

Getting Started with Adobe Illustrator CS5

A University of Michigan Library Instructional Technology Workshop

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WHAT'S ILLUSTRATOR GOOD FOR?

Adobe Illustrator is a graphic editing program well suited to creating graphics from scratch. It is significantly different from many other graphics programs because it deals primarily with **vector** graphics. Most people are more familiar with bitmap (**raster**) graphics, such as what Photoshop produces.

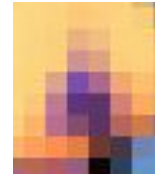
Bitmap imaging: uses a grid full of tiny squares called pixels to store image information. Bitmap images are good for continuous and/or irregular shadings and colors (such as in photographs), but do not resize well.



100%



300%



800%

Vector imaging: uses mathematics of points and lines (vectors) to store image information, and generates much smaller files than bitmap graphics. The resulting file is made up of lines and patches of color. It can handle smooth gradients, but does not do well with irregular shadings. When vector images are resized (smaller or larger), there is no loss of quality.



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WHEN TO USE ILLUSTRATOR

Types of documents you might choose Illustrator to create include:

- Simple line art: logos, buttons, and other images with clear areas of solid color.
- Maps and diagrams.
- Single-page document juxtaposing text and images – a handout for a class or a poster for a conference.



WHY TO USE ILLUSTRATOR

It may be difficult to convince yourself to spend the amount of time necessary to learn Illustrator, when similar work can be done in Photoshop. However, for many images, especially of the types listed above, Illustrator produces a MUCH smaller file, that looks better on screen *and* prints much more clearly than a similar document created in Photoshop!

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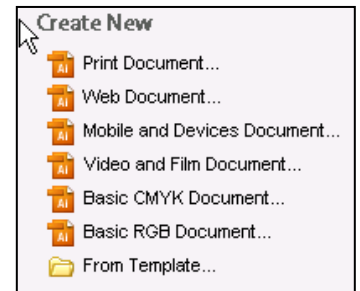
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GETTING STARTED: SETTING UP YOUR DOCUMENT

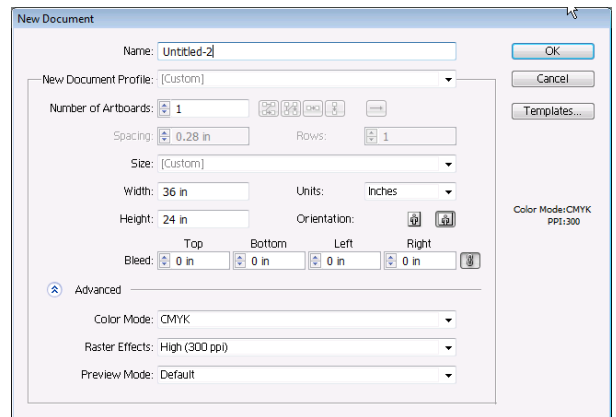
When you open Illustrator, you'll be prompted to open an existing document or to create a new document. Right off the bat, Illustrator wants you to make some decisions – do you want a print or web document, CMYK or RGB, based on a template, and so on. The templates can be used to get you started with a layout and design, and then you can adjust the content as needed. In fact, if you are designing a poster, you can go to http://www.dc.umich.edu/groundworks/Docs/poster/illust/ai_templates to download poster templates from Groundworks at instead of having to set up your own document.



The other options (print, web, etc.) are preset document profiles that have settings appropriate to that document format, though you can always change the settings as described below. If you like the preset profile, the next time you create a new document, hold down the *Alt* key (*Option* on the Mac) as you click on the profile name and it will skip the dialog box shown below.

It's best to create an image at the same size you intend to print it, in order to avoid distortion when rescaling. To set up a document in Illustrator, or to change the settings of a preset profile,

1. Go to the **File** menu and select **New** or choose one of the options described above. The New Document dialog box will appear.
2. The *Document Profile* you chose will appear – change if needed (hint: use *Print* for posters).
3. Choose the number of Artboards needed (often just one – you can add more later here or with the Artboard Tool).
4. Choose the *Units*: for your document from the pulldown (inches, points, etc.)
5. Set the size for your document in one of the following ways:
 - a. Use the *Size*: pulldown to select a standard size, and choose the *Orientation*: (landscape or portrait) as appropriate.
 - b. Type in the width and height of your document (the orientation will be determined by what you type in).
6. If you need to change the color mode, click on the arrow next to *Advanced*.
 - a. **CMYK color mode** is best for printed documents, since **Cyan**, **Magenta**, **Yellow**, and **Black** are the colors of ink used in computer printers and full-color lithographic printing.
 - b. **RGB color mode** is most useful for images to be used on computer screens, such as web graphics. **Red**, **Green**, and **Blue** are the colors of light used to make all the colors you see on any electronic screen.
 - c. Note: *Raster Effects* should be set to *High*, unless you are composing for a small size or onscreen viewing.



