



University Information
Technology Services

Illustrator CC 2017 Essential Skills

Adobe Illustrator Creative Cloud 2017

University Information Technology Services

Learning Technologies, Training & Audiovisual Outreach

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University Information Technology Services

Illustrator CC 2017 Essential Skills Adobe Illustrator Creative Cloud 2017

Table of Contents

Introduction	6
About Vector Graphics.....	6
Learning Objectives.....	6
Opening Illustrator	7
Start Workspace.....	7
Exploring the Workspace	8
Illustrator Tools and Shortcuts.....	9
Keyboard Shortcuts for Drawing.....	10
The New Document Dialog	11
Creating a New Document.....	12
Applying Color in Illustrator	13
Pen Tools.....	14
Pen Tool	14
Add Anchor Point Tool	17
Delete Anchor Point Tool.....	18
Anchor Point Tool	18
Selection Tools	19
Selection Tool.....	19
Selecting an Object	19
Selecting Multiple Objects	20
Alternate Selection Option	21
Resizing an Object.....	21
Moving an Object.....	21
Duplicating an Object.....	22

Direct Selection Tool	22
Selecting an Anchor Point to Manipulate an Object	22
Selecting Multiple Anchor Points.....	23
Group Selection Tool	24
Magic Wand Tool	24
Lasso Tool.....	25
Line Tools	25
Line Segment Tool.....	26
Creating a line	26
Changing the line color	26
Changing the thickness of the line.....	27
Changing the shape of the line	27
Arc Tool	28
Spiral Tool	28
Rectangular Grid Tool	29
Polar Grid Tool	30
Drawing Tools	31
The Shaper Tool	31
Shape Conversion	31
Overlapping Shape Punch Out	32
Merging Shapes.....	33
Pencil Tool.....	34
Adding to a Path.....	35
Reshape a closed path	35
Smooth Tool.....	36
Path Eraser Tool	36
Join Tool	37
Creating Basic Shapes	39
Rectangle Tool.....	39
Rounded Rectangle Tool	40
Ellipse Tool	41

Polygon Tool.....	42
Star Tool	43
The Flare Tool.....	44
Editing Tools.....	45
The Eraser Tool	45
Changing the <i>Eraser Tool</i> Options	45
Shape Builder Tool	46
Live Paint Bucket Tool.....	48
Changing the Background Color of an Artboard.....	49
Text.....	51
Point Type	52
Area Type	52
Adding Text to a Path.....	53
Adding Text on a Closed Shape.....	53
Saving a file	54
Printing.....	56
Resources	57
Additional Help	57

Introduction

Illustrator is a vector graphic editing program by Adobe. This booklet is designed to introduce you to the essential skills you will need to get started using some of the basic Illustrator tools. These instructions were created using Illustrator CC 2017 for Windows; the Mac Sierra version is similar.

About Vector Graphics

Vector graphics are made up of lines and curves called vectors. They are resolution-independent, meaning they can be scaled to any size and printed at any resolution without losing detail. You can move, resize, or change the color of vector objects without losing the quality in the graphic.

Learning Objectives

After completing the instructions in this booklet, you will be able to:

- Recognize Illustrator terminology
- Locate tools, panels, bars, and windows in the workspace
- Learn how to use the pen, selection, line, pencil, basic shapes, eraser, and shape builder tools
- Create text by itself or on a path of an object
- Save files in different versions or formats

Opening Illustrator

Follow these instructions to access Adobe Illustrator CC 2017:

1. Click the Windows **Start** button.
2. Click **Adobe Illustrator CC 2017**.



Start Workspace

When you open Adobe Illustrator CC 2017, you will see the *Start Workspace* window. This window is described below:

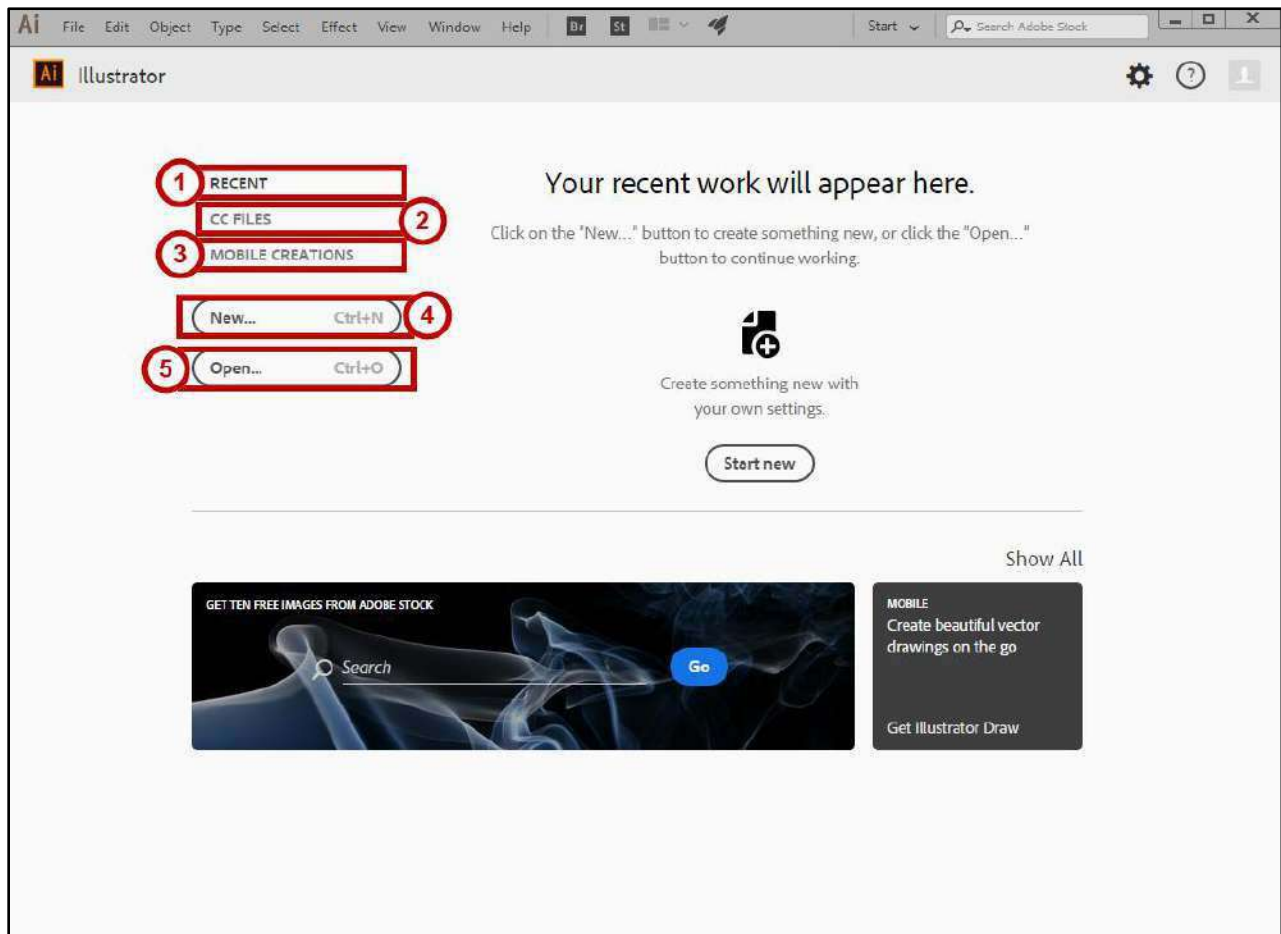


Figure 1 - Start Workspace

The *Start Workspace* window is displayed when *Illustrator CC 2017* is launched and no documents are open.

1. **Recent** - Files that you have recently opened (See Figure 1).
2. **CC Files** - List of libraries associated with your Creative Cloud account (See Figure 1).
3. **Mobile Creations** - Download apps to sketch, draw, and paint and create layouts for mobile devices (See Figure 1).
4. **New** - Create a new document (See Figure 1).
5. **Open** - Open a document that has already been created (See Figure 1).

Exploring the Workspace

The *Workspace* is where you edit your creations and arrange the various panels, bars, and windows. The section below explains some of the more important areas:

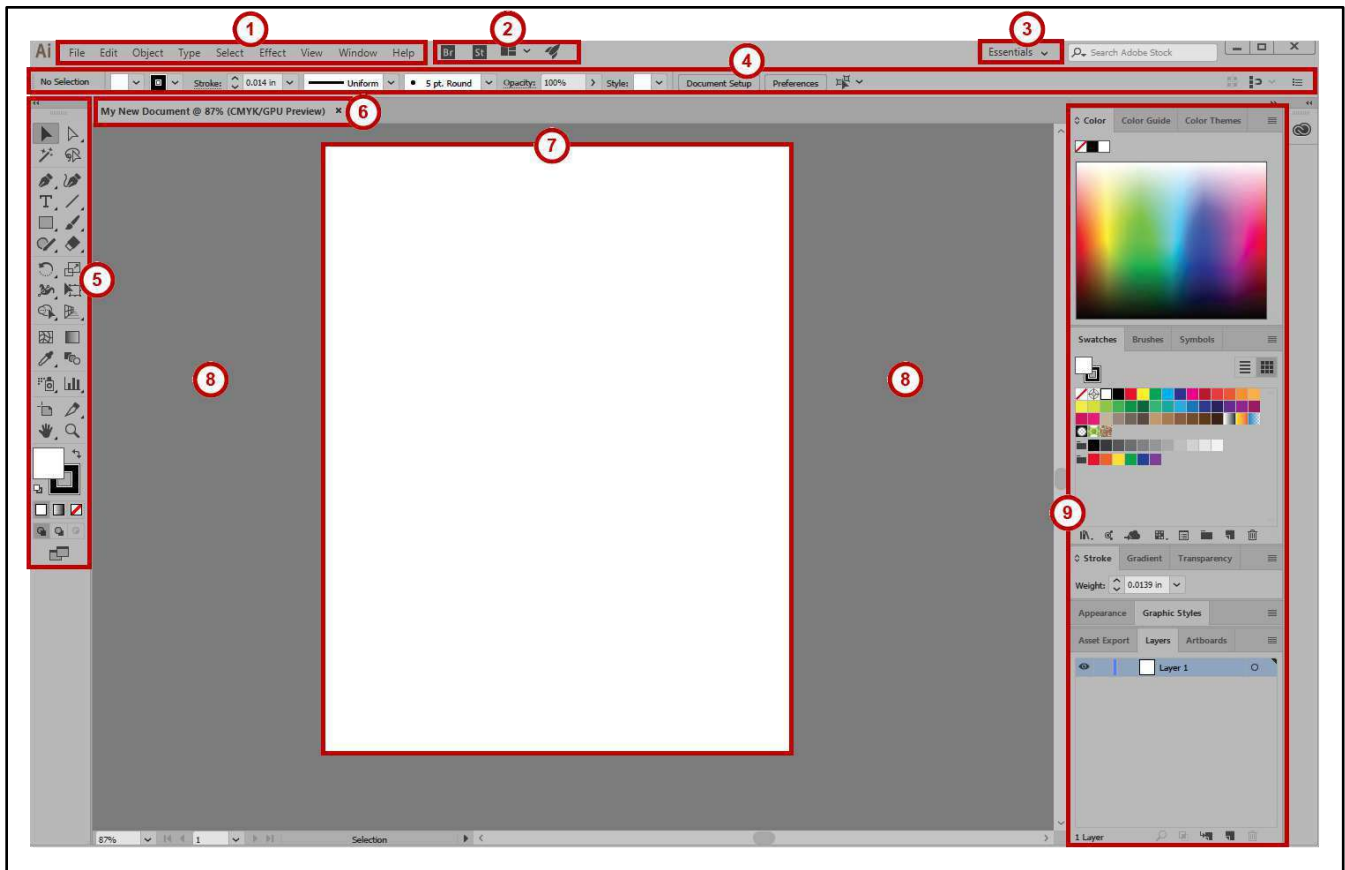


Figure 2 - Workspace

1. **Menu Bar** - File, Edit, etc. Illustrator functions are available from the drop-down menus (See Figure 2).
2. **Application Bar** - Access menus and application controls (See Figure 2).
3. **Workspace Switcher** - A workspace is the selection of Illustrator tools laid out on your screen for easy access (See Figure 2). The default workspace is *Essentials*.
4. **Control Panel** - Displays options relevant to the currently selected object (See Figure 2).
5. **Tools Panel** - Tools used to create and edit images, artwork and page elements (See Figure 2).
6. **Tabbed Document Windows** - A tab for each file you have open (See Figure 2).
7. **Document** - Create and edit objects, images, text, and page elements in this area (See Figure 2).
8. **Paste Board** - Objects and images can be created in the scratch area, but will not be printed (See Figure 2).
9. **Panel Title Bar** - Panels hold multiple options used for editing and manipulating objects (See Figure 2). To display more panels, go to *Window* on the *menu bar*.

Illustrator Tools and Shortcuts

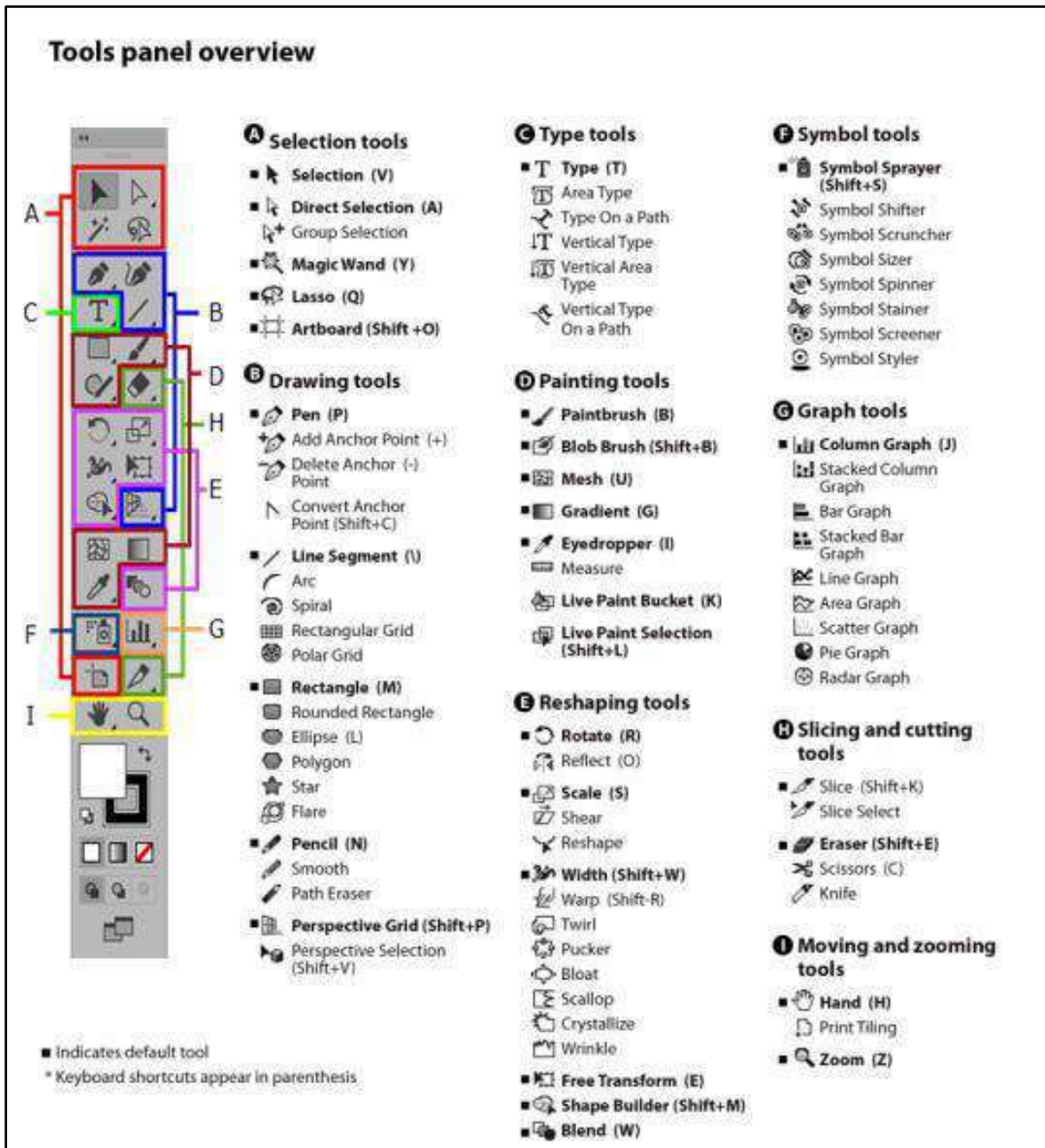


Figure 3 - Tools in the Illustrator tools panel; image from [Adobe](https://www.adobe.com).

Image from Adobe, <http://helpx.adobe.com/illustrator/using/tools.html>; visit the link to see more detail about the tools, including examples.

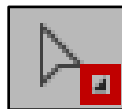


Figure 4 - More Tools

Note: Most tools show a triangle icon, denoting that more tools are hidden behind the one you see.

