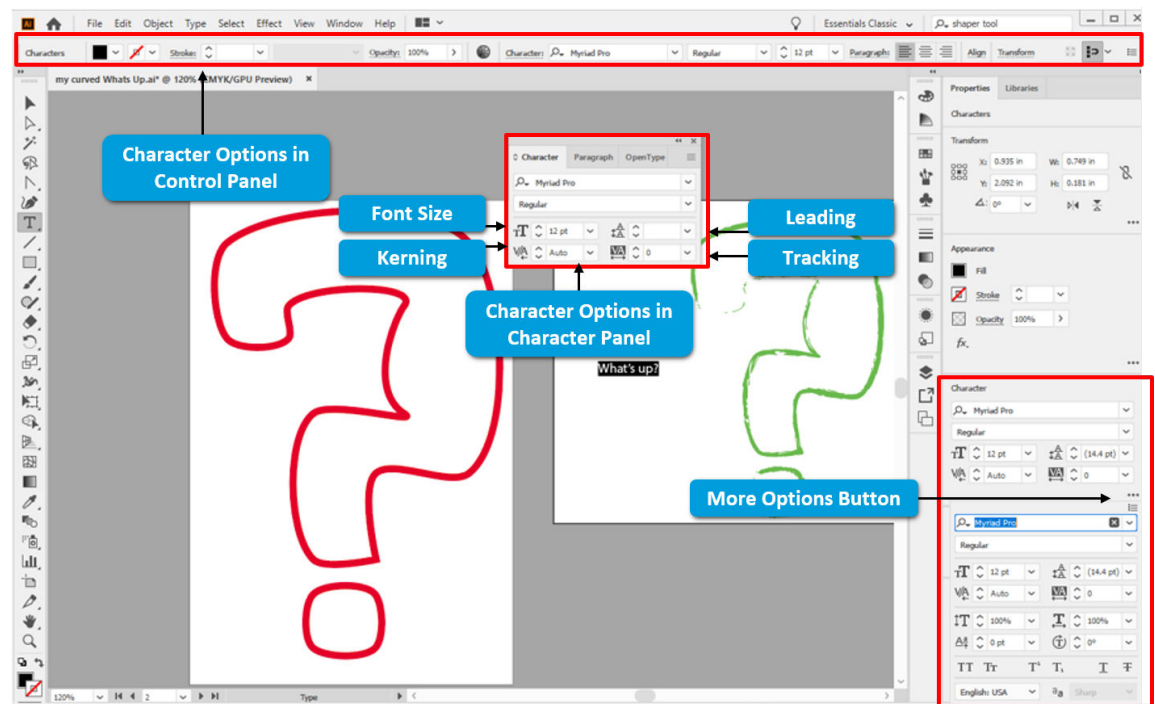Font characteristics include:
- **Typeface:** Creative design family to which fonts belong.
- **Weight:** The thickness of character outlines relative to height, which determines how heavy or bold the font looks.
- **Width:** How wide the characters are, such as condensed, compressed, or extended.
- **Style:** A variation of a particular font such as plain, bold, italic, or a combination thereof.
- **Color:** Is independent of a particular font, and can be applied to any piece of text, as desired.

To extend your selection of fonts, Adobe Fonts are included with most Creative Cloud® application subscriptions. This will give you thousands of fonts to choose from. Simply activate an Adobe Font, and it is available to use in any CC application for which you have a subscription.

Note: *Font* and *typeface* are two concepts that people often confuse. A *typeface* is the creative design of letters, numbers, and symbols. A *font* is the mechanical organization of characters with the same typeface into a single grouping. Each font is a particular size, weight, and style of a typeface. A single typeface is a group of fonts that share the same design.

Background Graphics

Background graphics are a very important part of the visual appeal of a design. The background generally sets the stage for the theme of the design. When it comes to the background, there is the body background and the content background, which can be combined in various ways to form the most commonly used background structures. There are also other background options.

Background Structure	Description
Content and Body Background Layered	The body background is at the bottom and the content background is layered on top of that.
Content Directly on Body Background	The content is laid directly on the body background, which is usually made up of images, textures, and illustrations.
Body and Content Backgrounds Combined as One	This is the most simple structure in which the content itself forms the background.
Header Backgrounds	A web page has a lot of leeway in terms of where the background design can be placed. Header and wrapper backgrounds offer a lot of flexibility. The header can flow seamlessly into the content or it can have a sharp boundary.
Wrapper Backgrounds	The wrapper can flow over from a standard layout, adding feeling and personality. Some graphics can be allowed to bleed into or extend through the content area.
Full-Body Backgrounds	Full-body backgrounds work well, provided they don't take away emphasis from the content, and highlights or bevels are used for color separation.

Find and Replace Fonts

When you are creating a document and you want to change any of the fonts you have used, it can be very tedious to go through the entire document and make the changes manually. With Illustrator, there is a **Find and Replace Fonts** option that allows you to search for the font by name. When you choose a font in the **Find Font** dialog box, the first instance of that font will be highlighted. You can then choose a replacement font. You can change only one or a few occurrences of the font or you can change all of them.
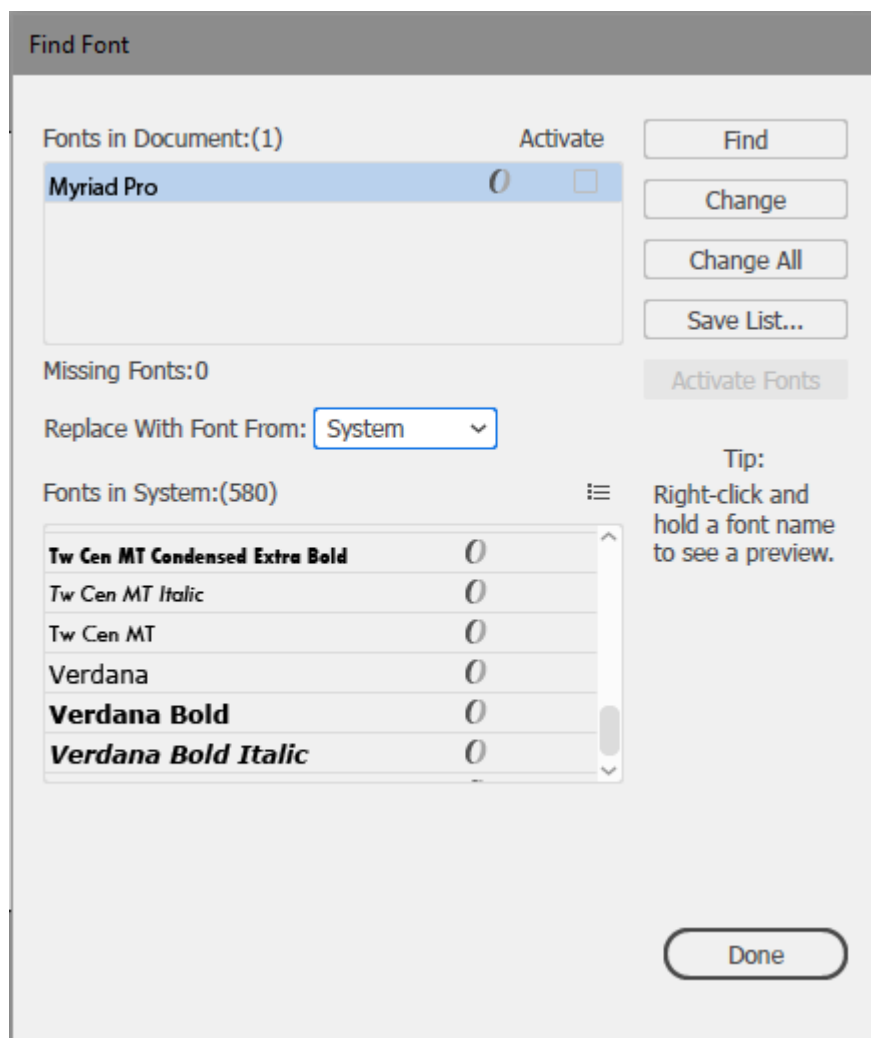
Figure 4-5: Find Font dialog box.

Font Classification, Size, Type, and Color in Graphic Design

Typography has a significant effect on the final impact of a design. No matter how incredible the images and layout of the design might be, a poor choice in typography can be ruinous. There are a number of aspects of typography to consider when choosing what works best in your design.

Typographical Element	Description
Connotations	It is important to ensure that the typeface matches the subject and the setting of the design; otherwise, the viewer could become confused and conflicted.
Utility	The typeface must be readable, and if there is any doubt at all about readability, then do not use the typeface. The rule of thumb is to choose a typeface that makes good use of space, balancing between positive and negative use of space.
Diversity	Variation in the typeface is a key way to differentiate between the importance of various parts of the text on a page. Using italics, bold, and bold italic in the right way can strengthen the message being conveyed.

Typographical Element	Description
Space	Give text space to breathe. Text should not be squashed together. Headlines need to have ample space before the body begins and there should be an appropriate amount of space between letters, words, lines, and paragraphs. Margin space between blocks of text is also important.
Color	Although color and text might seem like separate beasts, they need to be considered together. The key here is to contrast the color and type of text with the color on which the text appears. Avoid putting light-colored text on a light-colored background or dark text on a dark background. Imagery behind text should not make the text unreadable.

Empty Objects

When creating your artwork, you can often end up with numerous empty text boxes that increase the size of your file. When you have empty text objects, you can delete them one at a time. However, Illustrator makes this task easy, especially when you have many empty text objects. You can use the **Empty Text Paths** tool and clear the empty objects out all at once.

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Insert Text.**

ACTIVITY 4–1

Inserting Text

Data File

C:\092033Data\Creating Graphics Containing Customized Text\Inserting Text.ai

Scenario

You have been working with the standard "Tall" template to create a series of cards marketed to a specific demographic. The marketing department has come up with text for a generic "I love you" card from a grandparent to a grandson. They would like you to create a prototype for its look and feel for the next product-development review session.

	Note: Refer to the image presented here as you insert the text in this exercise.

1. Navigate to **C:\092033Data\Creating Graphics Containing Customized Text** and open **Inserting Text.ai**.

2. Add text in the elliptical area.

a) In the **Tools** panel, select the **Type** tool. T.

b) Click in the scratch area, type *DEAREST* and press **Enter**. Then type *GRANDSON...*

> **Note:** Be sure to press **Enter** before typing the word "GRANDSON".

c) With the **Type** tool, click in the word "**GRANDSON**."

d) Press **Ctrl+A** to select all the text that you just typed.

e) In the **Control** panel, select **Character** to display the **Character** panel. From the **Font** drop-down list, select a font of your choice.

f) With the **Selection** tool, drag the text into the elliptical area.

g) With the **Selection** tool, select the text to display the selection rectangle. Drag the corner of the selection rectangle to resize the text box so that it fills the ellipse. You may also use the **Selection** tool to drag the text and center it within the ellipse.

3. Add text to the stars.

a) Using the same font, create and place the text for the following stars:

- THAT
- I
- LOVE
- YOU!

b) Verify that your font choice makes all of the words legible.

4. Create and place the vertical text for the rectangle.

a) In the **Tools** panel, select and hold the **Type** tool to display the **Tool** menu.

b) Select the **Vertical Type** tool.

c) In the scratch area, create a text object with the following words: *TO SAY*

d) Press **Enter** to start a new line.

e) Type *JUST A CARD*

f) With the **Type** tool, click in the words "**JUST A CARD**".

g) Press **Ctrl+A** to select all of the text that you just typed.

h) In the **Control** panel, from the **Font** drop-down list, select a font of your choice.

i) Using the **Selection** tool, place and resize the text within the rectangle area.

5. If necessary, change the leading of your multi-line text objects to bring the lines closer together.

a) With the appropriate **Selection** tool, select the text object that contains the text "JUST A CARD TO SAY".

b) In the **Control** panel, select **Character** to display the **Character** panel.

c) Change the **Set the leading** property to bring the lines of text closer together or further apart, as desired.
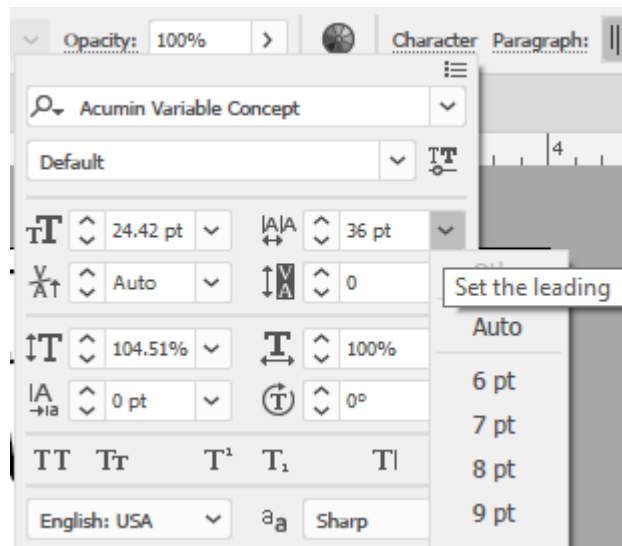
d) Click away from the **Character** panel to close it.

6. Save the file as *My Inserting Text.ai*

7. In the **Illustrator Options** dialog box, accept the default options and select **OK**.

8. Close the file.

TOPIC B

Apply Flow Text Along a Path

One of the features that sets Illustrator apart from other text-oriented software applications is its ability to easily merge graphic design ideas with the presentation of text. The synergy of this merger is no more evident than when typographical characters replace a path line in visually engaging ways. In this topic, you will flow text along a path.

Text Path Type Effects

Inserting text on a path adds a whole new dimension to your design options. Illustrator has two *text path type effects*:

*   Horizontal text paths flow text along a path and orient characters to the path such that for every character, subsequent characters are placed left-and-right.
*   Vertical text paths flow text along a path and orient characters to the path such that, for each character, subsequent characters are placed above-and-below.

The concept of "horizontal" and "vertical" does not refer to the orientation of the characters to the artboard, but rather to the path—that is, the relationship of the path direction to the directionality of each character.
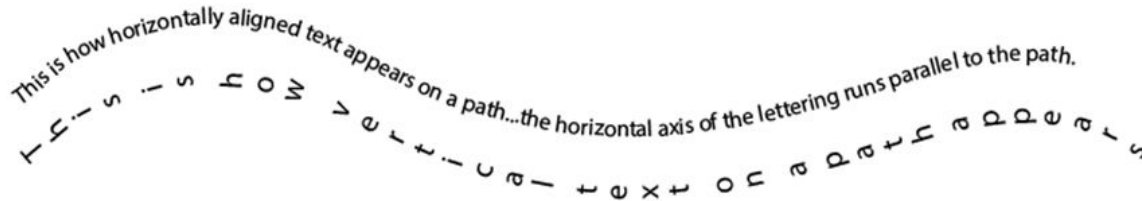

Figure 4–6: Text path type effects.

Text Path Formatting Effects

Text path formatting effects refer to a collection of font effects applied to text placed along a path:

*   **Rainbow:** The baseline of each character is placed at a tangent to the underlying path curve, which causes each character's vertical axis to be at a right angle (orthogonal) to the path.
*   **Skew:** The verticality of all characters is parallel to the artboard's vertical axis and is held constant despite changes in the path's curvature. Character width is changed, with maximum width at the horizontal and minimal width at the vertical.
*   **3D Ribbon:** Starting from the center of the path and moving toward the ends, text characters are rotated on their central vertical axis such that, at the center of the path, characters are rendered with no rotation, and at the end points, with a near-90-degree rotation.
*   **Stair Step:** Similar to the **Skew** effect except that the width of the characters is equal across the curve when measured horizontally.
*   **Gravity:** Similar to the **3D Ribbon** effect except that the horizontal axis of each character is rotated at the baseline of the character such that, at the center of the path, a character is rendered with no rotation, and at the end points, with a near-90-degree rotation.
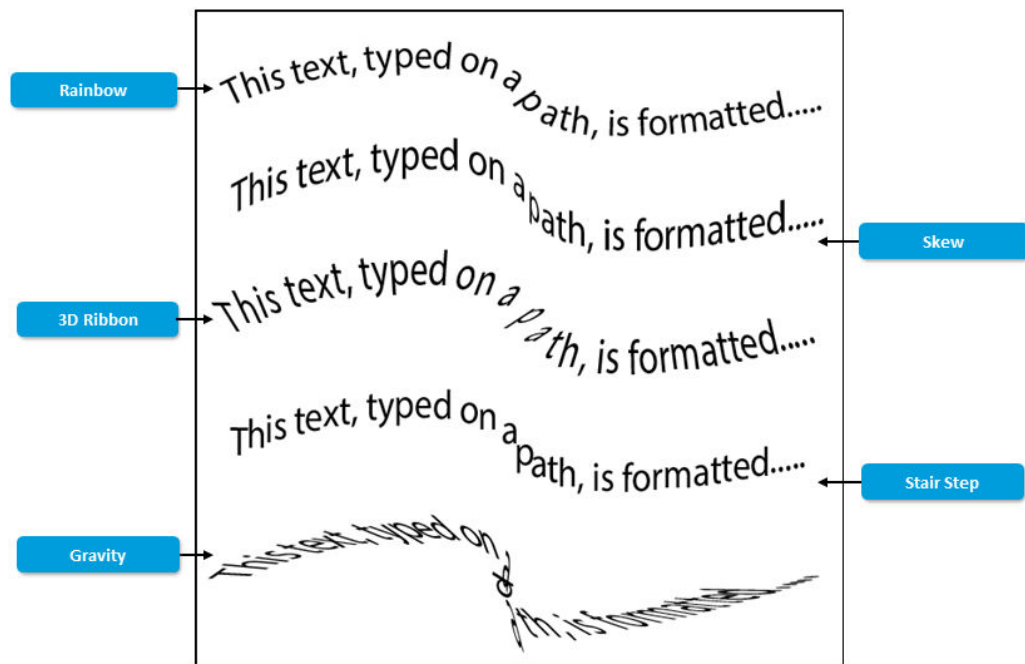
Figure 4-7: Text path formatting effects.

Path Alignments

Path alignments refer to the location where a text character is aligned with the path:

- **Baseline:** The standard base where the character would be placed if handwritten on lined paper.
- **Ascender:** The top-most point of the font's verticality.
- **Descender:** The bottom-most point of the font's verticality.
- **Center:** The midpoint between the font's top-most and bottom-most points of verticality.
- **Flip:** The horizontal alignment on the path is rotated 180 degrees.

Figure 4-8: Path alignments.

Character Spacing

Character spacing is the space that exists between two letters. This space can be adjusted by using kerning and tracking. With kerning, you add or subtract space between specific pairs of characters. With tracking, you loosen or tighten the space between the characters in a specific text selection or an entire block of text. Both kerning and tracking are measured in 1/1000 em. This is a unit of measure that is strictly proportional to the current typeface size. For example, in an 8 pt font, 1 em equals 8 points. In a 12 pt font, 1 em equals 12 points.

kemin g
tracking

Figure 4–9: Character spacing.

	Access the Checklist tile on your **CHOICE** Course screen for reference information and job aids on **How to Apply Flow Text Along a Path.**

ACTIVITY 4–2

Applying Flow Text Along a Path

Data File

C:\092033Data\Creating Graphics Containing Customized Text\Inserting and Formatting Texted Paths.ai

Scenario

The product manager handling your company's line of greeting cards for Valentine's Day has asked you to come up with a card cover design that "unambiguously gets the message across" by using a clean, simple design.

You start thinking about how to wed text, its position on the page, and a simple graphic into an appropriately sentimental statement without overdoing the language or the design concept. Use the following image as a reference during this activity.


1. Open **C:\092033Data\Creating Graphics Containing Customized Text \Inserting and Formatting Texted Paths.ai**.

2. Insert the word "You" repeatedly along the outer circle's path.

   a) In the **Tools** panel, select and hold the **Type** tool to display the tool flyout menu.

   b) Select the **Type on a Path** tool.

c) Click to place the cursor at the top of the largest circular path.

d) Type *You* and press the **Spacebar**. Verify that the text was entered along the path.
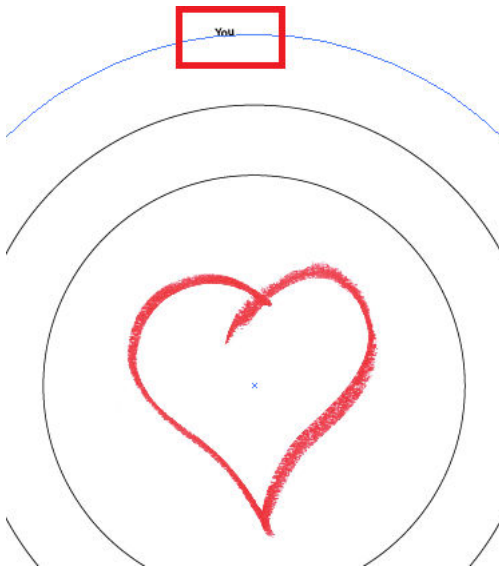
e) Ensure that the cursor is still in the outer text path, and then press **Ctrl+A** to select all of the text in the path.

f) In the **Control** panel, select **Character** to display the **Character** panel.

g) In the **Character** panel, in the **Font Size** control, change the point size of the text and the space to **36 pt**.
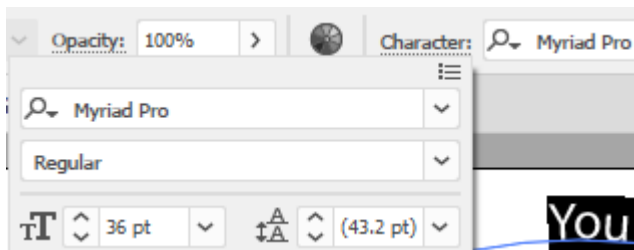
h) Fill in the rest of the path by repeating the word "you" until the circle is complete. (You can use **Ctrl +A**, **Ctrl+C**, and **Ctrl+V** to select, copy, and paste to fill in the text.)
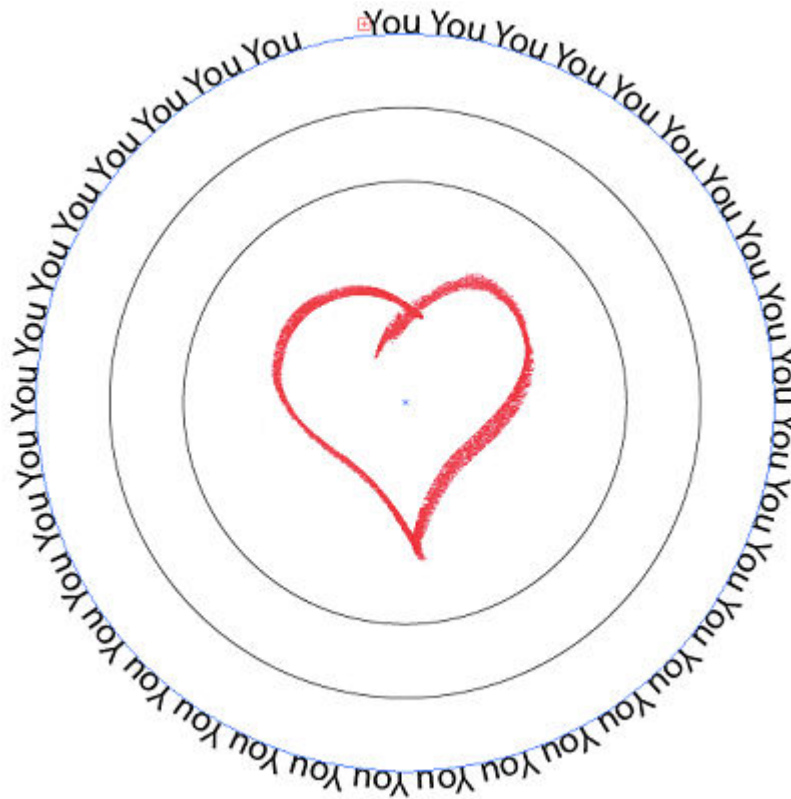
> **Note:** Once you complete the circle, subsequent text will be hidden behind the existing text; this might be confusing when you resize and format the text on this circle. If it causes any gaps in the line of text, rather than resize, with the **Text** tool, select the entire line of text, and then from the **Control Panel** select **Paragraph→Justify all lines**. Deselect the text. When you next select the **Type on a Path** tool, select **Paragraph→Align Left**.

3. Insert the word "are" repeatedly along the middle circle's path.

   a) If necessary, from the **Type** tool, select the **Type on a Path** tool.
   b) Place the cursor at the top of the middle circular path.
   c) Type *are* followed by a space and then verify that the text was entered along the path.
   d) Using the **Control** panel's **Font Size** control, select the text and change the point size of the text and the space to **48 pt**.
   e) Fill in the rest of the path by repeating the word "are" until the circle is complete.

4. Insert the word "my" repeatedly along the inner circle's path.

   a) If necessary, from the **Type** tool, select the **Type on a Path** tool.
   b) Place the cursor at the top of the inner circular path.
   c) Type *my* followed by a space and then verify that the text was entered along the path.
   d) Using the **Control** panel's **Font Size** control, select the text and change the point size of the text and the space to **59 pt**.
   e) Fill in the rest of the path by repeating the word "my" until the circle is complete.

5. Format the outer text path so that it has the **3D Ribbon** effect applied to it.

a) With the **Vertical Type on a Path** tool, place the cursor in the outer text path, and then press **Ctrl+A** to select all the text in the path.
b) On the **Menu** bar, select **Type→Type on a Path→3D Ribbon**.
c) Repeat steps 5a and 5b to format the other two circles with the **3D Ribbon** effect.

6. Recolor the text.

a) Select all the text of the outer circle.
b) In the **Control** panel, select **Fill Color** to display the set of color swatches.

c) Select a color of your choice.
d) Click in the scratch area to close the panel.
e) Change the color of the text in the middle and inner circles to any color of your choice.

7. Save the file as *My Inserting and Formatting Texted Paths.ai*

8. In the **Illustrator Options** dialog box, accept the default options and select **OK**.

9. Close the file.

TOPIC C

Insert Bounded and Threaded Text

You've probably heard the phrase "It's not what you say, but how you say it." Sometimes you can more effectively get a point across by arranging text in a manner that engages the eye. Bounding text within a geometric area is one of the primary ways to arrange blocks of text in various shapes.

You may have a good deal of text to place in multiple, non-connected areas of a graphic. You know that if you have to flow, reflow, edit, and format the text by hand, it will take a long time and be very precise (and needlessly tedious) work. Illustrator's threading tools enable you to place one block of text in multiple, non-contiguous areas while retaining the ability to format and flow text among them. In this topic, you will insert blocks of text inside the boundary of a closed shape and thread text.

Bounded Text Areas

Like the text boxes used in most text-oriented software applications, a *bounded text area* in Illustrator is a boundary within which a block of text exists. You can edit and format the text within the block, resize the block to rewrap and format the text, and do many other tasks.
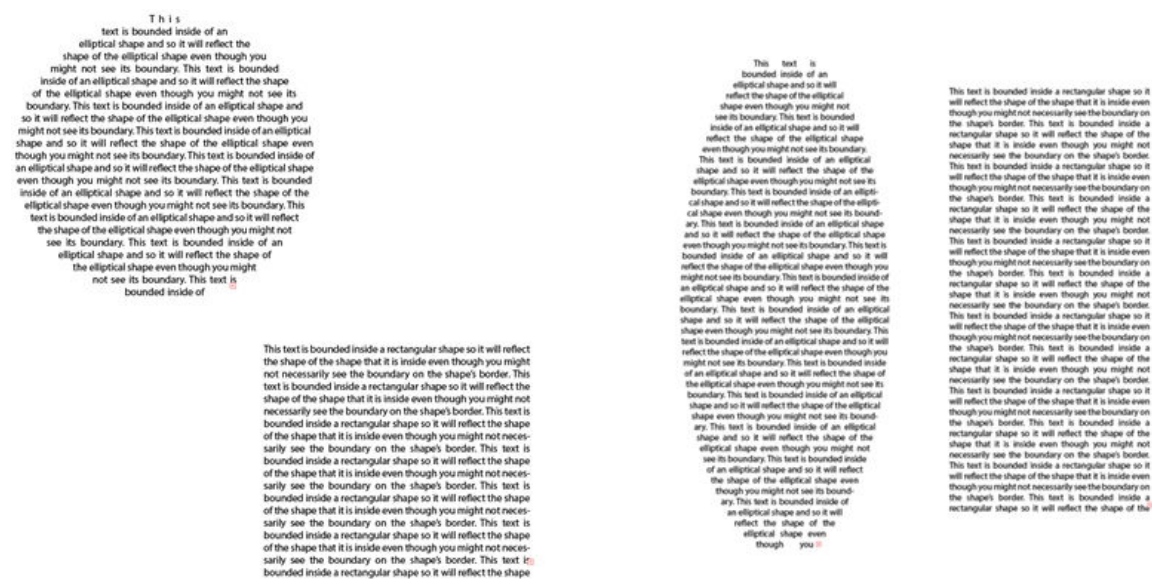

Figure 4–10: Bounded text areas.

Text Importing

Knowing how to import text will save you from retyping in the event that someone else writes the copy for you to place in your design. When you import text from another file, you can specify character and line spacing. You can import text from word-processing documents into Illustrator with or without previous formatting. You can make imported text conform to a certain size, number of lines, and flow (row or column).