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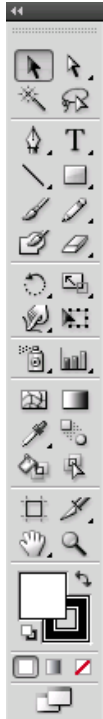
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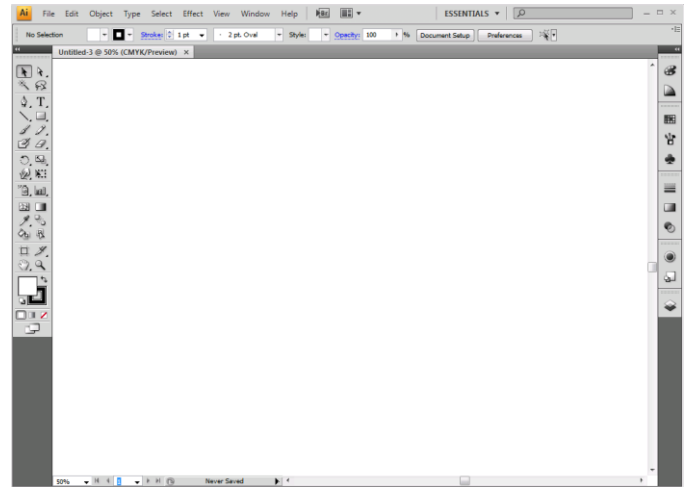
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GETTING STARTED: THE WORKSPACE AND BASIC CONCEPTS

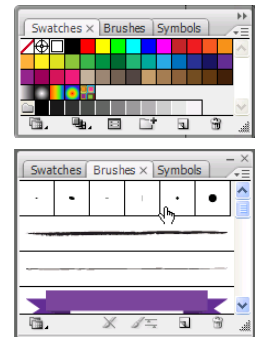


Like most Adobe products, Illustrator makes use of a Toolbox and several Panels (called Palettes in Photoshop). The Toolbox appears to the left of your Illustrator workspace, while most Panels appear to the right.

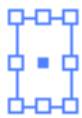
The Toolbox contains tools that allow you to create, edit, and view your files. **Any tool icon that has a small, black arrow in the lower right corner actually contains several related tools.** Click and hold on a tool icon to see all the related tools. You can display the Toolbox as a single or double column using the double arrows (▶▶) above it.



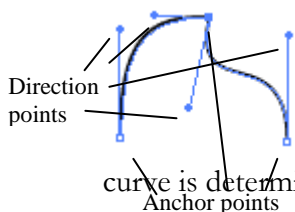
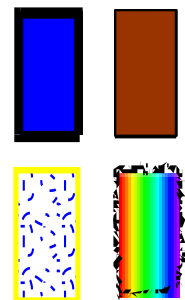
You'll soon get acquainted with several important Illustrator panels. Many of the Panels (such as Swatches and Brushes, shown at right) share a single window. You may have to click a tab within a panel box to show the particular panel you wish to use. Dragging the panes narrow enough or clicking the double arrows (▶▶) will switch the panel to icon mode. To show or hide any panel, go to the **Window** menu, and choose the panel by name from the list.



ILLUSTRATOR CONCEPTS: PATHS, OBJECTS, STROKE AND FILL



When you create artwork in Illustrator, you do so by drawing lines and shapes that combine to form a whole picture. Each item you create is called an **object**. For each object, there is an outline, called a **path**, made up of points and lines (see example at left.) Each shape you create can have a **fill** (filling in the space inside the path) and a **stroke** (tracing the path). At right are a few examples of that rectangle with different fills and strokes. Note that you may choose to use no stroke (as at upper right), to fill with a **solid** (upper left) or a **gradient** (lower right), and even to use special **brushes** on the stroke (lower right).



If a line changes direction at a point, it may do so either as a **corner point** (as in the rectangle above) or as a **smooth point**. Smooth points and corner points are both used to create curved lines and shapes, and consist of an **anchor point** (the white boxes we have already seen), and one or more **direction points** (indicated by slightly smaller dark circles). The shape of a curve is determined by the angle and distance of the direction points.

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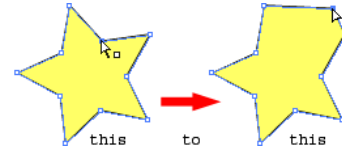
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SELECTION TOOLS

There are two kinds of selection tools in Illustrator. Once you have created an object, the Selection Tool (black pointer ) lets you select the entire object for further manipulation. The Direct Selection Tool (white pointer ) lets you select parts of an object, individual anchor points, direction points, and segments. Use the Direct Selection Tool to “morph” shapes, or to adjust direction points.



USEFUL TIPS AND TRICKS

- Use the Selection Tool select to drag a box around objects to select all of them in that area.
- With the Zoom Tool () selected, drag a box on the work area to zoom to the size of that box.
- Go to the **View** menu and select **Show Rulers** to see rulers on the top and left edges of your document. The units on the rulers are the units you specified when creating the document; you can change by going to the **Edit** menu, then **Preferences**, and select **Units & Display Performance...**
- Once the rulers are visible, click and drag from either ruler to display a vertical or horizontal **Guide** line. These Guides are not part of your artwork. They can be moved around the screen, but you may have to go to the **View** menu, then **Guides** and choose **Lock Guides** to unlock them. You can remove Guides by dragging them back to the ruler they came from, or by going to the **View** menu, then **Guides**, and select **Clear Guides**.
- Go to the **View** menu and choose **Show Grid** to show a grid behind your artwork. Go to the **View** menu and choose **Snap To Grid** or **View** and **Snap to Point** and this will help your artwork line up.