Keyboard Shortcuts for Drawing

Drawing Results	Keyboard Shortcuts
Constrain a shape's proportions or orientation to: <ul style="list-style-type: none"> • Equal height and width for rectangles, rounded rectangles, ellipses, and grids • Increments of 45° for line and arc segments • Original orientation for polygons, stars, and flares 	Shift - drag shape
Move a shape while drawing it	Spacebar - drag shape
Draw from the center of a shape (except for polygons, stars, and flares)	Alt - drag shape
Increase or decrease polygon sides, star points, arc angle, spiral winds, or flare rays	Start dragging, then press the Up Arrow or Down Arrow
Keep the inner radius of a star constant	Start dragging, then hold down Ctrl
Keep the sides of a star straight	Alt - drag
Switch between an open and closed arc	Start dragging, then hold down C
Flip an arc, keeping the reference point constant	Start dragging, then hold down F
Add or subtract winds from a spiral while increasing the length of the spiral	Start dragging, then Alt - drag
Change the decay rate of a spiral	Start dragging then Ctrl - drag
Add or remove horizontal lines from a rectangular grid or concentric lines from a polar grid	Start dragging, then press the Up Arrow or Down Arrow
Add or remove vertical lines from a rectangular grid or radial lines from a polar grid	Start dragging, then press the Right Arrow or Left Arrow
Decrease the skew value for horizontal dividers in a rectangular grid or radial dividers in a polar grid by 10%	Start dragging, then press F
Increase the skew value for horizontal dividers in a rectangular grid or radial dividers in a polar grid by 10%	Start dragging, then press V
Decrease the skew value for vertical dividers in a rectangular grid or concentric dividers in a polar grid by 10%	Start dragging, then press X
Increase the skew value for vertical dividers in a rectangular grid or concentric dividers in a polar grid by 10%	Start dragging, then press C
Create and expand a Live Trace object in one step	Alt-click Live Trace in the Control panel or hold down Alt and select a tracing preset.
Increase size of Blob Brush] (right square bracket)
Decrease size of Blob Brush	[(left square bracket)
Constrain Blob Brush path horizontally or vertically	Shift
Switch through drawing modes	Shift + D
Join two or more paths	Select the paths, then press Ctrl + J
Create corner or smooth join	Select the paths, then press Shift + Ctrl + Alt + j

Keyboard shortcuts for drawing, credit: Adobe, see <http://helpx.adobe.com/illustrator/using/default-keyboard-shortcuts.html>

The New Document Dialog

Adobe Illustrator CC 2017 has an updated *New Document* dialog window where you have access to document presets and templates across various categories: Mobile, Web, Print, Film & Video, and Art & Illustration. You can also use the dialog window to access files, templates, and items that you have saved or recently accessed. The section below displays the new interface and describes what you will find in each:

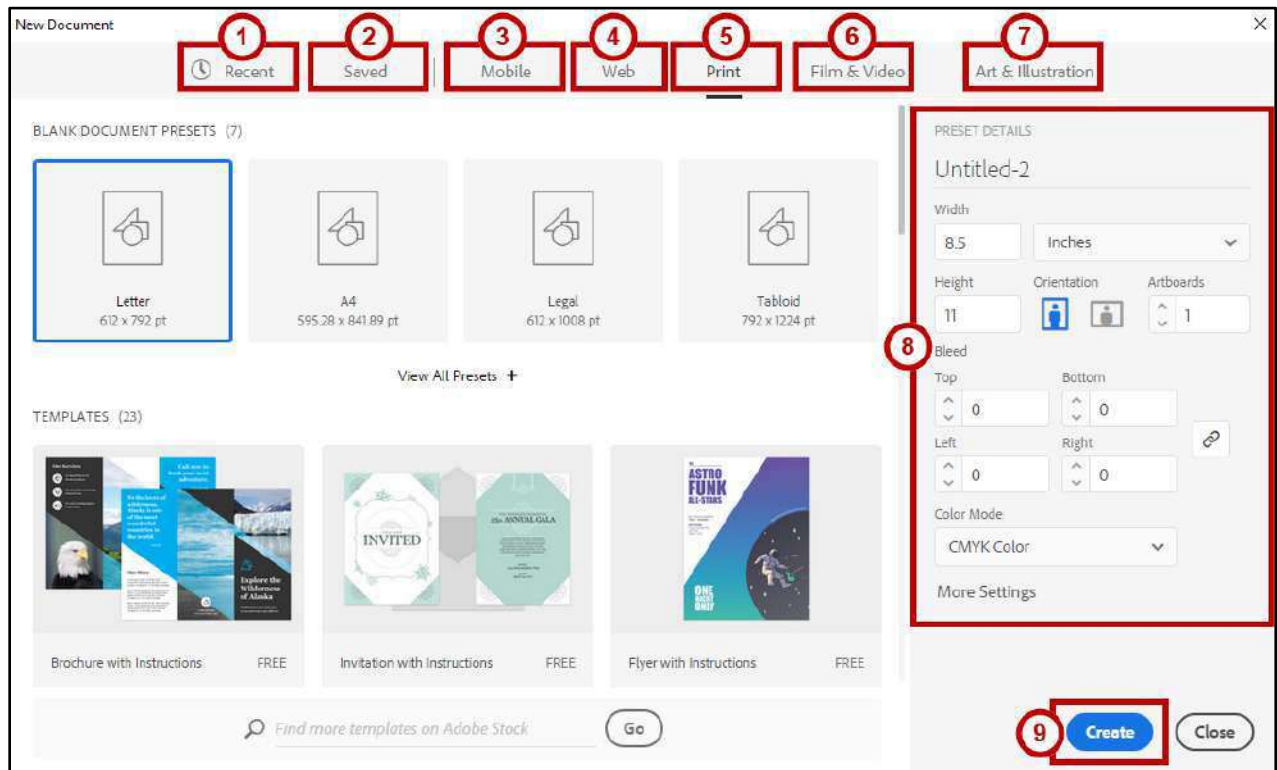


Figure 5 - New Document Dialog

1. **Recent** - View and access recently used items (See Figure 5).
2. **Saved** - View and access recently saved items (See Figure 5).
3. **Mobile** - Access and customize presets and templates designed for mobile devices or search for new templates on Adobe Stock (See Figure 5).
4. **Web** - Access and customize presets and templates designed for use on the Web or search for new templates on Adobe Stock (See Figure 5).
5. **Print** - Access and customize presets and templates or search for new templates on Adobe Stock to create printed materials (See Figure 5).
6. **Files & Video** - Access and customize presets and templates or search for new templates on Adobe Stock to create film and video material (See Figure 5).
7. **Art & Illustration** - Access and customize presets and templates or search for templates on Adobe Stock to create art and illustrations (See Figure 5).
8. **Document Name & Properties** - Name and customize settings for your creations (See Figure 5).

9. **Create Button** - When you have made your selections, create your new document (See Figure 5).

Creating a New Document

The following explains how to create a new document:

1. In the *Start Workspace* window, click the **New** button (See Figure 1).

Note: You can also select **New** from the *File* menu.

2. The *New Document* dialog window will appear. Click a **category tab** at the top to select recently accessed or saved documents or select from a preset or template. A set of preset values will appear in the right-hand panel based on your selection (See Figure 6).

3. Enter a **Name** for the Document (See Figure 6).

Note: You can choose to name the document now or later when you are saving.

4. Modify the remaining **Preset Details** as needed (See Figure 6).

Note: To access the legacy *Document Settings* options, click **More Settings**.

5. Click **Create** when ready to proceed. The *Workspace* window will appear based on your selections (See Figure 6).

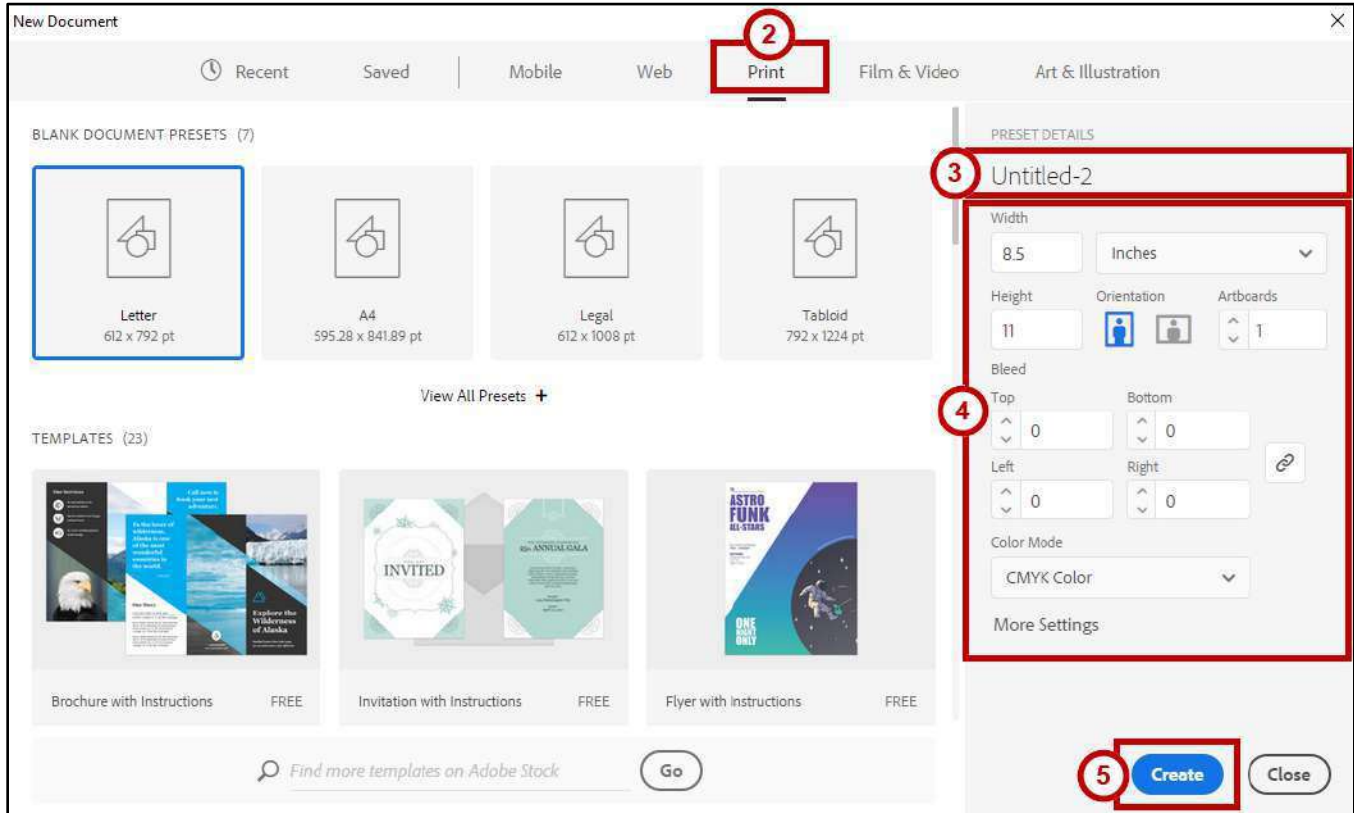


Figure 6 - New Document Dialog Window

Applying Color in Illustrator

Illustrator provides several methods to apply color to your objects. You can choose from one of the three methods described below to apply color to the *Fill* (inside) or *Stroke* (border or path) of the selected objects:

1. The *Swatches* panel allows you to access basic color, gradient, and pattern choices.
 - a. Select the **object**.
 - b. Click the **Fill** or **Stroke** button at the top left.

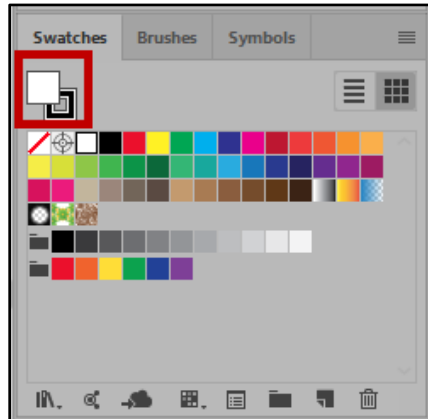


Figure 7 - Swatches Panel

Note: If you are applying color to the Fill, the *Fill* button must be on top. If you are applying color to the stroke, the *Stroke* button must be on top. To switch the position of the *Fill* and *Stroke* color buttons, simply click on the appropriate button, or use the shortcut key X to toggle from Fill to Stroke and vice versa.

- c. Select a **color**.
2. Accessing color from the *Control Panel* is probably the easiest way to apply color.
 - a. Select the **object**.
 - b. Click the **Fill** or **Stroke** drop-down button.



Figure 8 - Control Panel Fill & Stroke Drop-Down Buttons

- c. Select a **color**.

3. The *Fill* and *Stroke* drop-down lists in the *Tools Panel* allow quick access to the Swatches panel to apply color to the fill and/or stroke of an object.
 - a. Select the **object**.
 - b. Double click the **Fill** or **Stroke** button at the bottom.



Figure 9 - Tools Panel Fill and Stroke

- c. Select a **color** from the *Color Picker* window.
- d. Click **OK**.

Pen Tools

Use the *Pen Tools* to create elements, such as straight lines, curves, and closed shapes.

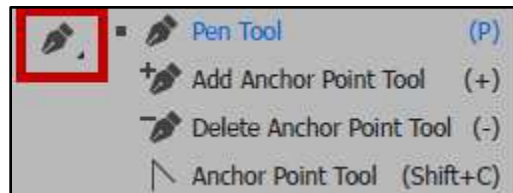


Figure 10 - Pen Tool

Pen Tool

The simplest path you can create with the *Pen Tool* is a straight line. The *Pen Tool* allows you to set anchor points, and then Illustrator inserts the line to connect the anchor points and create paths.

1. Click the **Pen Tool** from the *Tool Panel*.

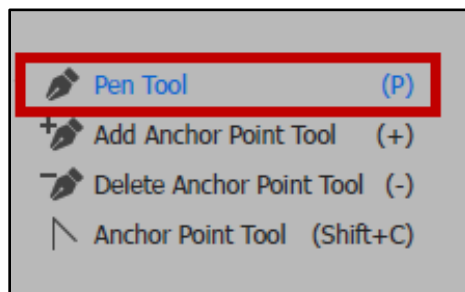


Figure 11 - Select Pen Tool

- Click the **Artboard** where you want the line to begin, to set the first anchor point.



Figure 12 - 1st Anchor Point

- Move the **Pen Tool** across from the anchor point you just created, as if drawing a straight line, and click on the **Artboard** again to set the second anchor point and create the line segment.

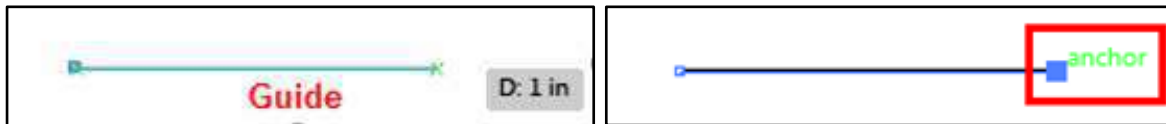


Figure 13 - Guide and 2nd Anchor Point

Note: As you move the *Pen Tool* across the Artboard, you will notice a line appear. This line is called a guide. The guide helps you to stay in line with the previous anchor point created, to ensure the connecting path will be a straight line.

- Move the **Pen Tool** up to set the top point of the triangle. As you move up and toward the center of the path you previously created, you will notice a vertical *guide* verifying that you are at the center point of the path.

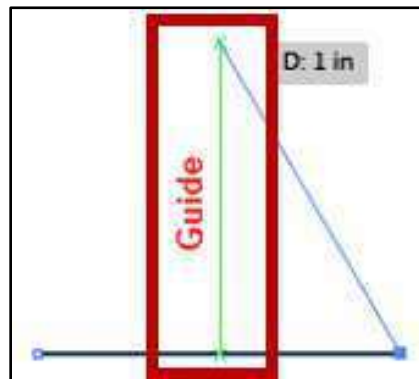


Figure 14 - Vertical Guide

- Click the **Artboard** to create a third anchor point.

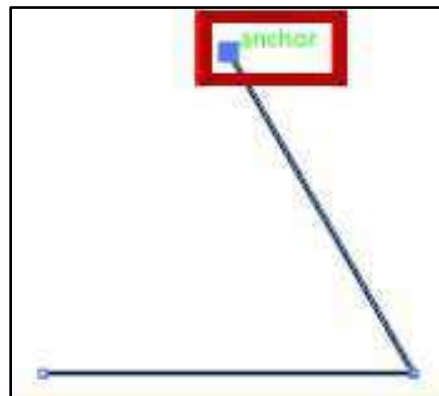


Figure 15 - 3rd Anchor Point

- Using the *Pen Tool*, hover over the **first anchor point** that was created in step 2 (See Figure 12). To the lower right of the *Pen Tool*, there should now be an (o). The (o) means that you are about to close the path.

