Adobe Creative Suite
Illustrator

MTSU School of Journalism
Visual Communication

Visual Communication

The contents of this manual were written and prepared by Philip Loubere, assistant professor, MTSU School of Journalism. ploubere@mtsu.edu

Interface

Document window   **Collapsed panels**   **Panel title bar**

Menus

Options bar
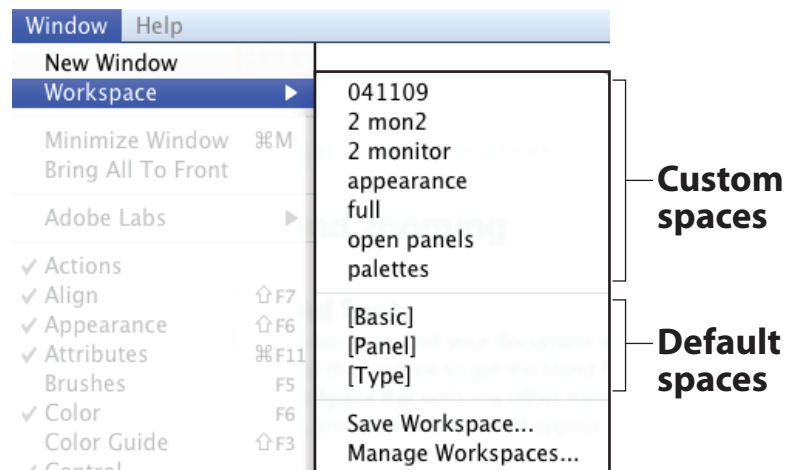
Collapse to icons button
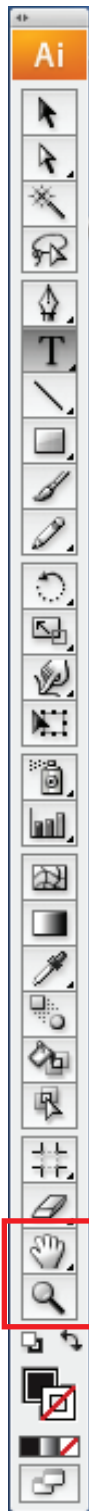
Toolbar
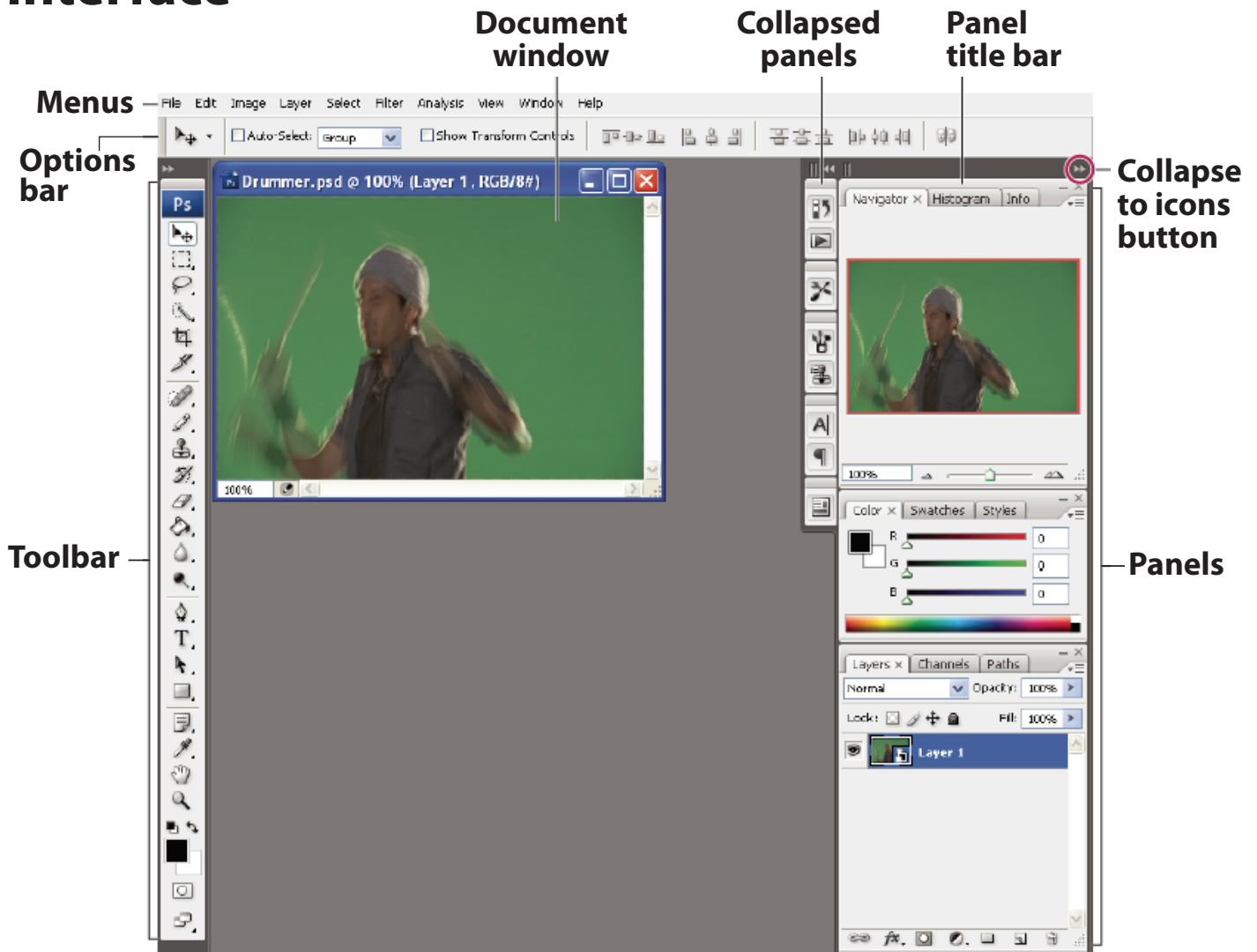
Panels