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WORKING WITH TEXT


Illustrator is not great as a word-processing tool. Almost all longer pieces of text should be edited in a word processing program such as Word, and then brought into Illustrator. Text in Illustrator needs to live in either text boxes or shapes. You can create new text in Illustrator, you can copy and paste from Word, or you can “place” a whole document into your Illustrator file.

PLACING (INSERTING) EXISTING TEXT

Unlike most programs, Illustrator doesn't have an **Insert** menu. Even so, you can import text and graphics by going to the **File** menu and using the **Place** command. You can place your text into preset text boxes or shapes, or you can create a new text box as you place the text.

1. Go to the **File** menu and select **Place**.
2. Navigate to your document and click **Place**.
 - a. You can also designate the size of your text block by creating a text box or shape first, and then placing into that space (see below for creating text boxes and shapes).
 - b. If you have more text than will fit in the text box (or shape), a red plus sign will appear in the lower right corner. See the [Linking Text Boxes](#) section on page 8.


Sometimes placed documents often have strangely overlapping text – to fix it,

1. Select the text box or shape with the [Selection Tool](#) ()
2. Click on the [Character Panel](#) link in the [Options Bar](#) and set the font sizes to any value you like.
3. Set the leading to *Auto* – this should fix the overlap problem.



CREATING TEXT BOXES

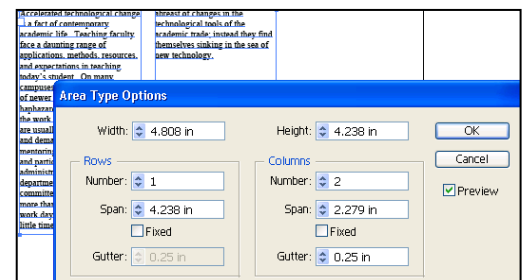
Most often, you will probably use text boxes for your text. The boundaries of a text box control the flow of characters; when text reaches a boundary, it will automatically wrap to fit inside the defined area. To create a text box,

1. Select the [Type Tool](#) () from the [Toolbox](#).
2. Click and drag on the document to define a text box. If you simply click and start typing, you will get a line of text that expands as you keep typing rather than wrapping.
3. Type in the box.

To move the text box, use the [Selection Tool](#) to click and drag it to its new location.

To resize the text box, drag the “handles” with the [Selection Tool](#) – hold down the *Shift* key to keep it proportionate.

To create multiple columns in your text box, go to the **Type** menu, then **Area Type Options...**, and then choose the correct number of *Columns*:



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EDITING TEXT PROPERTIES

To change all of the text in a text box or shape, use the Selection Tool (the black arrow) to do the below steps. If you want to affect only certain words or characters, use the Type Tool.

1. Select the text you wish to edit (using either tool suggested above).
2. Use the choices in the Options Bar to set font, size, etc. For more specificity,
 - a. Click on the Character Panel or Paragraph Panel links in the Options Bar, or
 - b. Use the **Type** menu (and whatever choice is appropriate).
3. To change the color of the letters (the fill color), use the solid color square in the Options Bar. To change the outline color (stroke), use the color square with the white square in the middle.





4. To change the fill or the stroke of the text box itself,
 - a. Choose the Direct Selection Tool from the Toolbox.
 - b. Click and release once on a corner handle of the text box itself – the Options Bar should change from *Type* (as shown in the screen shot above) to *Anchor Point*.
 - c. Change the stroke and fill as described in the [Working With Color](#) section on page 10.

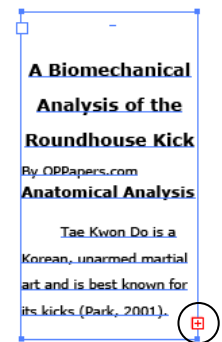
Remember that fonts used in an Illustrator document can only be displayed and printed correctly when the viewer has those fonts installed on their computer. If working on more than one computer, you may have to carry font files on a disk with your Illustrator file.

LINKING TEXT BOXES

Text boxes in Illustrator can be linked together. Once linked, text from one box will spill over into the next box. You can resize any one of the linked boxes, and text will re-spill itself from one box to the next.

If you've placed a lot of text from Word, you will probably find that your text box has a red plus sign at the bottom right corner (this is called the "out port") – this indicates that there is more text in the box than can be displayed at the current text box size.

1. Use the Selection Tool to click the red plus sign.
2. The cursor will change to the Loaded Text icon ().
 - a. Click elsewhere on the screen to make a new text box the same size and shape as the original or
 - b. Move the cursor over the path of an existing object and click to place the text in the existing object (the cursor icon will change to ).