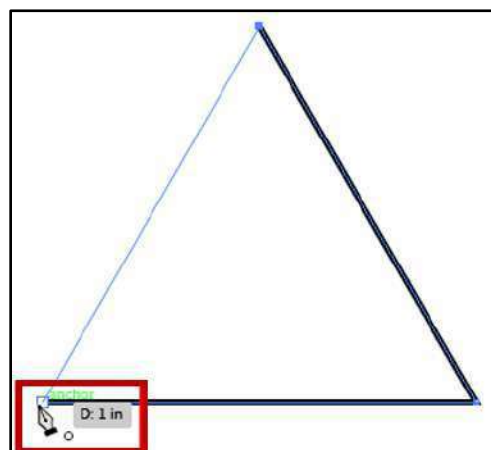


Figure 16 - Using the Pen Tool to Close Path

- Click the **anchor point** to close the path.

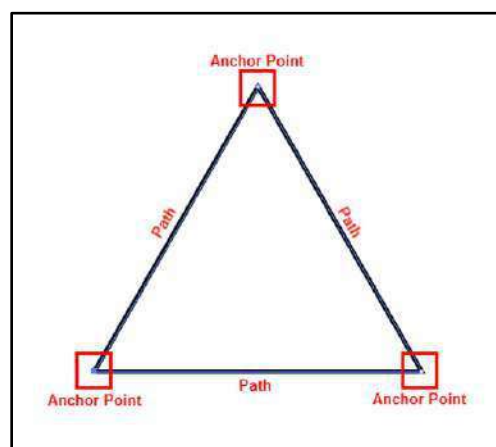


Figure 17 - Closed Path

Add Anchor Point Tool

To add an anchor point to an object:

1. Select the **object**.
2. Click the **Pen Tools drop-down arrow** (See Figure 18).
3. Click the **Add Anchor Point Tool** (See Figure 18).

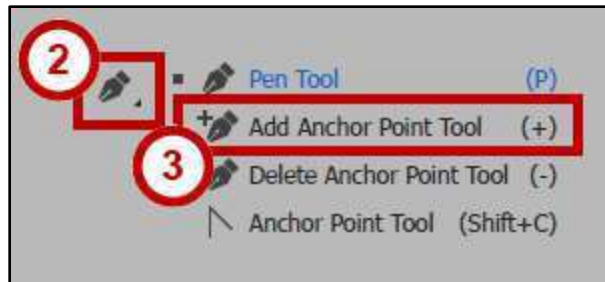


Figure 18 - Add Anchor Point Tool

4. Click a position on the **path** to add an anchor point.

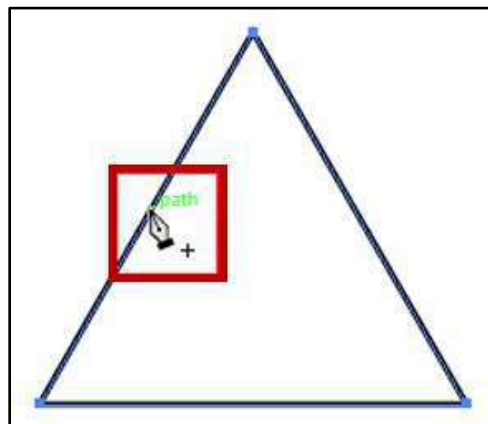


Figure 19 - Click on the Path to Add Anchor Point

5. A new anchor point is added to your object.

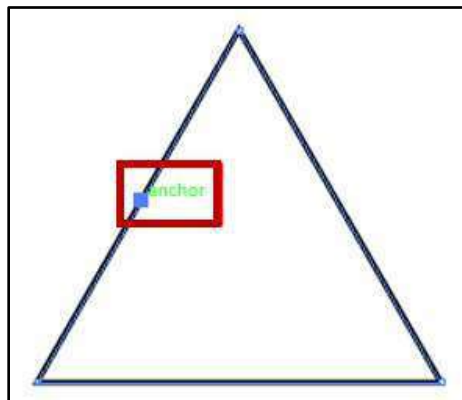


Figure 20 - Click on Path to Add Anchor Point

Delete Anchor Point Tool

To remove an anchor point:

1. Select the **object**.
2. Click the **Pen Tools drop-down arrow** (See Figure 21).
3. Select the **Delete Anchor Point Tool** (See Figure 21).

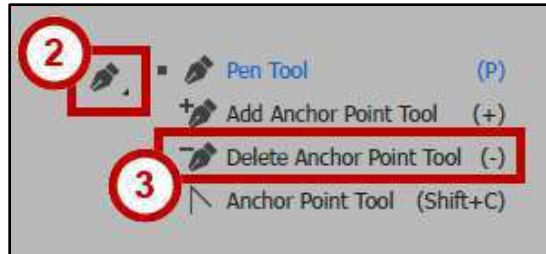


Figure 21 - Delete Anchor Point Tool

4. Click on an **anchor point** to remove that anchor point from the object.

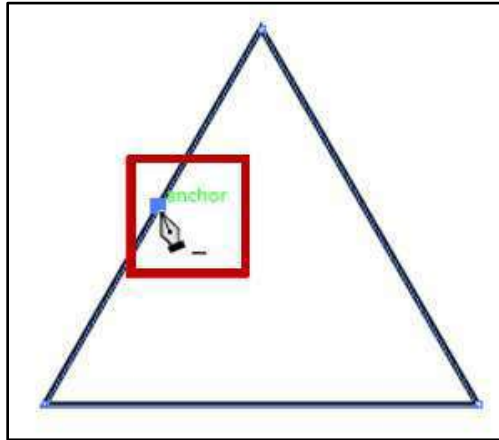


Figure 22 - Click on Anchor Point to Delete

Anchor Point Tool

To convert an anchor point and create a curved path:

1. Select the **object**.
2. Click the **Pen Tools drop-down arrow** (See Figure 23).
3. Select the **Anchor Point Tool** (See Figure 23).

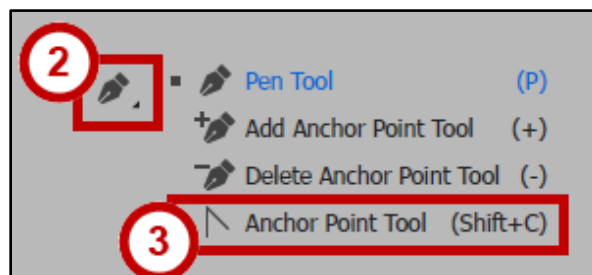


Figure 23 - Anchor Point Tool

4. Click the **anchor point** and **drag** to turn the straight path into a curved path.

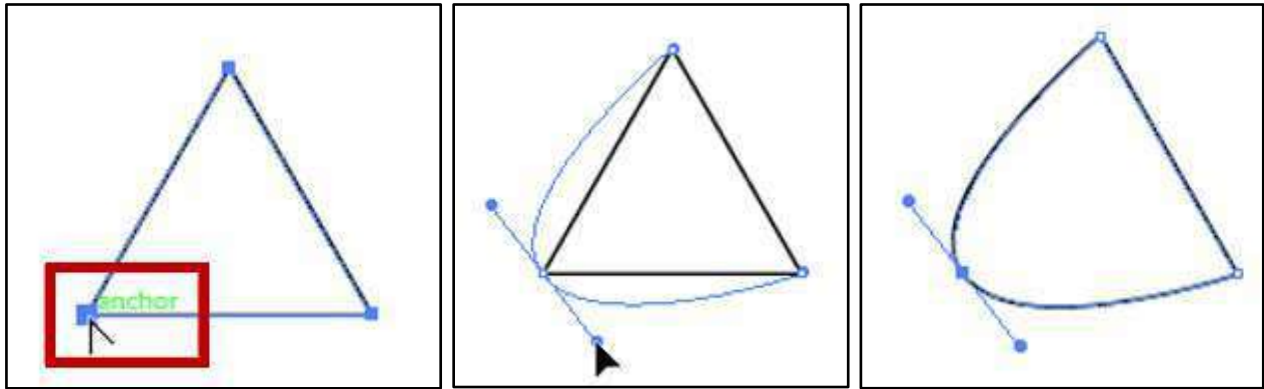


Figure 24 - Convert an Anchor Point to a Curved Path

Selection Tools

Use Selection Tools for selecting, positioning, and stacking objects accurately.



Figure 25 - Selection Tools from Tools Panel

Selection Tool

The *Selection Tool* allows you to select objects or groups. This tool activates all anchor points in an object or group at the same time, allowing you to move an object without changing its shape.

Selecting an Object

To select an object:

1. Click the **Selection Tool**.



Figure 26 - Section Tool

2. Click the **object** to select it, or **click and drag** allowing your pointer to touch the object. Either of these options will select the object.
3. Once selected, a *bounding box* will appear around the object. The bounding box allows an easy and effective way to resize an object using its sizing handles.

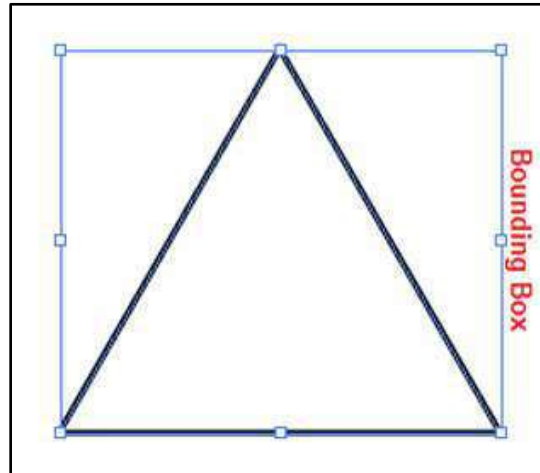


Figure 27 - Bounding Box

Note: To remove the *bounding box*, select **View** → **Hide Bounding Box**.

Selecting Multiple Objects

To select multiple objects in the Artboard:

1. Click the **Selection Tool** (See Figure 26).
2. Click an **object** to select it.
3. While pressing the **Shift** key on your keyboard, click the other **objects** that you would like to select (See Figure 28).

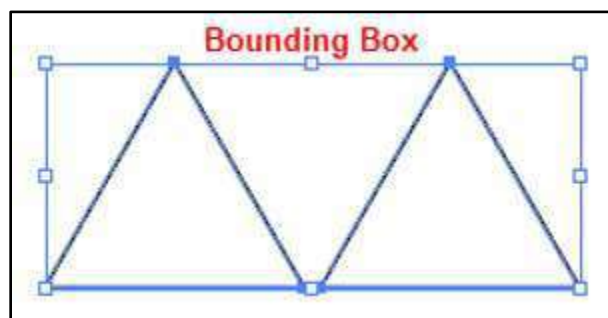


Figure 28 - Multiple Objects Selected with Selection Tool

Alternate Selection Option

The following explains an alternative method to select multiple objects:

1. Click the **Selection Tool** (See Figure 26).
2. **Click and drag**, touching each object that you want to select (See Figure 29).

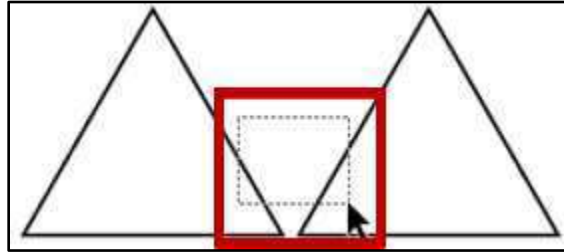


Figure 29 - Select Objects by Click and Drag with Selection Tool

Resizing an Object

To resize an object on the Artboard:

1. Click the **Selection Tool** (See Figure 26).
2. Hover over one of the **corners** or **side sizing handles**.
3. **Left-Click** and **drag** to resize the object (See Figure 30).

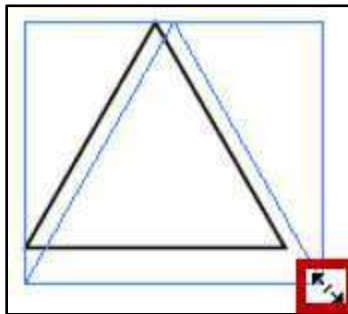


Figure 30 - Resize an Object with Selection Tool

Moving an Object

To move an object on the Artboard:

1. Select the **Selection Tool** (See Figure 26).
2. Hover over a **path** in the object.
3. Click the **path** and **drag** to move to your desired location (See Figure 31).

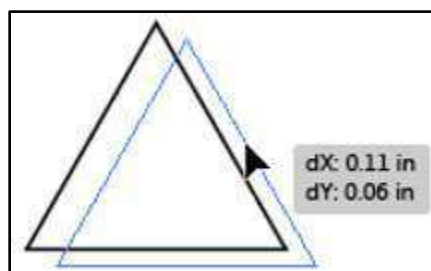


Figure 31 - Move an Object with Selection Tool

Duplicating an Object

To duplicate an object on the Artboard:

1. Click the **Selection Tool** (See Figure 26).
2. Select the **object**.
3. Position the pointer over the **path** of the object.
4. Hold down the **Alt key**, click the **path** and drag (See Figure 32).

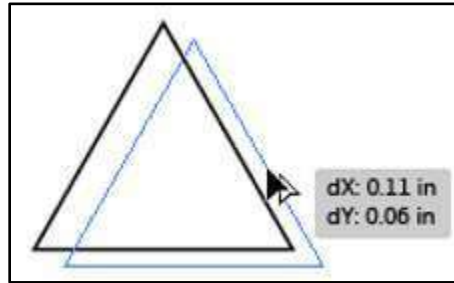


Figure 32 - Duplicate an Object with Selection Tool

5. Once in the desired location, release the **mouse** first, then the **Alt key**.

Direct Selection Tool

Use the *Direct Selection Tool* to select individual or multiple anchor points to manipulate the shape of the object.



Figure 33 - Direct Selection Tool

Selecting an Anchor Point to Manipulate an Object

To manipulate an object using an anchor point:

1. Click the **Direct Selection Tool** (See Figure 33).
2. Click one of the **anchor points**. The anchor point selected is solid filled. The other anchor points will be hollow.

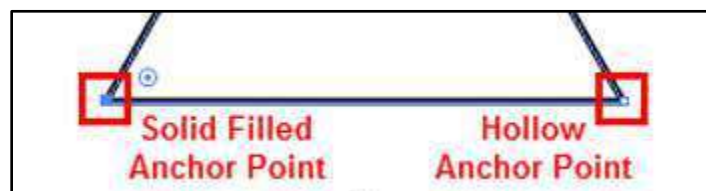


Figure 34 - Solid Filled and Hollow Anchor Point

3. Click and hold the **filled anchor point** and **drag** to manipulate the shape of the object.

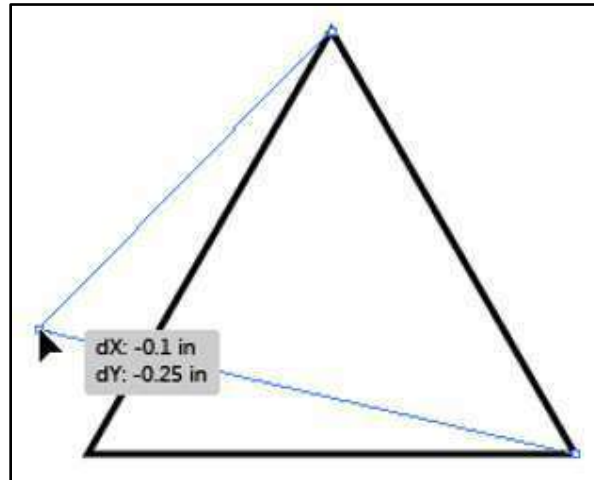


Figure 35 - Manipulating the Object with Direct Selection Tool

Note: Hollow anchor points will not move while dragging the selected anchor point.

4. Release the **mouse** button to indicate that you have completed the adjustments to the object.

Selecting Multiple Anchor Points

To select multiple anchor points:

1. Select the **Direct Selection Tool** (See Figure 33).
2. Click on an **anchor point**.
3. Hold down the **Shift** key and click **additional anchor points** (See Figure 36).

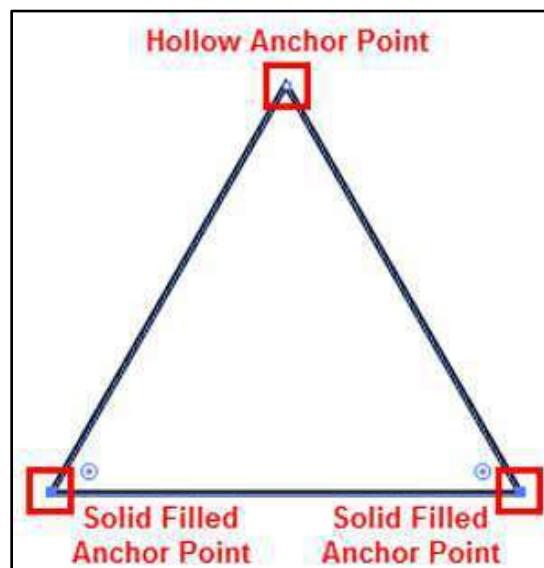


Figure 36 - Selecting Multiple Anchor Points with Direct Selection Tool

Note: If you select all anchor points on the object, you will not be able to manipulate the object. You will only be allowed to move it to another location.

Group Selection Tool

Hidden within the Direct Selection Tool, is the *Group Selection Tool*. Use this tool to select items within a group. It adds grouped items as you click objects in the order in which you selected them. This selection tool becomes more useful to you as you become more familiar with grouping objects in Illustrator.