Saved workspaces

Under the **Window** menu, highlitht **Workspace**. There will be several default spaces in the popup menu that will change the choice and appearance of panels and bars.

You can save your own custom workspace. Arrange panels and bars the way you want, then select **Save Workspace . . .**

Custom spaces

Default spaces

Navigation: Panning and zooming

Spacebar = Hand Tool
Use the **Hand Tool** to move around your document window. But instead of going to the Toolbox to get the Hand Tool, simply hold down the **Space Bar** with any other tool selected (except the Text Tool), and the Hand Tool will appear.

Command + space Bar = Zoom Tool
Hold down the **Command** key and the **Space Bar** at the same time. Whatever tool you have selected will change to the **Zoom In Tool** - drag a marquee over the area you want to zoom in on.

Command, Option and **Space Bar** will make the **Zoom Out Tool** appear — click anywhere on your document to zoom out.

Zoom In Or Out Incrementally
The **Command** key and the **Plus Key** will zoom in one step; the **Command** key and the **Minus Key** will zoom out one step.

The **Command** key and the numerical **Zero Key** will fit your document in your window.
The **Command** key and the **One Key** will take you to 100% view, or actual size.

Other Methods
In the bottom left corner of your document window is a field that shows current magnification. Highlight that number and type in the magnification level you want and hit enter.