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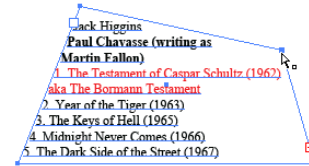
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SHAPING TEXT

You can wrap your text around objects, and you can also have your text flow either inside a shape or along its edge (or path) – to learn how to create shapes, see the [Working with Images and Preset Shapes](#) below.

Without even creating a new shape, however, you can use the Direct Selection Tool to create any shape you want from your text box.

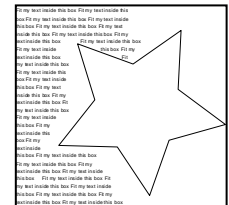
1. Create a text box and add text (as described above).
2. Choose the Direct Selection Tool from the Toolbox.
3. Click and release once on a corner handle, then click and hold to drag the corner into a different shape.



WRAPPING TEXT AROUND AN OBJECT

You can wrap text around any object.

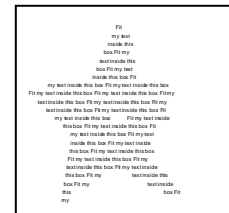
1. Make sure that the object you want to wrap around is above the text you want to wrap (you may need to select the object and bring it to the front).
2. Select both the text and the object, and go to the **Object** menu, then **Text Wrap** and select **Make** (to unwrap the text, select **Release**).



FITTING TEXT INSIDE AN OBJECT

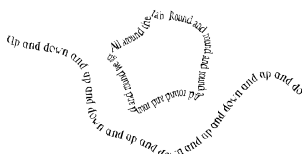
To fit text inside an object, you must use the Area Type Tool (or).

1. Draw the object.
2. Click and hold on the Text Tool and then select the Area Type Tool, and click on the object's path (note: the path is the line around most objects, so clicking in the center of the object doesn't work – click directly on the edge of the object.)
3. A type cursor will appear inside your path. Start typing, or paste type from another source.



TYPING ON A PATH

Use the Path Type Tool (or) to type along any path you have drawn. You can type along a curved line you've drawn with the pencil, or along the outline of a shape you created.



1. Draw a shape or line.
2. Click and hold on the Text Tool and then select the Path Type Tool, and click on the object's path (note: the path is the line around most objects, so clicking in the center of the object doesn't work – click directly on the edge of the object.)
3. A type cursor will appear along the edge your path. Start typing, or paste type from another source.

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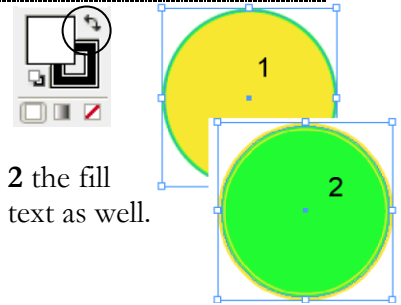
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WORKING WITH COLOR

Remember, **stroke** refers to the outline (path) of your object; **fill** refers to the area enclosed by that outline. In circle 1 at the right, for example, the fill is yellow (■) and the stroke (■) is green. The icons for each overlap each other (■), and the icon in front shows which is selected. The two-headed arrow between the two will swap the colors, so in circle 2 the fill is now green and the stroke is now yellow. The same principle applies to text as well.



To change the stroke or fill color of an object or text,

1. Select the object or highlight the text.
2. Double-click on the Stroke or Fill icon in the Toolbox.
3. In the dialog box that appears, use thin color bar to select the hue, and then click on a specific color in the large color box.
4. To use no color at all, select the None button (■) under the Stroke and Fill icons in the Toolbox. Applying None to Stroke will give you a patch of color with no bordering line. Applying None to Fill will give you a line with no fill color (this setting is frequently used with the Pencil Tool).

Note: If no object is selected, the next object that you draw will have these properties.

SWATCHES

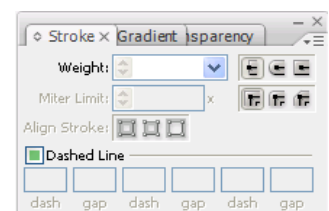
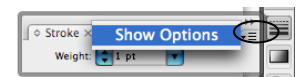
You may want to save your color choices as swatches for easy re-use. Swatches are saved along with your Illustrator document (i.e. they will show up in the Swatch Panel the next time you open your document). To add a new swatch, click the New Swatch icon (■) in the Swatches Panel, or drag the color from the Fill/Stroke Tools of the Toolbox to the Swatches Panel. To remove a color from your Swatches, click on that swatch, and then click the Trash icon (■).

STROKES

You can change color as well as other properties of the object's stroke. Choosing a different brush from the Options Bar or Brushes Panel, for example, can make a startling difference (find more options in the Brush Libraries Menu icon in the lower left corner of the Brushes Panel).

The Stroke Panel also lets you change a number of things about your stroke. To access all of these options, click *Show Options* under the Options icon (☰) in the Stroke Panel. These include:

- **Weight:** how thick your line appears
- **Cap:** how the ends of your line appear
- **Join:** how your line joins at corners
- **Miter Limit:** how far the joined lines project at corners
- **Align Stroke:** where the line is in relation to the path
- **Dashed Line:** check this box to create a dashed line, specifying how long each dash (and gaps) should be.