Threading

Threading is the means by which a single body of text can flow across multiple disjointed bounded text area locations (***frames***) in the visual field. You can subsequently edit and format the text across the frames; it reflows automatically.
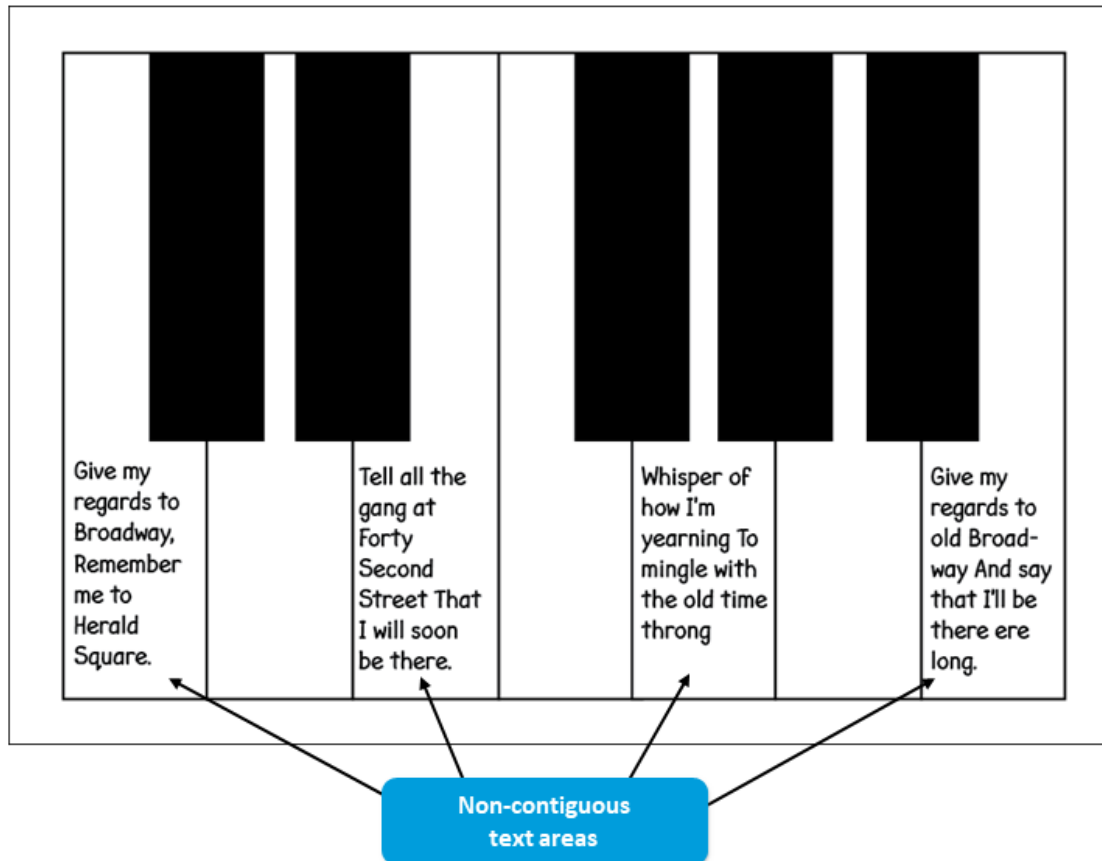

Figure 4–11: Threaded text in non–contiguous blocks.

Threaded Frames

In Illustrator, threaded frames are linked by a text thread (blue line) that shows the order in which the frames are connected. Each frame contains two ports—an **In Port** and an **Out Port**. The port names indicate the direction that the text flows between the frames. The small arrows inside of the ports indicate that text is flowing between the linked frames. A red plus sign in the **Out Port** indicates that there is additional text that does not fit in the frame.
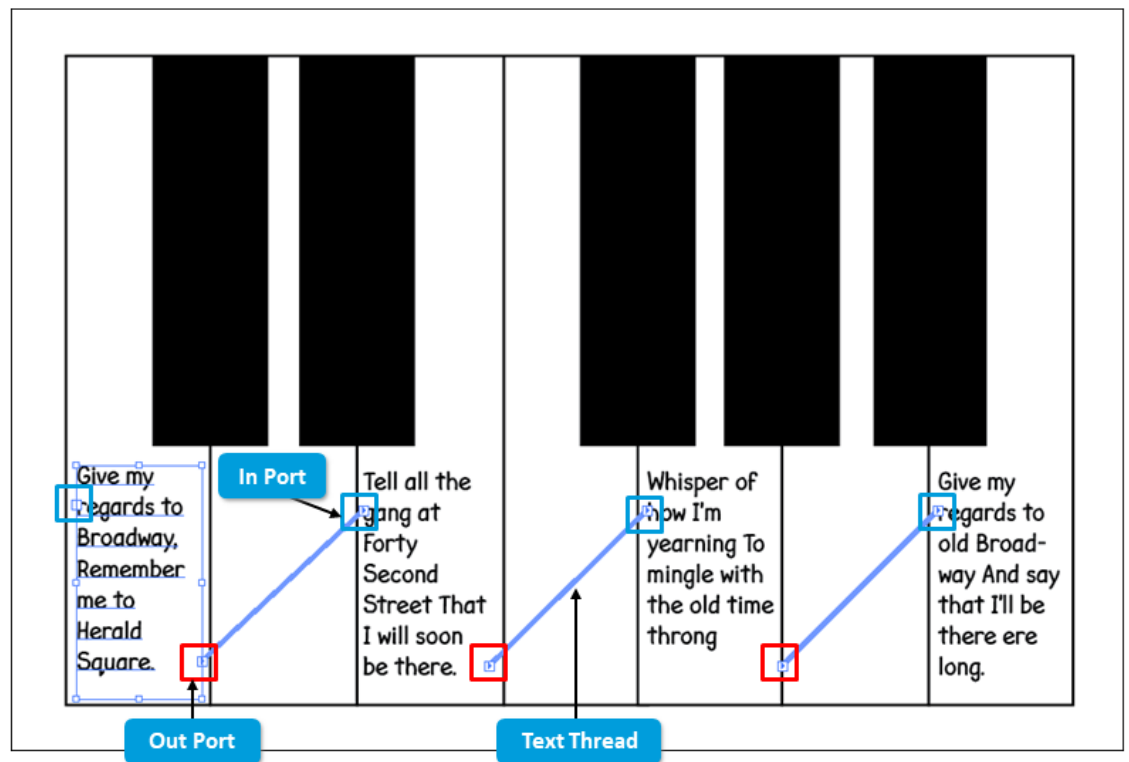
Figure 4-12: Threading symbols that identify the first frame and subsequent linked frames.

✓	Access the Checklist tile on your **CHOICE Course** screen for reference information and job aids on **How to Insert Bounded and Threaded Text.**

e) Select the **Star** tool.

f) Draw a small star.
g) In the **Tools** panel, select and hold the **Type** tool until the menu appears.
h) Select the **Area Type** tool.

If the **Essentials** workspace is selected instead of **Essentials Classic**, the **Area Type** tool is not listed. The **Typography** workspace also includes the **Area Type** tool by default.

i) With the **Area Type** tool, select the outline of the star. Observe that a cursor appears in the star.
j) Type the words *You are a Star!* and be sure to add a space at the end.

2. **Fill the star shape with the text "You are a Star!"**

a) Highlight the text you just typed.
b) Press **Ctrl+C** to copy the highlighted text.
c) Click after the text (after the space at the end) to place your cursor after the text.
d) Press **Ctrl+V** to paste a copy of the text.
e) Press **Ctrl+V** repeatedly to fill the star with your text. Observe that the text stays bounded within the confines of the star shape.

f) Save the file as *My Practice Bounded Text.ai*
g) In the **Illustrator Options** dialog box, accept the default options and select **OK**.
h) Close the file.

3. **In the C:\092033Data\Creating Graphics Containing Customized Text** folder, open the file **Importing and Flowing Bounded Text.ai**.

4. **Import a bounded text object.**

a) Select **File→Place** to display the **Place** dialog box.
b) If necessary, navigate to the **C:\092033Data\Creating Graphics Containing Customized Text** folder and select **Give My Regards to Broadway.txt**.

c) Select **Place** to display the **Text Import Options** dialog box. Under the **Extra Carriage Returns** heading, if necessary, check **Remove at End of Every Line** and **Remove Between Paragraphs** and then select **OK**.

d) Click in the white keys to place the text in the work area as a bounded text object.
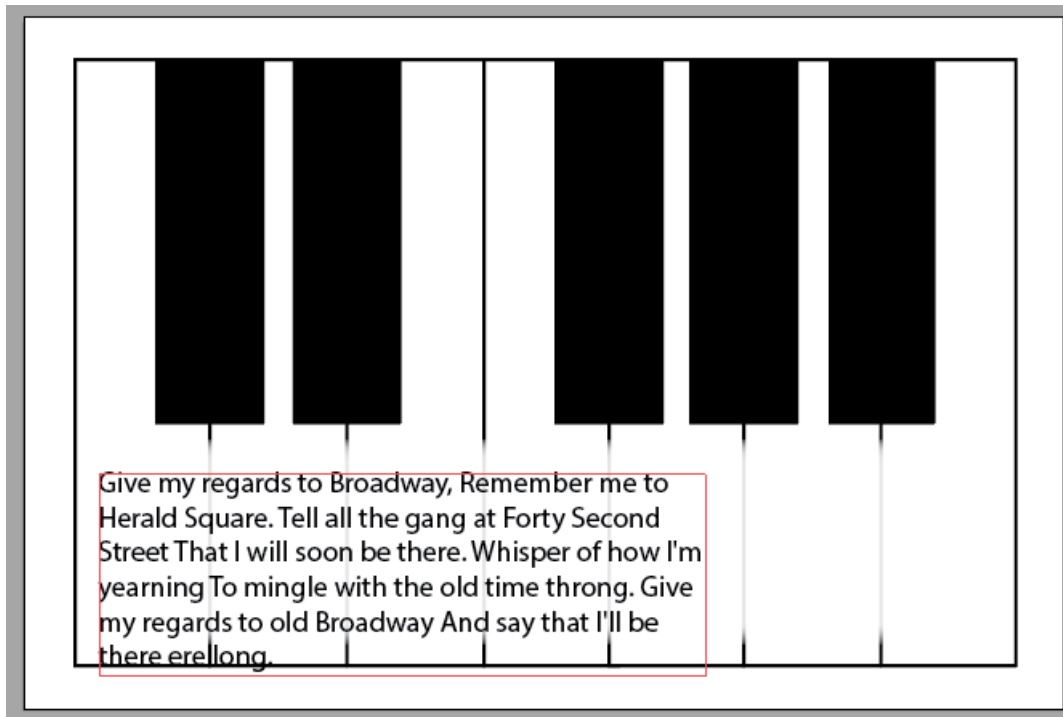
e) With the **Selection** tool, drag the bounded text object to fill the lower area of the piano keys.
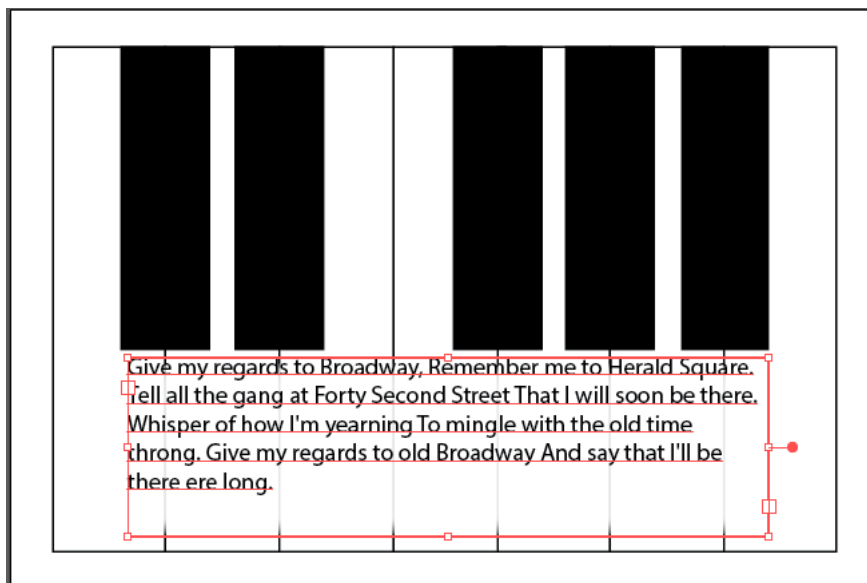
5. Reflow the text so that it appears as four lines.

a) With the **Selection** tool, enlarge the text box so that it is just a little narrower than the white part of the keys, and is centered within them.

b) In the **Tools** panel, if necessary, select and hold the **Type** tool to display the **Tool** menu, and then select the **Area Type** tool.

c) Place the cursor in the text at the beginning of each sentence and press **Enter** to start text on a new line, so that each sentence is its own line.
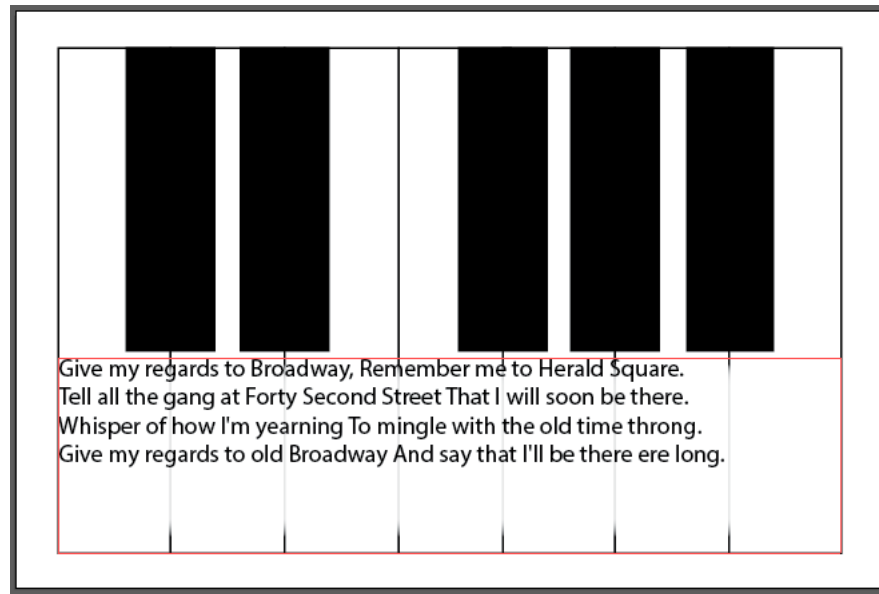
d) If necessary, to present the text attractively inside the piano keys, adjust the text box margins.
e) Select all of the text.
f) In the **Control** panel, select **Paragraph** and enter new values for the margin text fields.

6. Reformat the text with changes to its text properties.

a) Using any of the tools available, change the visual presentation of the text to achieve an attractive effect.

7. When you have finished your work, save the document as *My Importing and Flowing Bounded Text*

8. In the **Illustrator Options** dialog box, accept the default options and select **OK**.

9. Close the file.

10. Paste text that exceeds the bounding box.

a) In the **C:\092033Data\Creating Graphics Containing Customized Text** folder, open **Threading Multiple Text Areas.ai**.
b) Select **File→Place**.
c) In the **Place** dialog box, if necessary, navigate to the **C:\092033Data\Creating Graphics Containing Customized Text** folder and select **Give My Regards to Broadway.txt**.
d) Select **Place** and in the **Text Import Options** dialog box, under the **Extra Carriage Returns** heading, verify that **Remove at End of every Line** and **Remove Between Paragraphs** are checked.
e) Select **OK** to close the **Text Import Options** dialog box, and click to place the text in the white space of the left-most piano key.

f) With the **Selection** tool, resize the text object within the borders at the base of the left-most piano key.
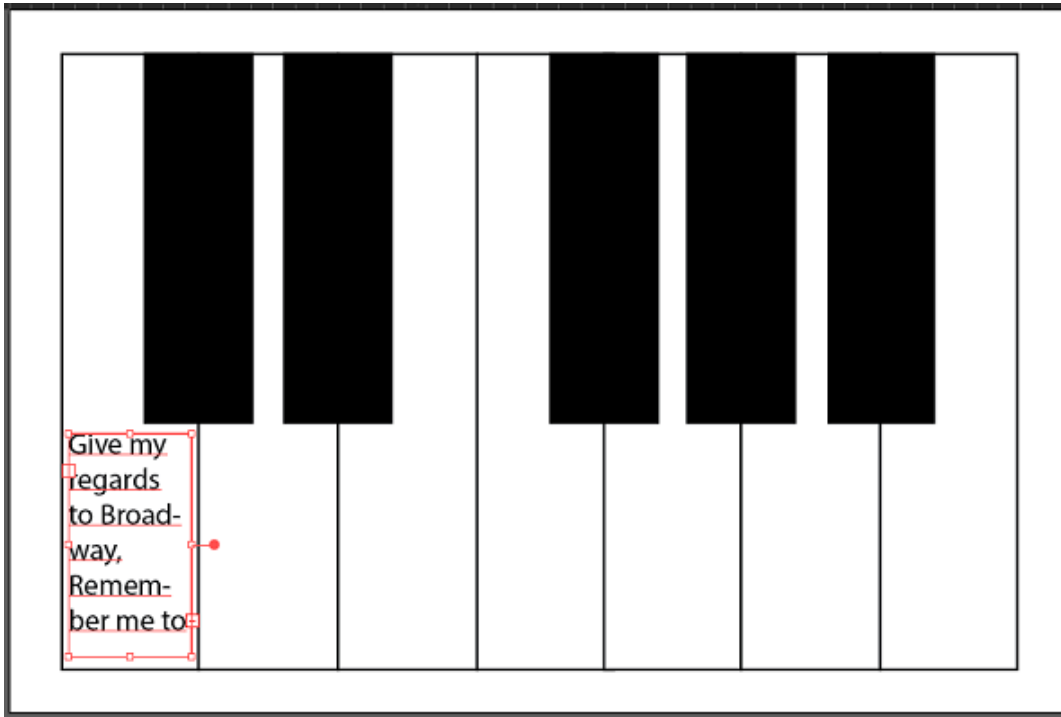
> **Note:** The small red square indicates that text continues past the bounding box.

11. Thread the text on alternate keys until you have a total of four text objects (frames).

a) If necessary, select the **Selection** tool.

b) In the text object in the left piano key, at the location where the text is truncated, select the small red square.
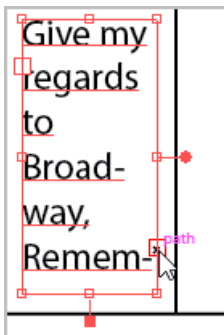
c) The cursor changes to the loaded text icon.

d) Reposition the mouse pointer in the scratch area and then click. Observe that a text object appears with the next line of text.
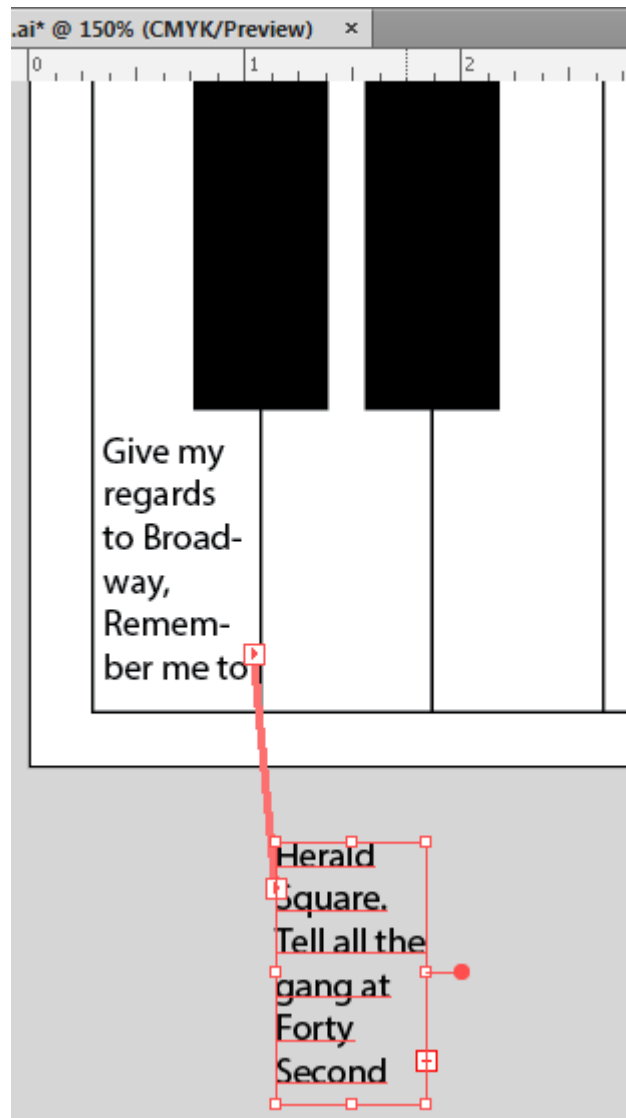
e) Reposition the second text object (frame) until the text object fills the base of the third key from the left, just inside the key boundary.
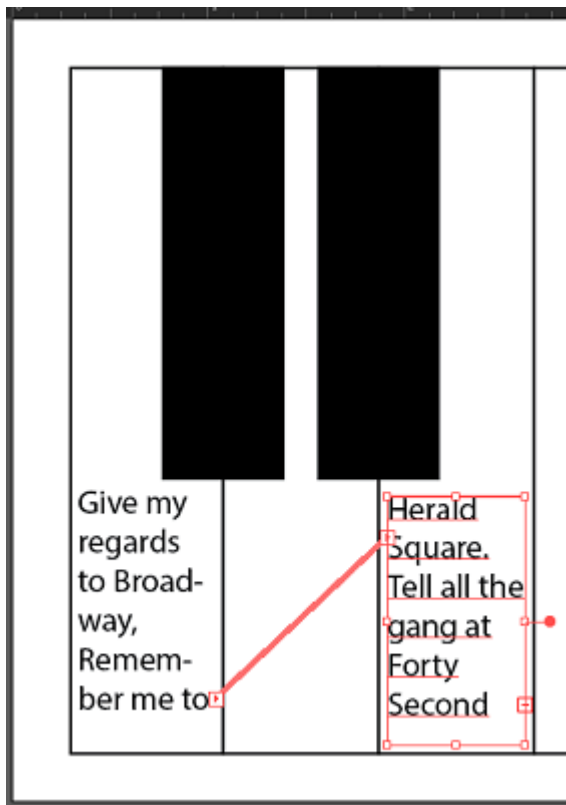
> **Note:** Do not worry about how the text flows at this point. That will come later.

f) In the second text object, click the small red square, position the mouse pointer two more keys to the right, and click to place the third text object.

g) Repeating the same steps, place the fourth and final text object on the far right key.
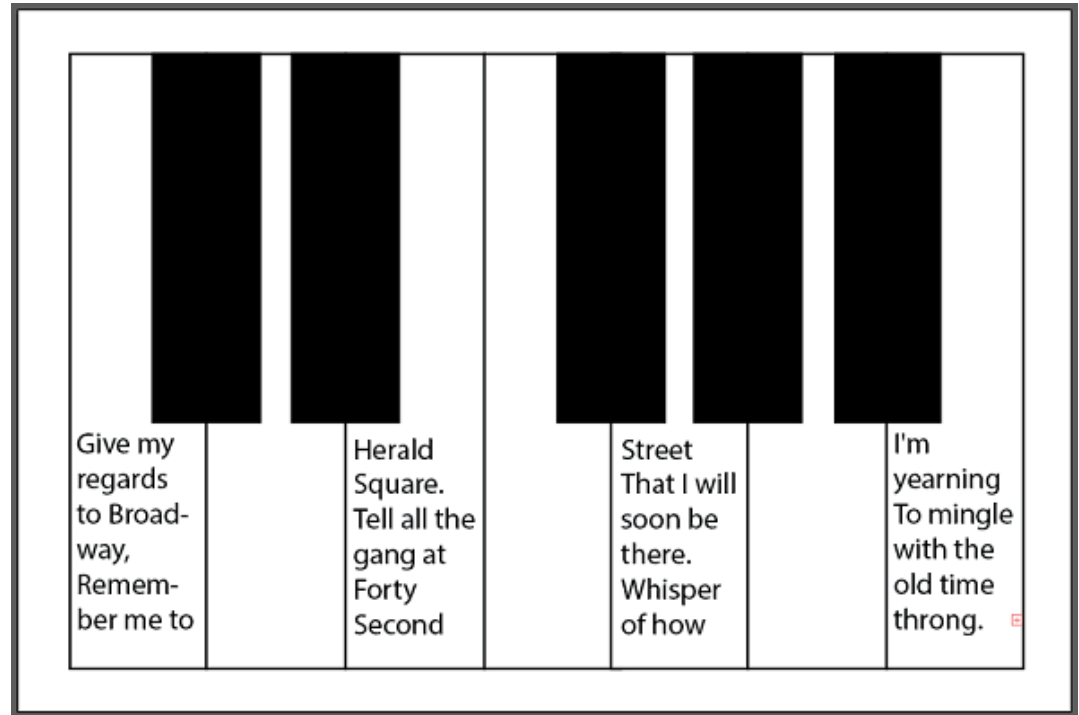
	Note: Some of the text will not be displayed. You will fix this in the next step.

12. Reformat the text to display the lyrics in their entirety.

a) With the **Type** tool selected, place the cursor in the first text object and then press **Ctrl+A** to select all of the text across all four text objects.

b) In the **Properties** panel, from the **Font Size** drop-down list, change the font size to **9 pt**.

c) Change the font to **Times New Roman** to display all the text.

d) Place the cursor before the **T** in the word **Tell** (first word of the second sentence) and press **Enter** several times to move the word to the second text object.

e) In the second text box, place the cursor before the **W** of **Whisper** and press **Enter** until the text is in the third text box.

f) In the third text box, place the cursor before the **G** of **Give** and then press **Enter** to move the text to the fourth text object.

	Note: You might have to press **Enter** more than once to get the desired change.

g) If desired, format the text to your liking to observe how your changes affect the text threading.
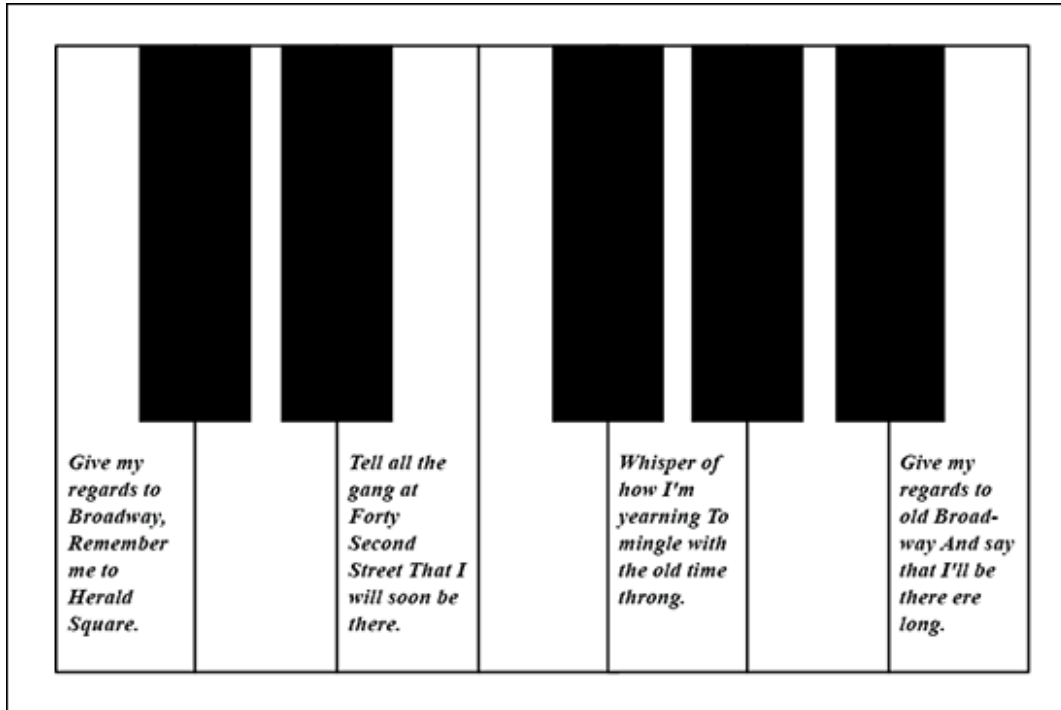
13.Save the file as *My Threading Multiple Text Areas.ai*

14.In the **Illustrator Options** dialog box, accept the default options and select **OK**.

15.Close all open files.

TOPIC D

Apply Text Styles

Not only might you have a really large project that contains a lot of text that must obey a set of formatting rules, but you might also have a work context where the rules themselves will probably undergo a good bit of change. Applying formatting with text styles provides you with the option of updating formatting multiple times just by making a few changes to the style definition and having Illustrator take care of the repetitive updating of each instance. In this topic, you will apply text styles to multiple objects.

Styles Overview

Styles bring a consistent look to your text and save you time when making formatting modifications. Many documents have structural parts denoted with specific formatting. For example, the text in this book consists of a schema of font types, sizes, and effects to denote various functional purposes, such as the heading of a new lesson, a subheading under that lesson, or a caption under a figure. With a correctly applied formatting schema, all structural text within a document should have the same look and feel, which helps you, the reader, navigate the information contained within.

A *style* is a named collection of multiple formatting properties (characteristics) you can use to apply consistent formatting repeatedly to structural text in a document. Styles help you to format text quickly and easily—instead of selecting and verifying that multiple formatting properties have been set for every instance of every structural item, you can apply styles and let Illustrator apply the formatting automatically.

You can also update style definitions with new formatting instructions, which are then applied to all text previously formatted with the style. This powerful tool can save you hours of boring, repetitive work should you have to change how structural text looks across a large document or project.

Styles can be applied at the paragraph level or the character level.
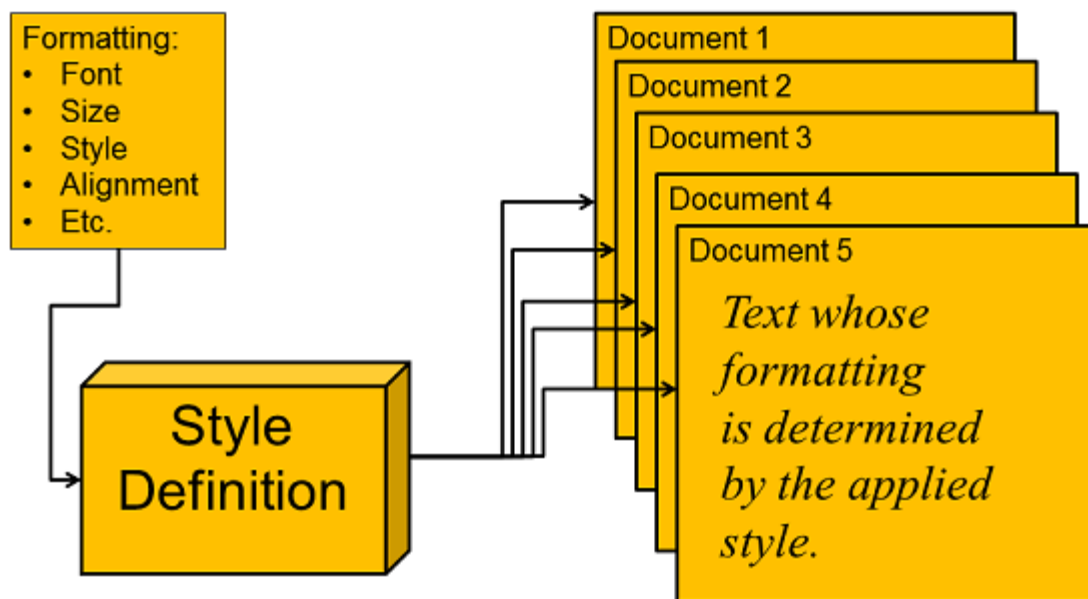
Figure 4–13: Styles overview.