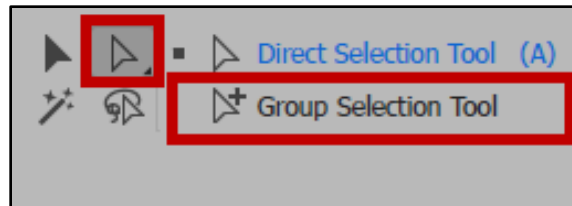


Figure 37 - Group Selection Tool

Magic Wand Tool

Use the *Magic Wand Tool* to select objects with like values, such as fill and stroke colors, based on a tolerance and stroke weight. Following is an example of how to use the *Magic Wand Tool*:

1. **Draw** three triangles.
2. Change the **fill color and stroke color** of all the triangles, making two the same and one different from the other two.
3. Click the **Magic Wand Tool**.



Figure 38 - Magic Wand Tool

4. Click on one of the two triangles that are the same. The triangles that are the same are selected.

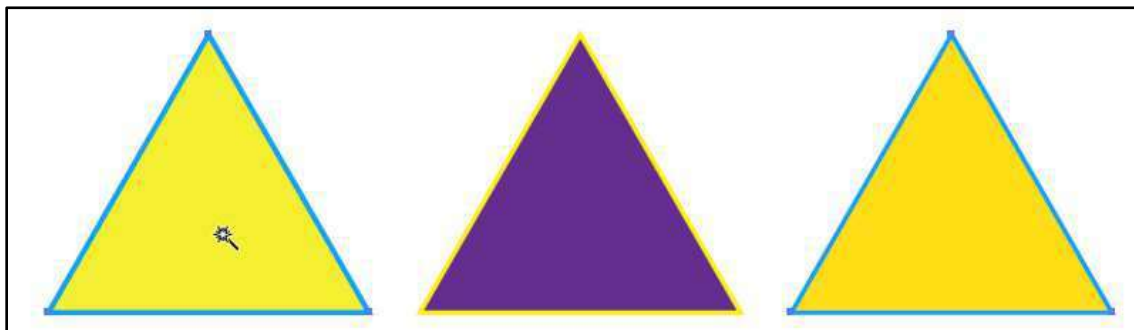


Figure 39 - Using the Magic Wand Tool

Note: To change options for selection, double-click the Magic Wand Tool in the *Tools Panel*.

Lasso Tool

Use the *Lasso Tool* to draw freehand to select anchor points or objects. To select anchor points or objects:

1. Click the **Lasso Tool**.



Figure 40 - Lasso Tool

2. **Click** and **drag** to draw a circle around the first two triangles.

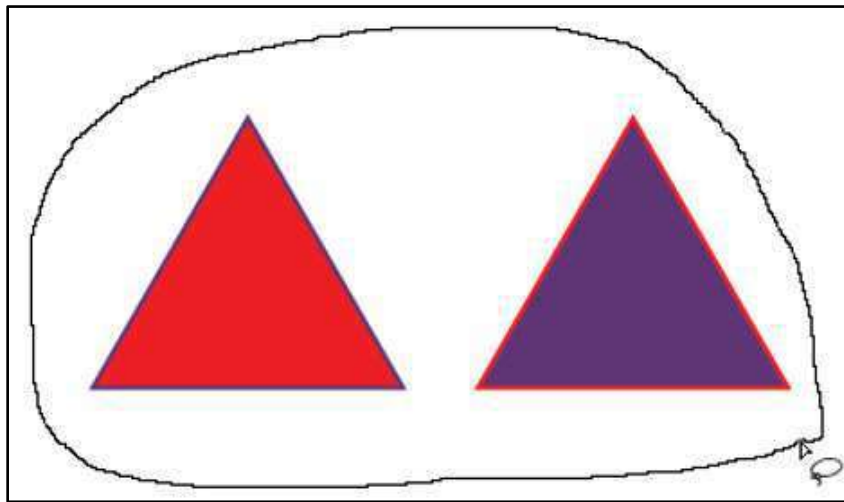


Figure 41 - Using the Lasso Tool

3. Upon releasing the mouse button, the two objects will be selected.

Line Tools

Use the *Line Tools* to draw straight or curved lines, spirals, and grids. When creating lines, you create the line and Illustrator inserts the anchor points.

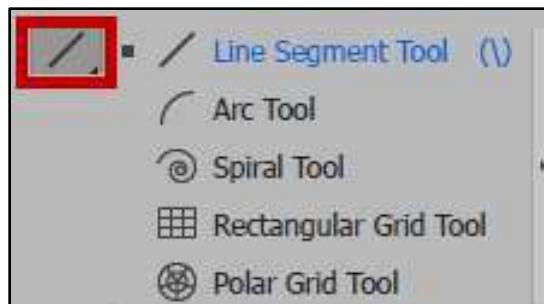


Figure 42 - Line Tools

Line Segment Tool

Use the *Line Segment Tool* to create a line.

Creating a line

To create a line:

1. Click the **Line Segment Tool**.

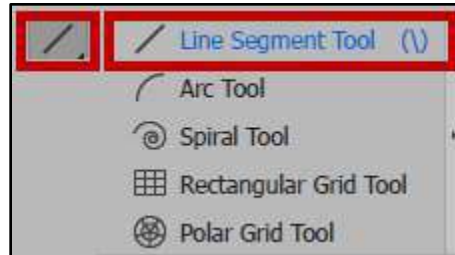


Figure 43 - Line Segment Tool

2. Position the **pointer** where you want the line to begin.
3. **Click** and **drag** to where you want the line to end. Once you release the mouse, your line will be drawn with two anchor points at each end.

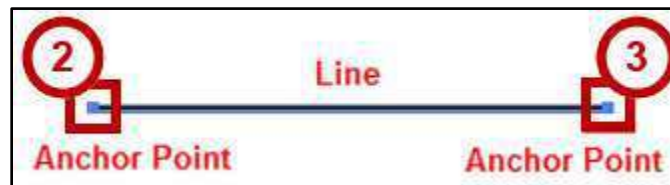


Figure 44 - Line with two Anchor Points

Note: To ensure a straight line, hold down the shift key while dragging the mouse.

Changing the line color

To change the color of the line:

1. Select the line using the **Selection Tool** (See Figure 26).
2. In the *Control Panel*, click the **Stroke drop-down arrow** to select a new color for the line (See Figure 45).

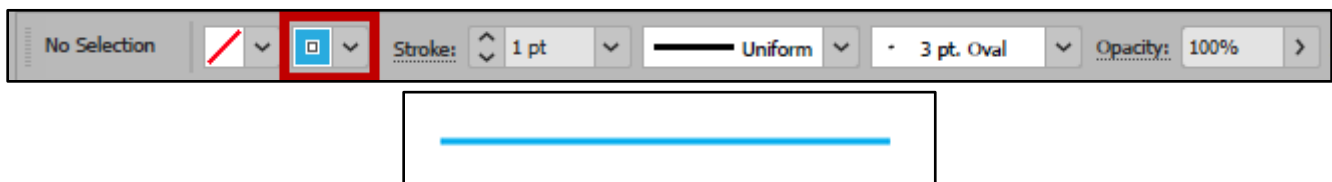


Figure 45 - Line Color Changed

Changing the thickness of the line

To change the thickness of the line:

1. Select the line using the **Selection Tool** (See Figure 26).
2. In the *Control Panel*, click the **Stroke Weight drop-down arrow** to select a weight for the line thickness (See Figure 46).

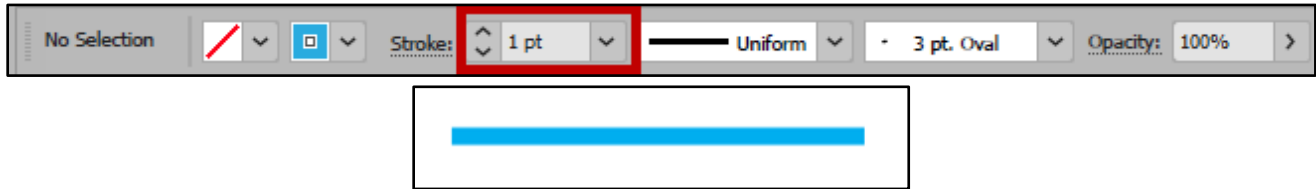


Figure 46 - Line Thickness Changed

Note: The higher the number, the thicker the line.

Changing the shape of the line

To change the shape of the line:

1. Select the line using the **Selection Tool** (See Figure 26)
2. In the *Control Panel*, click the **Variable Width drop-down arrow** to select a new shape for the line (See Figure 47).

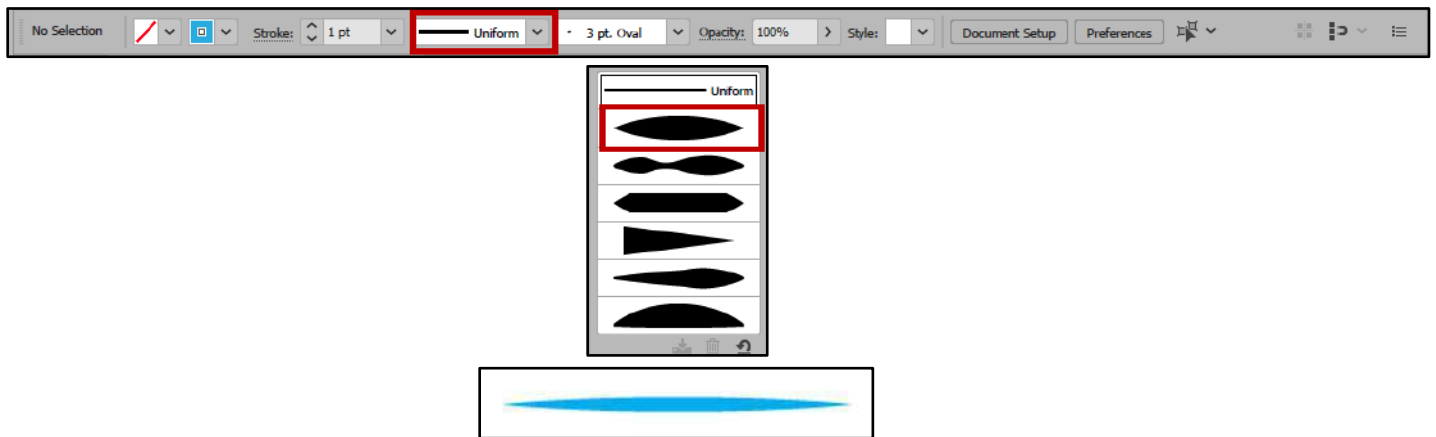


Figure 47 - Line Shape Changed

Arc Tool

Use the *Arc Tool* to create curved paths. To create a curved path:

1. Click the **Line Segment Tools drop-down arrow** (See Figure 48).
2. Click the **Arc Tool**, hidden beneath the *Line Segment Tool* (See Figure 48).

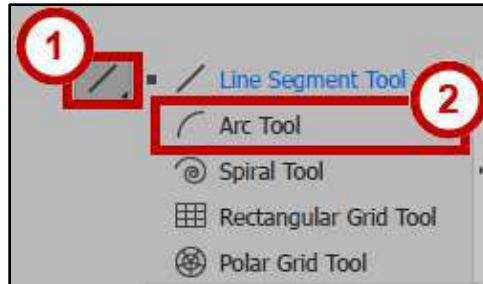


Figure 48 - Arc Tool

3. Position the pointer where you want the arc to begin.
4. Click and drag to the position where you want the arc to end. Once you release the mouse, you will have created a curved path (See Figure 49).

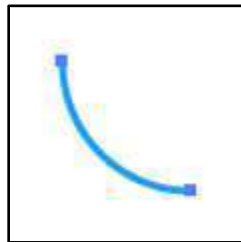


Figure 49 - Drawn Arc Tool

Note: To flip the arc to the opposite direction, while dragging, press the **(F)** key on the keyboard.

Spiral Tool

Use the *Spiral Tool* to create spiral paths. To create a spiral:

1. Click the **Line Segment Tools drop-down arrow** (See Figure 50).
2. Select the **Spiral Tool** hidden beneath the *Line Segment Tool* (See Figure 50).

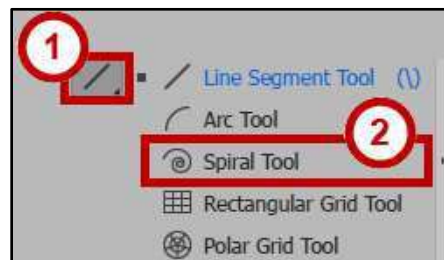


Figure 50 - Spiral Tool

3. Position the pointer in the position where you want to draw the spiral.
4. **Click** and **drag** to your desired size. Drag in an arc direction to rotate the spiral.



Figure 51 - Drawn Spiral Tool

Rectangular Grid Tool

The *Rectangular Grid Tool* creates rectangular grids of a specified size with a specified number of dividers. To create a rectangular grid:

1. Click the **Line Segment Tools drop-down arrow** (See Figure 52).
2. Click the **Rectangular Grid Tool** hidden beneath the *Line Segment Tool* (See Figure 52).

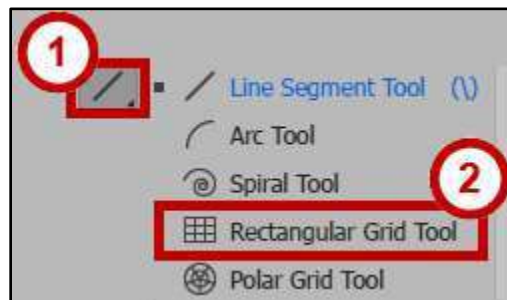


Figure 52 - Rectangular Grid Tool

3. Position the **pointer** where you want to begin the grid.
4. **Click** and **drag** until you reach the desired size.

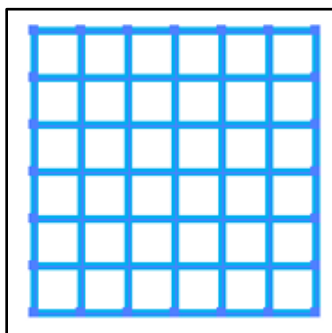


Figure 53 - Drawn Rectangular Grid Tool

Note: To add or remove horizontal lines, while dragging; press the **↑** or **↓ Arrow** keys on the keyboard. To add or remove vertical lines, while dragging; press the **←** or **→ Arrow** keys on the keyboard.

Polar Grid Tool

The *Polar Grid Tool* creates concentric circles of a specified size with a specified number of dividers. To create a polar grid:

1. Click the **Line Segment Tools drop-down arrow** (See Figure 54).
2. Click the **Polar Grid Tool** hidden beneath the *Line Segment Tool* (See Figure 54).

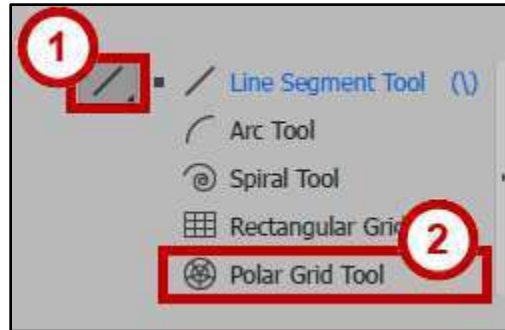


Figure 54 - Polar Grid Tool

3. Position the **pointer** where you want to begin drawing the grid.
4. **Click** and **drag** until you reach the desired size.

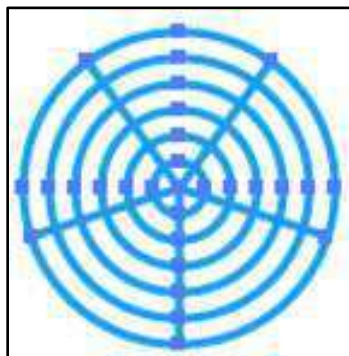


Figure 55 - Drawn Polar Grid Tool

Note: To add or remove concentric circles, while dragging; press the **↑** or **↓ Arrow** keys on the keyboard. To add or remove line segment dividers, while dragging, press the **←** or **→ Arrow** keys on the keyboard.

Drawing Tools

The *Drawing Tools* allow you to draw as if you were drawing with a pencil on paper. It is most useful for fast sketching or creating a hand-drawn look. Once you draw a path, you can immediately change it if needed. As you draw with the *Drawing Tools*, anchor points are set on the path. Illustrator determines the position they are set.

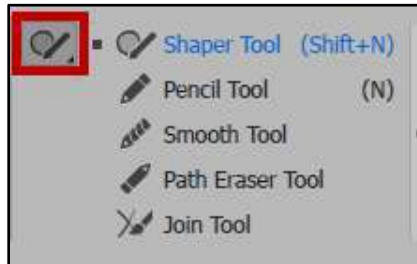


Figure 56 - Drawing Tools

The Shaper Tool

The *Shaper Tool* allows you to quickly create shapes as well as create complex designs by drawing, stacking, and placing shapes together, and then combining, merging, deleting, or moving them.