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WORKING WITH IMAGES AND PRESET SHAPES

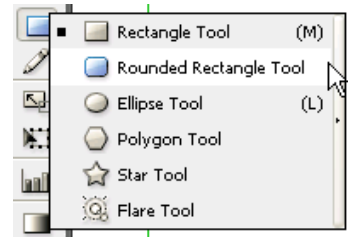
You can add photos and other images to your Illustrator document by placing them on the page. To insert an image, go to the **File** menu and select **Place**, then choose the file you wish to insert. It will appear in the center of your poster. **To move** the image, use the Selection Tool to click and drag it to its new location.

There are a few different tools that you can use to create predetermined shapes in your document. The colors of your shape are determined by the colors selected in the Stroke and Fill area of your Toolbox (or in the Appearance Panel on the right) – you can always changed them as described in the Working With Color section on page [10](#).

RECTANGLE TOOL


Click and hold on the Rectangle Tool () to choose a rectangle, ellipse, polygon, etc.

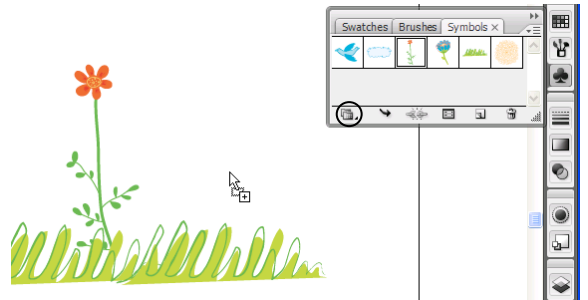
1. Click and drag on your workspace to create the shape. Thin lines will appear indicating the outline of your shape. If you are using the Polygon Tool, use the *Up* and *Down Arrow* keys on your keyboard to add or remove sides while making a polygon. Holding down the *Shift* key as you draw a rectangle or ellipse will restrict you to a perfect square or circle.
2. Release the mouse to complete the shape.



SYMBOL TOOL AND SPRAY CAN

Symbols are pieces of artwork that Illustrator stores to use over and over. Since all instances of the symbol in your document are linked to the main symbol, this saves file space as well as time. There are two ways to add symbols:

- Drag the symbol from the Symbol Panel onto your document (you'll see a plus sign as at right), or
- Use the Symbol Sprayer Tool () from the Toolbox. If you click and release (quickly) on your document, you'll get one occurrence; the longer you hold down the mouse, the more you will get (see the tree picture on the next page).



You can add more symbols from the Illustrator sets by clicking on the Symbols Libraries Menu icon located in the lower left corner of the Symbol Panel (circled above).

As mentioned, since all instances of the symbol are linked together, if you change the color of the main symbol, resize it, etc. (double-click on it in the Symbol Panel and make the change), your change will appear on all of them. This is true regardless of which method of placement you use. If you want to separate a symbol from the main symbol, click on it with Selection Tool then click on the *Break Link* button that appears in the Options Bar at the top.


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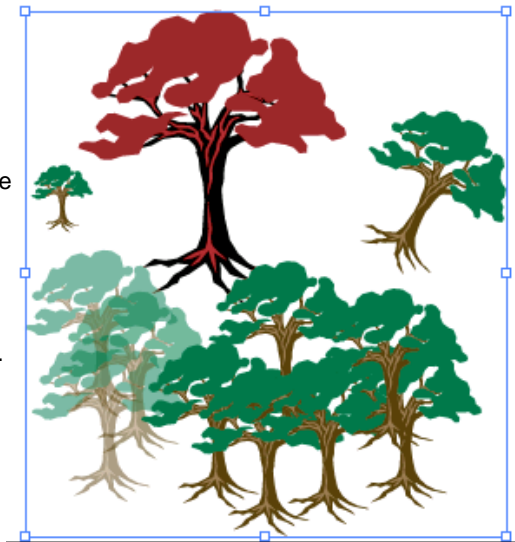
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There are a few extra tools under the Symbol Sprayer Tool () that are easier to show than talk about.

Use the Stainer Tool to change the color based on what is selected in the Fill Tool.

Use the Sizer Tool to resize the symbol (larger or smaller).

Use the Screener Tool to make the symbol(s) opaque.





Use the Spinner Tool to rotate the symbol.

Use the Shifter and Scruncher Tools to move the position the symbols.

CREATING FREE-HAND SHAPES AND LINES


In addition to objects of predetermined shape, you can also create any shape or line you want with the various drawing tools, such as the Line Segment Tool (including arcs and spirals) the Pencil, the Pen, and the Brush Tools.

PENCIL AND PAINTBRUSH TOOLS

Use the Pencil Tool () or Paintbrush Tool () or the to create free-flowing lines and shapes. As you draw, a thin line will appear indicating the outline of your shape, and the shape will be completed when you release the mouse button.

Re-tracing an existing shape with the Pencil Tool to redraw sections of the line, or the whole thing. At right, an original heart, and a version revised with the Pencil Tool.