Paragraph Styles

Paragraph styles are styles concerned with text at the paragraph level:

- Text alignment (left, center, right)
- Font family, size, and color
- Indents, leading, and tracking
- Horizontal and vertical scaling
- Hyphenation and justification settings
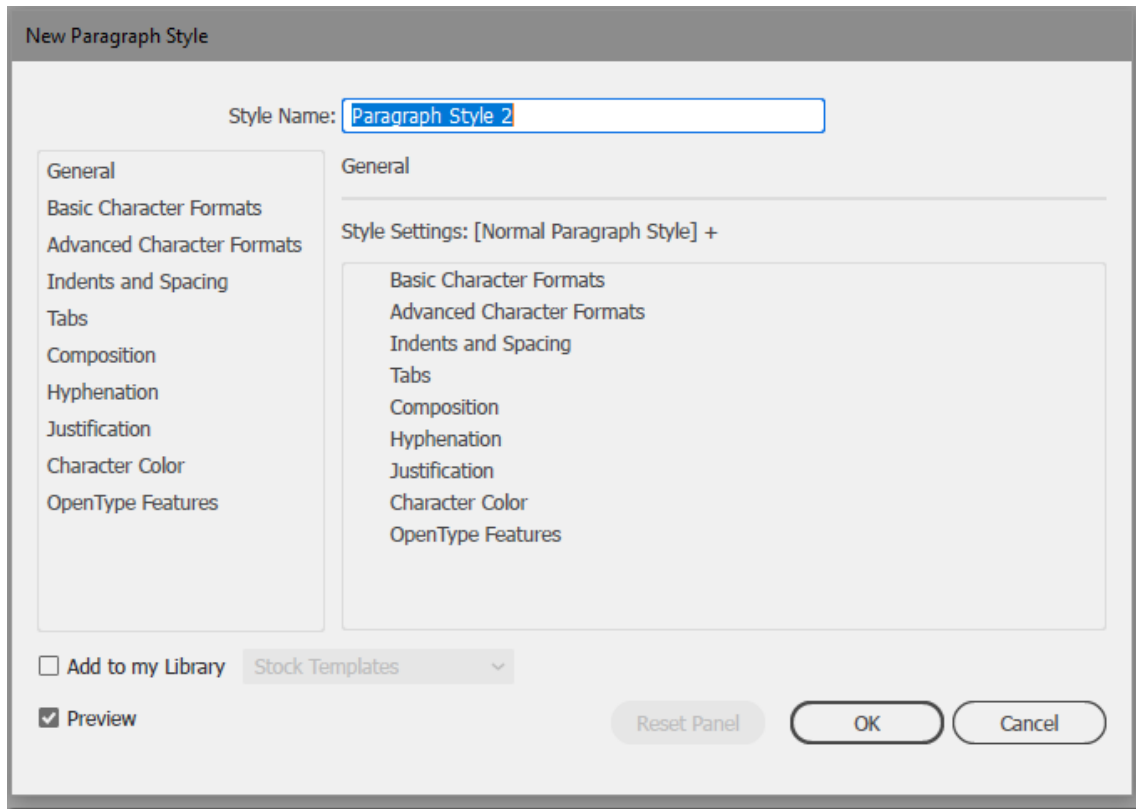
Figure 4–14: New Paragraph Style dialog box.

Style Panel

The *Style panel* is used to create, organize, and manage the paragraph and character styles you create.

Paragraph Style Options

By using the **Style** panel, you define paragraph style options when you create paragraph styles:

- **Basic Character Formats**
- **Advanced Character Formats**
- **Indents and Spacing**
- **Tabs**
- **Composition**
- **Hyphenation**
- **Justification**
- **Character Color**
- **OpenType Features**

Character Styles

Character styles are styles applied at the character level, such as font family and size, spacing, scale, and color.
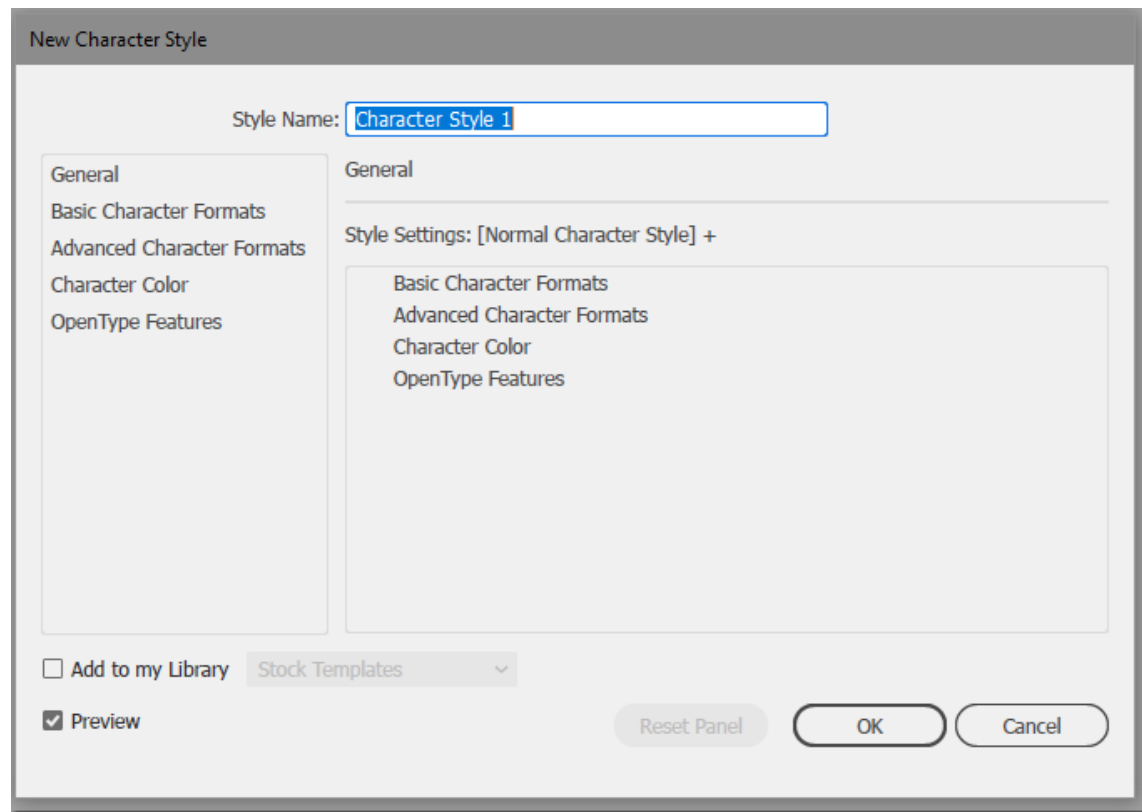
Figure 4–15: New Character Style dialog box.

Character Style Options

You define character style options when you create character styles with the **Style** panel:

- **Basic Character Formats** (font family, size, leading, tracking)
- **Advanced Character Formats** (horizontal and vertical scale, rotation, and baseline)
- **Character Color**
- **OpenType Features**

Overlapping Properties

Overlapping properties—that is, properties set at both the paragraph and character levels—are resolved by assuming that the most "local" style controls the property. In other words, character styles overpower paragraph styles when it comes to telling text what color to be, what size to be, or what font to appear in.

> Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Apply Text Styles.

ACTIVITY 4–4
Applying Text Styles

Data File

C:\092033Data\Creating Graphics Containing Customized Text\Applying Text Styles.ai

Scenario

You have been asked to come up with a look and feel for a series of cards that will tell silly knock-knock jokes. After "living with" your original look and feel for the cards, you decide to make modifications by changing some of the fonts.
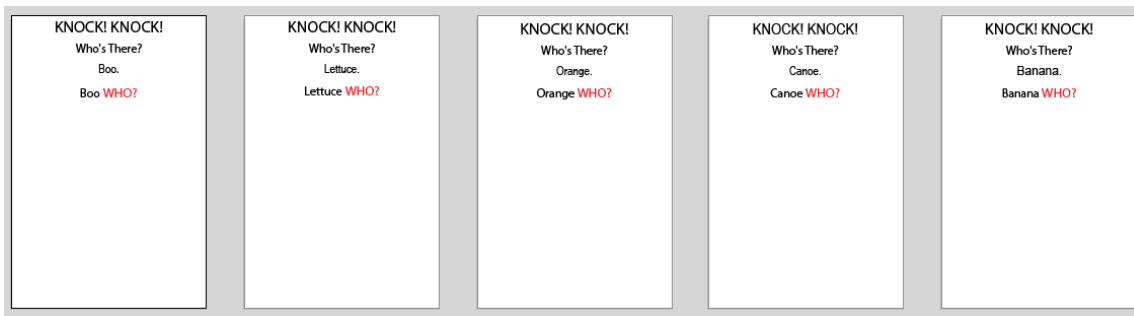
1. Navigate to the **C:\092033Data\Creating Graphics Containing Customized Text** folder and open **Applying Text Styles.ai**.

2. On the first artboard, come up with an engaging formatting scheme for the knock-knock joke text components.
   a) From the **Tools** panel, select the **Selection** tool, and then select the first artboard.
   b) Set a zoom level of **100%** so you can see the entire artboard.
   c) From the **Tools** panel, select the **Type** tool, and then select all the text on the first line, "KNOCK! KNOCK!"

    d) On the **Control** panel, adjust the font, font size, and the various alignment settings to something of your choice until you have a pleasing design for the text.
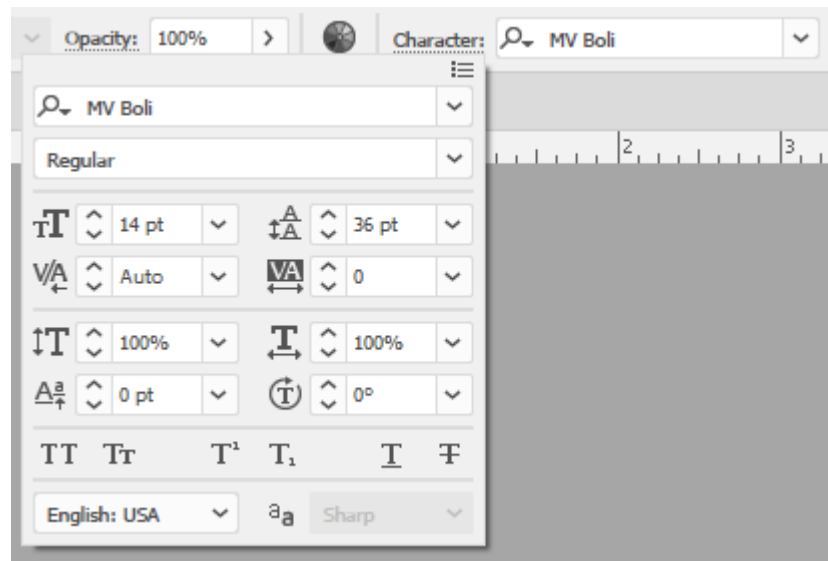
	Note: Your choices can be different. If desired, you can refer to the image in the scenario for ideas.

    e) Choose two more different settings for the questions and the answers.

	Note: Both questions on the card should have the same format.

3. In the document, create a paragraph style called **KKTitle** that uses the font, font size, and alignment you chose for the card title.

	Note: Be sure that no objects are selected in the work area.

    a) On the **Menu** bar, select **Window→Type→Paragraph Styles**.
    b) If necessary, in the **Styles** panel, select the **Paragraph Styles** tab.

c) Select the **Create New Style** button to create a paragraph style.
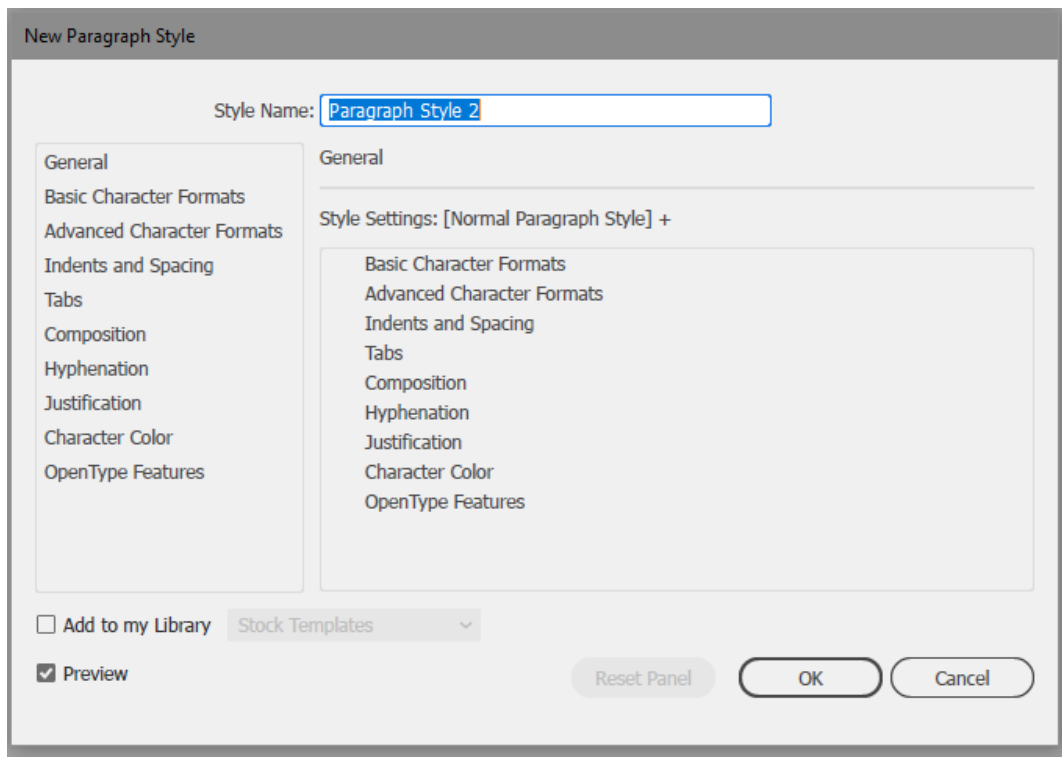
d) In the **New Paragraph Style** dialog box, in the **Style Name** text box, type *KKTitle*

4. For the **KKTitle** style, set the font and font size.

a) From the menu on the left side of the dialog box, select the **Basic Character Formats** tab.
b) From the **Font Family** drop-down list, select a font of your choosing. If you wish, it can be the same or similar to the font you chose when creating the questions.

> **Note:** If desired, you can refer to the image in the scenario for ideas.

c) From the **Size** drop-down list, select a font size of your choosing. If you wish, it can be the same or similar to the font size you chose when creating the questions.
d) From the **Leading** drop-down list, select the same size as the font size.

5. Set the alignment, verify your settings for the style, and complete the new style.

a) From the menu on the left side of the dialog box, select the **Indents and Spacing** tab.
b) From the **Alignment** drop-down list, select the alignment, as desired. If you wish, it can be the same alignment you chose when you created the questions.
c) From the menu on the left side of the dialog box, select the **General** tab.
d) Verify the property selections you have made.
e) Select **OK**.

> **Note:** Notice that **KKTitle** has been added to the **Paragraph Styles** tab in the **Paragraph** panel as well as the **Libraries** panel.

6. Create a paragraph style called **KKQuestion** for the question text.

a) With your focus still on the **Paragraph Styles** panel, press and hold **Alt** and select the **Create New Style** button to display the **New Paragraph Style** dialog box.

b) In the **New Paragraph Style** dialog box, in the **Style Name** text box, type *KKQuestion*

c) Enter the values for the font, font size, and alignment, as desired. If you wish, you can use the same or similar settings that you chose for the titles.

> **Note:** Although having the same value for the font and leading is a good starting point, feel free to adjust the leading settings to create a pleasing text arrangement.

d) Select the **General** tab to verify the property selections you have made, and then select **OK**.

e) On the **Paragraph Styles** tab, verify that **KKQuestion** is now listed.

7. Create a paragraph style called **KKAnswer** for the answers.

a) Press **Alt** and select the **Create New Style** button to display the **New Paragraph Style** dialog box.

b) Name the style *KKAnswer*

c) Enter the values for the font, font size, and alignment, as desired. If you wish, you can use the same settings you've previously chosen.

d) Enter the same value for the leading as you entered for the font size.

e) Select **OK**.

8. Create a character style called **KKWho** that changes the text color to red and expands the horizontal scale to **110** percent.

> **Note:** If you chose red for the text already, choose another color for the **KKWho** style.

a) In the **Styles** panel, select the **Character Styles** tab.

b) Press and hold **Alt** and then select the **Create New Style** button.

c) In the **New Character Style** dialog box, in the **Style Name** text box, type *KKWho*

d) On the left side of the dialog box, select the **Advanced Character Formats** tab.

e) From the **Horizontal Scale** drop-down list, select **110%**.

f) On the left side of the dialog box, select the **Character Color** tab.

g) Select **CMYK Red**.

h) Select the **General** tab and verify that the entered values appear in the list of settings.

i) Select **OK**.

j) On the **Character Styles** tab, verify that **KKWho** is listed.

9. Apply the **KKTitle** paragraph style to the "KNOCK! KNOCK!" text items on all five artboards.

a) If necessary, select the left-most artboard and then set the zoom so you can easily see and work with the "KNOCK! KNOCK!" text.

b) Highlight the title text.

c) In the **Styles** panel, on the **Paragraph Styles** tab, select **KKTitle** to apply the style to the selected text.

d) Scroll horizontally to the second artboard, and then apply the **KKTitle** style to its "KNOCK! KNOCK!" text.

e) Apply the **KKTitle** style to the other "KNOCK! KNOCK!" text items on the other three artboards.

10. Apply the **KKQuestion** paragraph style to the "Who's There?" and "[such-and-such] WHO?" text items on all five artboards.

a) Display the left-most artboard at a zoom level that displays both question items.

b) Select the "Who's There?" question item.

c) In the **Styles** panel, on the **Paragraph Styles** tab, select **KKQuestion** to apply the style to the selected text.

d) Select the other question item and apply the **KKQuestion** style.

e) Scroll horizontally to the other artboards to apply the **KKQuestion** style to their question items.

11. Apply the **KKAnswer** paragraph style to the answer text items on all five artboards.

a) Display the first artboard at a zoom level that displays the answer item between the two questions.

b) Select the answer item "Boo."

c) In the **Styles** panel, on the **Paragraph Styles** tab, select **KKAnswer** to apply the style.

d) Scroll horizontally to the other artboards to apply the **KKAnswer** style to their answer items.

12. Apply the **KKWho** character style to the word "WHO?" on all five artboards.

a) On the left-most artboard, select the text "WHO?"

b) In the **Styles** panel, on the **Character Styles** tab, select **KKWho** to apply the character style, change the text color to red, and expand the lettering.

c) Apply the **KKWho** character style at the same location on the other four artboards.

13. Save your file as *My Applying Text Styles.ai* and accept the **Illustrator Options** default settings.

14. Change the font for the knock-knock answer style.

a) Set the zoom so you can see all five artboards at once in the work area.

b) In the **Styles** panel, on the **Paragraph Styles** tab, double-click the **KKAnswer** paragraph style to display the **Paragraph Style Options** dialog box.

c) Select the **Basic Character Formats** tab.

d) From the **Font Family** drop-down list, select a different font.

e) Verify that the answers to the knock-knock questions are now displayed in the new font.

> **Note:** If the artboards do not display the new font, in the **Paragraph Style Options** dialog box, verify that **Preview** is checked.

f) Select **OK** to update the style and close the dialog box.

15. Change the font for the questions.

a) In the **Styles** panel, on the **Paragraph Styles** tab, double-click the **KKQuestion** paragraph style to display the **Paragraph Style Options** dialog box.

b) Select the **Basic Character Formats** tab.

c) From the **Font Family** drop-down list, select a new font.

d) Verify that the questions are now displayed in the new font.

e) Select **OK** to update the style and close the dialog box.

f) Collapse the **Styles** panel group.

16. Save your file as *My Modifying Text Styles.ai* and accept the **Illustrator Options** default settings.

17. Close all open files.

TOPIC E

Insert Typographical Characters

You have a graphical project that uses antiquated text with special characters that aren't available directly from the keyboard. You aren't sure whether you will have to draw the characters by hand or select them from a palette of special characters. Illustrator's glyphs provide you with dozens of nonstandard typographical characters that you can insert with the click of a mouse. In this topic, you will insert typographical characters.

Glyphs

Dating as far back as the printed page, ***glyphs*** are single characters printers use in place of multiple characters; they can also be specially designed shapes for a single or many purposes. Glyphs can abbreviate longer words, be symbols for an idea, and—as geometric shapes—be used to improve the organization or readability of a document.

Most of today's fonts include more characters than are available from a single keystroke. In a sense, the characters you can't type from a keyboard (and even some you can) can be considered glyphs. Whether they are necessary or just for aesthetics, special character glyphs offer design flexibility.

Figure 4–16: Glyphs (underlined).

Glyphs Panel

The ***Glyphs panel*** displays all the glyphs associated with a particular font. With it, you can quickly find and insert glyphs into text. Many fonts include glyphs for other languages.

Depending upon the font you work with, different sets of glyphs will appear in the **Glyphs** panel. Some fonts, such as Earwig Factory, have just a few glyphs; others, such as Times New Roman, have many. Because of this disparity, you must be sure that new fonts you might apply to existing text will accurately translate the glyphs contained within.

OpenType Font Format

The ***OpenType font format*** is a specification developed by Microsoft® and Adobe® to include several categories of typographical information under the umbrella of a font name:

- Basic support for the Roman alphabet.
- Extended support for languages that use the Roman alphabet plus other characters.
- Support for non-Roman alphabets, such as Russian, Arabic, and Hebrew.

- Advanced typographical symbols and glyphs.

Stylistic Alternatives Panel

The *Stylistic Alternatives panel* sets properties and behaviors for treating text. Its **OpenType** tab provides you with the means to invoke common glyphs and set preferences for the use of glyphs for such items as fractions and ordinal numbers.

	Note: To learn more about glyphs, check out the Spotlight on **Selecting Glyphs for Your Design** presentation from the **Spotlight** tile on the CHOICE Course screen.

	Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Insert Typographical Characters.

ACTIVITY 4–5
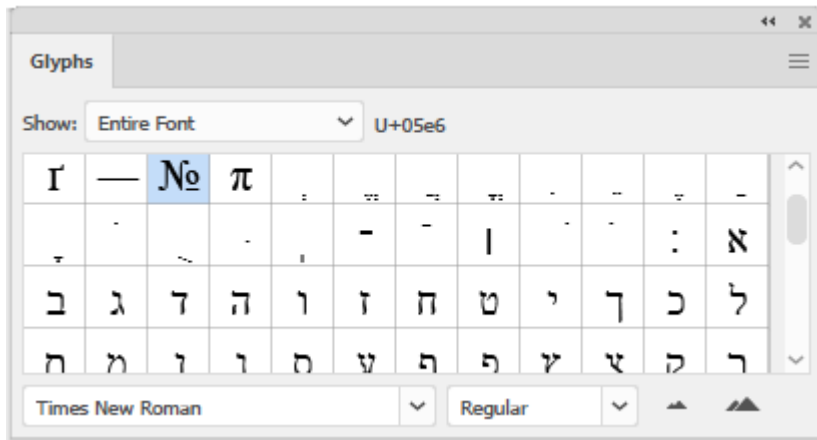## Inserting Typographical Characters

Data File

C:\092033Data\Creating Graphics Containing Customized Text\Greeting Cards Template.ait

Scenario

You've been asked to dash off another idea for a card that is flexible enough to use in a variety of social circumstances where one person wants to express appreciation for another. You choose to use the message "You Are Number One" as the graphical art on the card cover and want to look for an interesting way to convey that message.

---

1. Create an Illustrator document from your greeting card template and then maximize the appearance of its **Note** artboard in the work area.
    a) Select **File→New from Template**.
    b) In the **New from Template** dialog box, in the **C:\092033Data\Creating Graphics Containing Customized Text** folder, select **Greeting Cards Template.ait** and select **New**.
    c) Collapse the **Libraries** panel if it appears expanded.
    d) Scroll horizontally until the **Note** artboard can be seen. With the **Selection** tool, select the **Note** artboard, which is the artboard furthest to the right.
    e) From the **Zoom** control drop-down list, select **Fit On Screen**.

2. On the **Note** artboard, add the words "You Are" in Times New Roman.
    a) With the **Type** tool, in the **Note** artboard, type *You Are*
    b) Press **Ctrl+A** and then set the font to **Times New Roman**.

3. On the second line, insert the glyph representing the abbreviation for the word "number" and then add the number **1** after it.
    a) Place the cursor in the type after the "You Are" text. Press **Enter** to create a second line.
    b) Select **Window→Type→Glyphs** to display the **Glyphs** panel.
    c) Verify that in the **Font** drop-down list, **Times New Roman** is selected. Also verify that in the **Show** drop-down list, **Entire Font** is selected.

d) In the list of glyphs, about one-quarter of the way down, find the glyph representing the abbreviation for the word "number." № Double-click the glyph to insert it into the text area.

[Glyphs panel image showing: Show: Entire Font, U+05e6, with a grid of glyphs including Times New Roman, Regular. The № glyph is highlighted in blue.]

> **Note:** The exact location of the glyph in the list will depend on your screen resolution and the size of the **Glyphs** list. You can increase the size of the panel by dragging the lower-right corner.

e) Close the **Glyphs** panel.
f) Press the **Spacebar** and then type *1*

4. Center and enlarge the text and glyph.

a) Use the **Type** tool to select both text areas and, in the **Properties** panel, select the **Align Center** button.
b) Select the **Selection** tool. Double-click the small blue circle at the right of the text to convert the selection to **Area Type** to resize the area containing the text without resizing the text.

You are
№ 1

Convert to
Area Type
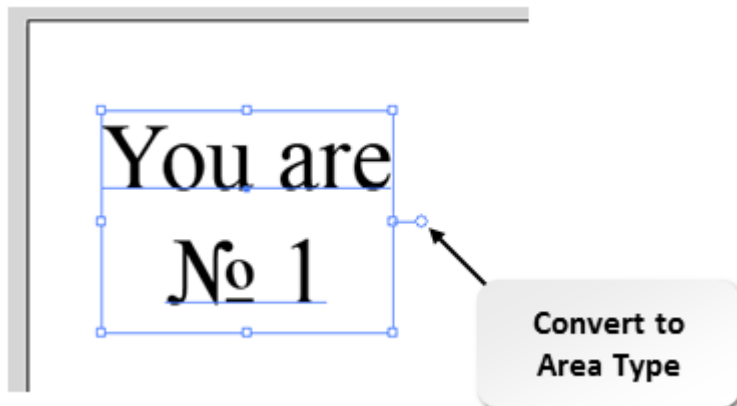
c) With the **Selection** tool, drag the selection handles to resize the text area so that all four margins are one-quarter inch from the edges of the artboard.
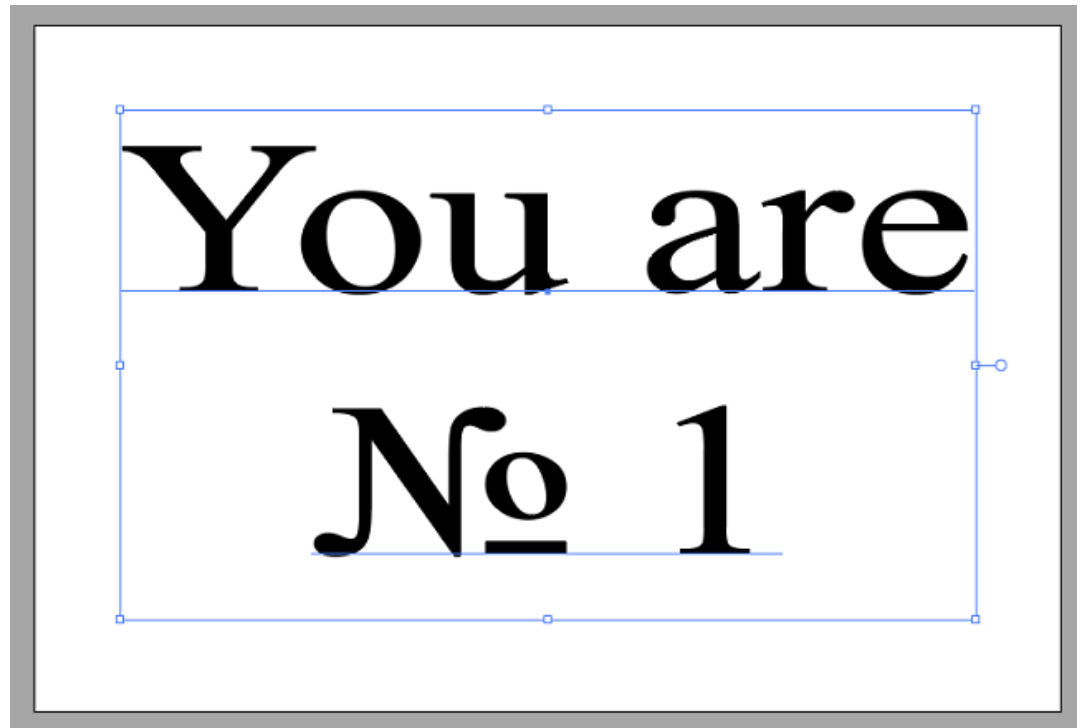
d) Use the **Type** tool to select the text "You are" and set the font size to **36**.
e) Use the **Type** tool to select the glyph and the numeral and, from the **Properties** panel, change the font size to **72**.

f) With both the glyph and numeral still selected, in the **Properties** panel, select **Character**. In the **Character** pop-up, modify the **Leading** so that it moves closer to the text "You Are" (approximately *64 pt* in size).
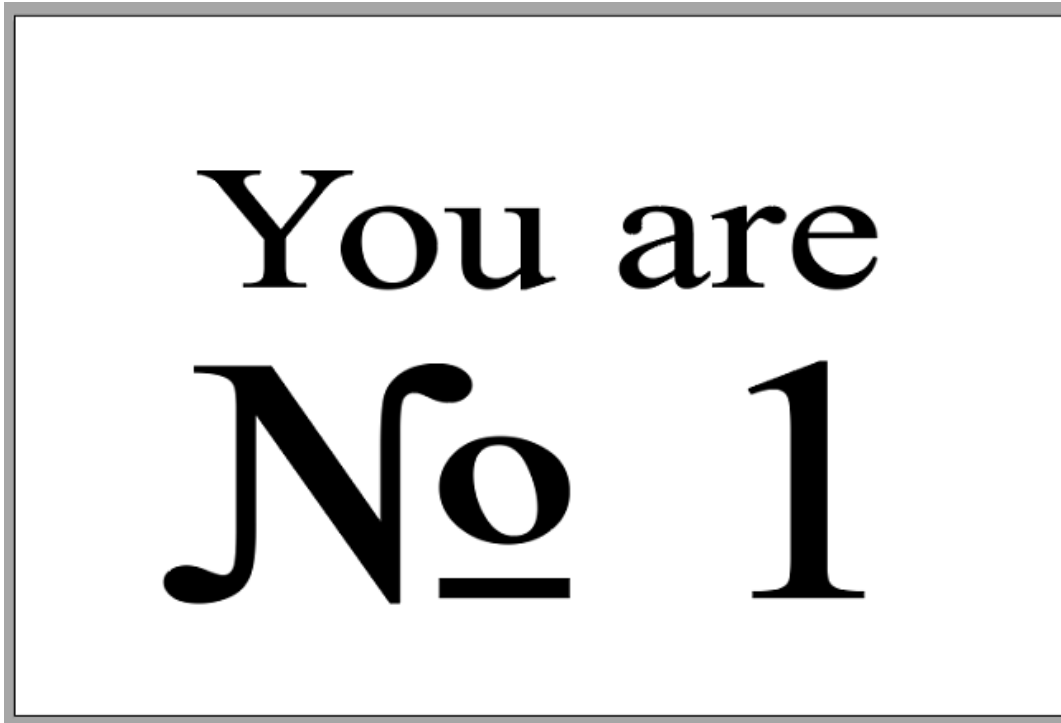
5. Save your file as *My Inserting Typographical Characters.ai*

6. In the **Illustrator Options** dialog box, accept the default options and select **OK**.

7. Close the file.

Summary

In this lesson, you used Illustrator's powerful tools for handling text in a variety of engaging, artful ways. With them, you have gained some insight into what is available to you when you are called upon to accentuate the interplay of the "wordlessness" of art and the words on the page when creating compelling messages.