Or, open the **Navigator Palette** from the Window menu. Move the red box around to reposition your view, or use the magnification slider on the bottom.
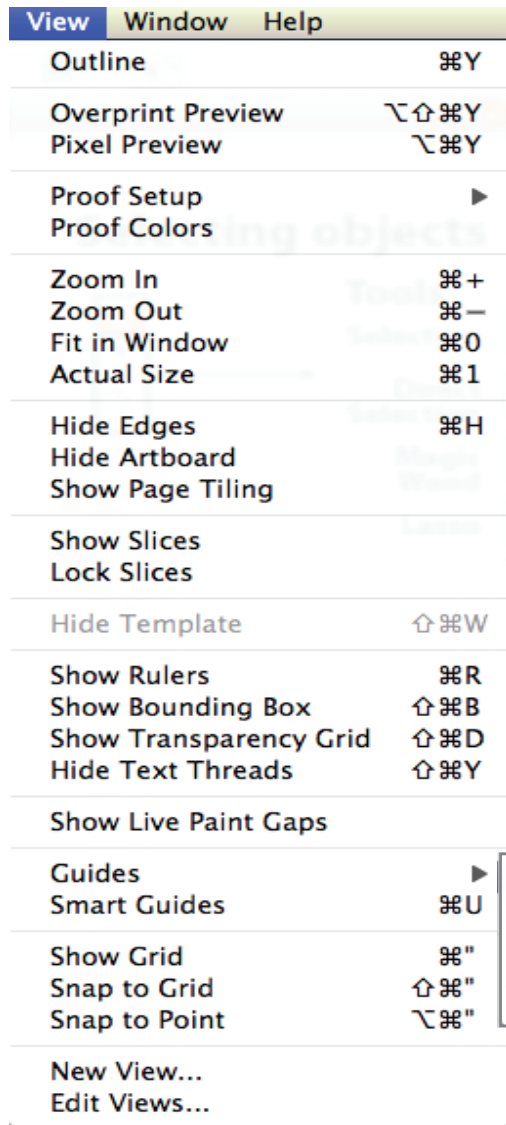
HAND TOOL
ZOOM TOOL

Keyboard commands

Fit in window	**Cmd 0** (zero)
Actual size	**Cmd 1**
Zoom in	**Cmd +**
Zoom out	**Cmd -**
Zoom tool	**Cmd Space bar** (hold down)
Zoom out tool	**Cmd Opt Space bar** (hold down)
Hand tool	**Space bar** (hold down)

Cmd: Apple key
Opt: Option key

View commands

View menu

Toggle between Preview and Outline views: **Command-Y**

Show/hide highlighted edges of selected objects: **Command-H**

Show/hide rulers: **Command-R**
Drag guides from rulers onto document.

Show/hide guides:
Command-Semicolon

Lock/unlock guides:
Command-Option-Semicolon

Make guides: **Command-5**
Any selected object can be made into a guide.
Any selected guide can be released back to an object with its previous attributes: **Command-Option-5**

View		
	Preview/outline view	**Cmd Y**
	Show/hide guides	**Cmd ;**
	Lock/unlock guides	**Cmd Opt ;**
	Show/hide edges	**Cmd H**
	Show/hide page rulers	**Cmd R**

Paths and points

In Illustrator, shapes that you create are called **paths**. You can modify the color and width of the outline, or **stroke**, and the type and color of the **fill**, the area inside the stroke. The fill can be a single color, a gradient—a blend between two or more colors—or a pattern.
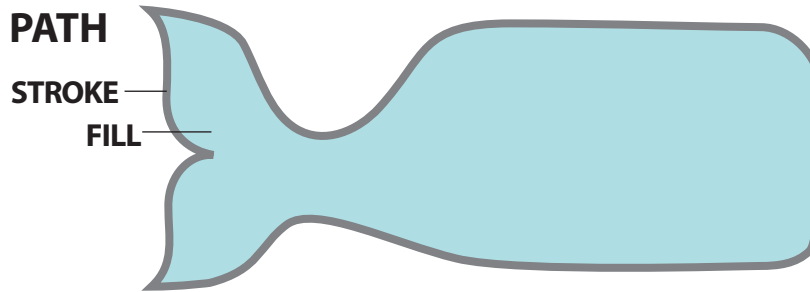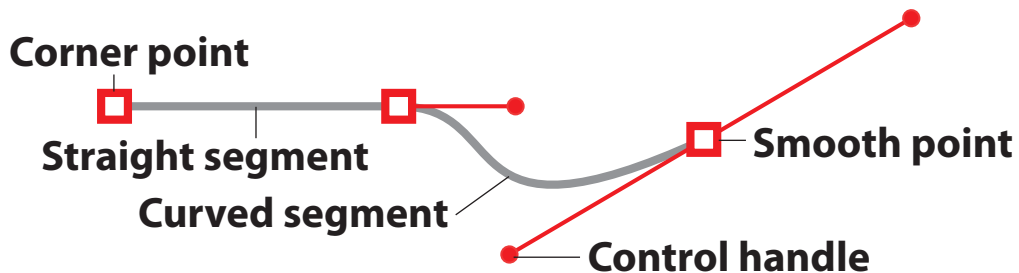
PATH
STROKE
FILL