Alternatively, you can use the Smooth Tool () to automatically smooth zigs and zags out of your lines. At left, a freehand-drawn line, and a version revised with the Smooth Tool. The Smooth Tool is located under the Pencil Tool in the Toolbox. The Paintbrush Tool does this smoothing automatically.

Choose different brush types or stroke sizes for either tool from the Options Bar at the top. The heart at right uses the charcoal brush with the Paintbrush Tool.



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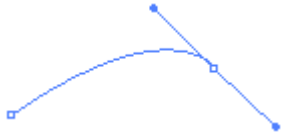
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PEN TOOL

Click multiple times in your document with the Pen Tool () to create a freehand polygon shape. Each new click defines a new anchor point in the polygon. As you near the point where you began the shape, the cursor will change, indicating it is ready to complete the shape by adding a small closed circle at lower right (). When you see this “close” cursor, you can click once to close the shape.

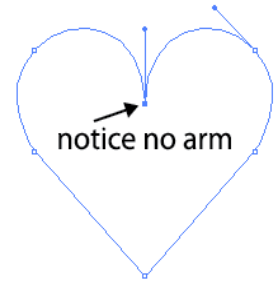
When you click to add a new anchor point with the Pen Tool, you may choose to click and drag instead of clicking once. This turns a sharp corner into a smoothly curved one.



To change the direction of the curve you need to remove the directional point from the anchor. Hover over the anchor point and the cursor will change ()

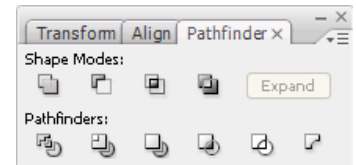
). Now click on the anchor point, and the directional arm will disappear.

The Pen Tool is very useful for creating freehand smooth curves. You can combine single-click anchor points (sharp corners) with click-and-drag anchor points (smooth corners) to create complex shapes that are more precise than freehand Pencil drawing.





PATHFINDER PANEL


For more complex effects, you may wish to use the **Pathfinder**. If you do not see the Align, Transform, or Pathfinder Panels group, go to the **Window** menu and select **Pathfinder**.

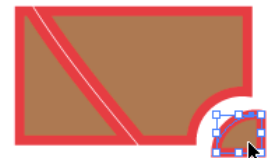


The most useful thing you can do with the Pathfinder is to add shapes together, or subtract one shape from another.

- **To add shapes together**, select two or more shapes, and click on the Add to shape area icon ().
- **To subtract** one shape from another, select both (making sure that the shape you want to take away is on top!) and click on the Subtract from shape area icon (.

THE ERASER TOOL

You can use the Eraser Tool () on paths, compound paths, paths inside Live Paint groups, and clipping paths. Select an object with the Selection Tool, then choose the Eraser Tool and move over your object. Notice this creates a new path around the different pieces, and that the pieces can now be separated from each other.



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TRANSFORMING, ALIGNING, AND GROUPING OBJECTS

TRANSFORMING OBJECTS


You've already seen how the Direct Selection Tool can be used to move individual points of an object, and the Selection Tool can manually scale or re-size any object. There are also several built-in options for transforming objects. The two easiest options are the **Transform** menu and the Transform Tools. To use the basic Transform Tools, select an object, then the tool or the right item in the **Transform** menu.

To apply transformations to an object using the menus, select the object, then go to the **Object** menu and select **Transform**. The advantage of the menus is that numeric values can be specified – Scale 150%, Rotate 32°, etc.

- **Rotate**  – dragging with the Rotate Tool rotates the object around a point; by default, the center point. You can move the point of rotation, by clicking before you begin dragging. Hold down the *Shift* key to rotate in 15-degree increments.
- **Reflect**  – click once, then again in a different location to indicate a line over which to reflect the object.
- **Scale**  – drag to resize the object. Hold down the *Shift* key to maintain original proportions.
- **Shear**  – drag to skew the object. Hold down the *Shift* key to stick to 15-degree increments.
- **Reshape**  – to change a shape by adding additional anchors. Use the Direct Selection Tool to drag the edges of the shape by an anchor.

To move the shape, use the Selection Tool to click and drag it to its new location.

To resize the shape, drag the “handles” with the Selection Tool – hold down the *Shift* key to keep it proportionate.

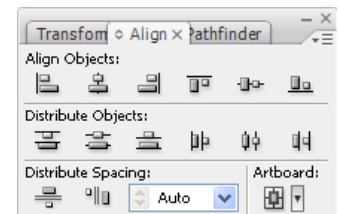
To move individual points of the shape, use the Direct Selection Tool ().

ALIGNING AND DISTRIBUTING OBJECTS

Go to the **Window** menu and choose **Align** to see the Align Panel; you can also find these icons on the Options Bar towards the top of your screen.

1. Choose the Selection Tool. Select multiple objects by drawing a box around them (or click on one, hold down *Shift*, click on another, etc.).
2. Click the appropriate button on the Align Panel or Options Bar to align or distribute the objects, or to distribute the spacing between them. This will align or distribute them relative to the bounding box of all of the objects you have selected. To align or distribute selected objects relative to a specific object in the selection, click that object once more (you needn't hold down *Shift* this time).