Which of the text tools that you've worked with are the most interesting?

Which text tool do you think is the most powerful in terms of saving time and work?

> **Note:** Check your CHOICE Course screen for opportunities to interact with your classmates, peers, and the larger CHOICE online community about the topics covered in this course or other topics you are interested in. From the Course screen you can also access available resources for a more continuous learning experience.

5 | Customizing Objects

Lesson Time: 30 minutes

Lesson Introduction

The days of Henry Ford's dictum of, "They can have any color car, as long as it's black," are over. Everything (especially graphic design) must possess the aura of special customization, even if it is mass produced. Adobe® Illustrator® has many tools that will enable you to improve the appearance of, and leverage, existing graphical content to put it in the best possible light. In this lesson, you will customize objects.

Lesson Objectives

In this lesson, you will:

• Import, place, and link graphics.

• Alter the appearance and position of graphics by using transform, alignment, and distribution tools.

TOPIC A

Import, Place, and Link Graphics

Although many graphics you incorporate into design projects never require updating, sometimes they do. This can be a problem, especially if you have a large body of work that's affected by the update. Knowing when to use the Illustrator import and linking functions can make graphic updates effortless. In this topic, you will import, place, and link graphics.

Imported Graphics

Imported graphics are existing vector or raster images you "place" into the Illustrator work area for use in your graphic design projects. Just as you might have to import someone else's text into a design, sometimes you will want to include existing images in your projects. Upon importation, the graphics appear at their last-saved size and shape, but you can manipulate them with most of the graphics tools available in Illustrator.

When you save an Illustrator document that contains one or more imported graphics, the graphics themselves become part of the Illustrator document file.

Graphics Placement

The primary method for importing graphics is the **Place** command. It supports most file formats, placement options, and colors. After placing a file, use the **Links** panel to identify, select, monitor, and update the file. You can create a link to the graphic file, or deselect **Link** to embed the graphic directly into the Illustrator document. You can place multiple PDF pages and crop the artwork. You can also place Adobe® Photoshop® files and choose how to convert layers, as well as choose which version of the image you want to import.

Linked Graphics

Linked graphics are graphics that are "read into" an Illustrator document each time it is opened. The digital information used to render each linked graphic is not incorporated into the Illustrator document; instead, the document records the location on your computer or network where the graphic is stored and then accesses that information when needed. Using linked graphics helps to reduce the size of Illustrator documents.

When you alter the appearance of linked graphics while developing graphic design projects, Illustrator records the changes you make, saves them in the Illustrator document, and then applies them to the graphic when it is read in. In other words, you do not alter the original image, only the read in copy.

Managing Linked Graphics

Linked graphics have challenges and opportunities: sometimes files get renamed or moved from their original location, which requires you to find them again; sometimes the original graphics are altered, which requires you to update the copy in your document.

You manage linked graphics in Illustrator by using the **Links** panel.

> Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Import, Place, and Link Graphics.

ACTIVITY 5-1
Importing, Placing, and Linking Graphics

Data Files

C:\092033Data\Customizing Objects\Graphics Linking\logo.png

C:\092033Data\Customizing Objects\Graphics Linking\logo_final.png

C:\092033Data\Customizing Objects\Graphics Linking\placeholder front graphic.jpg

C:\092033Data\Customizing Objects\Graphics Linking\Still Life Apples.jpg

C:\092033Data\Customizing Objects\Graphics Linking\Still Life Lemons Limes.jpg

C:\092033Data\Customizing Objects\Graphics Linking\Still Life Pumpkins.jpg

C:\092033Data\Customizing Objects\Graphics Linking\Still Life With Melon.jpg

C:\092033Data\Customizing Objects\Graphics Linking\Still Life With Sausages.jpg

C:\092033Data\Customizing Objects\Graphics Linking\Welcome Series 01.ai

C:\092033Data\Customizing Objects\Graphics Linking\Welcome Series 02.ai

C:\092033Data\Customizing Objects\Graphics Linking\Welcome Series 03.ai

C:\092033Data\Customizing Objects\Graphics Linking\Welcome Series 04.ai

C:\092033Data\Customizing Objects\Graphics Linking\Welcome Series 05.ai

Scenario

You have been working on a series of dinner invitation cards that will have classic art on the front. You have added placeholders on the front and back pages, awaiting the final graphics. Today you received the finalized version of the logo and artwork and are ready to finish linking and updating.

1. Open five files containing the trademark message and logo placeholder.

   a) Navigate to **C:\092033Data\Customizing Objects\Graphics Linking** and open the following files: **Welcome Series 01.ai**, **Welcome Series 02.ai**, **Welcome Series 03.ai**, **Welcome Series 04.ai**, and **Welcome Series 05.ai**.

   > **Note:** You can open multiple files at once by pressing **Ctrl** and selecting from the file list.

   b) Inspect each file to see that its first artboard contains trademark text and that four out of five files display the logo graphic.

   c) Select the file tab for **Welcome Series 05.ai**.

2. Place the **logo.png** graphic in the center of the first artboard of **Welcome Series 05.ai**.

   a) On the **Menu** bar, select **File→Place** to display the **Place** dialog box.

b) In the **C:\092033Data\Customizing Objects\Graphics Linking** folder, select **logo.png**.

c) In the lower area of the dialog box, verify that the **Link** check box is checked.
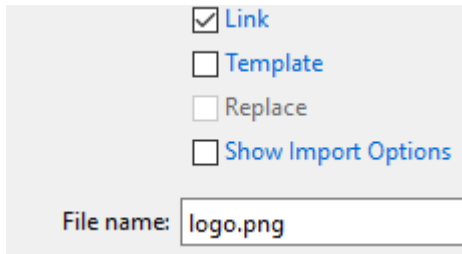
d) Select **Place** and click artboard 1 to actually place the text.

e) Use the **Selection** tool to resize the **logo.png** graphic to a 1-inch by 1-inch approximately square shape, and then center it on the artboard.

> **Note:** Use the **Transform** panel to more precisely resize the graphic.

3. Close all open files, saving with the same name, when prompted.

4. Rename the placeholder and finalized logo files.

   a) In **File Explorer**, navigate to **C:\092033Data\Customizing Objects\Graphics Linking**.

   b) Right-click the **logo.png** file and select **Rename**.

   c) Rename the file to *logo_placeholder.png*

   d) Right-click the **logo_final.png** file and select **Rename**.

   e) Rename the file to *logo.png*

5. View the updated links in each file.

   a) In Illustrator, reopen the five Welcome Series files.

   b) Select the **Welcome Series 01.ai** tab.

   c) Verify that the logo graphic was updated to the color image.

   d) Select and verify the other files by selecting their tabs.

6. Relink the placeholders for the card fronts.

   a) Select the **Welcome Series 01.ai** tab.

   b) Select **Window→Links** to display the **Links** panel.

   c) In the **Links** panel, on the **Links** tab, select the **placeholder front graphic.png** link item.

   d) At the bottom of the **Links** panel, select the **Go To Link** button [image] to select the placeholder graphic and center it in the work area.

   e) At the bottom of the **Links** panel, select the **Relink** button. [image]

   f) In the **Place** dialog box, select the **Still Life Apples** image, and then select **Place**.

   g) If necessary, resize and reposition the graphic so that it fills the card front.

   h) Repeat these steps for the remaining cards, using the remaining still life images.

7. Save your files in **C:\092033Data\Customizing Objects** as the following:

   • *My Welcome Series 01.ai*
   • *My Welcome Series 02.ai*
   • *My Welcome Series 03.ai*
   • *My Welcome Series 04.ai*
   • *My Welcome Series 05.ai*

   For each file, in the **Illustrator Options** dialog box, accept the default options and select **OK**.

8. Close all open files.

TOPIC B

Alter the Appearance of Objects

The saying "less is more" can often apply in situations where you must make the most out of a limited amount of graphical content or are intentionally trying to unify the look and feel of a project by keeping underlying motifs to a minimum. Using transform tools can enable you to re-purpose existing graphical content in many engaging and unexpected ways. In this topic, you will alter the appearance of graphical objects.

Basic Object Transforms

When you transform an object, you are moving, rotating, reflecting, scaling, or shearing it. You transform objects by using the **Transform** panel, **Object→Transform** command. You can also transform by dragging the bounding box for a selection. In addition to the common tools for adjusting width and height and position on the artboard, there are two *basic object transforms*:

*   **Shear:** Altering the base angle of the object to skew the visual content.
*   **Rotate:** Rotating an object at its center.

By combining the shear and rotation of the object components, you can draw in perspective. You can make the object appear as if it is being viewed from a certain angle.

Figure 5–1: Basic object transforms.

Object Distortion

You can distort objects by twirling, tweaking, and roughening to turn them into something completely different. You can distort by using the **Free Transform** tool or a liquefy tool. The **Free Transform** tool enables you to distort freely. A liquefy tool lets you take advantage of specific preset distortions such as puckers, wrinkles, or twirls.
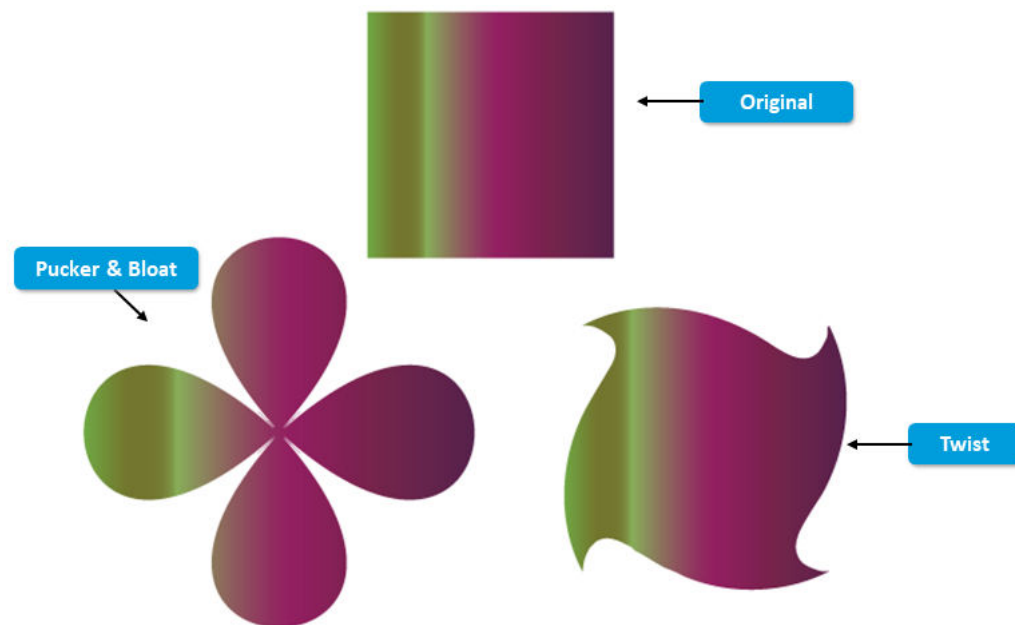
Figure 5–2: Object distortion.

Object Alignment

Object alignment refers to alignment effects along vertical and horizontal boundaries, and spacing effects used to distribute objects along a larger defined area. You can use various tools to manually drag objects into alignment. You can also move objects by using the arrow keys on the keyboard, or by entering specific, precise values in a panel or dialog box. Snapping helps you position objects as you move them. You can snap the pointer to guides and anchor points. You can also snap object boundaries to gridlines. The **Align** panel will help you position objects relative to each other. Holding the **Shift** key while moving objects *key constrains* the movement to a precise horizontal, vertical, or diagonal direction.
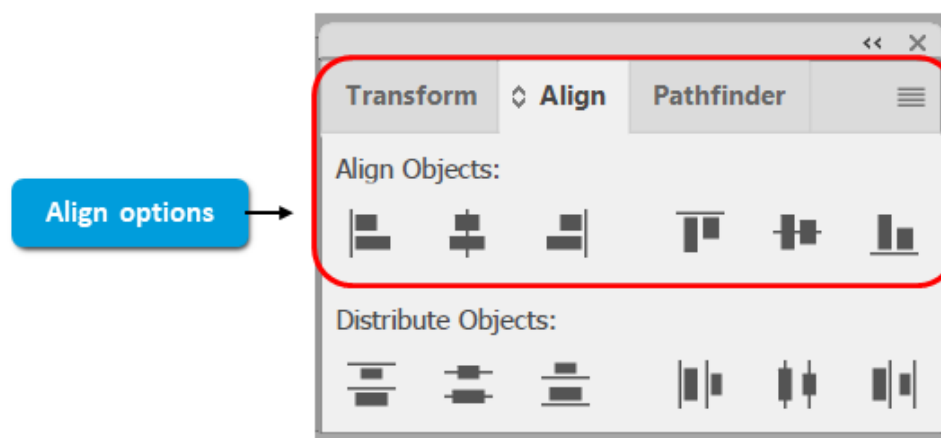

Figure 5–3: Align options.

Object Distribution

You can use the **Align** panel to align or distribute selected objects along whatever axis you specify. Either the object edges or anchor points can be used as the reference point. You can align to an artboard, a selection, or a key object (one specific object in a selection of multiple objects).

When you select more than two objects, distribution options become visible in the **Control** panel. If they do not appear, select **Window→Align** to display the **Align** panel.
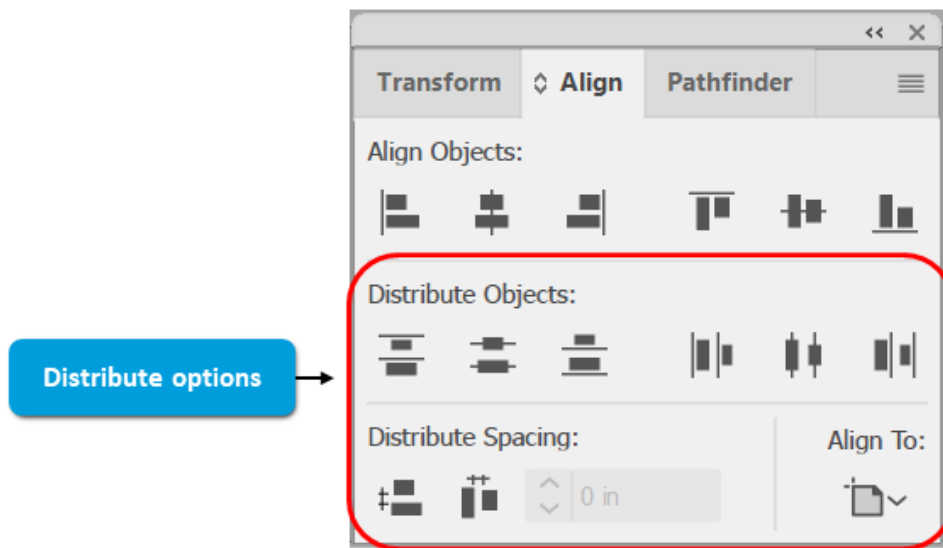

Figure 5–4: Distribute options.

📋	**Note:** If the **Distribute Spacing** section of the **Align** panel is not visible, from the panel menu, select **Show Options** to display it.

✅	**Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Alter the Appearance of Objects.**

ACTIVITY 5-2
Altering the Appearance of Objects

Data Files

C:\092033Data\Customizing Objects\Transforming Graphics.ai

C:\092033Data\Customizing Objects\Masks.jpg
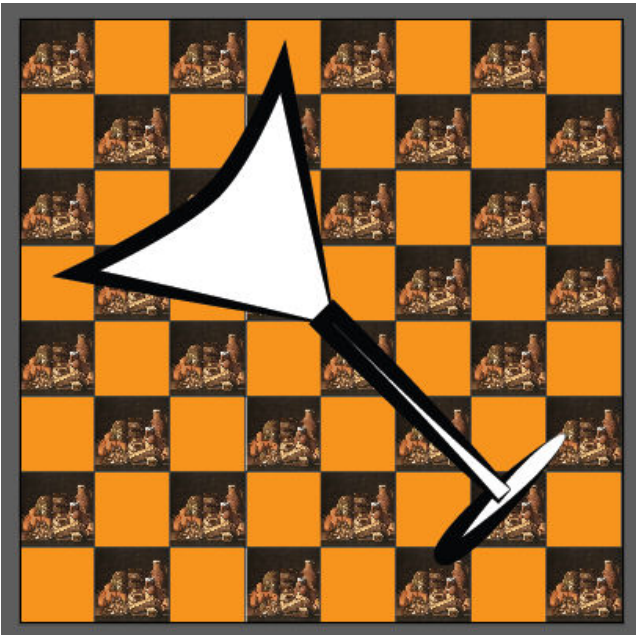
C:\092033Data\Customizing Objects\martiniglass.svg

C:\092033Data\Customizing Objects\pumpkins.jpg

Scenario

You found an engaging graphic that would make a humorous invitation for a Halloween, Mardi Gras, or costume party. You begin exploring ways that it can be leveraged to express a message.

You also want to work on another party invitation card in the Welcome Series. This time, you will create a checkerboard grid using a still life graphic and a colored square. Then, you'll put the outline of a cocktail glass over the grid.

	Note: Refer to the images presented here as you work through this exercise.

1. Open **C:\092033Data\Customizing Objects\Transforming Graphics.ai**.

2. Place the **Masks** graphic in the scratch area, resize it to a 1-inch by 1-inch square, and then make two additional copies of it.
   a) On the **Menu** bar, select **File→Place** to open the **Place** dialog box.
   b) Navigate to **C:\092033Data\Customizing Objects** and select the **Masks.jpg** graphic.
   c) Uncheck **Link** to place the graphic as an embedded graphic.

   d) Select **Place** to place the graphic and close the dialog box.
   e) Click anywhere on the artboard with the black background to place the object there.
   f) Select **Window→Transform** to display the **Transform** panel.
   g) In the **W** and **H** property text boxes, enter *1* to resize the graphic to a 1-inch by 1-inch square.
   h) Press **Ctrl+C** to copy the graphic.
   i) Press **Ctrl+V** twice to make two copies. The copies will appear over each other, but not the original.
   j) With the **Selection** tool, move the copies to the left side.

3. Transform one of the graphics to form the unopened side of the box by shearing and rotating the graphic 30 degrees.
   a) With the **Selection** tool, select the first graphic.

b) In the **Transform** panel, from the **Shear** drop-down list [icon] select **30** degrees.

c) In the **Transform** panel, from the **Rotate** drop-down list, select **30** degrees.

d) Move the graphic to the right side of the artboard.

> **Note:** Be sure to leave enough room for the right margin.

4. Transform another square mask graphic to form the top of the box with an edge that will join the unopened box side.

a) Select one of the square mask graphics in the scratch area.

b) Shear the graphic **-45** degrees.

c) Rotate the graphic **30** degrees.

d) Move the graphic so that its lower-right edge lines up with the top edge of the box side.

5. Transform the last square graphic to form the opened side of the box, with a vertical edge that will join the top of the box at the corner.

a) Select the last square mask graphic in the scratch area.

b) Shear the graphic **-30** degrees.

c) Rotate the graphic **330** degrees.

d) Move the graphic so that its upper-left corner lines up with the left corner of the top of the box.
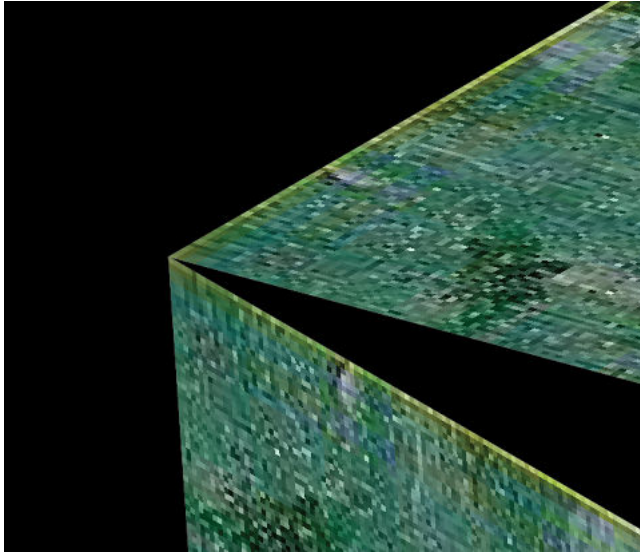
6. Lengthen the right end of the open box door slightly to narrow the opening. With the **Selection** tool, on the open door graphic, drag the right center handle to the right until you are satisfied with the design.

7. Adjust the corners of the open side with the top side, so that they meet appropriately.

   a) On the **Status** bar, set the zoom level to **6400%**. You may need to use the **Hand** tool to locate the box join.

   b) With the **Hand** tool, select the location where the box corners join and drag to the center of the work area.

   c) With the **Selection** tool, move the box door graphic so that its corner aligns with the top corner of the box.

   > **Note:** At this level of zoom, you will see the pixels as small squares.

   d) Reset the zoom to **Fit On Screen**.

8. In the **C:\092033Data\Customizing Objects** folder, save the file as *My Transforming Graphics.ai* and select **OK** to accept the default **Illustrator Options**.

9. Close the file.

10. Create a new file with a single artboard that is 8-inches wide by 8-inches tall.

11. Use the pumpkin still life as the dark square of the checkerboard and a pumpkin-colored square as the light square to create a vertical line of alternating squares along the card's left boundary.

    a) From the **C:\092033Data\Customizing Objects** folder, place the file **pumpkins.jpg** in the work area. Resize it to 1-inch by 1-inch.

b) Using the **Selection** tool, move the pumpkin graphic to the upper-left corner of the artboard.
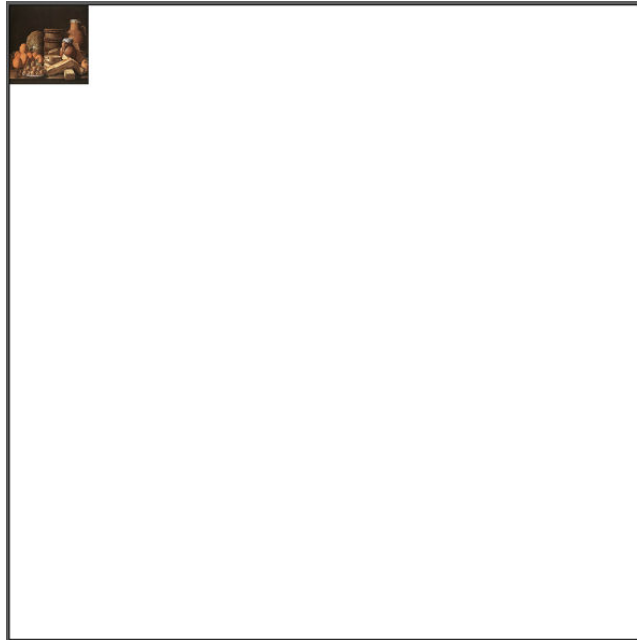
c) Make three copies of the pumpkin graphic and distribute them down the length of the artboard, so that you have four pumpkin graphics along the left edge of the artboard.

d) With the **Rectangle** tool, draw a 1-inch by 1-inch square. If necessary, in the **Properties** panel, use the **Transform** panel to set the exact dimensions.
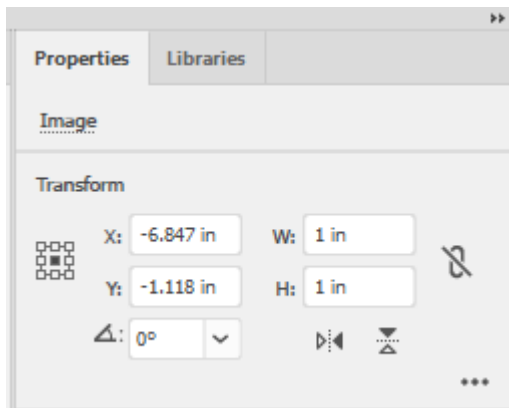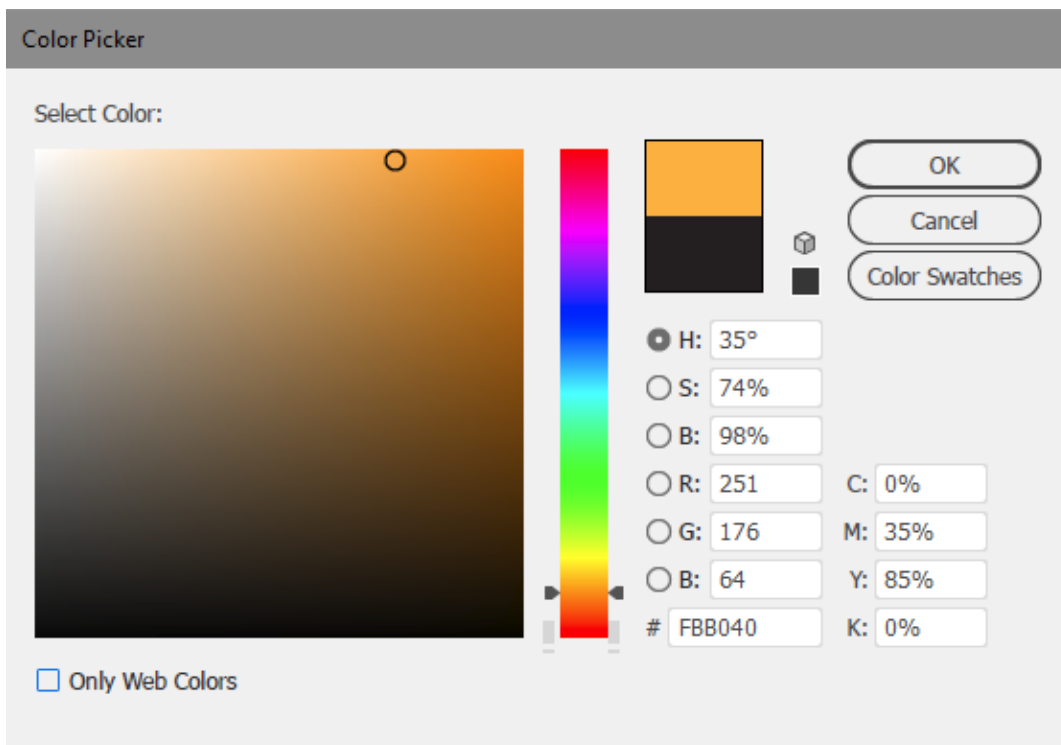
e) From the **Tools** panel, double-click **Fill** to open the **Color Picker** dialog box.

f) Set the rectangle's CMYK values as:

*   C = *0*
*   M = *35*
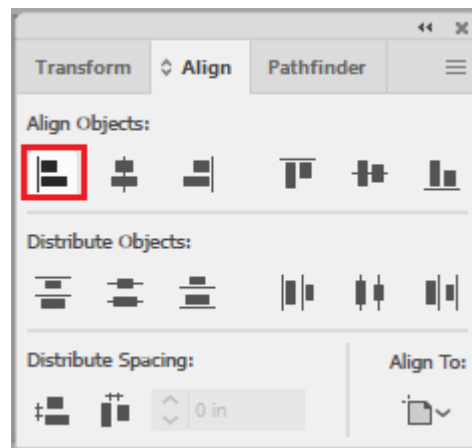*   Y = *85*
*   K = *0*

g) Make three copies of the rectangle, and place them roughly between the graphic squares.
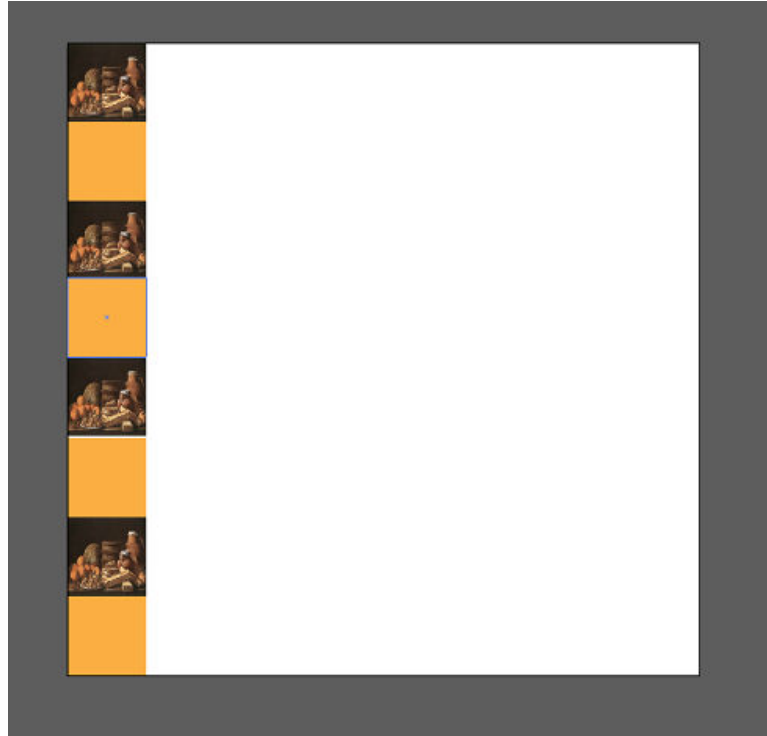
h) With the **Selection** tool, select all eight objects.

i) In the **Align** panel, set the **Align To** option to **Align to Artboard**.

j) In the **Align** panel, select the **Horizontal Align Left** button to line up all the objects along the left edge of the artboard.

k) In the **Align** panel, select the **Vertical Distribute Top** button. Observe that the squares arrange themselves precisely.
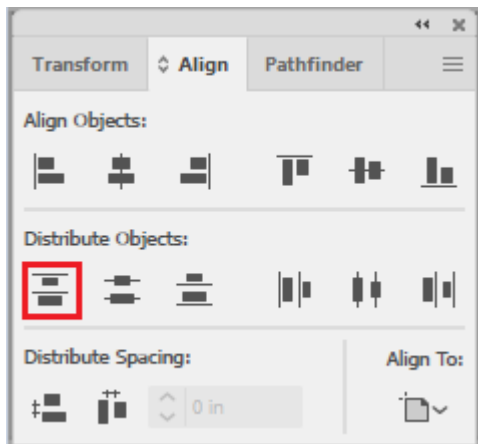
12. Create another alternating set of vertical squares along the right edge of the artboard.

a) Select one of the pumpkin-colored squares. Press **Ctrl+C** to copy the square. Press **Ctrl+V** to paste a copy.
b) Move the copy to the upper-right corner of the artboard.
c) Press **Ctrl+V** three more times to paste three additional copies.
d) Space out the four copied squares down the right edge of the artboard.
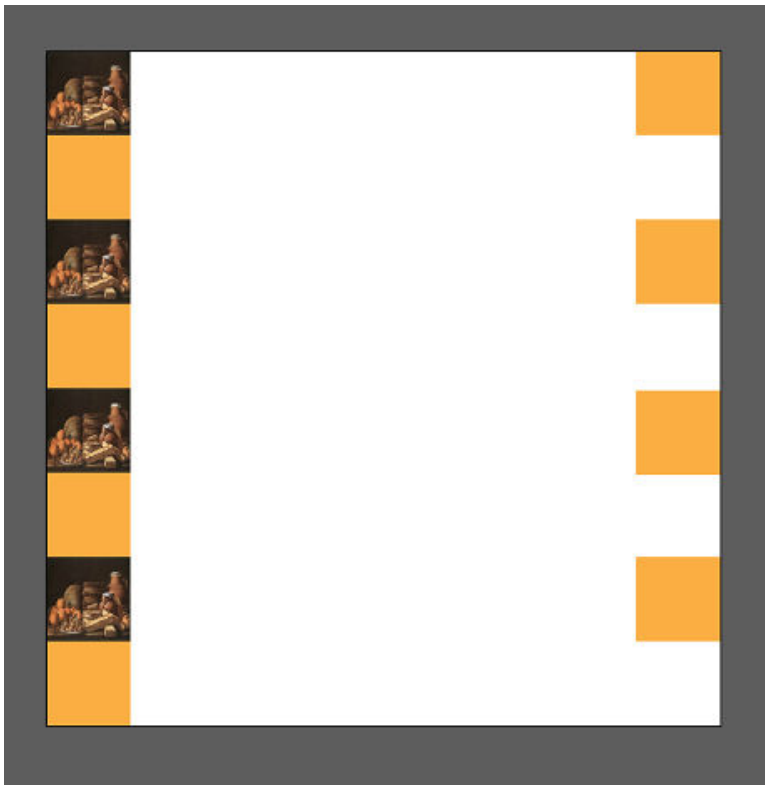
e) Make four copies of the graphic image square and move them between the pumpkin-colored squares.
f) Select all eight objects along the right edge and then apply the following transformations: **Horizontal Align Right** and **Vertical Distribute Top**.