A path is composed of **anchor points** and **segments** that join the points.

ANCHOR POINTS

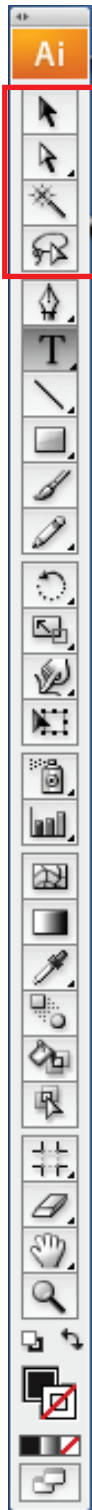**SEGMENT**

Bounding box   **Handle**
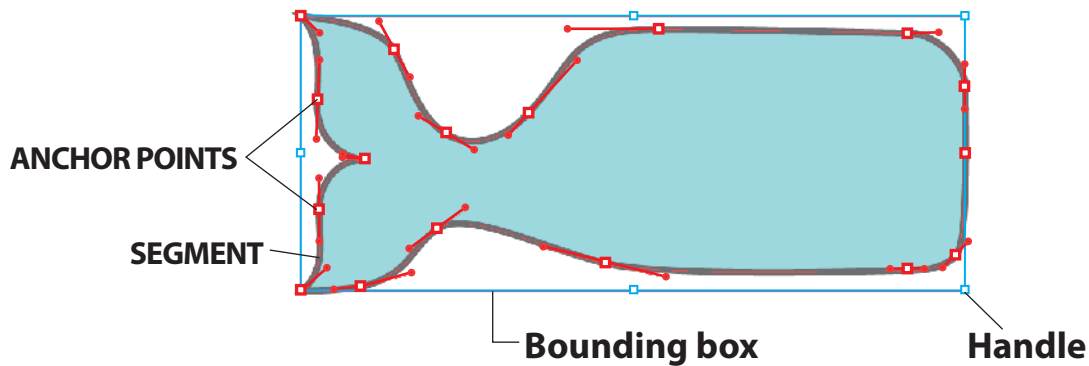
When a path is selected, its **bounding box** appears. The bounding box has handles in each corner and in the middle of each side that can be used to resize the path.

There are two types of anchor points: **Corner** and **Smooth**. Smooth points have curved segments between them, and have control handles that can be used to modify the curve of the segment.

Corner point

Straight segment

Curved segment

Smooth point

Control handle

Anchor points and control handles are only visible when a path is selected. They don't print or show up in the final artwork.

Selection Tools

**Selection Tool** (black arrow) selects entire paths.

Direct Selection (white arrow) selects individual points or segments, that is, parts of paths.

Magic Wand selects all paths in a document with the same or similar fill attributes.

Lasso Tool selects paths or parts of paths by dragging a marquee around all or part of the paths.