To align individual anchor points, use the Direct Select Tool. Click on one anchor point, and then holding the *Shift* key, click on the others. Apply the alignment tools as described above.



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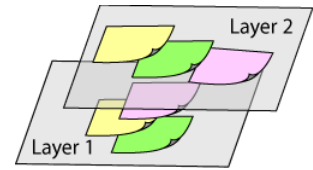
GROUPING OBJECTS

Grouping is the simplest way to make two or more objects behave as one.

1. Select one object and hold down the *Shift* key as you click on one (or several) more object(s) until you have selected everything you want in the group.
2. Go to the **Object** menu, or right-click (hold *control* and click on a Mac), and select **Group**. All lines and fills are preserved in a Group, and individual component objects can be selected with the Direct Selection Tool.

ORDERING OBJECTS

Illustrator has a lot more control over the stacking order of objects than PowerPoint does. Like Photoshop, Illustrator allows you to create **Layers** within your document. Think of the objects you draw as Post-It notes stuck to a transparency (or Layer). You can move those Post-It notes around, and you can rearrange their stacking order. Any object in a higher layer is automatically above any object in a lower layer; control that stacking order in the Layers Panel.



Within one layer, objects may be rearranged as well. To change the stacking order of an object within a layer:

1. Select the object.
2. Go to the **Object** menu, or right click on the object, and choose **Arrange**. On the pulldown menu, select an option:
 - a. **Bring to Front/Send to Back** – brings the currently selected object to the top of all the objects on the layer, or sends it all the way to the bottom.
 - b. **Bring Forward/Send Backward** – brings the currently selected object one level up or down in the layer.
 - c. **Send to Current Layer** – brings the currently selected object to the currently selected layer in the Layers Panel.

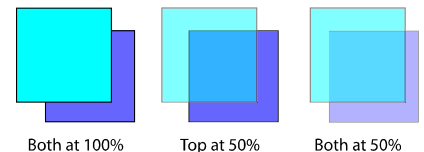
Bring to Front	Shift+Ctrl+]
Bring Forward	Ctrl+]
Send Backward	Ctrl+[
Send to Back	Shift+Ctrl+[
Send to Current Layer	

OPACITY OF OBJECTS AND LAYER

Each layer, and each object within a layer, can vary from 100% opaque (solid), to 0% opaque (completely see-through). Opacity is additive – two black objects that are each at 50% opacity (appearing gray) will create 100% black wherever they overlap.

If you have multiple layers and want to change opacity of a single layer, click on the layer name in the Layers Panel. Then change the Opacity setting in the Options Bar on the top of your screen.

To change opacity for a single object, select the object and adjust its Opacity in the Transparency Panel or in the Options Bar.



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USING OBJECTS AS “COOKIE CUTTERS”

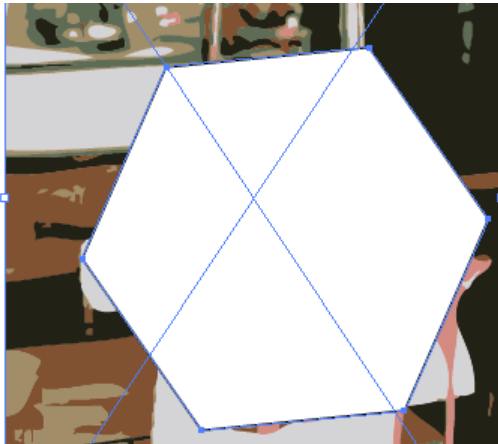
1. Place one object above another, and select the object on top. The edges of the upper shape will be used as a “cookie cutter” to sever any objects below into pieces.
2. Go to the **Object** menu, select **Path**, and choose **Divide Objects Below**.
3. Deselect the object, and then use the Direct Selection Tool to click on the piece you no longer want or would like to move. Press *Delete* on your keyboard to get rid of the section or move it to the desired location.



CLIPPING MASKS

Clipping masks are objects that mask anything outside of that shape.

1. Place one object above another, and select both objects.
2. Go to the **Object** menu, select **Clipping Mask**, and choose **Make**.



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SPECIAL EFFECTS

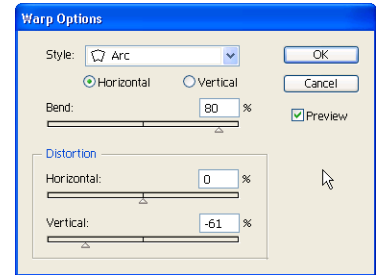
There are numerous special effects available in Illustrator's Toolbox as well as in the **Effect** menu and other menus that you can apply to your text or image to change its look. The **Effect** menu will allow you to modify or remove the effect after applying it by using the Appearance Panel. Many of the effects (*Gaussian Blur*, *Color Halftone*, etc.) are native to Photoshop and function the same way in both programs. Some artistic effects are only available for documents that are in RGB mode. A few effects are highlighted below – feel free to experiment!