13. Fill in the rest of the checkerboard.

    a) With the **Selection** tool, select the left set of objects, right-click, and select **Group**.

    b) Group the right set of objects.

    c) Copy and paste three copies of the right set of objects.

    d) Copy and paste three copies of the left set of objects.

    e) Move the groups until they create the full checkerboard pattern.

    f) Select the entire checkerboard.

    g) In the **Align** panel, select the **Vertical Distribute Top** button.
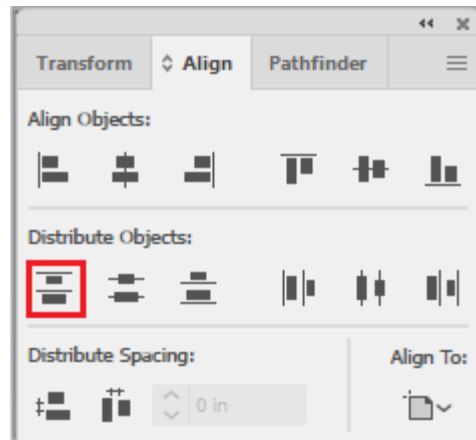
    h) In the **Align** panel, select the **Horizontal Distribute Left** button.
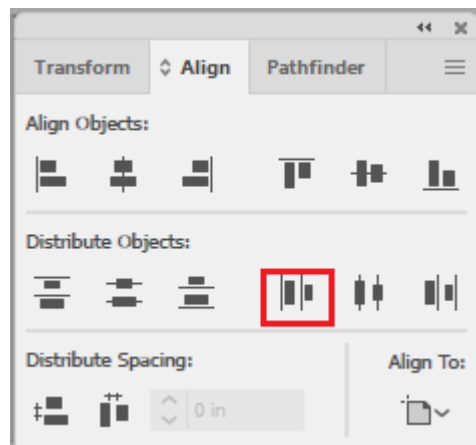
i)   Observe that the checkerboard is now perfectly arranged.
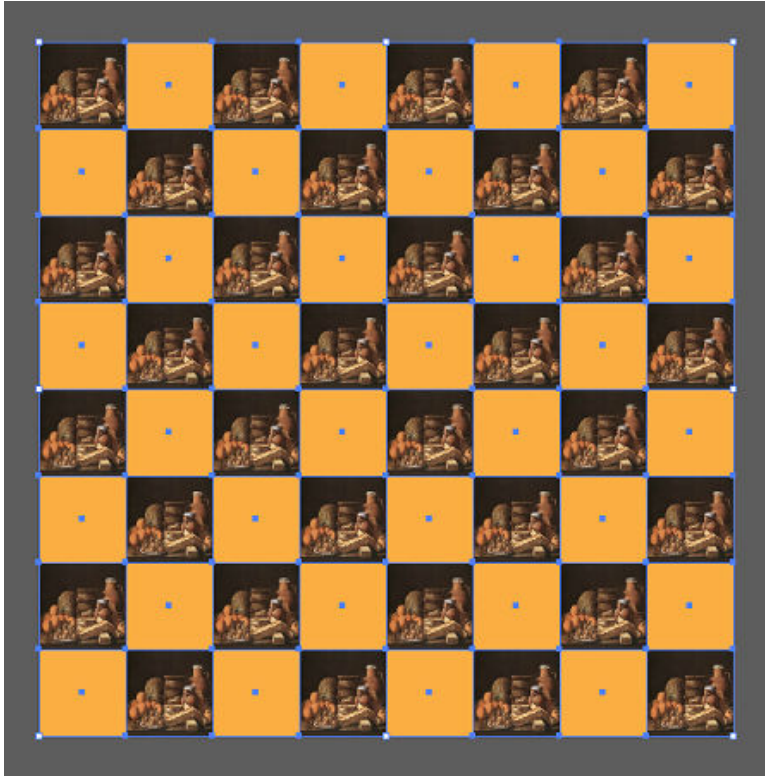
14. Group the 64 objects together and place a martini glass graphic over them.

a)   If necessary, reduce the zoom so you can see the artboard with some scratch area around it.

b)   Using the **Selection** tool, drag from the upper left to lower right to select all of the squares, then right-click and select **Group**.

c)   In **C:\092033Data\Customizing Objects**, place the file **martiniglass.svg** in the scratch area.

d)   Select the martini glass, and use the **Transform** panel to change the width and height to **7.5 in**.

e) Select the martini glass, right-click, and select **Transform→Rotate**. Rotate the glass 45 degrees so that its top is pointing to the left. Select **Preview** to see the results. Select **OK**.
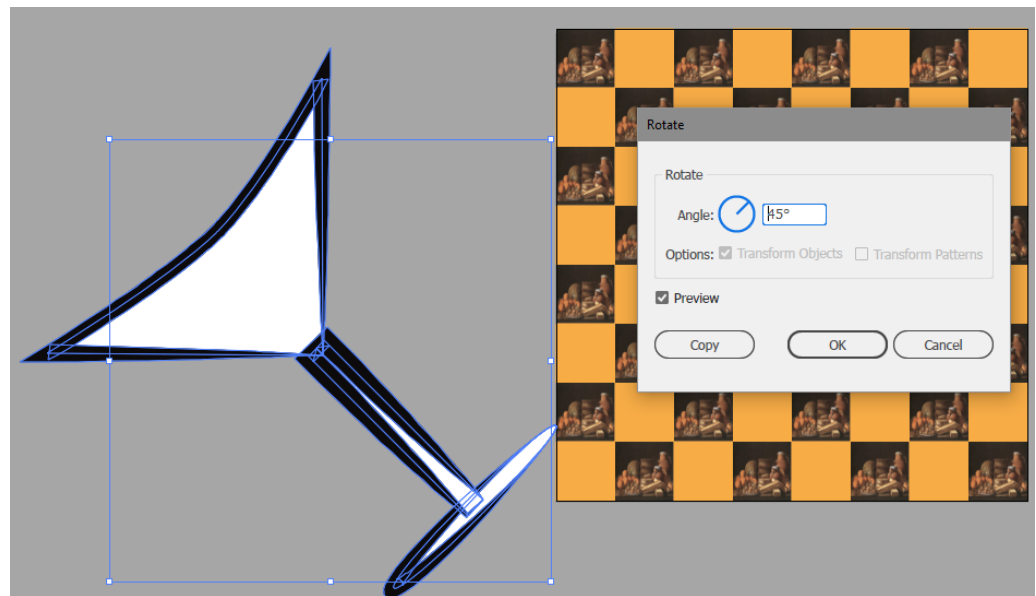
f) With the **Selection** tool, drag the martini glass into the center of the checkerboard.
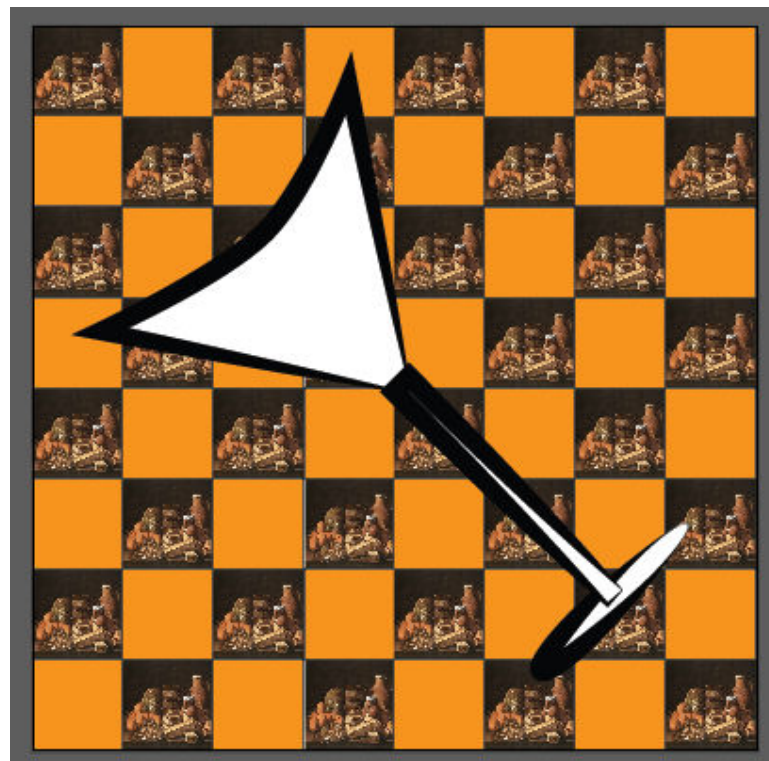
15.Save the file in **C:\092033Data\Customizing Objects** as *My Aligning and Distributing Graphics* and select **OK** to accept the default **Illustrator Options**.

16.Close the **Transform** panel and close all open files.

Summary

In this lesson, you customized objects. By discovering several methods for taking a small number of graphical resources, modifying them, and positioning them to form engaging, custom graphical designs, you found that Illustrator's many tools enable you to improve the appearance of existing graphical content to put it in the best possible light.

Which do you think is harder: shearing graphics or aligning graphics?

What are the main benefits or pitfalls you might often encounter when using the object customization tools in this lesson?

Note: Check your CHOICE Course screen for opportunities to interact with your classmates, peers, and the larger CHOICE online community about the topics covered in this course or other topics you are interested in. From the Course screen you can also access available resources for a more continuous learning experience.

6 | Customizing Basic Shapes

Lesson Time: 1 hour

Lesson Introduction

You have worked with basic shapes but don't see much "bang for the buck" so far in terms of formatting them. Adobe® Illustrator® has many formatting tools that operate on basic shapes so that you can create a multitude of beautiful, engaging designs from simple geometric objects. In this lesson, you will customize basic shapes.

Lesson Objectives

In this lesson, you will:

• Apply strokes and brushes.

• Fill shapes and apply gradients.

• Apply graphic styles.

• Distort text with text envelopes.

TOPIC A

Apply Strokes and Brushes

You know that not only the interior of objects can be places of interest in graphic design, but also the edges. Illustrator's management of the appearance of edges consists of tools that create and format strokes. In this topic, you will apply strokes and brushes.

Strokes

Strokes are sets of properties (such as color and thickness) that define the look and feel of a path or outline of an object. Strokes can be associated with particular tools, or they can be applied to paths independently.
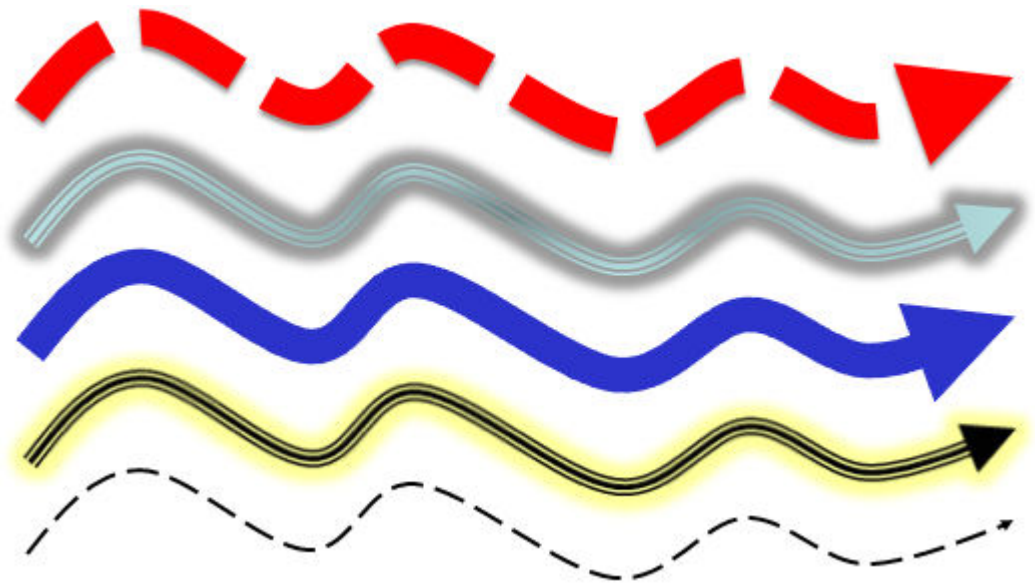
Figure 6–1: Strokes applied to a path.

Brushes

Brushes are tools you can use to stylize the appearance of paths. Just as a painter has different brushes for various techniques, Illustrator provides paintbrush options to fit your digital designs. You can apply brush strokes to existing paths, or you can draw a path and apply a brush stroke at the same time by using the **Paintbrush** tool. Illustrator has the following brush types:

*   **Calligraphic:** Creates strokes that resemble those drawn with a calligraphy pen.
*   **Scatter:** Creates copies of an object along the path.
*   **Art:** Stretches a brush shape or object shape evenly along the path.
*   **Bristle:** Emulates the stroke of a brush with natural bristles.
*   **Pattern:** Creates a pattern of individual tiles along the path.

> **Note:** Scatter and pattern brushes create much the same effect. However, pattern brushes follow the path exactly, whereas scatter brushes do not.

Brush Stroke Removal

Just as brush strokes can be added to an object, they can also be removed. When you remove a brush stroke, you're left with a basic, plain path with the original color and width. Remove the brush stroke by selecting the object, layer, or group that has the brush stroke assigned to it. Then in the **Brushes** panel, select the **Remove Brush Stroke** button.
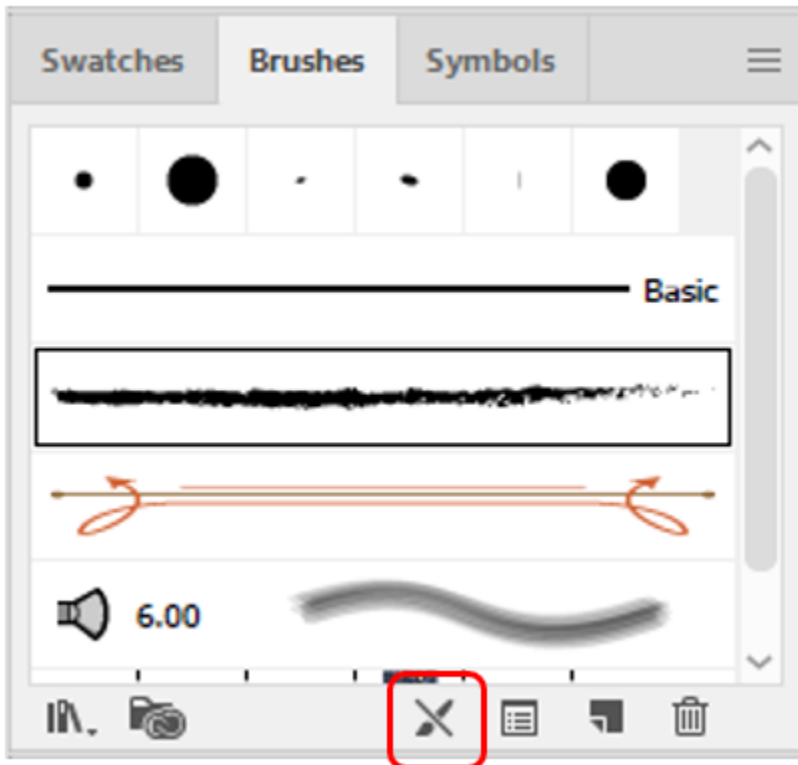
Figure 6-2: Brush stroke removal.

Conversion of Brush Strokes to Outlines

If you want to edit individual components of a brushed path, you can convert brush strokes into outlined paths. You can convert a brush stroke by using the **Object→Expand Appearance** command. Illustrator will place the components of the expanded path in a group. Inside the group are a path and a subgroup that contain the brush stroke outlines.

A brush stroke converted to outlines

Figure 6-3: Conversion of brush strokes to outlines.

Image Use in Artistic Brushes

In Illustrator, you can define a brush to contain non-vector images. You can define **Scatter**, **Art**, and **Pattern** brushes with images. You can use any image that is embedded in an Illustrator file to define the brush. Drag the desired image into the **Brushes** panel (**F5**). Then select either **Scatter**, **Art**, or **Pattern** as the type. Images contained in a brush take the shape of the brush stroke. They can bend, scale, and stretch along with the shape and type of brush stroke used.

Figure 6–4: Image use in artistic brush strokes.

There are a few considerations to bear in mind regarding the type of images that you can use:

- Large images will negatively impact speed and performance.
- You cannot use bitmap images directly; Illustrator will rasterize the bitmap to grayscale first.

Image Use in Pattern Brushes

You can use any vector or raster image to create a pattern brush. As you paint with the brush, Illustrator will create a brush stroke out of a repeating pattern of that image. You must prepare the image, masking and cropping it down to only the section you want. It's a good idea to choose a beginning and end that can line up with each other so the repeat pattern appears seamless. Many people use Adobe® Photoshop® to prepare the image.

Once you have the image ready, import it into Illustrator. You can create the pattern brush by dragging the image to the **Brushes** panel and in the **New Brush** dialog box, selecting **Pattern Brush**. You have the opportunity to change the pattern brush options and name it. You can then select the brush and apply it to your path.
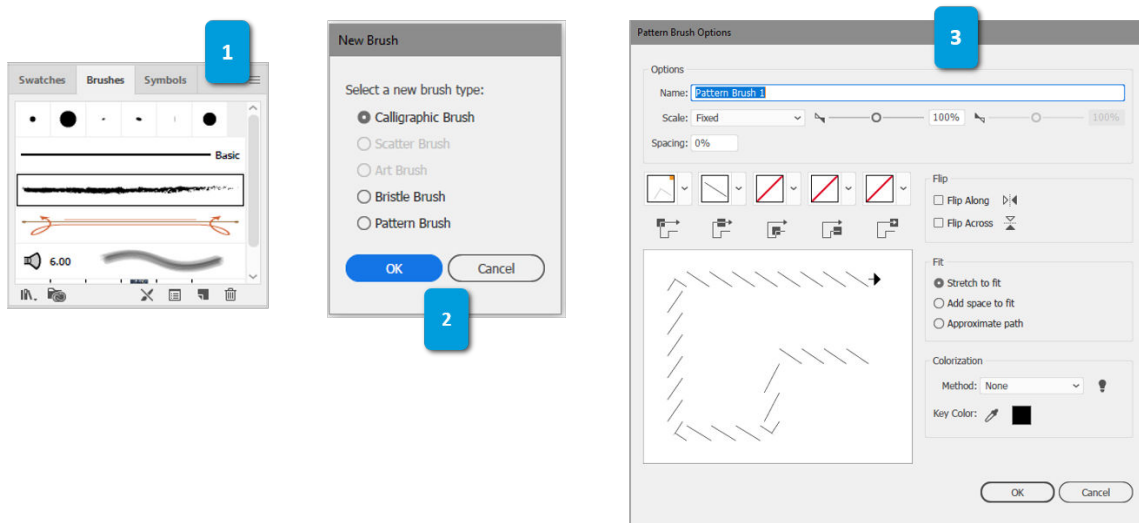
Figure 6–5: Creating a pattern brush.

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Apply Strokes and Brushes.**

ACTIVITY 6-1
Using Strokes and Brushes

Before You Begin
The **Essentials Classic** workspace is selected.

Scenario
You've been asked to come up with a custom alphabet for a line of cards, so you begin exploring different looks for the characters.

1. Create a new document with three 6-inch by 4-inch artboards.

2. Draw the first letter of a prototype alphabet.
   a) Select the first artboard and set the zoom so that it fits the screen.
   b) In the left **Tools** panel, select the **Paintbrush** tool.
   c) On the artboard, in the upper-left corner, press and hold the mouse button as you draw the first stroke of a capital letter **A**.
   d) If necessary, release the mouse button and create additional brushstrokes to complete the letter A.

3. Draw the rest of the letters of the alphabet. (Or in the interest of time, you can draw letters A, B, and C only.)
   a) With the **Paintbrush** tool, draw the letters **B** and **C**.

   > **Note:** If necessary, use **Ctrl+Z** to undo your brushstrokes, or use the **Selection** tool to select the unwanted brushstrokes and delete them.

4. Copy your work to the next artboard.
   a) With the **Selection** tool, select all the brushstrokes that you've made on the artboard.
   b) Position the mouse pointer on one of the selected strokes, right-click, and then select **Group** to group all the strokes together into one object.
   c) Press **Ctrl+C** to copy the grouped object.
   d) Select the next empty artboard.
   e) Press **Ctrl+V** to paste the grouped object.
   f) If necessary, reposition the grouped object so that it displays the lettering on the second artboard.
   g) Right-click the grouped object and select **Ungroup**.

5. Apply variable width profiles of your choice to the set of characters on the second artboard until you find the one you like best.

   a) If necessary, with the **Selection** tool, select all the letters on the second artboard.
   b) In the **Control** panel, in the **Brush Definition** drop-down list, verify that **Basic** is selected.
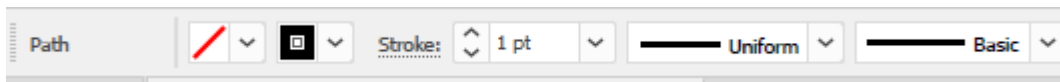
   c) From the **Variable Width Profile** drop-down list, select a profile of your choice.

   d) If desired, increase the **Stroke Weight** to make the profile more obvious.
   e) If desired, select another profile and stroke weight until you have found a combination that is best suited for your set of characters.

6. Copy the grouped alphabet from the first artboard to the third artboard.

   > **Note:** If you copied something else since originally copying the grouped brush strokes, return to Artboard 1, select the grouped object and press **Ctrl+C** to copy it again.

   a) Select the third artboard.
   b) Press **Ctrl+V** to paste the object.
   c) If necessary, reposition the object, and then ungroup the letters.

7. On the third artboard, select several brush definitions until you find one you like the best.

   a) In the **Control** panel, from the **Brush Definition** drop-down list, select a brush definition.
   b) Verify that the alphabet's stroke formatting changed.
   c) Select another brush definition and observe the results.
   d) Investigate all the brush definitions available and select the definition you like the best.

8. Use the **Stroke Weight** control in conjunction with a brush definition to customize your alphabet stroke using an additional effect.

   a) With the alphabet selected, from the **Stroke Weight** drop-down list, select a heavy stroke weight, and then observe the changes made to the alphabet.
   b) Select another stroke weight; this time, a medium stroke. Observe the changes.

9. Save the file as *My Alphabets.ai* to **C:\092033Data\Customizing Basic Shapes** and select **OK** to accept the default **Illustrator Options**.

10. Close the file.

TOPIC B

Fill Shapes

Filling in the color is one of the first things you learned as a non-digital graphic artist, so it's no secret that you need the same basic skill in the digital world. Illustrator's **Fill** tools color basic shapes. Coloration can be simple or complex in appearance. Sometimes you can use it to draw special attention to a spot in a graphical design artwork. In Illustrator, you can enhance the complexity of coloration by applying gradients, which transition colors from light to dark, or from one color to another. In this topic, you will fill shapes and apply a gradient effect to basic shapes.

Swatches

A *swatch* is a small square of color placed on a color grid or in drop-down lists. You use swatches to select colors or gradients with color tools. Swatches can also provide you with a thumbnail for the many fill patterns you can apply. You can choose a color by selecting the swatch or by entering the hexadecimal equivalent number. Color is a fundamental element of design. You will regularly add some to your digital shapes.
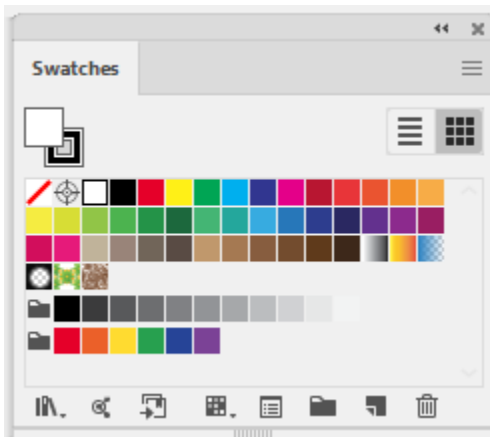
Figure 6–6: Swatches.

Opacity

Opacity is the degree to which a fill hides the visual content behind it. The more opaque a filled object, the less that can be seen behind it. You can use opacity to blend two superimposed images together, enabling the viewer to see both while focusing on one image predominantly.

Transparency describes the same phenomenon as opacity, but from the opposite end of the spectrum. If something is 100 percent transparent, its opacity is zero percent, and vice versa.

Figure 6–7: Opacity.

Libraries

A ***library*** is a collection. Illustrator's color tools possess libraries of colors, gradients, and patterns for you to use. Some libraries have descriptive names that let you know the reason for the "connectedness" of the collection. Others are more random. You can add to, modify, and delete libraries for your convenience.

Gradients

A ***gradient*** is a coloration technique that transitions from one color to another in a given direction. Some gradients are linear; that is, they go from point A to point B by gradually shifting the presence of one color with another in a very subtle, smooth way. Other gradients are radial; that is, they transition from one color inward to a central point of interest. You can also alter the angle and aspect ratio of a gradient.
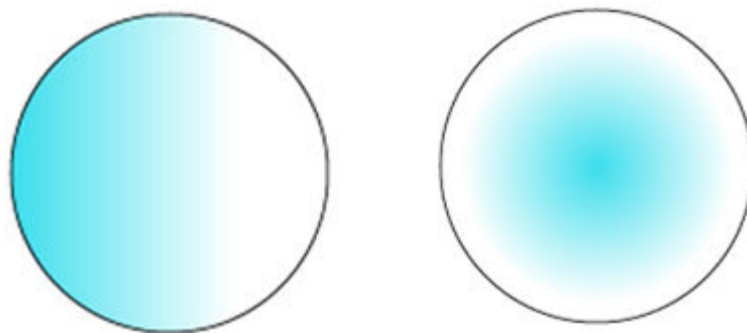
Figure 6–8: Linear and radial gradients.

Freeform Gradients

In addition to linear and radial gradients, Illustrator enables you to create ***freeform gradients***, or graduated blends of color in an ordered or random sequence. There are two modes for freeform gradients: point mode and line mode. While you can apply linear and radial gradients to an object's fill and stroke, freeform gradients can be applied only to an object's fill.

Figure 6–9: A freeform gradient.

Modified Gradients

Gradients do not have to have an utterly smooth transition between colors. Transitions can take place at different rates to achieve the desired effect.
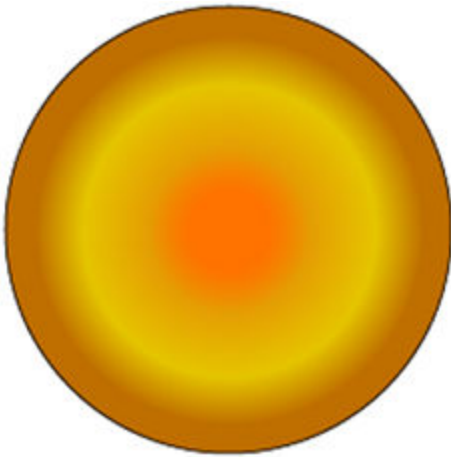
Figure 6–10: A modified gradient.