| | Direct Selection Tool | (A) |
| | Group Selection Tool | |
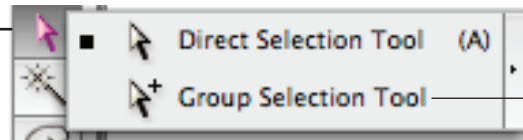
(Click and hold lower right corner of tool to make popup menu appear)
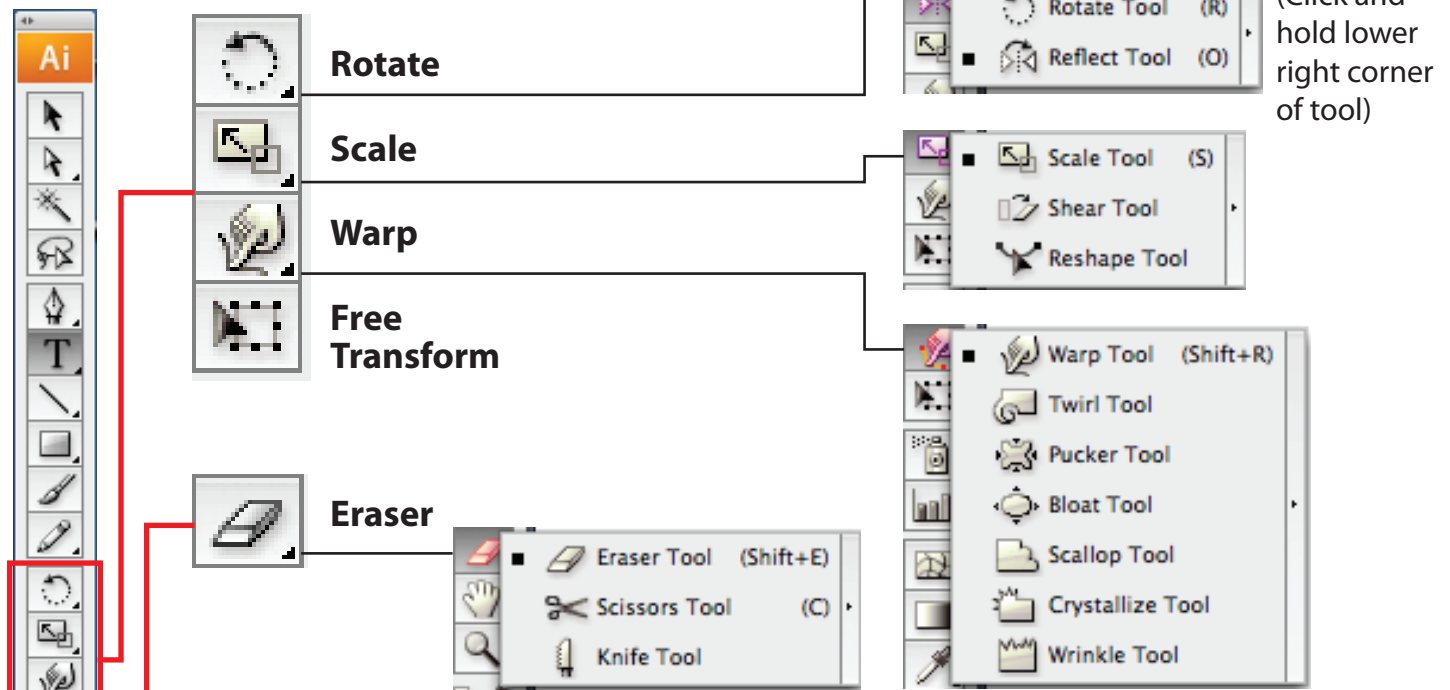
Group Selection tool:
First click selects individual path, second click selects all paths that it's grouped with.

Selecting multiple paths

• **Click and drag** with any of the selection tools to select multiple paths or parts of paths.

• **Shift-click** on additional paths after one is already selected. Also deselects an already selected path.

Select		
	Selection tool (black arrow)	**V**
	Direct Selection tool (white arrow)	**A**
	Group Selection tool (white arrow +)	**Opt** (hold down)
	Toggle between black and white arrows	**Cmd** (hold down); **Cmd Opt Tab**
	Lasso	**Q**
	Magic Wand	**Y**

Transforming paths

Submenus

Rotate

Scale

Warp

Free Transform

Eraser

(Click and hold lower right corner of tool)

Rotate Tool	(R)	
Reflect Tool	(O)	