Shape Conversion

To automatically convert a drawing to a crisp geometric shape:

1. In the *Tools Panel*, click the **Shaper Tool**.

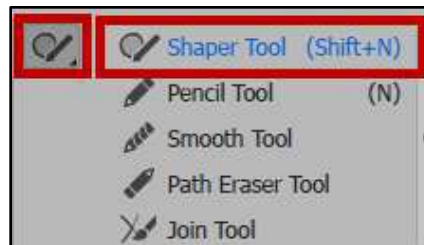


Figure 57 - Shaper Tool

2. **Left-click** and **drag** the mouse to draw a rough representation of a shape.

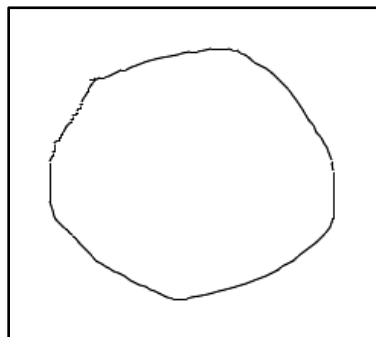


Figure 58 - Representation of a Shape

3. Release the **mouse button**. The shape is converted into a crisp geometric shape.

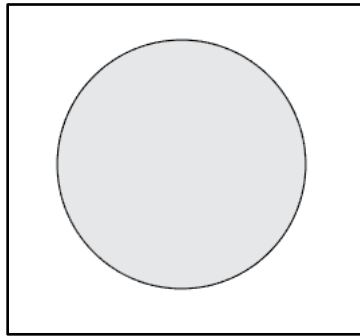


Figure 59 - Converted Shape

Note: Conversion functionality is limited to circles, squares, rectangles, and polygons.

Overlapping Shape Punch Out

Shapes that overlap can be merged or punched out. To punch out parts of your drawing:

1. Click the **Shaper Tool** to draw overlapping shapes.

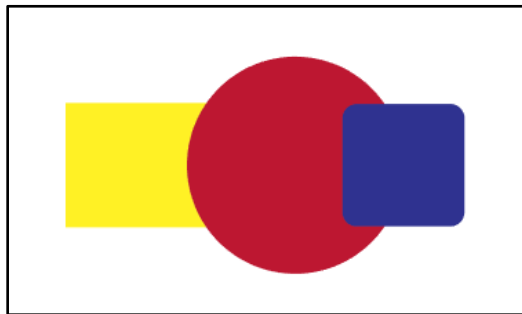


Figure 60 - Overlapping Shapes

2. **Left-click** the mouse to **scribble** on the area you want to punch out of the drawing.

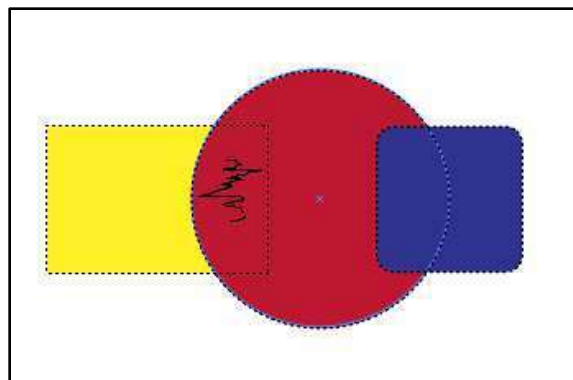


Figure 61 - Scribble the Area to be punched out

Note: If the scribble is within one shape, the shape is punched out. If the scribble is across intersecting areas of two or more shapes, the intersecting areas are punched out.

3. Release the mouse button. The area selected is punched out from the shape.

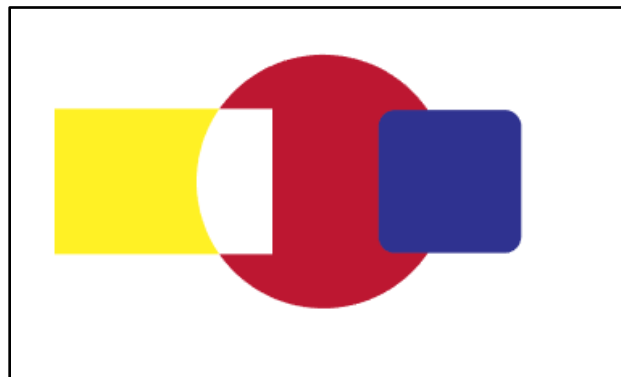


Figure 62 - Punched Out Area

Merging Shapes

To merge shapes, you must scribble across the shapes you want to merge.

1. In the *Tool Panel*, click the **Shaper Tool**.
2. **Left-click** the mouse and **scribble across the shapes you want merge**.

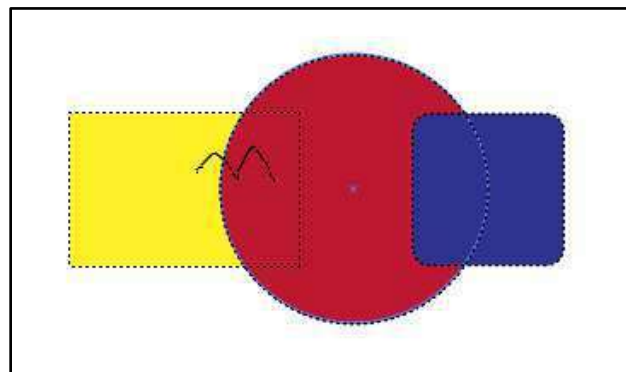


Figure 63 - Scribble the Shapes to Merge

3. Release the **mouse button**. The shapes are merged with the color of the merged area being that of the scribble origin point.

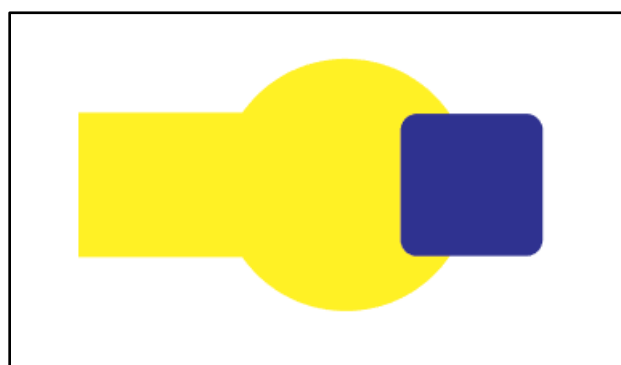


Figure 64 - Merging Shapes

Pencil Tool

The *Pencil Tool* lets you draw open and closed paths as if you were drawing with a pencil on paper. The following explains how to draw a freeform open path:

1. In the *Tool Panel*, click the **Shaper Tool drop-down arrow**.
2. In the *Shaper Tool* drop-down box, click the **Pencil Tool**.

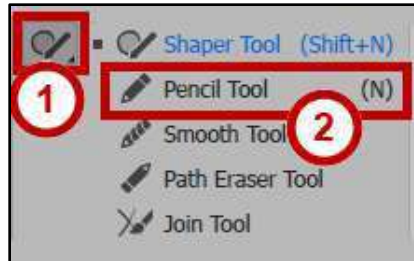


Figure 65 - Pencil Tool

3. Position the tool where you want the path to begin.
4. Click and **draw** a path. The *Pencil Tool* will display a small asterisk to indicate that you are drawing a freeform path.
5. Once you release the mouse, the line will change into a solid line, and Illustrator will insert anchor points.

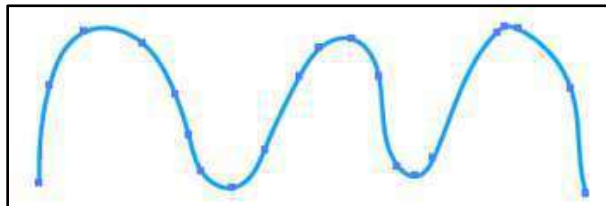


Figure 66 - Drawing a Freeform Path with the Pencil Tool

The following explains how to draw a closed path with the Pencil Tool:

1. Click the **Pencil Tool**.
2. Position the tool where you want the path to begin.
3. After you begin dragging, hold down the **Alt key**. The *Pencil Tool* will display a small circle to indicate that you are drawing a closed path.
4. Once the path is to your desired size and shape, release the **mouse button** first. Once the path closes, release the **Alt key**.

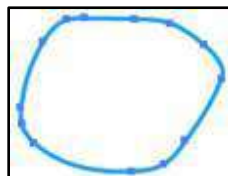


Figure 67 - Drawing a Closed Path with the Pencil Tool

Note: You do not have to position the cursor over the starting point to close the path. If you release the mouse in another location, the Pencil Tool will close the shape once you release the mouse.

Adding to a Path

To add to a path:

1. Select an existing path using the **Selection Tool** (See Figure 26).
2. Select the **Pencil Tool**.
3. Position the **Pencil Tool** on an endpoint of the path.

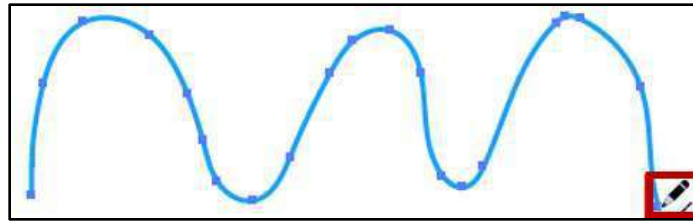


Figure 68 - Edit Path with Pencil Tool

Note: You will know that you are positioned on the endpoint, once the asterisk changes to a forward slash next to the *Pencil Tool*.

4. Click and drag to continue the path in the desired direction.

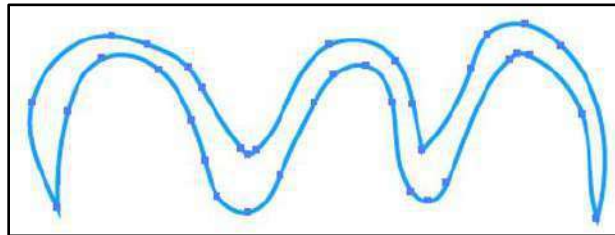


Figure 69 - Path Edited with Pencil Tool

Reshape a closed path

To reshape a closed path:

1. Select a closed path using the **Selection Tool** (See Figure 26).
2. Select the **Pencil Tool**.
3. Position the **Pencil Tool** on the path, in the position where you want to begin redrawing.

Note: You will know when you are on the path when the asterisk next the *Pencil Tool* disappears.

4. Click and drag creating the desired shape.

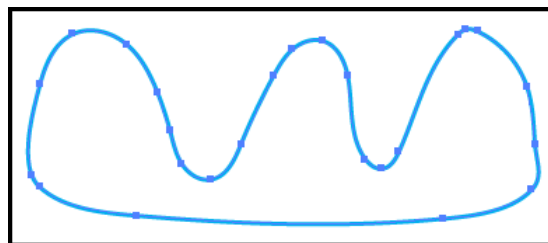


Figure 70 - Path Reshape with Pencil Tool

Note: In order for the path to remain closed, be sure to release the mouse while hovering over a different position on the path.

Smooth Tool

The *Smooth Tool* will round out and straighten any crooked, pointy, or jagged parts of the path to make it look smoother. The following explains how to use the tool:

1. Select the object using the **Selection Tool** (See Figure 26).
2. Select the **Smooth Tool** hidden beneath the *Pencil Tool*.

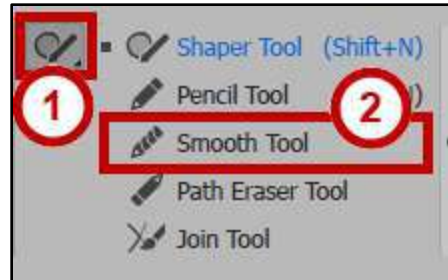


Figure 71 - Smooth Tool

3. Position the **pointer** where you would like to begin.
4. **Click** and **drag** the tool across the top of the path in the area that you want to smooth out.
5. Repeat this step to this portion of the path until you get the desired results.

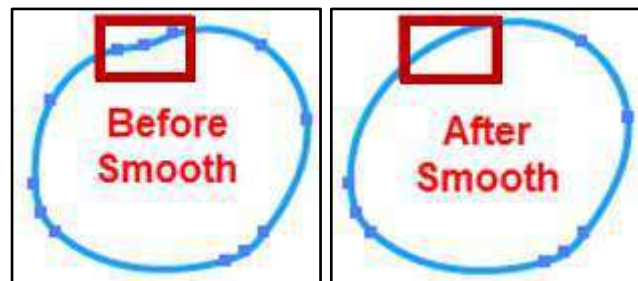


Figure 72 - Using the Smooth Tool

Path Eraser Tool

The *Path Eraser Tool* allows you to erase parts of the path. To erase parts of the path, use the following steps:

1. Select the object using the **Selection Tool** (See Figure 73).
2. Select the **Path Eraser Tool** hidden beneath the *Pencil Tool* (See Figure 73).

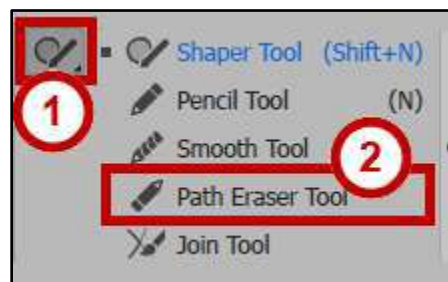


Figure 73 - Path Eraser Tool

3. Position the pointer at a position in the path that you would like to erase.

- Click and drag over the area that you would like to erase.

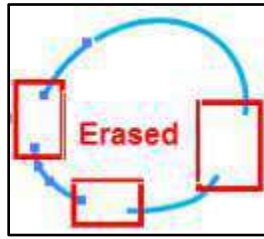


Figure 74 - Using the Path Eraser Tool

Join Tool

The *Join Tool* allows you to join parts of the path. Following is an example of how to use the join tool:

- Draw lines using the **line segment tool**.
- Click **CTRL + A** on your keyboard to **select all lines** (See .

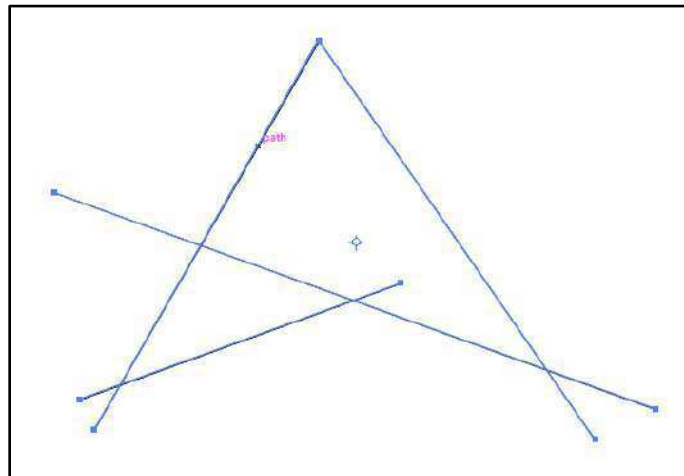


Figure 75 - Click CTRL + A

- Click the **Shaper Tool drop-down arrow** (See Figure 76).
- Click the **Join Tool** (See Figure 76).

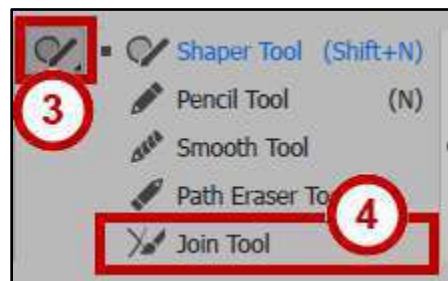


Figure 76 - Join Tool

5. Left-click the mouse to **draw across the two segments** you want to join together.

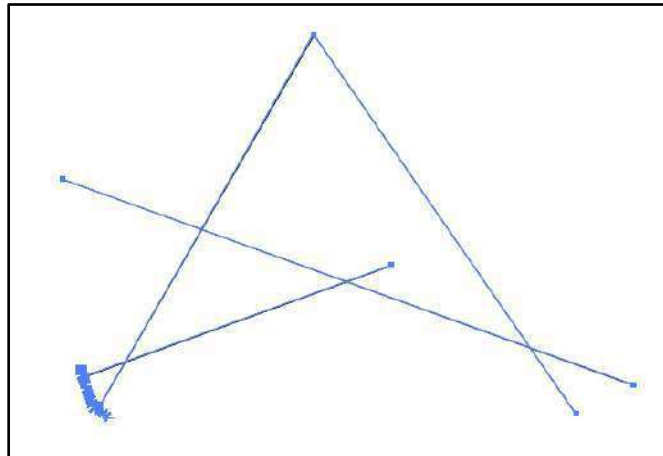


Figure 77 - Release the Mouse Button

6. Release the **mouse button** to join the segments.

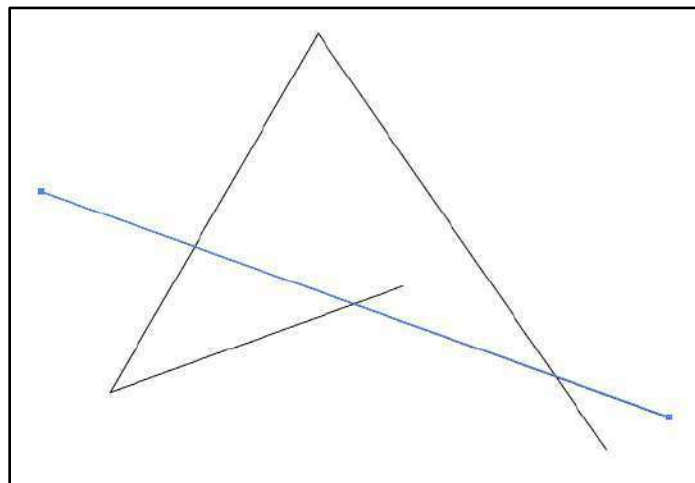


Figure 78 - Release the Mouse to Join Segments

7. Continue steps 4-6 until the segments to join the rest of your segments to create your object.

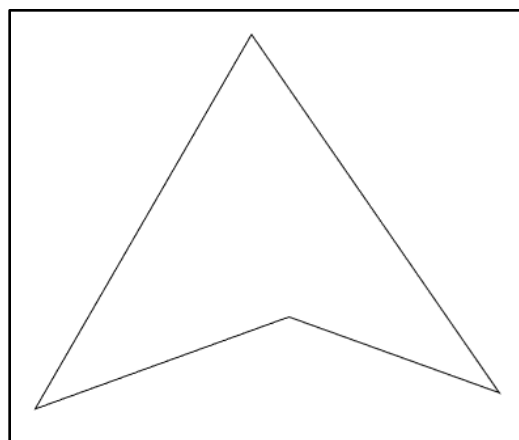


Figure 79 - Complete Shape

Creating Basic Shapes

Learn how to create basic shapes using the Rectangle Tool, Rounded Rectangle Tool, Ellipse Tool, Polygon Tool, Star Tool and Flare Tool.