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Fill Shapes.**

ACTIVITY 6-2
Filling Shapes

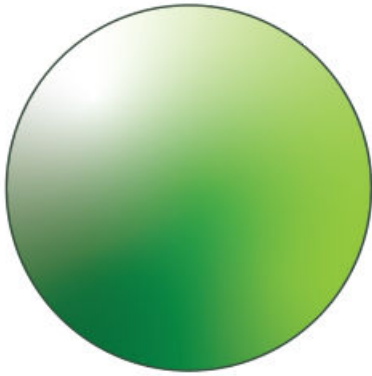### Data File

C:\092033Data\Customizing Basic Shapes\Filling Basic Shapes.ai

Scenario

You return to working on a card you started earlier, adding color to the basic shapes. You've also decided to work on providing more visual transitions between the card's components.
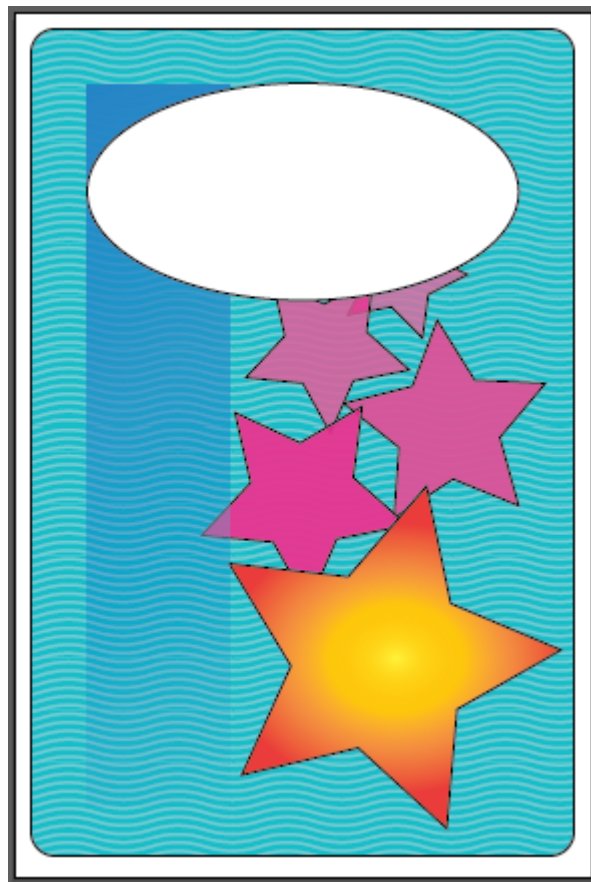
1. Open **C:\092033Data\Customizing Basic Shapes\Filling Basic Shapes.ai**.

2. Use the **Color Picker** to color the interior of the largest star with yellow.

   a) With the **Selection** tool, select the largest star at the bottom of the star cascade.

b) In the **Tools** panel, double-click **Fill** to display the **Color Picker** dialog box.

c) In the vertical spectrum, select the yellow area.
d) In the large square to the left of the spectrum, click in the upper-right corner to select the yellow with the greatest saturation.
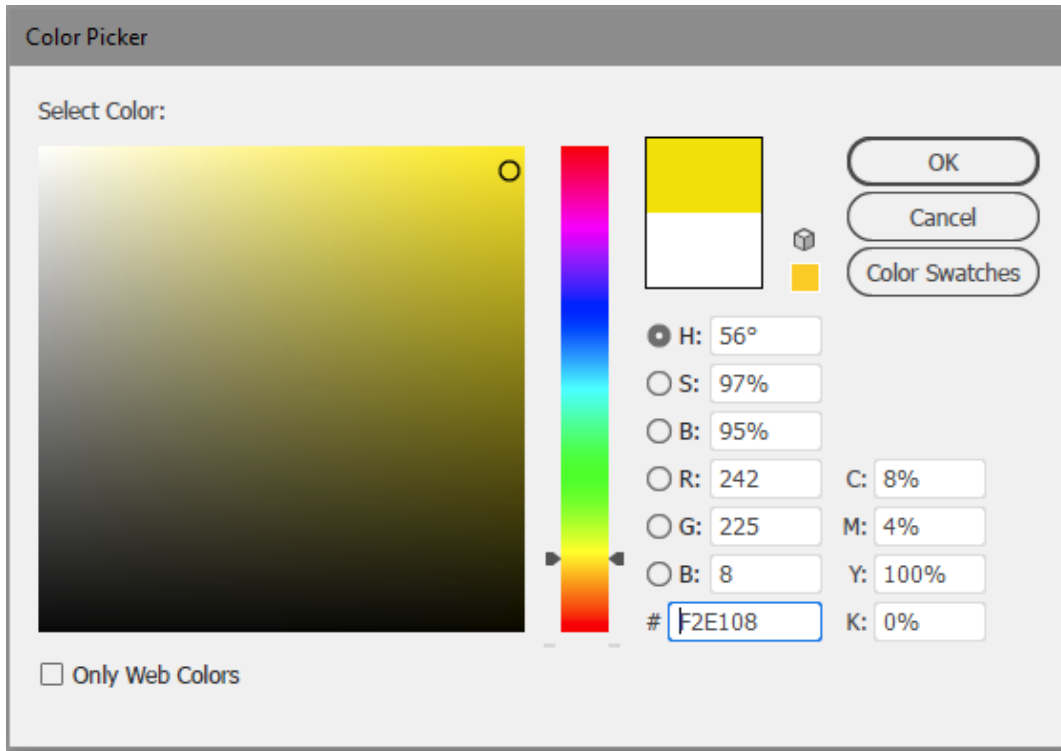
If you wish, you can make the color pure yellow by adjusting the **CMYK** settings to the following:

- C = *0*
- M = *0*
- Y = *100*
- K = *0*

e) Select **OK** to apply the fill to the star and observe the effect.
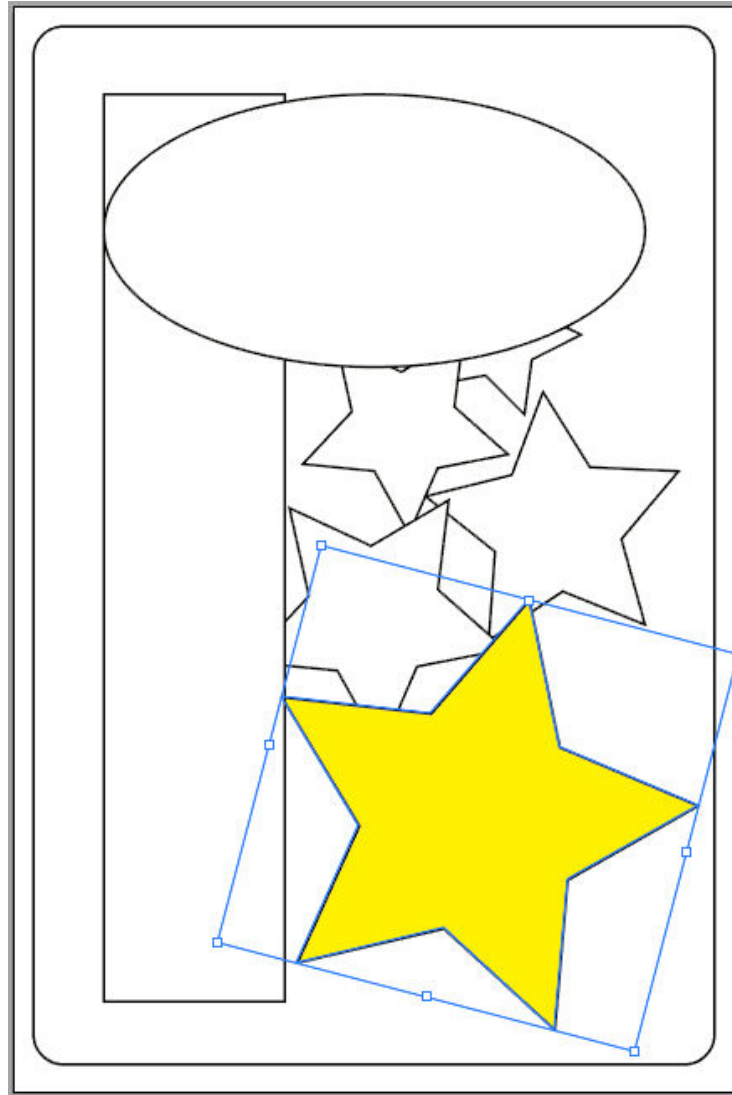
3. Color the next star yellow by using a **Color Picker** swatch.
    a) Select the next star above the large star you just filled.
    b) Double-click the **Fill** button to display the **Color Picker** dialog box.
    c) Select **Color Swatches**.
    d) From the scrollable list of colors, select **CMYK Yellow**.
    e) Select **OK** and observe the effect.

4. Apply **CMYK Magenta** to all the stars at once.
    a) Select each star while holding **Shift**.
    b) Double-click the **Fill** button to display the **Color Picker** dialog box.
    c) Select **Color Swatches**.
    d) From the scrollable list of colors, select **CMYK Magenta**.
    e) Select **OK** and observe the effect.

5. Apply the **Waves Smooth** color swatch from the **Decorative Legacy** swatch collection to the rounded background rectangle.

a) Select the rounded rectangle.
b) Select **Window→Swatches** to display the **Swatches** panel.
c) In the upper-right corner of the **Swatches** panel, select the options menu drop-down.
d) From the context menu that appears, select **Open Swatch Library→Patterns→Decorative→Decorative Legacy** to display the library containing **Waves Smooth Color**.
e) In the first row of swatches, select the right-most swatch to apply the **Waves Smooth Color** pattern and observe the effect.
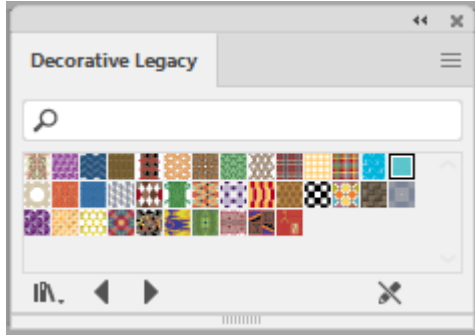
f) Close the **Decorative Legacy** swatch panel.

6. Use the **Appearance** tool to apply a violet fill to the rectangle.

a) Select the rectangle.
b) In the **Properties** panel, in the **Appearance** section, select the box to the left of **Fill**.

   If the **Appearance** section is not included under **Properties**, from the **Menu** bar, select **Window→Appearance** to display the **Appearance** panel.

c) In the third row of swatches, select the left-most swatch to apply the color and observe the effect.
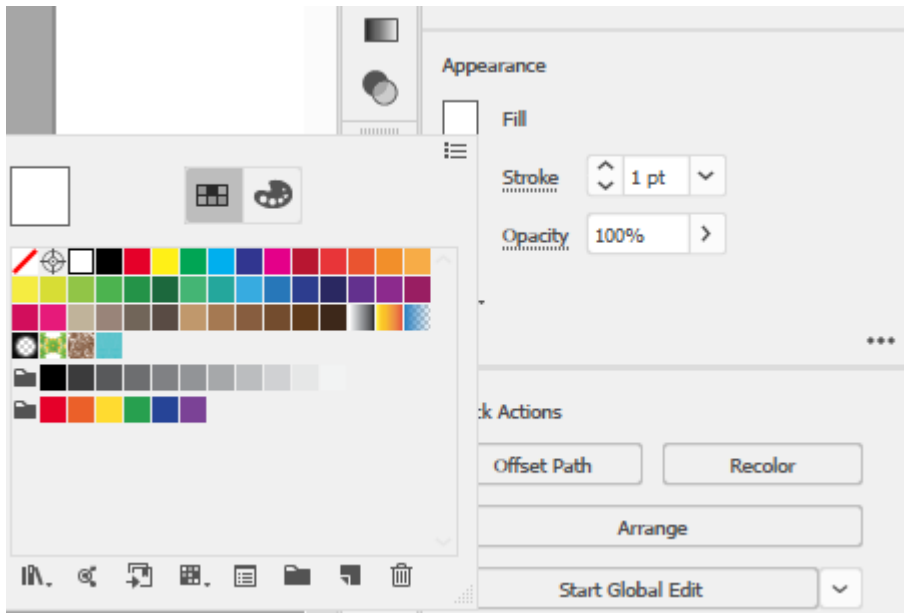
7. Change the opacity of the stars from 100 percent to 60 percent, in 10-percent increments.

a) Select the second star from the bottom.

b) In the **Properties** panel, in the **Appearance** section, select the right-facing arrow to the right of **Opacity**.
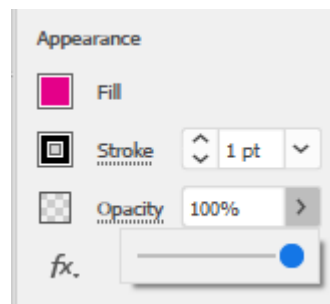
You can also type the value in the text box.

c) Adjust the **Opacity** to **90%**.
d) Select the next star up.
e) Adjust the **Opacity** to **80%**.
f) Set the opacity for the fourth star at **70%**.
g) Set the opacity for the fifth star at **60%**.

8. Apply the orange-yellow radial gradient to the largest star.

a) Select the largest star, and then, in the collapsed panel to the left of the **Properties** panel, select the **Gradient** tool.

b) In the **Gradient** panel, from the preset gradient drop-down list in the upper-left corner, select **Orange, Yellow** to change the star color to an orange-yellow linear gradient.
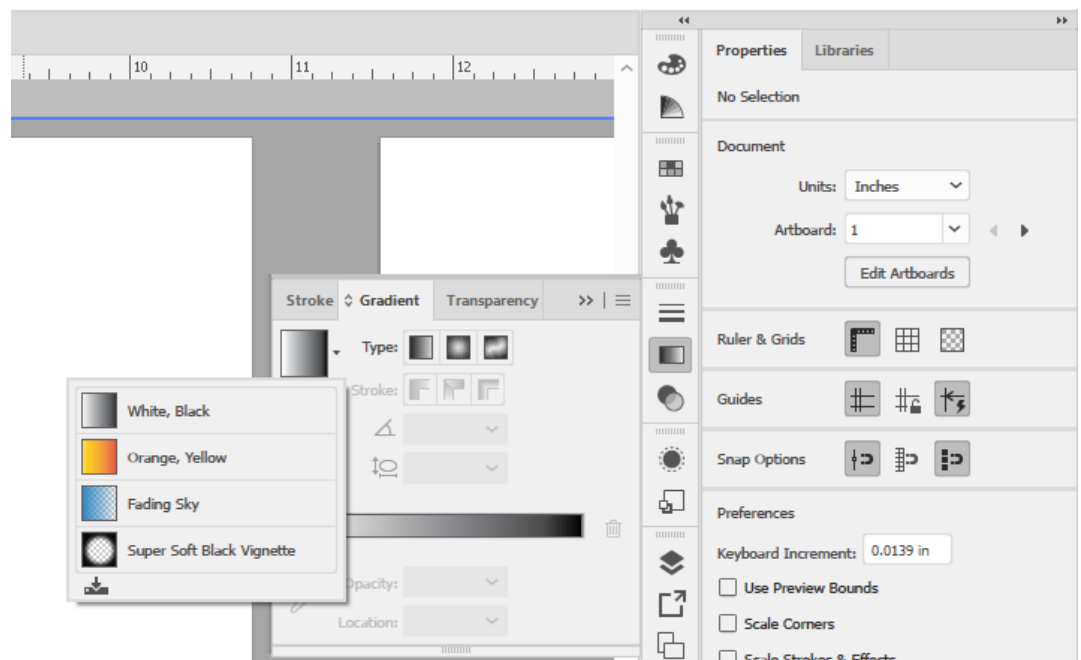
9. Change the gradient style from linear to radial, and reset the gradient slider to a different color transition scheme.

a) For the **Type**, select **Radial Gradient**.
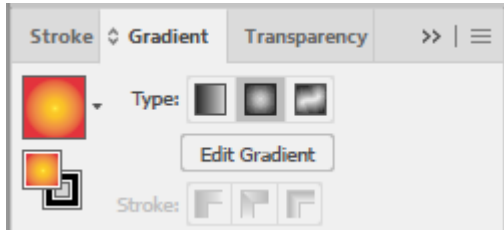
b) On the **Gradient Slider**, reposition the five sliders as desired, observing how the changes affect the color transitions in the star.

10.Set an aspect ratio and location setting of your liking.

a) On the **Gradient** tab, from the **Aspect Ratio** drop-down list select an aspect ratio.
b) If necessary, reset the aspect ratio until you find a setting you like.

c) Select any of the gradient sliders.
d) From the **Location** drop-down list, select a location setting to adjust the location of a color change.
e) Reset the location until you find a setting you like.
f) Adjust additional gradient sliders to find the look you like.

11.Apply the **Fading Sky** gradient to the long rectangle.

a) Select the rectangle.
b) On the **Gradient** tab, from the list of preset gradients, select **Fading Sky**.
c) If necessary, for the **Type**, select **Linear Gradient**.

12.Apply a gradient angle of negative 60 degrees to the rectangle's gradient and then remove the rectangle stroke color.

a) From the **Angle** drop-down list, select **-60**.

b) In the left **Tools** panel, select the **Stroke** button.
c) In the left **Tools** panel, on the **Color** tab, select the **None** button to remove the stroke.
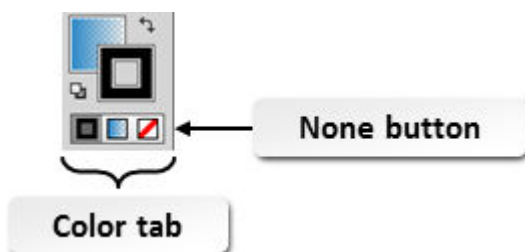
13.Save the file as *My Filling Basic Shapes.ai* and select **OK** to accept the default **Illustrator Options**.

14.Close all open files.

TOPIC C

Apply Graphics Styles

Sometimes it's fun to change things with very different visual textures instead of plain colors. Illustrator's graphic styles are a compilation of visual fields that provide lots of visual texture and patterns. In this topic, you will apply graphic styles.

Graphic Styles

Similar to color swatches, *graphic styles* are complex collections that provide visual texture and transition to the fills and strokes they inhabit. They can replicate the look of real-world objects, such as a fabric pattern, or be designs made purely within the world of digital graphic design.

Graphic styles operate the same as applying a fill or a stroke. Find the style you like, select it, and drag it onto the object. It's that simple.
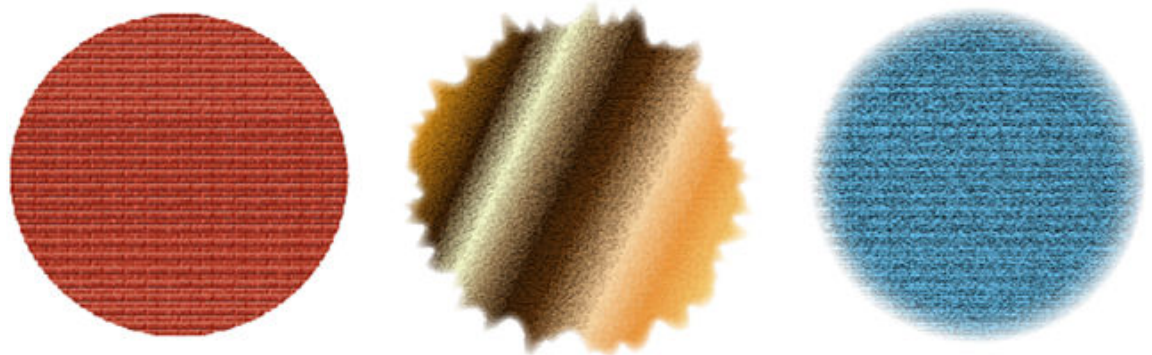
Figure 6–11: Textured and patterned graphic styles.

Graphic Style Libraries

A graphic style library is a collection of preset graphic styles. Creating and saving your own graphic style library can save you a lot of time if you need to reuse the same styling over and over again. The libraries can be found in the **Graphic Style** panel options. When you open a library, it appears in its own panel, not in the **Graphic Styles** panel. You can view and select items in a graphic style library just as you would in the **Graphic Styles** panel. However, you can't edit items, add items to, or delete items from a graphic style library. You would have to manage the items in the **Graphic Styles** panel. If you select a particular graphic style, it is placed in the **Graphic Styles** panel, and you can view its details in the **Appearance** panel.

You can create a graphic style in the **Appearance** panel by selecting the **Path** item and, in the **Graphic Styles** panel, selecting **New Graphic Style**.

> **Note:** Do not confuse **Graphic Styles** with **Symbols**. When you save a symbol in the **Symbols** panel, you are saving an entire object. When you save a graphic style, you do not save an object's shape; only its appearance.

Eyedropper Tool

There will be times when you simply want to copy the appearance of an object to another object. Rather than creating a graphic style, you can accomplish this by using the **Eyedropper** tool. By default, the **Eyedropper** tool will copy only the basic appearance of an object. This includes only

the stroke and fill. If you want to change the default settings, in the **Toolbar**, double-click the **Eyedropper** tool and then select **Appearance**, **Character**, and **Paragraph** styles, as desired. You can configure the **Eyedropper** both for what it picks up and applies.

Figure 6–12: Eyedropper tool.

📘	**Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Apply Graphic Styles.**

ACTIVITY 6–3
Applying Graphic Styles

Data File

C:\092033Data\Customizing Basic Shapes\Applying a Graphic Style.ai

Scenario

You continue working on your card design, adding graphic styles to the ellipse and a base rectangle to make the design pop.

1. Open **C:\092033Data\Customizing Basic Shapes\Applying a Graphic Style.ai**.

2. Apply the **Dusk** graphic style to the ellipse.
   a) Using the **Selection** tool, select the **Ellipse** shape.

   b) In the collapsed panels to the left of the **Properties** panel, select the **Graphic Styles** button. The **Graphic Styles** panel opens.

   c) Select the **Dusk** button.
   d) Observe that the ellipse has the **Dusk** graphic style applied.
   e) With the **Selection** tool, click anywhere in the scratch area to deselect the **Ellipse** shape.

3. In the scratch area, create a rectangle shape, apply the **Pompadour** style to it, and then place it across the bottom of the rounded rectangle area.
   a) With the **Rectangle** tool, draw a rectangle on the scratch area.

b) In the **Graphic Styles** panel, select the **Pompadour_GS** button.

c) Observe that the rectangle is filled with the **Pompadour** style.
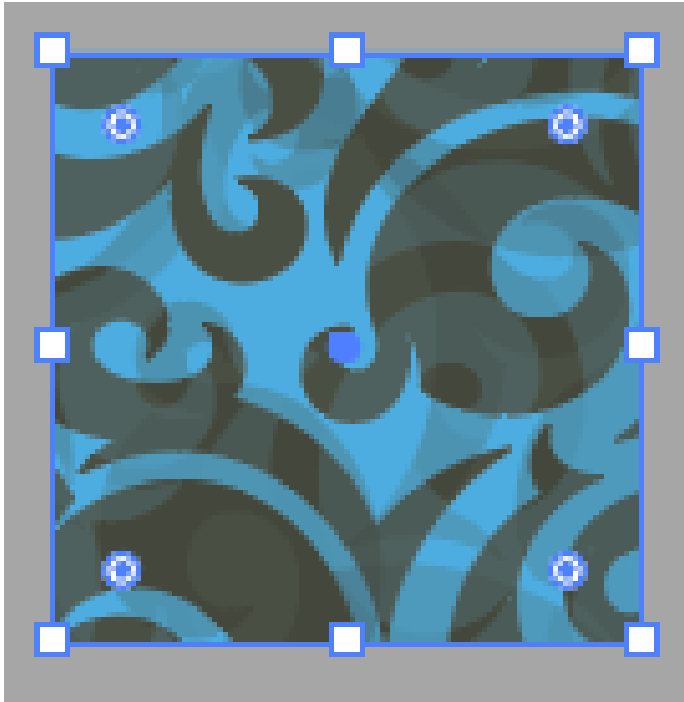
d) Use the **Selection** tool to drag and reposition the rectangle over the base of the greeting card.

e) Resize the rectangle so that it forms a base for the other shapes.

Note: You might have to adjust the zoom and then move the rectangle sides gently so that they will line up with the sides of the rounded rectangle.

4. Rearrange the rectangle so that it is behind the star but in front of the rounded rectangle background.

    a) Right-click within the interior of the rectangle, and then select **Arrange→Send Backward**.

    b) If necessary, repeat the command until you get the desired results.

	Note: Remember that the selections **Send to Back** and **Bring to Front** send the selected object all the way to the end of the layered arrangement; the selections **Send Backward** and **Bring Forward** move the selected object backward or forward one layer.

5. Save the file as *My Applying a Graphic Style.ai* and select **OK** to accept the default **Illustrator Options**.

6. Close all open files.

TOPIC D

Distort Text with Text Envelopes

The way text appears on a page can say a lot in the world of graphic design. You can bend, squeeze, expand, enlarge, shrink, and distort text in ways too numerous to imagine. In Illustrator, distorting text often occurs when you use text envelopes. In this topic, you will enter text within a text envelope and then distort the text.

Text Distortion

Text can be distorted by using the **Object→Envelope Distort** commands.

- You can convert the text into a shape by selecting **Type→Create Outlines** and then selecting an option from the **Object→Envelope Distort** submenu.
- Or you can select the text and then select an option from the **Object→Envelope Distort** submenu.

Once you have applied a distortion effect, you can grab and move the handles to further distort the shape. You can also add color and styles as desired to produce a final effect.
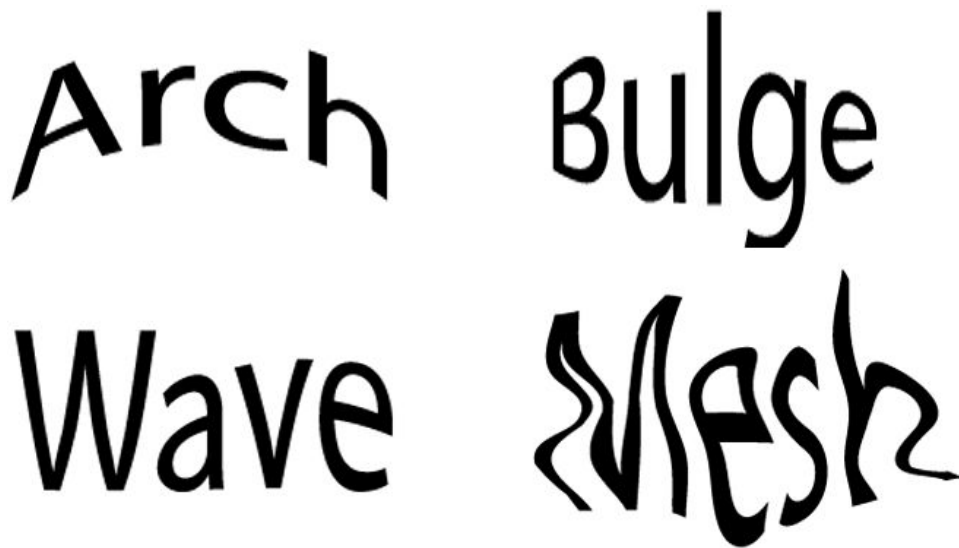
Figure 6–13: Text distortion.

> **Note:** To learn more about customizing text using envelopes, check out the Spotlight on **Customizing Text with Mesh Envelopes** presentation from the **Spotlight** tile on the CHOICE Course screen.

Text Envelopes

Text envelopes are containers in which you place text and then subsequently resize and shape them until the desired size, position, and distortion is achieved. It's common to draw a rectangle around the text to create the envelope. From there, select both objects and select **Object→Envelope Distort→Make with Top Object**. You will then be able to manipulate the envelope to distort the text.

Envelope Text Formats

Like text on a path, you can apply preset formatting to text envelopes to reshape the text within them to the desired look. You can also use a mesh, which reshapes the text by moving the crosshairs of a grid.

Figure 6-14: Text envelopes.

📘	**Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Distort Text with Text Envelopes.**

ACTIVITY 6–4
Distorting Text with Text Envelopes

Data File

C:\092033Data\Customizing Basic Shapes\Distorting Text with Text Envelopes.ai

Scenario

Now that the coloration on your card project is finished, you decide to add the text message.

1. Open **C:\092033Data\Customizing Basic Shapes\Distorting Text with Text Envelopes.ai**.

2. Add the word "YOU" in a font and coloring of your choice.
    a) Select the **Type** tool, click in the scratch area, and type *YOU*
    b) Select the text. In the **Control** panel, from the **Font** drop-down list, select a font.
    c) Select the **Fill** button on the **Control** panel and select a CMYK color swatch of your choice.
    d) From the **Font Size** drop-down menu, select a large enough font size so you can see the effect.
    e) Deselect the text to verify that all changes have been made, and then reselect the text.

3. Apply an envelope that distorts the text with an effect of your choice.
    a) Select the **Selection** tool and then verify that the text displays selection handles.
    b) On the **Menu** bar, select **Object→Envelope Distort→Make with Warp** to display the **Warp Options** dialog box.
    c) From the **Style** drop-down list, select an effect.

d) Select **OK**.

4. Place the text in the large ellipse and fit the text along the interior perimeter with an appropriate margin.
   a) With the **Selection** tool, drag the text object into the large ellipse.
   b) Use the text object's selection handles to resize the text to fit inside the ellipse.

5. Create a similar text object with the word "ARE" in it, apply a different text envelope style and color, and then place it in the third highest star.
   a) With the **Type** tool, in the scratch area, type *ARE*
   b) Apply a font and change the color of the text.
   c) Select a font style: bold, italic, bold italic, or regular.
   d) Select the **Selection** tool.
   e) Select **Object→Envelope Distort→Make with Warp**.
   f) In the **Warp Options** dialog box, select the **Preview** check box and adjust the settings as desired until you get an effect you like.
   g) Select **OK** to apply the warp options and close the dialog box.
   h) With the **Selection** tool, drag the text object into the middle-right star.
   i) Use the text object's selection handles to resize the text to fit inside the star.

6. Create another text object with similar formatting, enter the text "MY" in it, apply another style to it, and place the text in the star next to the bottom star.
   a) Create a text object with the text *MY* in it.
   b) Color the text white and apply a font of your choice.
   c) Apply another text envelope style to the text.
   d) Move the text inside the star.