WARP EFFECT

The **Warp** effect, located in the **Effect** menu, allows you to distort your pre-existing object into the form of another shape. Select an object you wish to warp, and choose a shape from the **Warp** sub-menu. The *Warp Options* dialog box will appear, where you can make adjustments to the *Bend* or *Distortion* of your image. This effect can be applied to text as well.

regular text

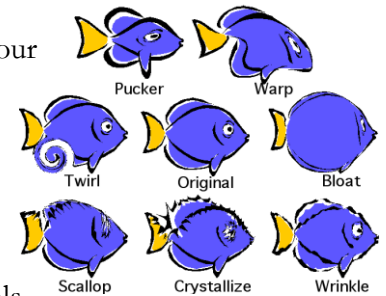
Warped text



WARP TOOLS

Located under the Warp Tool (👉) in the Toolbox, these tools “liquify” your objects. When using these tools, objects become malleable, like wet paint.

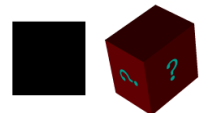
1. Select an object with the Selection Tool.
2. Click and hold on the Warp Tool to select which tool you would like.
3. Click and hold on the object, and drag to shape the object.



Experiment with these tools to find out what they do – note that these tools don't work with text unless you convert it to an outline first.

3D

3D effects, located in the **Effect** menu, allow you to create 3D artwork from 2D objects in your document. You can control attributes such as lighting, color, shading, rotation, and symbols in the 3D Extrude & Bevel Options dialog box.



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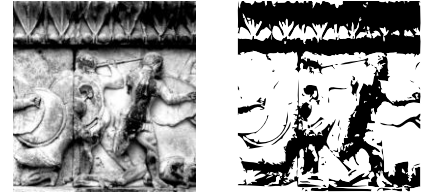
LIVE TRACE

You can turn a bitmap image into a vector image very easily in Illustrator CS5.

1. Place the bitmap file, and then select it.
2. Go to the **Object** menu, then **Live Trace** and choose **Make**.


If you don't like your results, check the settings under the **Object** menu, then **Live Trace** and select **Tracing Options....** Make the adjustments you want and click the *Trace* button.

Once you have Live Traced an image, then you can use Live Paint.

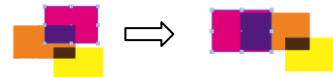


LIVE PAINT

When you have a group of objects, and want to color parts of those objects, **Live Paint** is a terrific feature. If you have placed or opened a raster image, you must use the **Live Trace** feature on it first before using **Live Paint**.

1. Draw several objects that overlap and select them all (click one, hold down the *Shift* key, click the next, etc.).
2. Select the **Live Paint Bucket Tool** () from the Toolbox. When you bring the **Live Paint Bucket Tool** over the objects you will see a prompt to "Click make a Live Paint group". Or, you can go to the **Object** menu, then **Live Paint**, and select **Make**.
3. Select fill colors in the **Swatches** Panel, and then click with the Live Paint bucket to fill areas of that group with colors.

The best part about Live Paint is that you can still move the objects within the Live Paint groups, and they'll keep their Live Paint colors as you move them around!

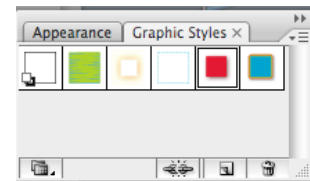


Tip: To cycle through color swatches quickly while you work, you can use the right and left arrow keys on your keyboard.

GRAPHIC STYLES

Graphic Styles are similar to brushes, but they change the stroke, fill, and special effects of your objects. Select an object, and choose a **Style** from the **Graphic Styles Panel** (located next to **Appearance**) to see the radical changes. If you find a combination of stroke and fill effects that you like and want to use again, select an object on your workspace, and drag it to the **Styles Panel** to create your own new **Style**.

NOTE: Any new swatches, styles, or brushes you create are saved only within your document. To re-use it with a new document, drag and drop it from an old document to a new one.



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SAVING ILLUSTRATOR FILES

As with all programs, remember to save frequently as you work. The standard file format for Illustrator is the Adobe Illustrator (.ai) file. Work saved as an .ai file can be re-opened in Illustrator with full editing capabilities. All objects, layers, styles, color and gradient swatches, etc. are saved for an .ai file. When you are done with your artwork, you may choose to save it in other formats as well.

Use the **File** menu and select **Save As** to create these types of files:

- Adobe PDF – great for sharing documents online
- Illustrator EPS – a useful format for sharing with professional printers
- SVG – a high-quality vector format for interactive web graphics

Use the **File** menu and select **Export** to create these types of files:

- WMF – the format of Office Clipart. Preserves vector formatting, can be re-sized smoothly in Office
- SWF – a multimedia Flash format that also preserves vector formatting
- JPEG, Photoshop, PNG, TIFF – converts document to bitmap graphic (of varying quality)

Use the **File** menu and select **Save for Web & Devices** to create these types of files:

- GIF – a very good web format for most Illustrator files
- JPEG – another web format, you may want to use if you make extensive use of gradients

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