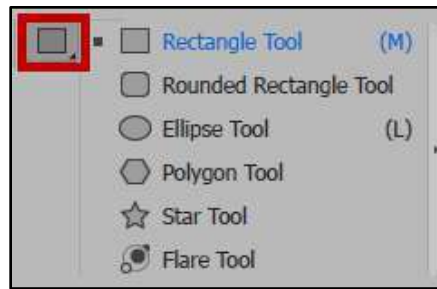


Figure 80 - Basic Shapes

Rectangle Tool

The following describes how to create rectangles and squares using the *Rectangle Tool*:

1. Select the **Rectangle Tool**.

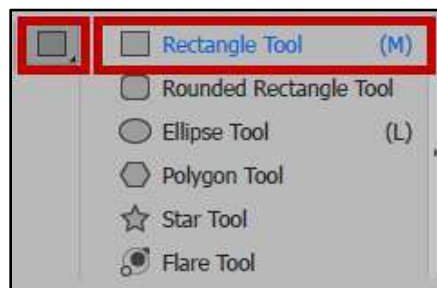


Figure 81 - Rectangle Tool.

2. Click on the **Artboard** where you want the shape to begin, and then **drag** until you reach the desired size.

Note: To draw a square, hold down the **Shift** key while you drag diagonally until the square is at the desired size. To create a square or rectangle using values, click where you want the top-left corner to be, specify a Width and Height, and then click OK.

3. After you create the shape, you can adjust the size and position by using the *Selection Tool*.

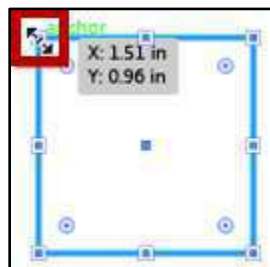


Figure 82 - Adjusting the Rectangle Size

Rounded Rectangle Tool

The following explains how to create rounded rectangles and rounded squares using the *Rounded Rectangle Tool*:

1. Click the **Rectangle Tool drop-down arrow** (See Figure 83).
2. Click the **Rounded Rectangle Tool** hidden beneath the *Rectangle Tool* (See Figure 83).

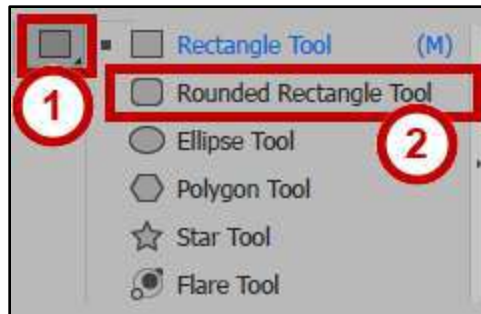


Figure 83 - Rounded Rectangle Tool

3. Click on the **Artboard** where you want the shape to begin, and drag diagonally until you reach the desired size.

Note: To add or remove the corner radius, while dragging; press the **↑** or **↓ Arrow** keys on the keyboard. To create square or most rounded corners, while dragging, press the **←** or **→ Arrow** keys on the keyboard.

Note: To draw a rounded square, hold down the **Shift** key while you drag diagonally until the square is the desired size. To create a rounded square or rectangle using values, click in the document window, and enter a value for Width, Height, and Corner Radius then click OK.

4. After you create the shape, you can adjust the size and position by using the *Selection Tool*.



Figure 84 - Adjusting the Rounded Rectangle Size

Ellipse Tool

The following explains how to create circles and ovals using the *Ellipse Tool*:

1. Click the **Rectangle Tool drop-down arrow** (See Figure 85).
2. Click the **Ellipse Tool** hidden beneath the *Rectangle Tool* (See Figure 85).

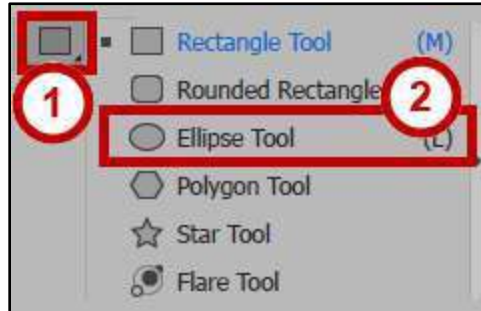


Figure 85 - Ellipse Tool

3. Click on the page where you want the shape to begin, and drag diagonally until you reach the desired size.

Note: To draw a round circle, hold down the **Shift** key while you drag diagonally until the circle is the desired size. To create an ellipse or circle using values, click in the document window, and enter a value for Width and Height then click OK.

4. After you create the shape, you can adjust the size and position by using the *Selection*.

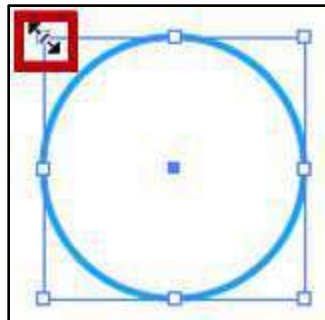


Figure 86 - Adjusting the Ellipse Size

Polygon Tool

The following explains how to create a polygon using the *Polygon Tool*:

1. Click the **Rectangle Tool drop-down arrow** (See Figure 87).
2. Click the **Polygon Tool** hidden beneath the *Rectangle Tool* (See Figure 87).

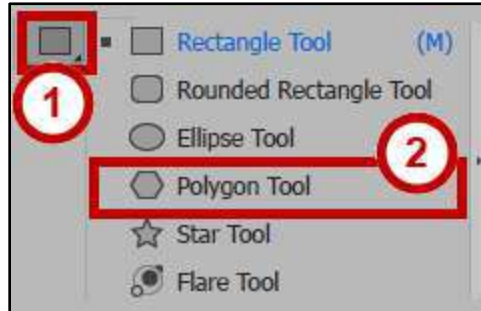


Figure 87 - Polygon Tool

3. Click on the page where you want the shape to begin, and drag diagonally until you reach the desired size.

Note: Drag the pointer in an arc to rotate the polygon. To add or remove sides from the polygon, while dragging; press the **↑** or **↓ Arrow** keys on the keyboard.

Note: To create a polygon using values, click in the document window, and enter a Radius and number of Sides then click OK.

4. After you create the shape, you can adjust the size and position by using the *Selection Tool*.

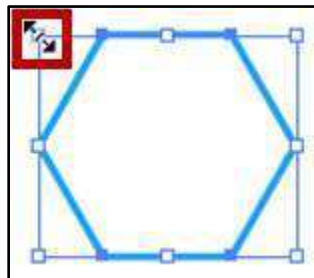


Figure 88 - Adjusting the Polygon Size

Star Tool

Creating a star shape using the *Star Tool*.

1. Click the **Rectangle Tool drop-down arrow**
2. Click the **Star Tool** hidden beneath the *Rectangle Tool* (See Figure 89).

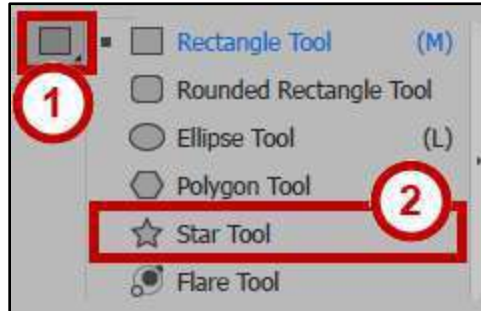


Figure 89 - Star Tool

3. Click on the page where you want the shape to begin, and drag diagonally until you reach the desired size.

Note: Drag the pointer in an arc to rotate the star. To add or remove points from the star, while dragging; press the **↑** or **↓ Arrow** keys on the keyboard.

Note: To create a star using values, click in the document window, and enter a Radius 1, Radius 2, and number of Points then click OK.

4. After you create the shape, you can adjust the size and position by using the *Selection Tool*.

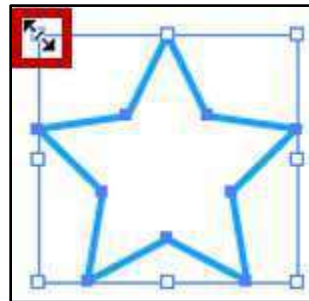


Figure 90 - Adjusting the Star Size

The Flare Tool

Use the *Flare Tool* to create special effects within your drawing. The tool has properties that make it interact with what is beneath it. It has the effect of a lens flare from a camera, creating flare objects with a bright center, a halo, and rays and rings. The following explains how to use the tool:

1. Click the **Rectangle Tool drop-down arrow** (See Figure 89).
2. Click the **Flare Tool** hidden beneath the *Rectangle Tool* (See Figure 89).

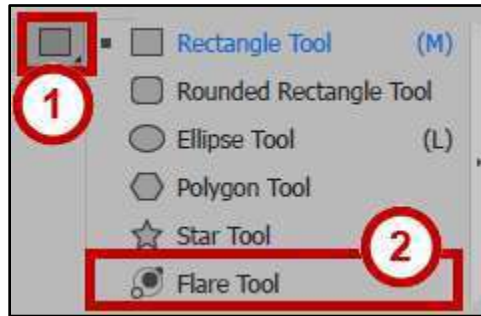


Figure 91 - Flare Tool

3. Click on the page where you want the shape to begin, and drag diagonally until you reach the desired size.
4. Flares include a center handle and an end handle. Use the handles to position the flare and its rings. The center handle is in the bright center of the flare. The flare path begins from this point.

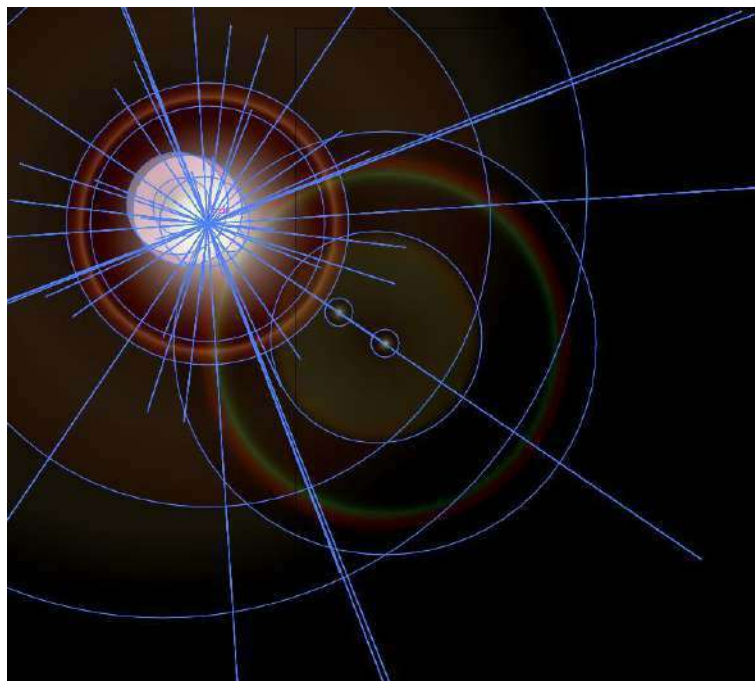


Figure 92 - Flare Path

Editing Tools

The *Editing Tools* allow you to fine tune your drawings.



The Eraser Tool

The *Eraser Tool* allows you to erase mistakes or manipulate objects. The following explains how to use the tool:

1. Draw a basic shape and fill it with a color.
2. Click the **Eraser Tool**.

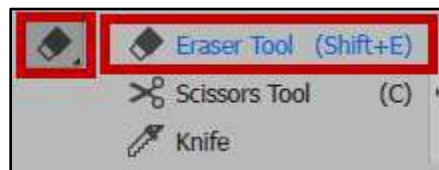


Figure 93 - Eraser Tool

3. Click and drag the **Eraser Tool** across the shape from left to right.
Note: You now have two objects that you can manipulate separately.

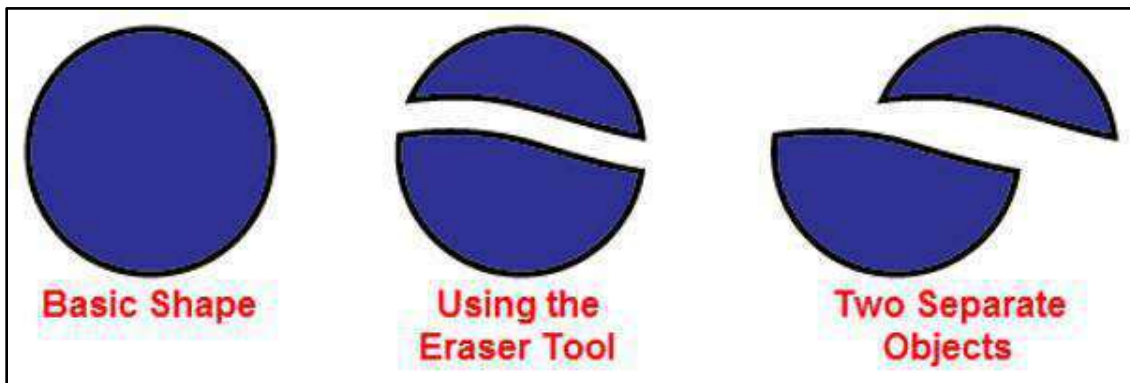


Figure 94 - Using the Eraser Tool.

Changing the *Eraser Tool* Options

1. Double-click the **Eraser Tool** to bring up the options dialog box.
2. Change the *Size*, *Angle*, and *Roundness* values to customize the eraser.
3. Preview your options in the small white square at the top of the dialog box.
4. Click **OK**.

Shape Builder Tool

The *Shape Builder Tool* is an interactive tool for creating complex shapes by the merging and erasing of simple shapes.

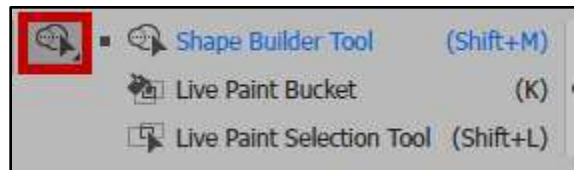


Figure 95 - Shape Builder Tool

1. Create several overlapping shapes.

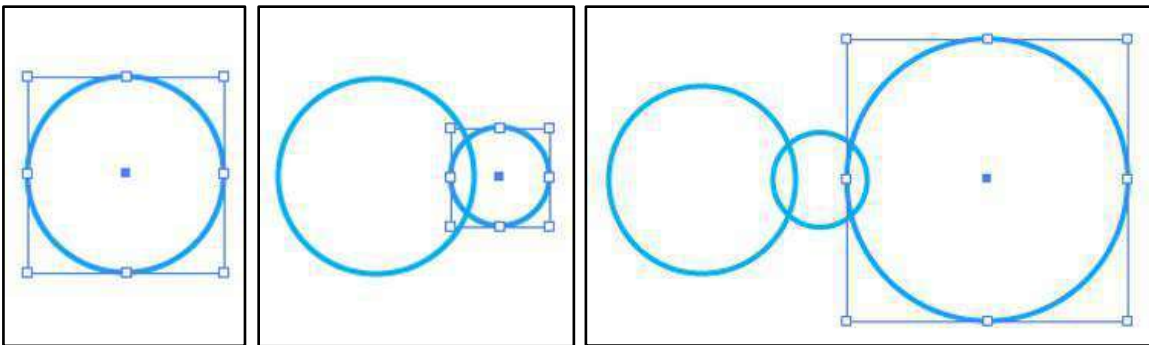


Figure 96 - Overlapping Shape.