7. Create a custom mesh distortion and place the word "STAR" in the large star at the bottom.
   a) Type the word *STAR* and then apply a font and color.
   b) Select the **Selection** tool.
   c) Select **Object→Envelope Distort→Make with Mesh** to display the **Envelope Mesh** dialog box.
   d) In the **Envelope Mesh** dialog box, enter *6* in **Rows** and **Columns**. Then select **OK** to create the envelop mesh and close the dialog box.
   e) With the **Selection** tool, move the text object and center it in the large star.

8. Apply a custom mesh distortion.
   a) Select the **Direct Selection** tool.
   b) Observe the white squares at the intersections of the grid. These squares are anchors.
   c) Select the anchor at the bottom of the letter S. Release the mouse button.
   d) Drag the anchor at the bottom of the letter S downward toward the bottom of the star.
   e) Continuing to work with the **Direct Selection** tool, select and drag other anchors so that the word inflates into the star shape. (This will take some time.)

9. Save your file as *My Distorting Text with Text Envelopes.ai* and select **OK** to accept the default **Illustrator Options**.

10. Close all open files.

Summary

In this lesson, you customized basic shapes. With Illustrator's many formatting tools that operate on basic shapes, you can create a multitude of beautiful, engaging designs from simple geometric objects.

Which of the formatting tools explored in this lesson did you like the most? The least? Why?

Which of the formatting tools do you think will be the most valuable to you in your work? Why?

Note: Check your CHOICE Course screen for opportunities to interact with your classmates, peers, and the larger CHOICE online community about the topics covered in this course or other topics you are interested in. From the Course screen you can also access available resources for a more continuous learning experience.

7 | Preparing Documents for Deployment

Lesson Time: 30 minutes

Lesson Introduction

Once you've done the creative work, the practical part is ahead of you: where the content will go and how it will be used. Adobe® Illustrator® has a nice array of tools you can use to optimize the content you create in most delivery modalities, on and off the Internet. In this lesson, you will prepare documents for deployment.

Lesson Objectives

In this lesson, you will:

- Update text.
- Wrap text.
- Hyphenate text.
- Optimize content for print.
- Optimize content for the web.
- Optimize content for PDF documents.

TOPIC A

Update Text

As a graphic artist, you may have an eye for artistic detail, but tying up the loose ends with regard to text may be another matter. Fortunately, Illustrator has several tools you can use to spot misspelled words, even for topics with a lot of technical jargon. In this topic, you will update text.

Find and Replace

Find and Replace, an editing tool used in word-processing applications, enables the user to locate characters or words in a body of text so that they may be removed or replaced by other characters or words. Using **Find and Replace** avoids the tedious work of locating and modifying text characters by hand.
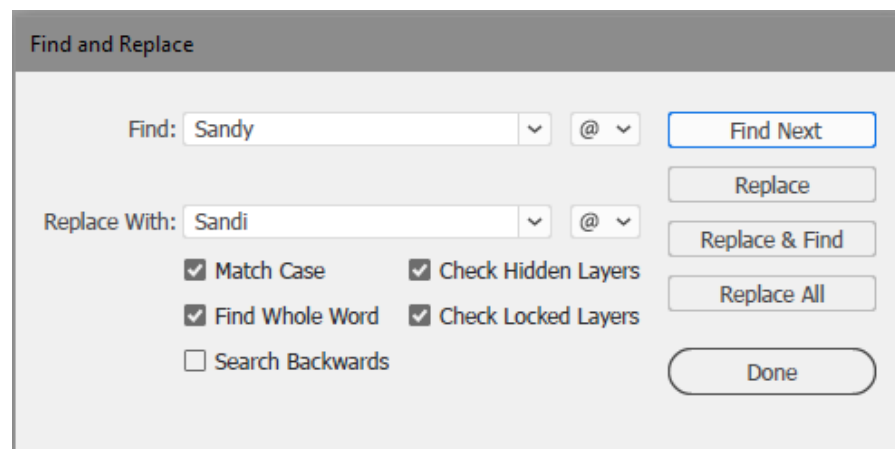

Figure 7–1: Find and Replace dialog box.

Find and Replace Options

Find and Replace has several options:

- Locating characters and words that contain specific uppercase and lowercase lettering.
- Locating and replacing a series of characters that constitute an entire word, while leaving the same sequence of characters that are part of larger words alone.
- Locating and replacing special characters (some glyphs) as well as non-printing characters (such as a space).
- Directional searching—searching from the cursor to the top of the document, or from the cursor to the bottom of the document.
- Searching parts of an Illustrator document that cannot be seen or are unavailable for editing (locked).

Check Spelling

Check Spelling is an editing feature used in most word-processing applications in which a block of text is checked against a dictionary of correctly spelled words in the computer's memory. Each word in the text block is checked against the dictionary list; if a match is not made, the user is notified by a message that a misspelled word has been found.
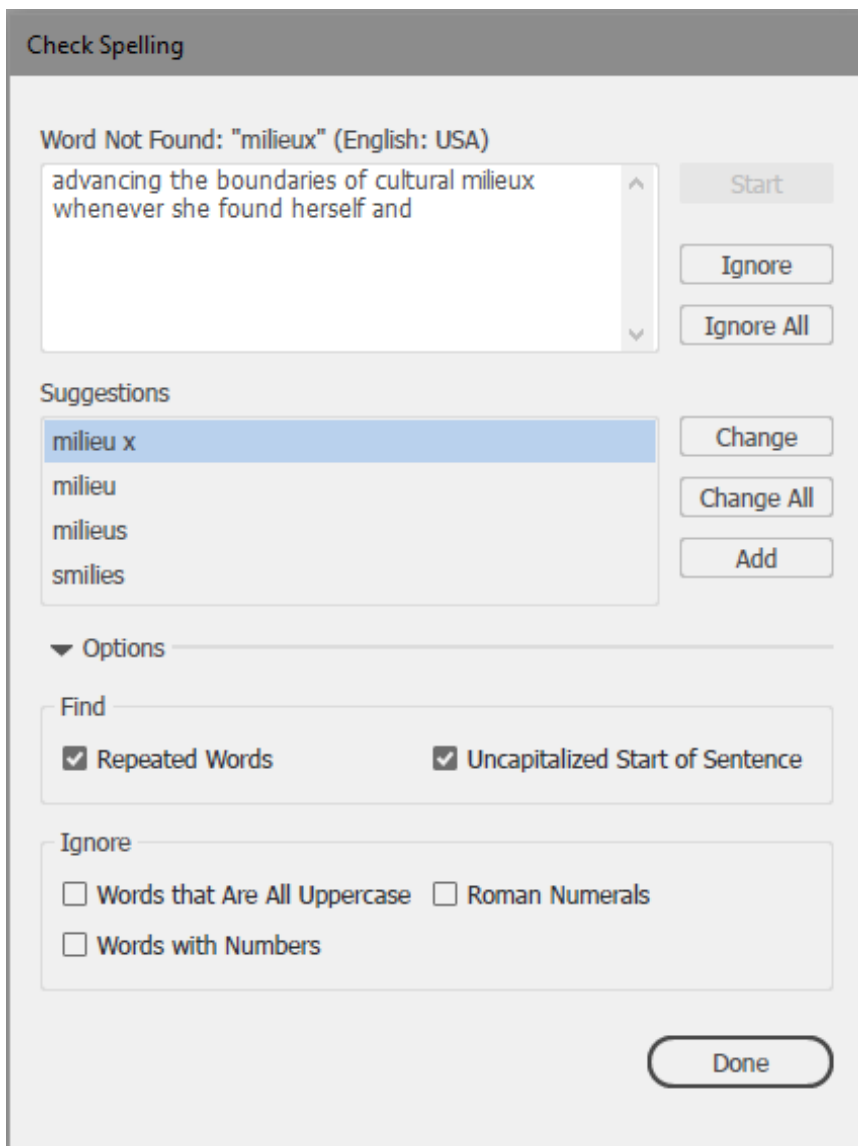
Figure 7–2: Check Spelling dialog box.

Check Spelling Options

In Illustrator, the **Check Spelling** dialog box offers options for each misspelled word:

- Select from a list of possible correct words to replace the misspelled word.
- Ignore (leave alone) the word noted as misspelled, either for the immediate instance of the word only or the immediate instance of the word and all other instances of the word in the text block.
- Add the word noted as misspelled as a correctly spelled word in the dictionary list.

Auto Spell Check

If you enable **Auto Spell Check**, words that regular spell check would find when you run spell check are identified as you work. A red wavy line is placed under words not found in the standard or custom dictionaries, repeated words, and uncapitalized words at the start of a sentence.

Custom Dictionaries

A *custom dictionary* is a list of words used by a spell-checking editing function that includes all correctly spelled words, as well as a list of words that would otherwise be considered misspelled.

With custom dictionaries, you can conveniently develop a master list of words for a particular subject matter, such as artistic terms or acronyms, so that you can easily check nonstandard words for correctness.

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Update Text.**

ACTIVITY 7–1
Updating Text

Data File

C:\092033Data\Preparing Documents for Deployment\Updating and Preparing Text.ai

Scenario

You have been working on one of your firm's Artist Series line of cards. Each card in the series features the artists' work on the front, with the artist's bio and picture on the back.

You must proof the artist's bio. A colleague mistakenly used the wrong spelling for her first name, so you must change all instances of "Sandy" to "Sandi," as well as perform other tasks.

1. Open **C:\092033Data\Preparing Documents for Deployment\Updating and Preparing Text.ai**.

2. Convert the rectangular text area into a triangle.
   a) Verify that artboard 5 is showing.
   b) With the **Selection** tool, select the text object.
   c) From the **Pen** tool menu, select the **Delete Anchor Point** tool.
   d) Select the anchor point in the upper-left corner of the text object to convert it to a triangle.

3. Change all instances of "Sandy" to "Sandi."

    a) Select **Edit→Find and Replace** to display the **Find and Replace** dialog box.

    b) In the **Find** text box, type *Sandy*

    c) In the **Replace** text box, type *Sandi*

    d) Check the **Find Whole Word** check box.

    e) Select **Find** to find the first instance of the word "Sandy."

> **Note:** You might want to move the **Find and Replace** dialog box so you can see the selected text.

    f) Select **Replace All**. Observe the message that four changes were made.
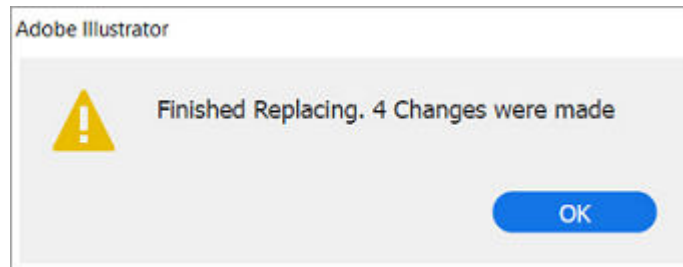
    g) Select **OK**.

    h) Select **Done** to close the **Find and Replace** dialog box.

4. Check the spelling.

    a) Place the cursor at the top of the document.

    b) Select **Edit→Spelling→Check Spelling**.

    c) In the **Check Spelling** dialog box, select **Start**.

    d) With each word found except "mathamatical," select **Ignore**.

    e) When "mathamatical" is found, verify that **mathematical** is selected in the **Suggestions** list box, and then select **Change** to change it to the correct spelling.

    f) When the spell check is finished, select **Done** to close the **Check Spelling** dialog box.

5. Save your file as *My Updating and Preparing Text.ai* and select **OK** to accept the default **Illustrator Options**.

6. Close all open files.

TOPIC B

Wrap Text

You have some skill in working with graphics and with text, but aren't sure what will happen when you want to come up with ideas where the two interact with each other on the artboard. Illustrator has tools that enable you to place graphics and words in close proximity without having to worry about making sure that one doesn't hide or get hidden by the other. In this topic, you will wrap text.

Text Wrapping

Text wrapping refers to arranging an object and block of text so that the characters and the image do not obscure each other. With it, you can place graphics and other objects in the midst of a text block and wrap the text around the object so that the text is readable, and the object is plainly visible. Text wrapping can result in a visually interesting relationship between text and graphics.

Text Wrapping Around Different Graphic Types

Because Illustrator develops vector graphics, its primary tool for applying text-wrap formatting to a graphical object works specifically with vector graphics, not raster graphics. If you provide text wrapping for raster images, you must first envelop the image within a closed path, which forms a vector-like perimeter that you can then apply text-wrap formatting to.

Figure 7–3: Text wrapping around different graphic types.

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Wrap Text.**
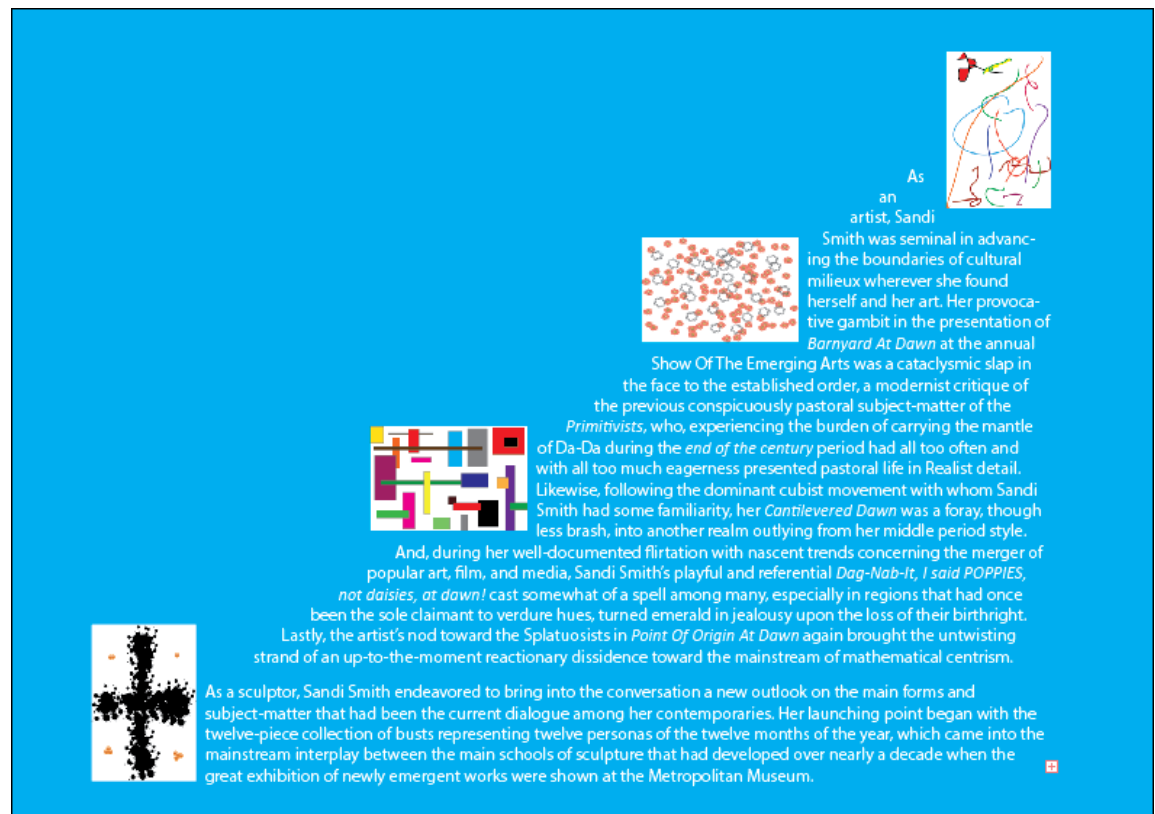
ACTIVITY 7–2
Wrapping Text

Data File

C:\092033Data\Preparing Documents for Deployment\Wrapping Text around Graphics.ai

Scenario

You plan to create indents along the hypotenuse of the text triangle to display the artwork in the card series.

> **Note:** Refer to the image presented here as you work through this exercise.

1. Open **C:\092033Data\Preparing Documents for Deployment\Wrapping Text around Graphics.ai**.

2. Prepare the four graphics for the back side of the card.

   a) If necessary, set the zoom to **25%** so you can see all five artboards at once.
   b) With the **Selection** tool, select the graphic in artboard 1, and then select **Edit→Copy**.
   c) Deselect the graphic and then select **Edit→Paste** to paste the copy.
   d) Move the copy to the scratch area and resize it to **1.5** inches tall by **1** inch wide.

e) Copy the graphic on artboard 4 and resize it to **1.5** inches tall by **1** inch wide.

f) Copy the graphics on artboards 2 and 3 and resize them to **1** inch tall by **1.5** inches wide.

g) Move the small copies of the graphics to the scratch area above artboard 5.

3. Position the graphics on artboard 5 as shown in the scenario.

a) Select artboard 5 and reset the zoom to **66.67%**.

b) Move the abstract "plus sign" graphic to the left base of the text triangle so that it covers up the text behind it.

c) Move the "colored squares" graphic up and to the right of the first graphic, covering up the text behind it.

d) Move the "floral" graphic up and to the right of the second graphic, covering up the text behind it.

e) Move the "swirly abstract" graphic to the top corner of the text triangle, covering up the text behind it.

f) Reset the artboard zoom to **Fit On Screen**.

4. Set text wrapping for the four graphics.

a) With the **Selection** tool, select the four graphics while holding **Shift**.

b) Select **Object→Text Wrap→Make**.

c) Click in the scratch area to deselect the graphics.

d) Verify that the text now wraps around the graphics.

e) If necessary, reposition the graphics to improve the appearance of the wrapping.

5. Save your file as *My Wrapping Text around Graphics.ai* and select **OK** to accept the default **Illustrator Options**.

6. Close all open files.

TOPIC C

Hyphenate Text

You know how to work with text blocks, but aren't sure how to make them conform as closely to a geometric shape as they can get. Splitting long words up into smaller pieces at the right margin helps to reduce a ragged look. In this topic, you will hyphenate text.

Hyphenation Overview

Hyphenation refers to the practice of reducing the raggedness of a text block's margin by splitting words at the end of the line, inserting a hyphen, and flowing the rest of the word's syllables on the next line. Hyphenation editing tools undertake the process of hyphenating a block of text by splitting words apart based upon a series of rules that define how often words should be hyphenated.

Goals of Hyphenation

The two main goals of hyphenation are mutually exclusive, so sometimes they conflict:

* Achieve a compact, even margin on both sides of a text block.
* Minimize the number of hyphenated words.

> **Note:** Adobe Illustrator uses the same hyphenation rules as Adobe® InDesign®.

Text Hyphenation

Hyphenation options determine if words can be hyphenated and what breaks are permitted. There are two ways to configure text hyphenation in Illustrator:

* Adjust automatic hyphenation settings.
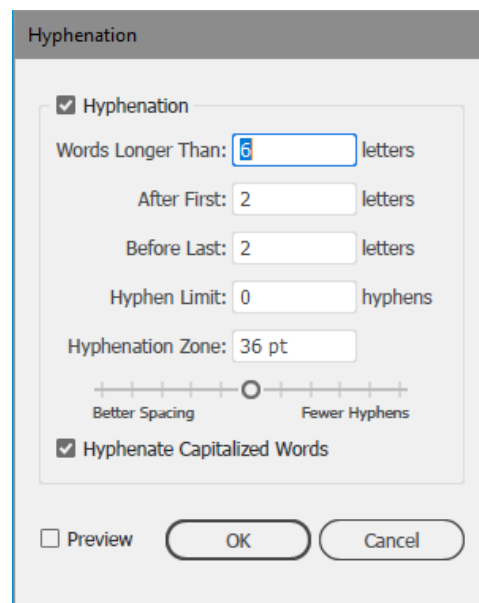* Use the hyphenation dictionary.

Figure 7–4: Hyphenation dialog box.

You can configure automatic hyphenation in the **Paragraph** panel. You can also select specific paragraphs to apply hyphenation to. Configuration options include the following.

Option	Description
Words Longer Than _ Letters	Specifies the minimum number of characters for a word to be hyphenated.
Before Last _ Letters **After First _ Letters**	Specifies the minimum number of characters before or after the hyphen. For example, if you set the value to 3, the word **aromatic** would be hyphenated as **aro-matic** instead of **ar-omatic** or **aromat-ic**.
Hyphen Limit	Specifies the maximum number of consecutive lines that can have hyphenation. Zero means an unlimited number of lines have a hyphen at the end.
Hyphenation Zone	Specifies a distance from the right edge of a paragraph, identifying a portion of the line that does not allow hyphenation. Setting the value to **0** allows all hyphenation. (This option applies only when using the **Adobe Single-line Composer**.)
Hyphenate Capitalized Words	Specifies whether or not capitalized words may be hyphenated.

Hyphenation settings apply only to Roman characters. Unicode (double byte) character sets such as Chinese, Japanese, and Korean are not hyphenated.

Hyphenation Dictionary

Illustrator determines when to hyphenate words by using proximity language dictionaries. A proximity language dictionary breaks up words into their base components so it is easier to check the spelling and hyphenate every variation of a word. With these dictionaries, you can specify a different language on any amount of text, down to a single character. You can select a default dictionary and customize the dictionary in the **Preferences** dialog box. Configure the **Hyphenation Dictionary** by selecting **Edit→Preferences**. You can choose a default dictionary and set a default language. You can further configure it by adding or deleting words that are exempt from the dictionary.
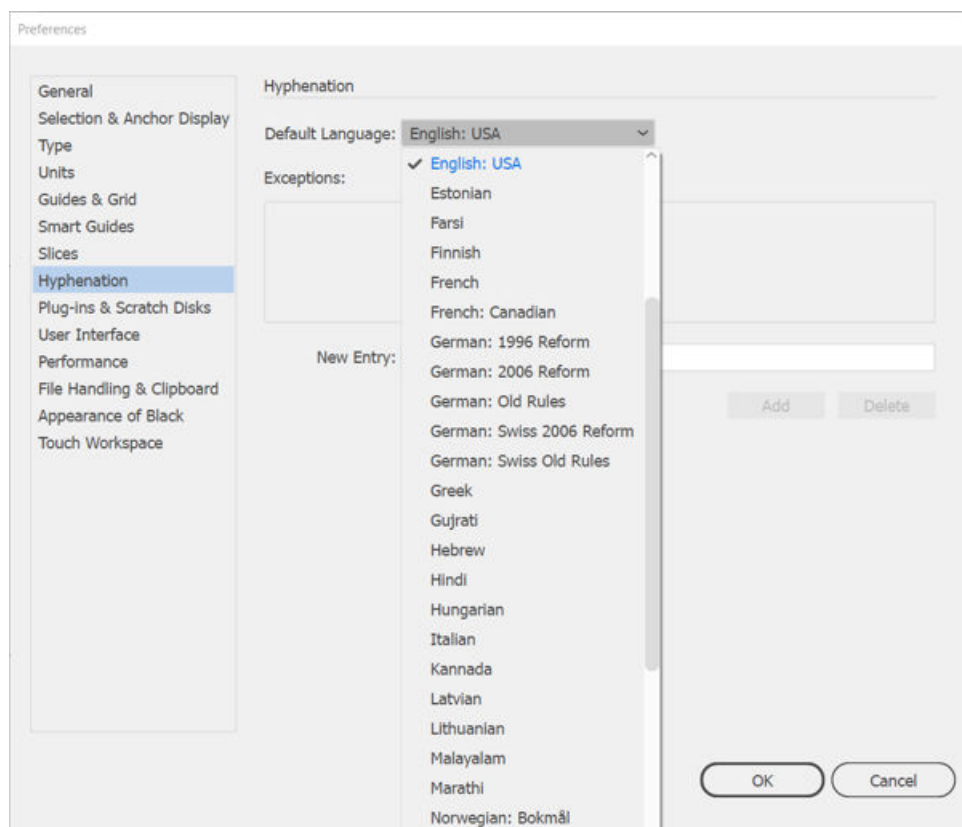
Figure 7–5: Hyphenation settings.

|	Access the Checklist tile on your **CHOICE** Course screen for reference information and job aids on How to Hyphenate Text.

ACTIVITY 7–3
Hyphenating Text

Data Files

C:\092033Data\Preparing Documents for Deployment\Hyphenating and Justifying Text.ai

C:\092033Data\Preparing Documents for Deployment\artist headshot.jpg

Scenario

Now that the graphics are placed in indents in the text area, you decide to concentrate on getting the text itself to look as triangular as possible.
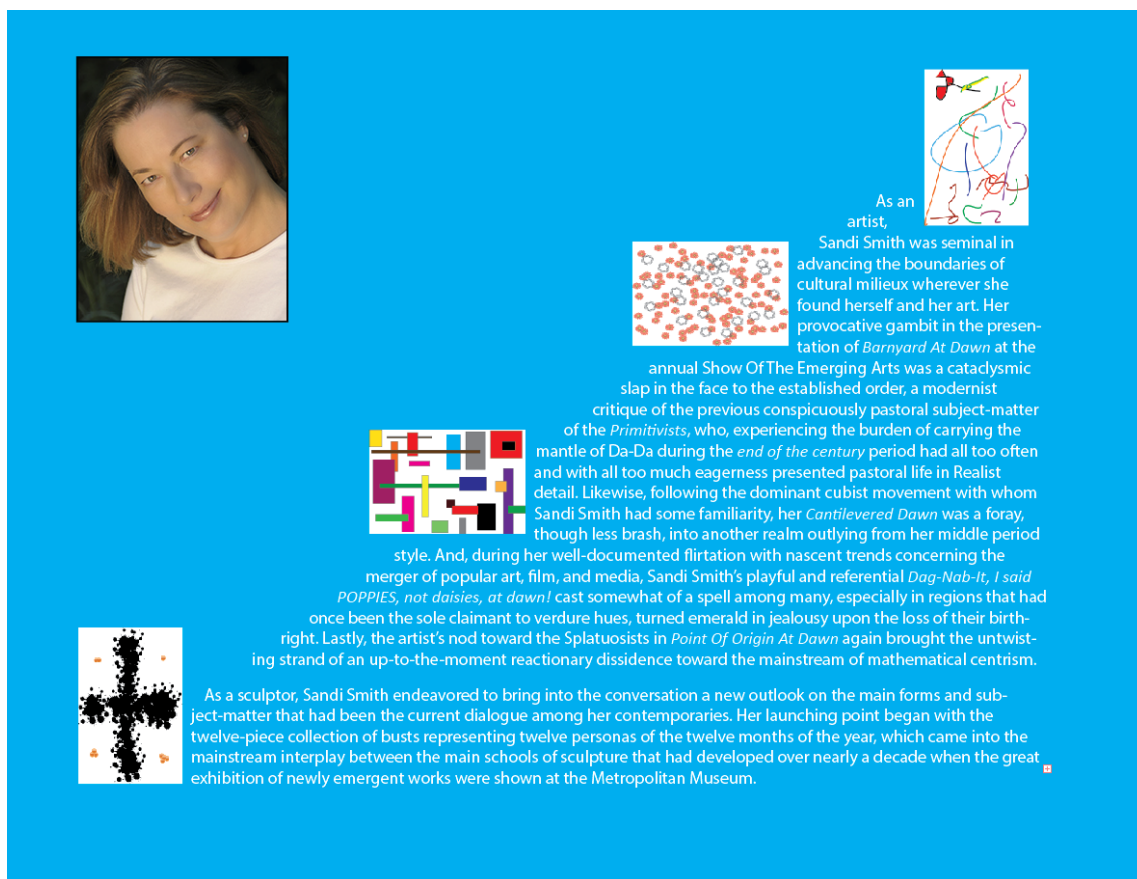
Note: Refer to the image presented here as you work through this exercise.

1. Open **C:\092033Data\Preparing Documents for Deployment\Hyphenating and Justifying Text.ai**.

2. **Set the hyphenation to improve the ragged right margin of the triangular text area.**

   a) Select the text object on artboard 5.

   b) In the **Control** panel, select **Paragraph** to display the **Paragraph** panel.

   c) Uncheck **Hyphenate**, while noticing the change in the text's right margin.
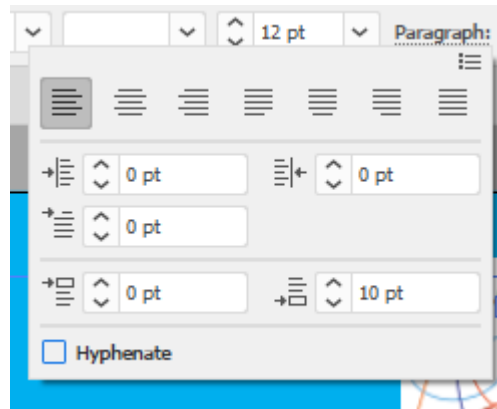
   d) Verify that the right margin is more ragged without hyphenation, and then turn hyphenation back on by checking **Hyphenate**.

   e) In the upper-right corner of the **Paragraph** panel, select the **Options** button and then select **Hyphenation** to display the **Hyphenation** dialog box.


   f) In the **Hyphenation** dialog box, move the slider all the way to the left to increase the hyphenation effect.
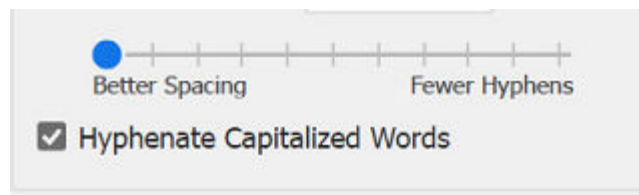
   g) If necessary, move the **Hyphenation** dialog box away from the text area so you can see the text.

   h) Check **Preview** to see how the text flow changes with the new hyphenation settings.

   i) Select **OK** to close the **Hyphenation** dialog box.

3. **Set the text alignment to justify the text across the triangular region.**

   a) If necessary, with the **Selection** tool, select the text area.

   b) If necessary, in the **Control** panel, select **Paragraph** to display the **Paragraph** panel.

c) Select the **Justify with last line aligned left** button.
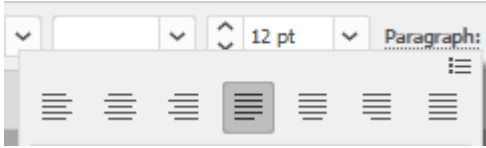
d) Verify that the text now fills the triangular area completely.

e) If necessary, relocate the graphics to align them with the text more attractively.

f) Close the **Paragraph** panel by clicking in the scratch area.

4. Place the artist's headshot in the upper-left corner of the artboard.

a) Select **File→Place**.

b) In **C:\092033Data\Preparing Documents for Deployment**, select **artist headshot.jpg**.

c) Select **Place** to place the headshot and close the **Place** dialog box.

d) Resize the headshot to an appropriate size.

e) Drag the graphic to the upper-left corner of the artboard.

5. Save your file as *My Hyphenating and Justifying Text.ai* and select **OK** to accept the default **Illustrator Options**.