Scale Tool	(S)
Shear Tool	
Reshape Tool	

Warp Tool	(Shift+R)
Twirl Tool	
Pucker Tool	
Bloat Tool	
Scallop Tool	
Crystallize Tool	
Wrinkle Tool	

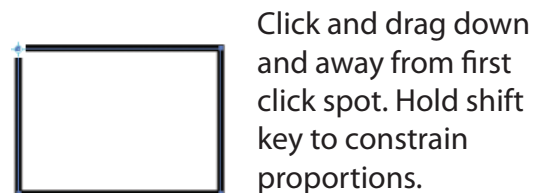|	
Eraser Tool	(Shift+E)
Scissors Tool	(C)
Knife Tool	

Most of the tools, such as Scale or Rotate, work the same way:
- **Select the path** or part to be transformed
- **Select the tool**
- **Click once** to establish the point of origin
- **Click and drag** at another spot on the document (usually diagonally from the point of origin) to perform the transformation.
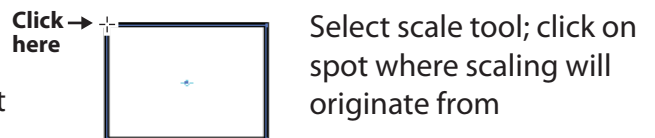
Hold down **Shift** as you drag to constrain proportions in Scale or to 45 degree increments in Rotate or Reflect.

Hold down **Option** as you drag to make a copy of the path being transformed.

Select path

Click here → Select scale tool; click on spot where scaling will originate from

Click and drag down and away from first click spot. Hold shift key to constrain proportions.

X Click and drag here

Transform		
Scale		S
Rotate		R
Reflect		O
Free Transform		E
Scissors		C
Eraser		Shift E
Toggle stroke/blend		X
Delete stroke/blend		/

Pen Tool: Drawing straight and curved paths

Clicking once with the Pen tool creates an anchor point for a straight stroke.
Clicking and dragging creates an anchor point for a curved stroke. The curved anchor point will have control handles.
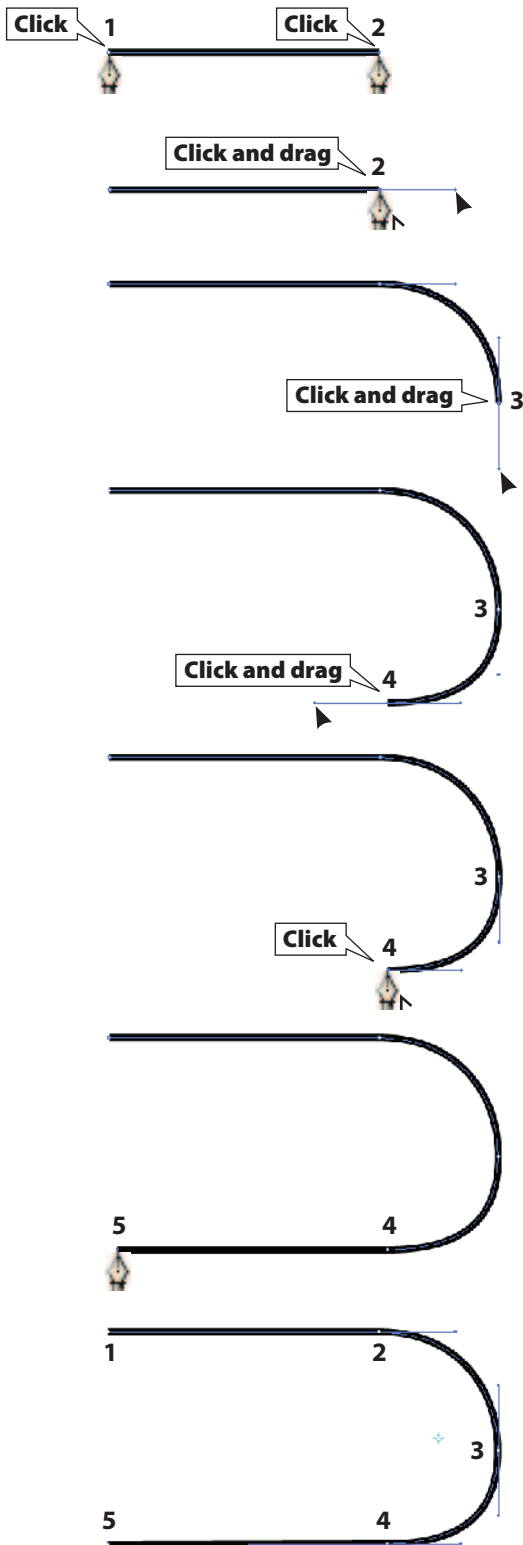
STRAIGHT TO CURVED