2. Select the shapes that you want to combine with the *Selection Tool*.

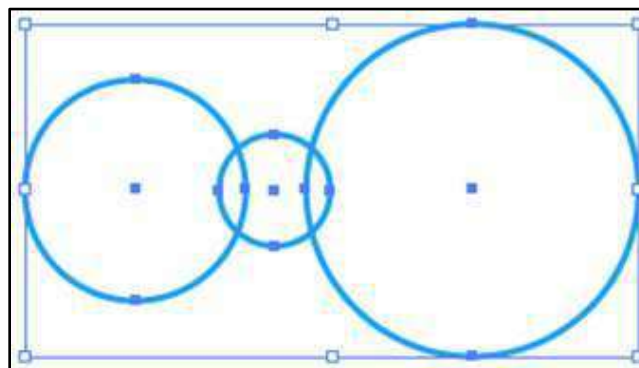


Figure 97 - Select the Shapes with the Selection Tool

3. Select the **Shape Builder Tool**.



Figure 98 - Shape Builder Tool

- Click and drag across the selected shapes. The shapes are now merged into one shape.

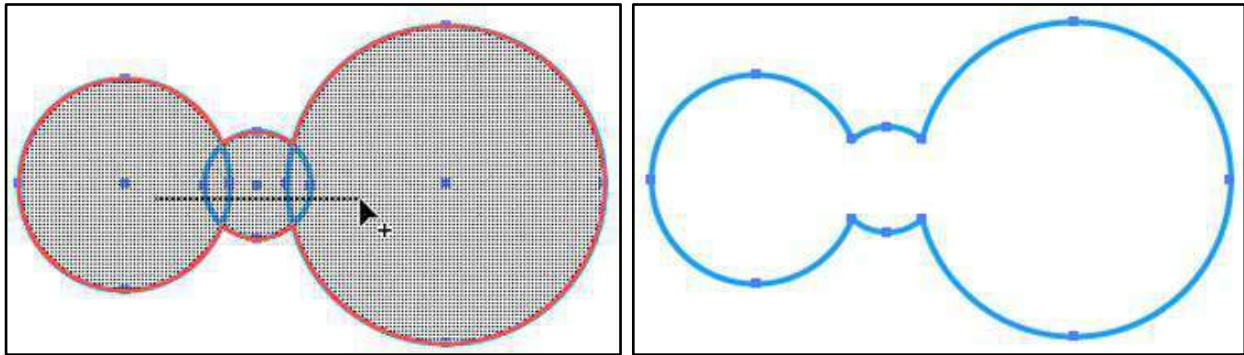


Figure 99 - Merge Overlapping Shapes

- Create another shape that overlaps your new combined shape.

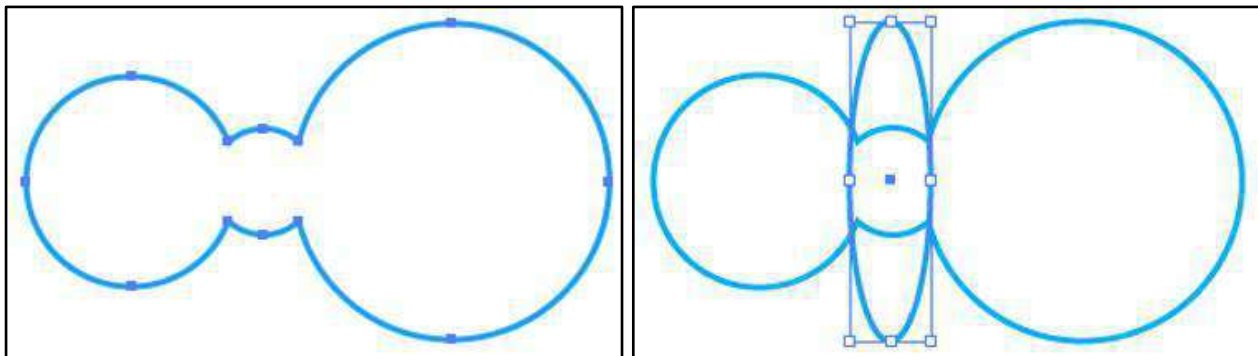


Figure 100 - Overlap New Shape on Combined Shape

- Using the *Selection Tool*, select both shapes.

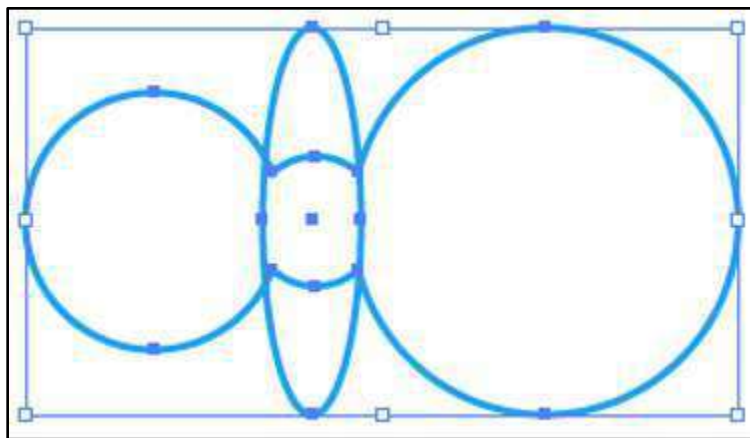


Figure 101 - Select the Combined and Overlapping Shape

- Select the **Shape Builder Tool** again.
- Hold down the **Alt** key then **click and drag** across the new shape where it overlaps with the previous shape. The new shape is erased from the underlying shape.

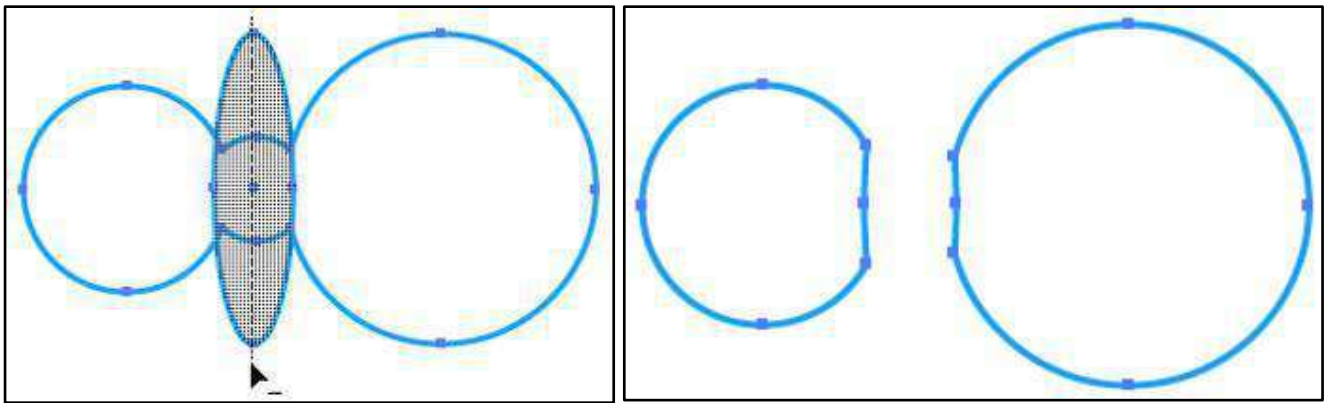


Figure 102 - Erase Overlapping and Underlying Shape.

Live Paint Bucket Tool

The *Live Paint Bucket* tool allows you to break and edit overlapping shapes and intuitively fill those in-process shapes with color.

1. Choose the **Selection Tool** and select the object created in the Shape Builder Tool exercise.
2. Make sure the **Fill** switch is forward on the *Tools Panel*.
3. Select the **Live Paint Bucket** tool hidden beneath *Shape Builder Tool*.

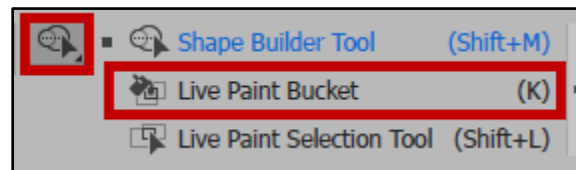


Figure 103 - Live Paint Bucket tool

4. Choose a Fill color from the swatches or color panel.
5. Click in the region you want to fill with that color (See Figure 104).

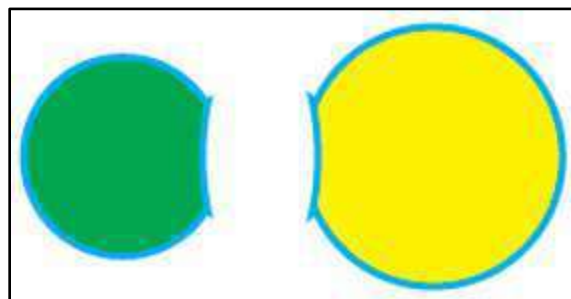


Figure 104 - Using the Live Paint Bucket tool

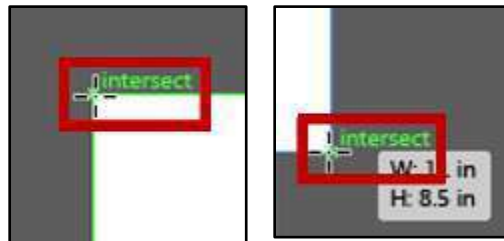
Note: Pressing the ← or → **Arrow** keys will allow you to easily choose colors from the swatches panel.

Changing the Background Color of an Artboard

Because Illustrator is a vector drawing program, you always have to create an object to apply color to; there is no “background” layer, as there is in Photoshop. To change the background color of an Artboard, we will use an object. The following instructions explain how to change the background color of an Artboard using objects:

1. Select the *Rectangle Tool*.
2. Position the crosshairs at the top-left corner of the Artboard until you see the word *intersect* (See Figure 105).
3. Click and drag in a diagonal direction to the bottom-right corner until you see the word *intersect* (See Figure 105).

Note: The idea is to draw a rectangle the exact same size as the Artboard.



Top left corner
of artboard

Bottom right corner
of artboard

Figure 105 - Drawing the Rectangle.

4. From the *Control Panel*, choose a **Fill** color.

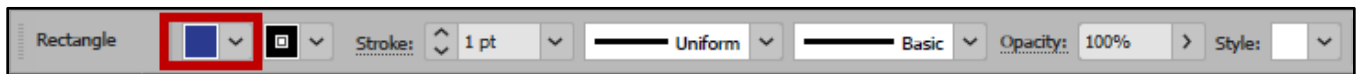


Figure 106 - Choose Fill Color

5. At the bottom of the panels to the right of your window, you should see a *Layers* panel.

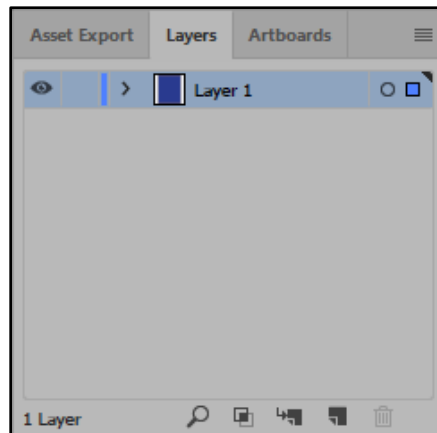


Figure 107 - Layers Panel

Note: If you do not see the *Layers Panel*, go to the *Window* menu and select *Layers*.

- In the Layers Panel, notice Layer 1. To the far left of Layer 1 you will see an open eye. Next to the eye, there will be an empty square. **Click** the empty square. A lock will appear, locking this layer (See Figure 108). If you try to create art on the Artboard now, you will not be able to do so.

Note: We are locking this layer to prevent it from moving as we create art on the artboard.

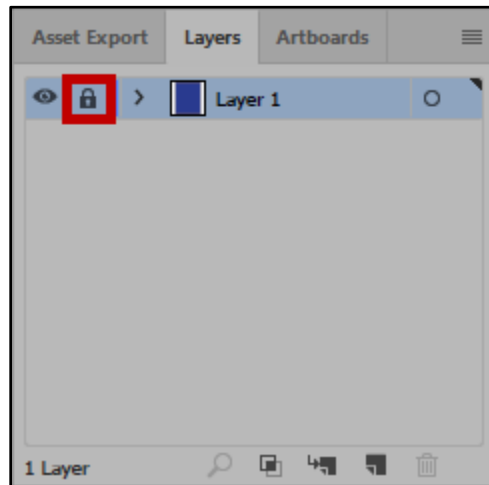


Figure 108 - Locked Layer

- Click the **Create New Layer** icon at the bottom of the Layers panel, next to the trash can.

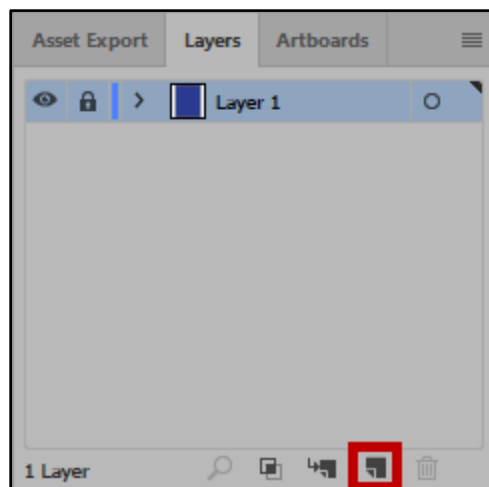


Figure 109 - Create New Layer

- You can now begin creating art on the Artboard.

Note: If you plan on changing the background color of your Artboard, it is recommended that you do this, before you begin creating art on the Artboard. Changing the background color after you have created art, may cause your art to be hidden from view.

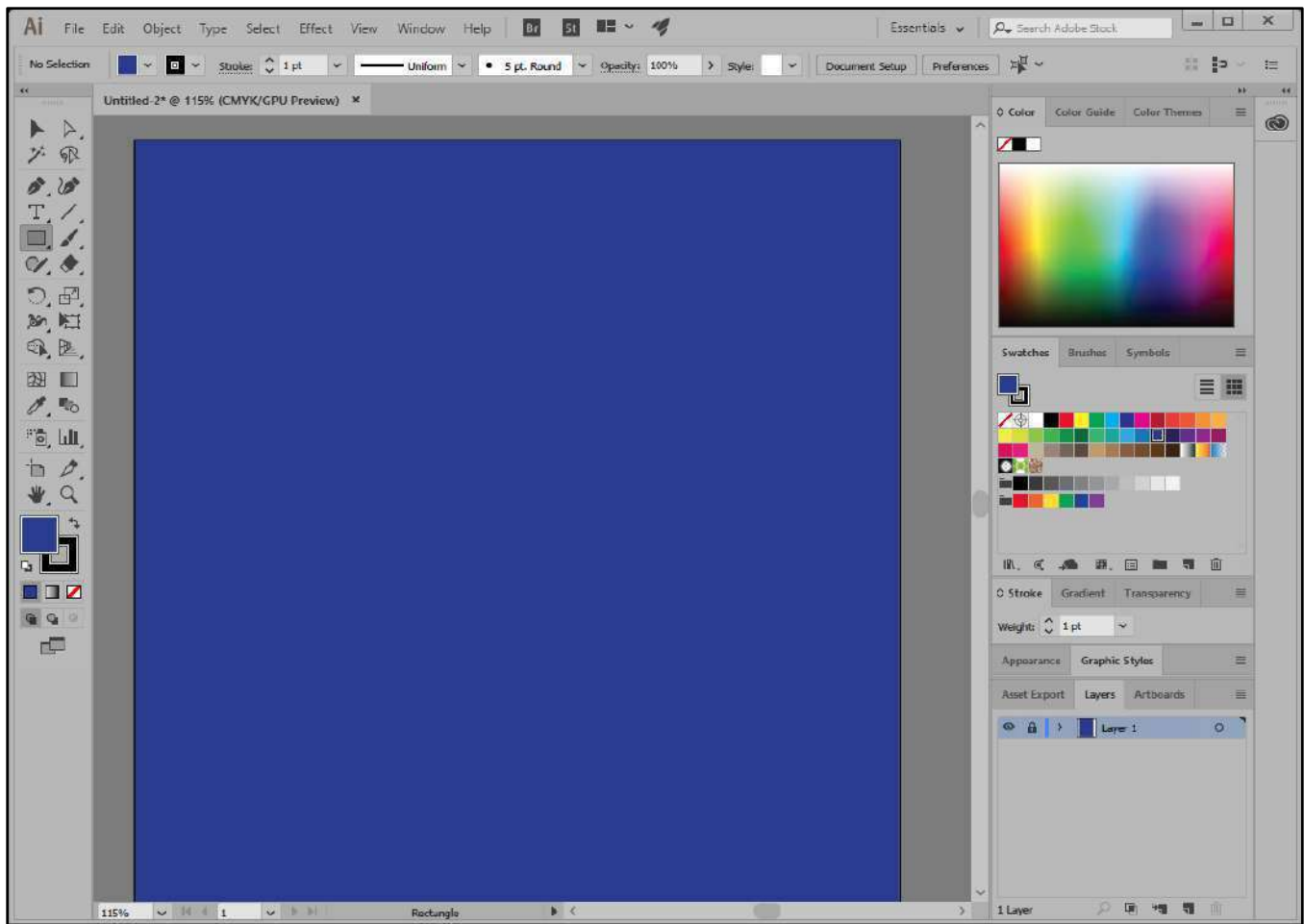


Figure 110 - Changing the Artboard Background Color

Text

There are several types of text that you can add to an Illustrator file. The following instructions will explain how to apply *Point* type text and *Area* type text. The instructions will also explain how to add text to a path, and how to add text on a closed shape.