6. Close all open files.

TOPIC D

Optimize Content for Print

In today's digital graphics world, not only do you need to have talent for working on the creative front end, but also the practical knowledge for ensuring that what you do will work well with the back end. Illustrator's optimization features for print help you to meet the back-end requirements of getting your creative work from your screen to the printed page. In this topic, you will optimize content for print.

Print File Format for Images

Print file formats for images break into two main protocols or image specifications:

- The *Tagged Image File Format (TIFF)* stores images: raster images and vector images. Owned by Adobe, TIFF has been used since the days of desktop publishing. The TIFF image specification has not been updated since 1992.
- *Encapsulated PostScript® (EPS)* graphics are PostScript files describing graphical objects inside another PostScript file.

Principles of TIFF File Optimization

When preparing TIFF files for printing, address each of the following:

- **File color model:** The file color model might be CMYK, RGB, or grayscale. If you know the color model your press will use, have your TIFFs conform to it.
- **Resolution and document purpose:** Key graphics may require a high resolution. For other graphics, a lower resolution will suffice. A higher resolution results in larger file sizes.
- **File size:** Very large file sizes can result in slow system performance. LZW compression can help reduce file size while maintaining image clarity.
- **Image borders:** Some designs require exact and visible image borders. Anti-aliasing can make graphic edges appear cleaner and more natural in relation to the background.
- **Color management:** If you need to manage colors, you can embed ICC profiles in your images.

Each of these issues can be addressed in the **TIFF Options** box that appears when you save a TIFF file.

Principles of EPS File Optimization

Successfully working with and optimizing EPS files involves paying attention to dynamics and circumstances involved in the print process:

- Pay attention to versioning. If you are working with legacy Illustrator files, you might want to save the EPS files you're updating or developing to match the rest of the graphics in the job. This will help keep everything on an even keel in the printing process, but the down side is that you might lose functionality by going back in time to an earlier version of Illustrator.
- Determine whether the print job will need a preview image of the EPS file. The EPS format does not render in many circumstances, so in place of the actual graphic is a thumbnail in a different, more user-friendly format. If you think you'll need to see a preview of the image, be sure to include the thumbnail with the **Preview** setting; if you do not think you'll need a preview of the image, then do not include the thumbnail, as this saves on file size and possible complications that might arise from extra detail.

- Will the file need to have transparency? In layout, a non-transparent background can sometimes mess up an otherwise flawless design concept, so to keep unintended background colors from encroaching on the space needed by another object, use transparency settings.
- Will the graphic need fonts? If so, you might consider embedding the fonts in the graphic instead of relying on the chance that the printing system will furnish them.
- Pay attention to options affecting linking, versioning, and legacy. You might need to embed linked graphics, create thumbnails, and ensure that you have backward-compatibility to print such things as gradients, meshes, and PostScript protocols.

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Optimize Content for Print.**

ACTIVITY 7-4
### Optimizing Content for Print

Data File
C:\092033Data\Preparing Documents for Deployment\Exporting to the TIFF and EPS Formats.ai

Scenario
You've finished the back page and now need to output the graphics for the marketing department, who will use the page in print advertising.

1. Open **C:\092033Data\Preparing Documents for Deployment\Exporting to the TIFF and EPS Formats.ai**.

2. Export your work into TIFF format.
   a) Select **File→Export→Export As**.
   b) If necessary, in the **Export** dialog box, navigate to **C:\092033Data\Preparing Documents for Deployment**.
   c) In the **File name** box, enter *My Exporting to the TIFF and EPS Formats*
   d) From the **Save as type** drop-down list, select **TIFF (*.TIF)**.
   e) Under the **Save as type** drop-down list, check **Use Artboards**, select the **Range** option, and in the text box, type *5*
   f) Select **Export**.
   g) In the **TIFF Options** dialog box, verify that **CMYK** is selected as the **Color Model** and that the current **Resolution** setting is **High (300 ppi)**.
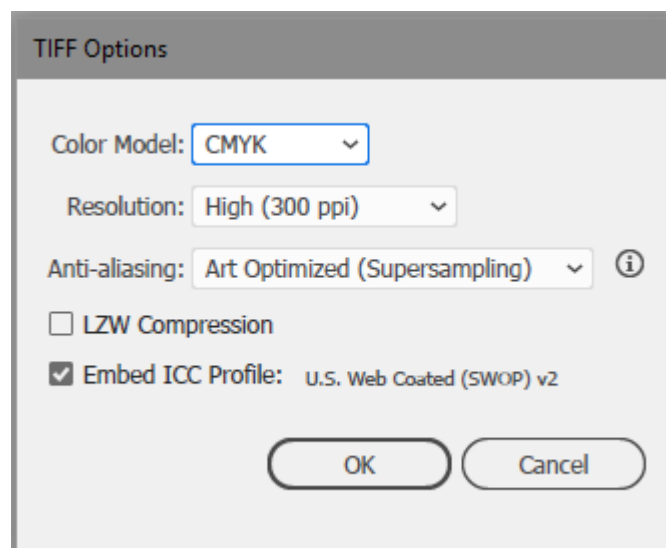
   h) Select **OK**.

3. Export your work into EPS format.
   a) Select **File→Save As**.

b) In the **Save As** dialog box, verify that **C:\092033Data\Preparing Documents for Deployment** is listed as the destination.

c) In the **File name** box, enter *My Exporting to the TIFF and EPS Formats*

d) From the **Save as type** drop-down list, select **Illustrator EPS (*.EPS)**.

e) Under the **Save as type** drop-down list, verify that **Use Artboards** is checked, and if necessary, set the **Range** option, to *5*.

f) Select **Save**.

g) In the **EPS Options** dialog box, select **OK** to accept the default options and save the file in EPS format.

h) Keep the file **Exporting to the TIFF and EPS Formats.ai** open. You will use it in the next activity.

i) Close all other files.

TOPIC E

Optimize Content for the Web

Let's face it, the web channel is a huge customer for graphic design, especially digital graphic design. Illustrator's optimization features for web-oriented graphics keep you from having to be overly focused on the dry technical requirements of optimizing graphics so you can keep your mind on the important part: creating beautiful images. In this topic, you will optimize content for the web.

Principles of Web Graphics

When it comes to displaying graphics on the web, two opposing dynamics must unite and support a single solution:

- The graphics must look good, have clarity, and have sharp resolution.
- The graphics must have as small a file size as possible to minimize the time it takes to transfer them from the server to the viewer's browser.

The more important having a sharp image is, the more of a case you can make for having a larger file size. The less important the image, the greater the chance that it will assume a file format that portrays the image by using the smallest possible file.

Common Web Graphic Formats

There are a handful of common formats for web graphics:

- JPG (Joint Photographic Experts Group) is a commonly used lossy method of compression for digital photography; it can achieve 10:1 compression ratios with minimal perceptible loss in image quality.
- PNG (Portable Network Graphics) is the standard recommended by the World Wide Web Consortium (W3C). In making this recommendation, the W3C notes that PNG creates lossless, portable, well-compressed raster images.
- GIF (Graphics Interchange Format) is an 8-bit-per-pixel (low color resolution) bitmap image format in wide use on the web; it is being replaced by the PNG standard.

> Access the Checklist tile on your **CHOICE Course** screen for reference information and job aids on **How to Optimize Content for the Web.**

ACTIVITY 7–5
Optimizing Content for the Web

Data File

C:\092033Data\Preparing Documents for Deployment\Exporting to the TIFF and EPS Formats.ai

Before You Begin

The file Exporting to the TIFF and EPS Formats.ai is open.

Scenario

The marketing department also wants to advertise your project on the company website, so you must come up with a web-friendly version.

1. Review the web version of your document.
   a) Select **File→Export→Save for Web (Legacy)** to display the **Save for Web** dialog box.
   b) If a message about the new **Export for Screens** options appears, close it.
   c) Above the image preview, select **2-Up**.
   d) If necessary, in the **Preset** area, from the **Name** drop-down list, select **PNG-24**.
   e) Verify that the image quality of the PNG graphic on the right is approximately as good as the original Illustrator graphic on the left.

2. Display the other available web-oriented graphics to determine their quality and file size.
   a) In the **Preset** area, from the **Name** drop-down list, select **GIF Web Palette** to display the file on the right in GIF format.
   b) Display the file in **JPG** format in a variety of resolutions.
   c) Display the file in **PNG-8 128 Dithered** format.

3. Export the graphic in a format that provides the smallest file size, but still maintains a reasonable image quality.
   a) Select **JPG Medium**.
   b) Select **Save** to display the **Save Optimized As** dialog box.
   c) In the **Save Optimized As** dialog box, navigate to the folder **C:\092033Data\Preparing Documents for Deployment**.
   d) In the **File name** text box, enter *My Save for Web*
   e) Select **Save** to save the file and close the **Save Optimized As** dialog box.
   f) Keep the file **Exporting to the TIFF and EPS Formats.ai** open. You will use it in the next activity.
   g) Close all other files.

TOPIC F

Optimize Content for PDF Documents

Is it online or is it offline? That common question can irk many a graphic design developer when determining the end use of the content they are producing. Illustrator's optimization features for PDF files enable you to meet the demands of the online world while offering options in the print world. In this topic, you will optimize content for PDF files.

PDF Documents

The ***PDF document*** file format renders documents and graphics without having to rely on specific word-processing desktop applications, hardware, or operating system platforms. PDFs can contain text, graphics, and associated information (such as fonts and graphics settings) required to present the document in a reader window. PDFs can be rendered in a browser, as well as a PDF reader application.

PDF Usage

PDF documents can be viewed in conjunction with a browser, or displayed separately via an independent viewing application. From any channel in which it is rendered, a PDF document can be viewed or printed. PDFs can also have certain functionality locked through encryption, for which the viewer must have the key to perform certain functions such as view, edit, print, and more.

> **Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Optimize Content for PDF Documents.**

ACTIVITY 7–6
Optimizing Content for PDF Documents

Data File

C:\092033Data\Preparing Documents for Deployment\Exporting to the TIFF and EPS Formats.ai

Before You Begin

The file Exporting to the TIFF and EPS Formats.ai is open.

Scenario

The marketing department also wants a document containing the back page. You decide to put it in a PDF.

---

1. Save a PDF version of your document.

   a) Select **File→Save As** to display the **Save As** dialog box.

   b) If necessary, in the **Save As** dialog box, navigate to the folder **C:\092033Data\Preparing Documents for Deployment**.

   c) In the **File name** text box, enter *My Save as PDF*

   d) From the **Save as type** drop-down list, select **Adobe PDF (*.PDF)**.

   e) Under the **Save as type** drop-down list, select **All** to export all of the artboards.

   f) Select **Save** to display the **Save Adobe PDF** dialog box.

   g) In the **Save Adobe PDF** dialog box, select **Save PDF** to save the PDF file and close the **Save Adobe PDF** dialog box.

2. Verify that you have successfully saved the PDF file.

   a) In File Explorer, open the **My Save as PDF.pdf** file.

   b) Verify that the visual content of the Illustrator file is displayed in an Adobe Reader application window. Each artboard appears on its own page.

   If Adobe Reader is not installed or is not the default application for PDF files, it will open in the default app for PDF files such as a web browser.

3. Close the Adobe Reader application window.

4. Close all open files.

5. Exit Illustrator.

Summary

In this lesson, you prepared documents for deployment. Illustrator includes an array of tools you can use to optimize the content you create in most delivery modalities, on and off the Internet. Optimizing the output format reduces the complications that can often accompany the delivery of your graphical development projects.

Of the different kinds of optimization and export tasks you performed in this lesson, which ones do you think you will work with the most? Why?

Do you find the export and optimization tools in Illustrator easier or more difficult to use than similar tools in other software that you have encountered?

Note: Check your CHOICE Course screen for opportunities to interact with your classmates, peers, and the larger CHOICE online community about the topics covered in this course or other topics you are interested in. From the Course screen you can also access available resources for a more continuous learning experience.

Course Follow-Up

In this course, you created graphical design projects that worked with basic shapes and text to transform them into engaging aesthetic designs that made use of a variety of formatting and transform features. You also prepared an Illustrator document for deployment in several different formats, each of which was oriented toward a particular use.

What's Next?

Now that you have some experience working in the Illustrator environment and creating basic designs, you may want to delve deeper into the world of digital illustration with the next Logical Operations course in this series, *Adobe® Illustrator® (2020): Part 2*.

You are encouraged to explore Illustrator further by actively participating in any of the social media forums set up by your instructor or training administrator through the **Social Media** tile on the CHOICE Course screen.

A | Mapping Course Content to Graphic Design & Illustration Using Adobe Illustrator Exam

Adobe is revising Creative Cloud certifications and plans to release updated exams in the first half of 2020.

Currently, through **Certiport.com**, Adobe offers the Adobe Certified Associate (ACA) certification program. Candidates who wish to obtain Adobe Certified Associate (ACA) - Illustrator certification must pass the associated exam.

To assist you in your preparation for the exam, Logical Operations has provided a reference document that indicates where the exam objectives are covered in the Logical Operations *Adobe® Illustrator® (2020)* courseware.

The exam-mapping document is available from the **Course** page on CHOICE. Log on to your CHOICE account, select the tile for this course, select the **Files** tile, and download and unzip the course files. The mapping reference will be in a subfolder named **Mappings**.

Best of luck in your exam preparation!

Mastery Builder

Mastery Builders are provided for certain lessons as additional learning resources for this course. Mastery Builders are developed for selected lessons within a course in cases when they seem most instructionally useful as well as technically feasible. In general, Mastery Builders are supplemental, optional unguided practice and may or may not be performed as part of the classroom activities. Your instructor will consider setup requirements, classroom timing, and instructional needs to determine which Mastery Builders are appropriate for you to perform, and at what point during the class. If you do not perform the Mastery Builders in class, your instructor can tell you if you can perform them independently as self-study, and if there are any special setup requirements.

Mastery Builder 1–1
Creating a Custom Workspace

Activity Time: 15 minutes

Data File

C:\092033Data\Introducing Illustrator\New Text Project.ai

Scenario

You have been sitting through a meeting on a new project and know that the work you will be doing will stress the following:

• Working with a lot of text
• Working with a lot of raster images
• Developing digital paintings

As you listen, you realize that to be organized, you should probably think about customizing your workspace so that you won't be hunting for the right tool all the time.

---

1. In Illustrator, open **New Text Project.ai**

2. In Illustrator, look through all of the existing default workspaces. As you examine how the work area changes, take note of the tools that are displayed (use tooltip text).

3. Develop a list of tools that you think you would need for your custom workspace.

4. Create your custom workspace, which can take several approaches:
   • Start with a default specialized workspace and add other tools to it.
   • Start with a generic workspace and add all the tools.

5. When you have finished setting up your custom workspace, call your workspace *My Lab Workspace* and save it.

6. Reset any workspace you made changes to.

7. When you have finished, set your workspace to **Essentials**.

Mastery Builder 2–1
Drawing More Basic Shapes

Activity Time: 15 minutes

Scenario

You have been asked to come up with another greeting card blank consisting of basic shapes into which various messages can be dropped to create multiple card designs.

---
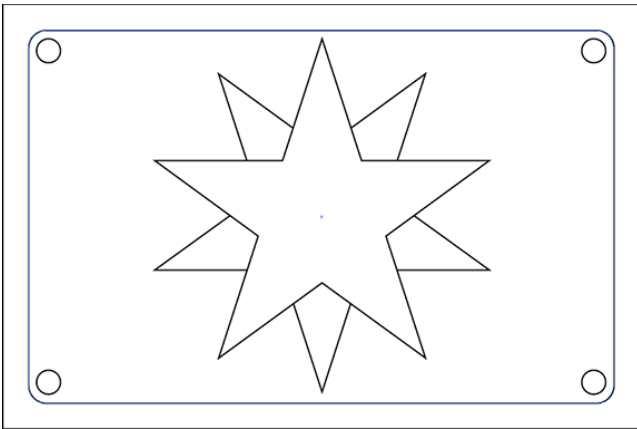
1. Create a new document with an artboard that is 6-inches wide by 4-inches tall.

2. Using the basic shape tools, create a blank for the greeting card layout.
   a) Use a rounded rectangle to create a border for the card.
   b) Use two same size stars in the middle, rotated to create a starburst pattern.
   c) Create circles in the inside corners of the rounded rectangle.

3. In the **C:\092033Data\Creating Documents Containing Basic Shapes** folder, save the greeting card blank as *My Starburst Greeting Card*

4. Close the file.

Mastery Builder 3-1
Drawing and Modifying Paths

Activity Time: 15 minutes

Scenario

Your supervisor likes the question mark motif and asks you to come up with something specifically for Spanish, which indicates a question with two marks: one like the English question mark, and one displayed as an "upside-down" English question mark.

---

1. Create a new document with artboard dimensions of 6 inches by 4 inches.

2. Use the **Pen** tool to create a double-question-mark image.

3. Use the **Direct Selection** tool to adjust the anchor points until you are satisfied with the shape of the question marks.

4. Group the first question mark paths together.

5. Group the second question mark paths together.

6. Select both question marks.

7. From **Brush Definition**, select **Mop**.

8. Set the **Stroke Weight** to *.5*

9. Select the first question mark.

10. Set the fill color to a green and the stroke color to a purple.

11. Select the second question mark.

12. Set the fill color to an orange and the stroke color to a pink.

13. In the **C:\092033Data\Creating Graphics Containing Customized Paths** folder, save your file as *My Spanish Whats Up.ai*

14. Close the file.

Mastery Builder 4–1
Creating Bounded Text in Simple Shapes

Activity Time: 20 minutes

Scenario

You have been asked to come up with some general geometric ideas, not so much as a final design for a particular card, but just as a way to jump-start some brainstorming among your colleagues. You decide to wed image and text by creating several geometric shapes and threading text with numbers spelled out as words from one to the other.

---

1. Open a new blank Illustrator document with one artboard.

2. On the artboard, draw a square, and then create a triangle by deleting one of the anchor points.

3. Next to the triangle, draw a square.

4. Next to the square, draw a star.

5. Next to the star, draw a hexagon.

6. Arrange and resize the shapes on the artboard in an attractive manner. As a rule, the shapes should be large enough so that they fill all the available real estate on the artboard.

7. With the **Area Type** tool, click inside one of the shapes and type out the words for the numbers one through six: *one two three four five six*

8. Copy the text, and then paste it in repeatedly until the shape fills up and you get a red plus sign to indicate that the text needs to be flowed out of the shape.

9. Thread the text to the next shape and then fill it up with the sequence of number-words. (Hint: Use the **Selection** tool, select the **Out Port** of the first text box, and when the mouse pointer changes to the loaded text icon, select the **In Port** of the next text box.)

10. Using the number-words as filler text, thread the text to the other shapes.

11. If you have time, experiment with formatting a portion of the text and see how it affects the text in the other shapes.

12. In the **C:\092033Data\Creating Graphics Containing Customized Text** folder, save your file as *My Creating Bounded Text.ai*

13. Close the file.

Mastery Builder 5-1
Building a House of Cards

Activity Time: 15 minutes

Scenario

The copywriting department has given you the following greeting card text:

"I'm No House of Cards… You can lean on me, Sweetie, I won't let you down!"

You need to design an appropriate graphic for the front of the card. You decide to make a house of cards for the front.
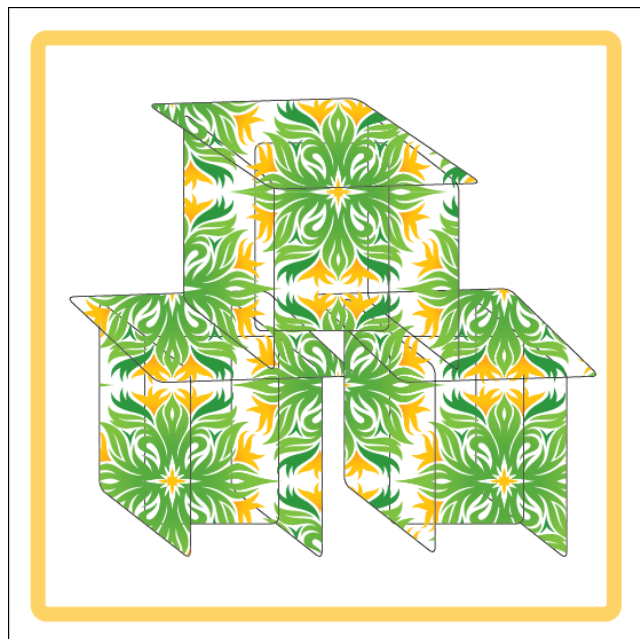
1. Open a new blank Illustrator document with one artboard that is 12 inches by 12 inches.

2. Draw a rectangle (either square or rounded-corner) that is 2.5 inches by 3.5 inches (a playing card).

3. Select the shape, and then, in the **Properties** panel, from the **Fill** drop-down list, select the green floral swatch (**Foliage**). Each of these swatches has opaque and transparent areas.

4. Make several copies of your playing card, and then, if you prefer, move them into the scratch area so that they are out of the way.

5. Using the rotate and shear functions, change the perspective of the cards as you build a house of cards.

   If you want to get fancy, create another deck with a contrasting color (either solid or patterned) and use both in the creation of your card house.

6. In the folder **C:\092033Data\Customizing Objects**, save the file as *My House of Cards.ai*

7. Close the file.

Mastery Builder 6-1
Making a New Greeting Card

Activity Time: 20 minutes

Scenario

You've been asked to brainstorm birthday card designs for specific birthdays.

1. Create a new document with a 6-inch by 4-inch artboard.

2. Create a circle, center it on the artboard, and apply the **Charred Paper** graphic style (or a style of your choice) from the **Artistic Effects** library.

3. Create the "OMG…" text by using the **Juice ITC** font. Apply an **Envelop Distortion, Make with warp, Arc** effect. Scale, rotate, and position along the top-left of the circle.

4. Create the "50?" text by using the **Ravie** font. Apply the **Scribble 7** graphic style from the **Scribble Effects** library. Scale and position the text inside the circle.

5. Create a rectangle for the base and apply the **Scribble 6** graphic style from the **Scribble Effects** library.

6. Move the base rectangle behind the circle.

7. Save your file to **C:\092033Data\Customizing Basic Shapes** as *My Custom Card.ai*

8. Close the file.

Mastery Builder 7–1
Optimizing Content for Different Deployments

Activity Time: 20 minutes

Scenario
You've decided to create a Thank You card that is non-specific so that it can be used for many occasions. This allows you the perfect opportunity to use your newly acquired skills.

1. Create a new document with the default size of letter, 8.5 inches by 11 inches.

2. Experiment with the many Illustrator tools, creating a design of your choice.

3. In order to share the file by email, you will save it as a PDF.

4. Select **File→Save As** and save your file in the current lesson folder with the name of *My MB*

5. Select **Adobe PDF** as the file type and select **Save**.

6. In the **Save Adobe PDF** dialog box, specify the desired PDF settings.

7. Select **Save PDF**.

8. If possible, share the file with the other students by sending it as an email attachment.

9. Close the file and exit Illustrator.

Solutions

ACTIVITY 1-1: Applying Design Principles, Elements, and Graphics Composition

3. **Which element of the shower invitation immediately catches the viewer's eye? What design elements are used on this object?**

   A: Answers will vary, but should include the area with the text and/or the shark illustration. The reason the text box would stand out is the use of white space and the contrast; the reason the shark would stand out would be the size. Both of these principles create emphasis.

4. **Do you see any use of movement in the design?**

   A: Answers will vary, but can include use of movement in the way the seahorse is floating in the water, or the way the seaweed seems to be moving, and the positioning of the legs of the octopus and crab.

5. **What other design principles do you see at play in the invitation?**

   A: Answers will vary, but can include: repetition is used in the bubbles in the background; color is used throughout the design; unity is created in the similar cartoon-like styles of the sea animals; white space is used in the text area, allowing plenty of legibility and breathing room; and proximity is used in the bubbles, the seaweed, and the starfish. In all these elements, a difference in size and position becomes apparent; size is used in the name of the baby, creating immediate visual hierarchy and emphasis.

Glossary

anchor points
Structural locations that define the shape of a path.

Application bar
A section that, depending on the screen size, might be combined with the Menu bar. When separate, this contains the Home icon to return to the Illustrator Start screen, an Arrange Documents drop-down list, access to Illustrator tutorials, access to pre-defined workspaces, and a Search box to search Adobe Stock or to search for help topics. When combined with the Menu bar, it contains these plus the menu.

artboard
The virtual canvas area that contains illustrations and layout work developed in Illustrator.

Artboards panel
Located on the right Tools panel, this panel is used to perform such tasks as renaming, adding, and deleting an artboard, and displaying artboard properties.

basic object transforms
Transforms that include shear and rotate.

basic shapes
Geometric objects drawn on an artboard with specialized tools.

Bezier curves
A technique for generating curved lines in Illustrator.

bleed
Intentionally printing outside the intended edge of the sheet.

bounded text area
A geometric area within which a text area is created.

brushes
Tools used to create free-form paths.

character styles
Styles whose properties are concerned with character-level formatting.

Check Spelling
An editing feature that detects and can correct misspelled words.

color mode
The system used to mix colors from a set of foundation colors; RGB and CMYK are two popular modes.

Control panel
A dynamic collection of tools located at the top of the application window just under the Menu bar.

custom dictionary
A list of nonstandard words the Check Spelling feature collects so that the nonstandard words will be checked for correct spelling, but more importantly, will be ignored when they are correctly spelled.

document profile
A collection of predetermined settings that include the size of the artboard, the color

mode, the units of measure, the artboard's orientation, the transparency of the work, and the graphical resolution.

drawing modes
Changeable settings that enable users to draw in front of, behind, or through existing shapes on the artboard.

EPS
(Encapsulated PostScript) An image specification that uses PostScript files to describe graphical objects inside another PostScript file.

Find and Replace
A text editing function that searches for characters or words and replaces them with other characters and words.

font
A collection of letter, number, and symbol characters that share certain visual characteristics such as size, weight, style, and width.

frames
The bounded text areas in which threaded text flows.

freeform gradient
A type of gradient that provides a graduated blend of color in an ordered or random sequence.

glyphs
Single-character "letters" that stand in place of several letters or an entire word.

Glyphs panel
Displays all the glyphs for a particular font and is used to insert glyphs into text.

gradient
A coloration technique that transitions from one color to another in a given direction.

graphic styles
Complex collections that provide visual texture and transition to the fills and strokes they inhabit.

hyphenation
A text editing function that determines whether words at the right margin will be hyphenated to the next line.

Illustrator document type
Adobe Illustrator documents, Illustrator templates, Adobe PDF files, Illustrator EPS files, Adobe FXG files, SVG files, and SVG Compressed files.

imported graphics
Graphics that are placed within (incorporated into) an Illustrator document.

library
A related collection of options.

linked graphics
Graphics that are read into, but not incorporated into, an Illustrator document. A link to the graphic's location is recorded for later reading and updating.

Menu bar
A section that holds many of the same tools and commands as the Tools panel, as well as document- and system-level tools that control the Illustrator work environment and its interoperability with other Adobe Creative Cloud apps and features.

object alignment
Alignment effects along vertical and horizontal boundaries, and spacing effects used to distribute objects along a large defined area.

opacity
The degree to which a fill completely hides the visual content behind it.

OpenType font format
A specification developed by Microsoft and Adobe to include several categories of typographical information under the umbrella of a font name.

overlapping properties
Style properties set at both the paragraph and character levels; the most local style takes precedence.

paragraph styles
Styles whose properties are concerned with paragraph-level formatting.

path components
Anchor points, line segments, and Bezier curve controls.

path formatting tools
Tools that include the Stroke tool, the Brush Definition tool, the Variable Width Profile tool, and the Stroke Weight tool.

paths
Straight and curved lines drawn with Illustrator's drawing tools.

PDF document
A file format standard for rendering documents and graphics independent of specific applications, hardware, or operating system platforms.

pixel
A dot of color with an assigned color and intensity that is the building block of a raster graphic.

pixelation
Distortion of a raster graphic that occurs as each pixel is made to represent a larger portion of the image.

predefined workspaces
Selectable, job-focused settings consisting of displayed toolsets and defined properties that together form an environment well-suited for performing particular kinds of work.

Properties panel
A dynamic collection of tools located at the right of the application window. It appears by default in the Essentials workspace.

raster graphics
Images rendered via the use of a dense grid of color made up of pixels; typically used for photographic images.

saving options
Illustrator's two options for saving documents: Save, which saves information to the currently saved document name; and Save As, which saves the document under a new or different name.

scratch area
The part of the work area where tools and objects can be parked without affecting the artboards.

screen modes
Viewing methods that enable you to quickly alter the work area environment without having to move, hide, and later display individual work area components.

shape tools
A set of tools used to draw basic shapes: rectangle, rounded rectangle, ellipse, polygon, star, or flare.

slice
A portion of a large image that can be saved as an independent file with its own format and settings.

smart guides
Intermittently appearing guides used to align objects on an artboard.

Status bar
Running along the bottom of the user interface, it displays basic information about selected tools, as well as artboard navigation and zoom controls.

strokes
Sets of properties that define the look and feel of a path.

style
A collection of formatting properties that can be applied to multiple text objects, where they can later be altered.

Style panel
The panel used to create, organize, and manage paragraph and character styles.

Stylistic Alternatives panel
Sets properties and behaviors for treating text, such as setting preferences for the use of glyphs for fractions.

swatch
A small square of color placed on a color grid or on a drop-down list; used to select colors with color tools.

template libraries
Collections of preset templates created by Adobe for use in day-to-day work in graphic design.

text envelopes
Containers in which text is placed and then resized and shaped.

text formatting
Alterations made to the standard, default appearance of text.

text path formatting effects
A collection of font effects applied to text placed along a path, including the Rainbow, Skew, Stair Step, 3D Ribbon, and Gravity effects.

text path type effects
Horizontal or vertical type effects.

text type effects
Text effects that include Horizontal Type, Area Type, Vertical Type, Vertical Area Type, Type on a Path, and Vertical Type on a Path tools.

text wrapping
Text in a text block that is moved to make way for an object, such as a graphic.

threading
The process of flowing a single block of text across several disconnected text areas.

TIFF
(Tagged Image File Format) A legacy Adobe specification for storing raster and vector images.

tool panels
Panels that store most of the tools used to develop graphical design projects in Illustrator.

transparency
The degree to which an object's fill shows the visual content behind it. The opposite of opacity.

vector graphics
Images that rely on computational power to draw and redraw an image from a set of instructions each time it is rendered.

work area
The large blank region in the center of the Illustrator user interface where graphic design work is performed.

workspace
The combination of the areas of the Illustrator user interface where work is performed, but also the combination of currently displayed toolsets and selected environmental settings that enable a user to perform work.

Index

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