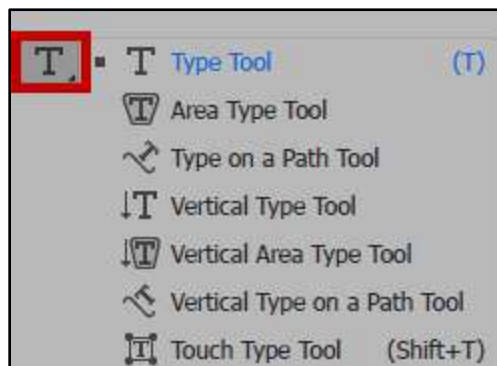


Figure 111 - Type Tools

Point Type

Point type is a horizontal or vertical line of text that begins where you click and expands as you enter characters.

1. Select the **Type Tool**.
2. Click where you want to begin typing.

Note: Press Enter to start a new line.

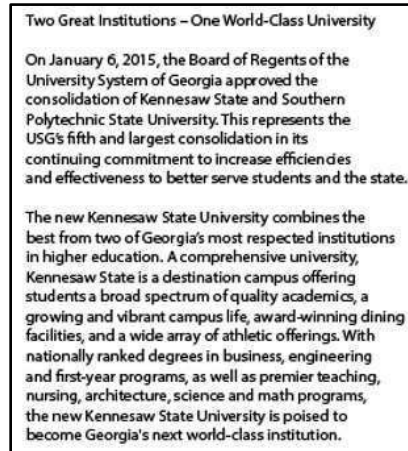


Figure 112 - Type Tool Text

Area Type

Area type uses the boundaries of an object to control the flow of characters, either horizontally or vertically. When the text reaches a boundary, it automatically wraps to fit inside the defined area.

1. Select the **Type Tool**.
2. Click and drag on the page to create a textbox. This will be the area that your text will be displayed.
3. Begin typing and continue until you are done. Your text will automatically wrap to the next line (See Figure 113).

Note: You do not need to press Enter to start a new line. To view the area type options dialog box, double-click the Type Tool. Enter the desired specification for the textbox, then click OK.

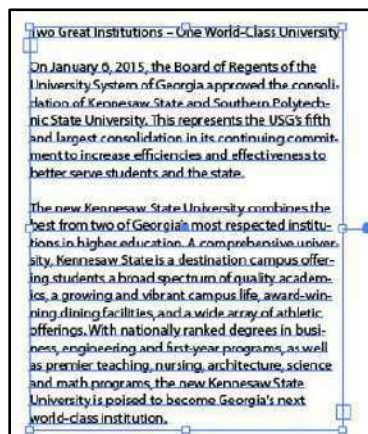


Figure 113 - Area Type Text.

Adding Text to a Path

1. Create a path using the *Pen, Line, or Pencil Tool*.
2. Select the **Type Tool**.
3. Hover over the start of the path until your cursor turns into an I-bar with a squiggle, and then click.

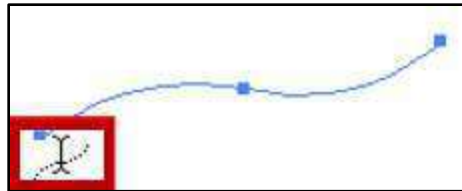


Figure 114 - I Bar Cursor with a Squiggle Line

4. Begin typing. Your text will run along the selected path.



Figure 115 - Adding Text to a Path

Adding Text on a Closed Shape

1. Create a closed shape, a circle or oval for example.
2. Select the **Type Tool**.
3. Hover over the path of the closed shape until you see the I-bar become rounded

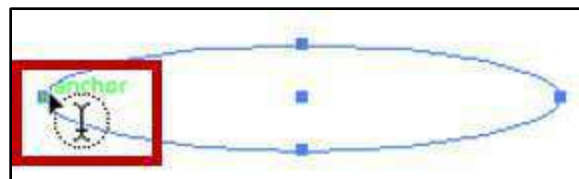


Figure 116 - I Bar Cursor with a Circle on a Closed Shape

4. Hold down the **Alt** key to change the icon to the squiggle line (See Figure 117).

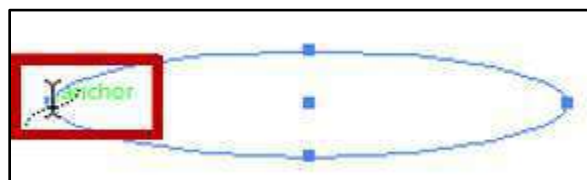


Figure 117 - I Bar Cursor with a Squiggle Line on a Closed Shape

- When the squiggle line appears, click and **begin typing**. The text will flow around the path of the shape.

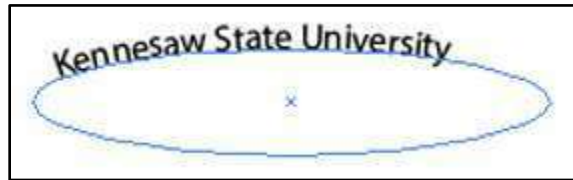


Figure 118 - Text on a Closed Shape

Saving a file

- Select **File** on the *Menu Bar*, then select **Save**. The *Save As* dialog box appears (See Figure 119).
- Choose where you want to save the file, .e.g., Desktop, Computer (See Figure 119).
- Give the file a name and file type (See Figure 119).

Note: Saving a file as an (*.AI) file, will allow you to open and edit the document in Illustrator.

- Select **Save** (See Figure 119).

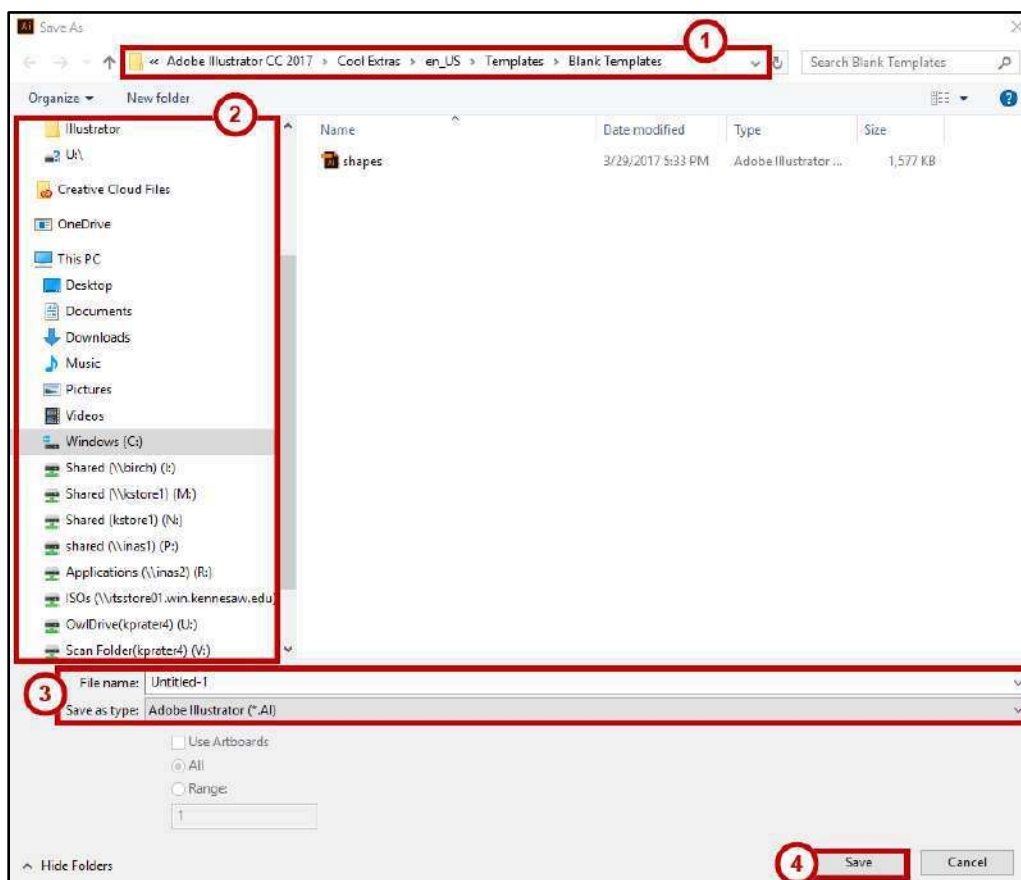


Figure 119 - Save Window.

5. The *Illustrator Options* dialog box will open after clicking the Save button (See Figure 120).
6. Choose the **Version** you want to save the file as (See Figure 120).
7. Choose your options (See Figure 120).
 - a. Create PDF Compatible File allows you to open the file in Adobe (See Figure 120).
 - b. Embed ICC Profiles are your color profiles; therefore, you may want to leave this option checked (See Figure 120).
 - c. Use Compression will make the file smaller on a disk (See Figure 120).
 - d. Artboards were not introduced in Illustrator until version CS4. Therefore, if you choose to save the file in a version earlier than CS4, you will have to save each Artboard to a separate file (See Figure 120).
8. Once you have made your selections, select **OK** (See Figure 120).

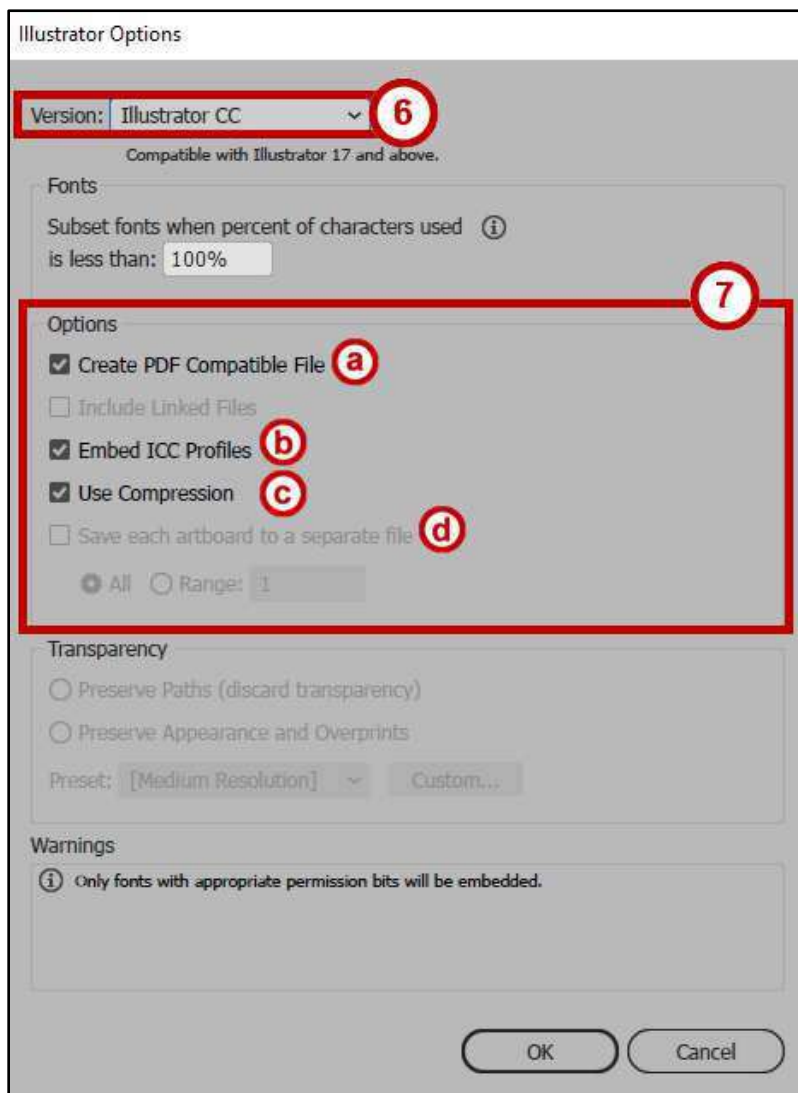


Figure 120 - Illustrator Options

Printing

1. Choose **File** from the *Menu Bar* and select **Print....**
2. In the *Print* dialog box that appears, select a **printer** if the correct one is not already selected (See Figure 121).
3. Choose from the other options available.

Note: For example, use the General section to pick pages to print. In the Media area, select the size of the media you are printing to. In the Options area, choose whether you want layers to print and any options specific to printing layers.

4. Once you have selected all of your options, click the **Print** button (See Figure 121).

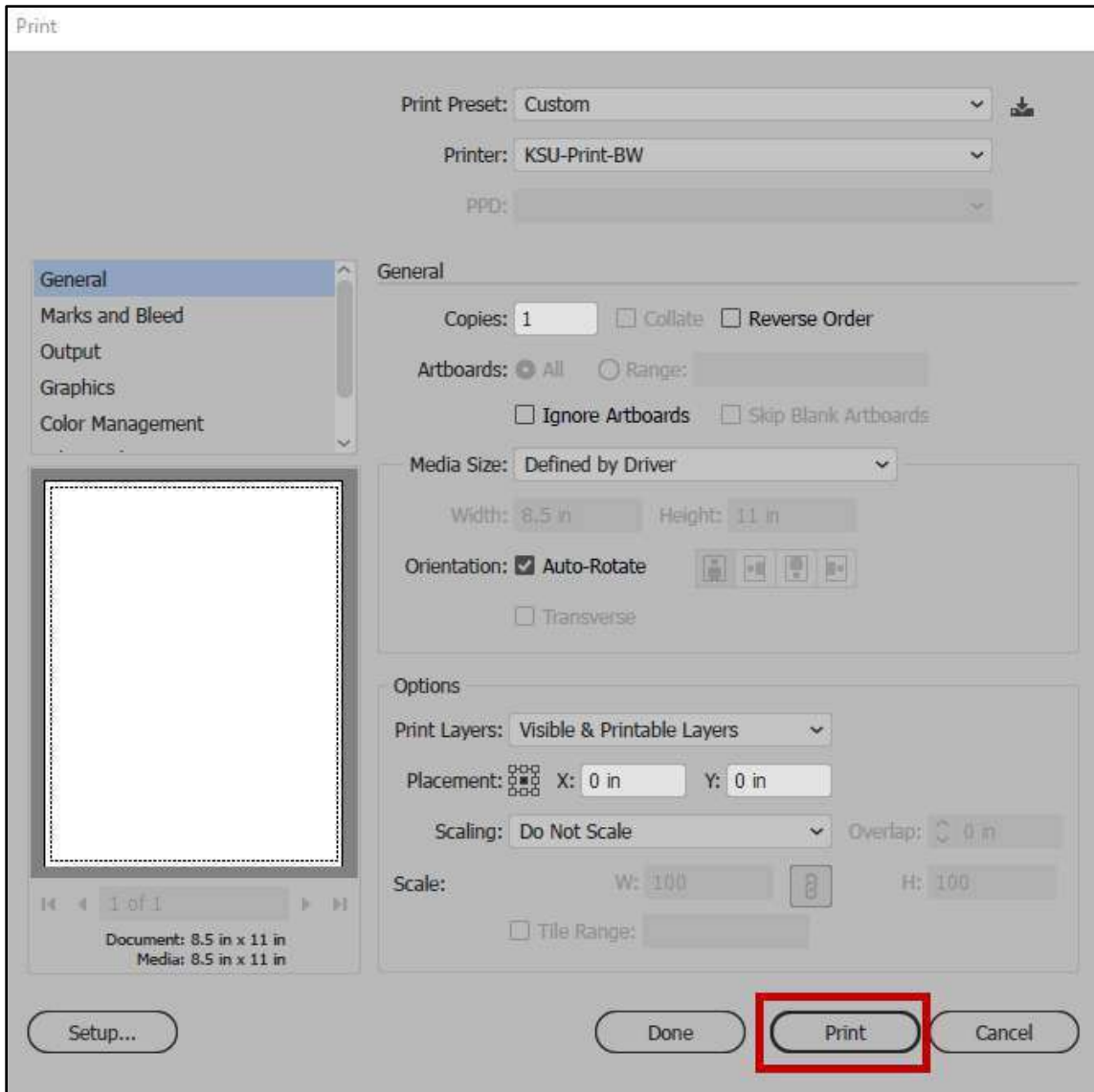


Figure 121 - Printing Dialog Box.

Resources

OwlTrain has many Illustrator resources available to you on their website:

- OwlTrain: <http://owltrain.kennesaw.edu/>

Additional Help

For additional help or installation issues, please contact the KSU Service Desk (Faculty & Staff) or the KSU Student Help Desk (Students).

KSU Service Desk for Faculty & Staff

- Phone: 470-578-6999
- Email: service@kennesaw.edu
- Website: <http://uits.kennesaw.edu/>

KSU Student Help Desk

- Phone: 470-578-3555
- Email: studenthelpdesk@kennesaw.edu
- Website: <http://uits.kennesaw.edu/>