With **Pen Tool** selected, click a point and then a second point. This creates two anchor points joined by a straight stroke.

Click and drag on the second point, creating a control handle. Notice how the Pen Tool changes in appearance when over point 2, and when dragging out the handle.

Click and drag a third point, creating an anchor point with two handles. The stroke joining points 2 and 3 is curved, and the curve can be adjusted by clicking and dragging on the small points at the ends of the handles.

CURVED TO STRAIGHT

Click and drag a fourth point. Again, the stroke between points 3 and 4 will be curved and adjustable with the handles.

Click once on the fourth point. This eliminates its front handle, but leaves the one in back that controls the stroke between points 3 and 4.

Click once to make a fifth point, without dragging. The stroke between points 4 and 5 will be straight, with no handles.

The entire path will be defined by five points connected by two straight strokes and two curved strokes. Points 1 and 5 will have no handles, points 2 and 4 will have one handle each, and point 3 will have two handles.

Pen Tool: Closing paths; altering points

1

Close-path symbol

**5** **Solid blue anchor point**
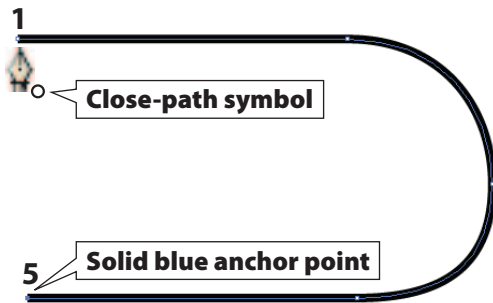
CLOSING THE PATH

With point 5 still selected with the Pen tool — it will be solid instead of hollow — move the Pen tool over point 1. A circle will appear next to the cursor when it is directly over the point. Click once to close the path, or click and drag to add a single handle to point 1.
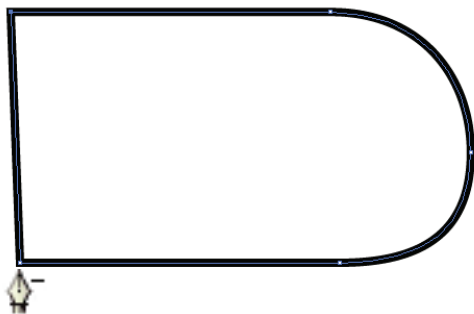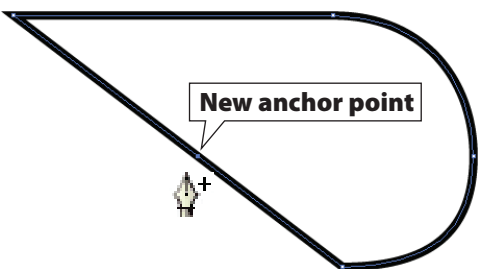
REMOVING POINTS

With the path selected, placing the Pen tool over any anchor point will cause a minus sign to appear next to the cursor.
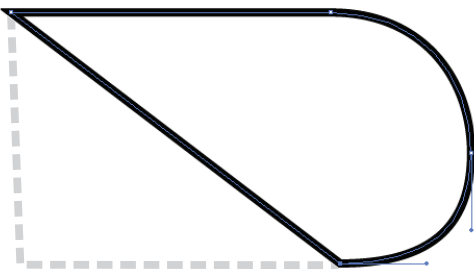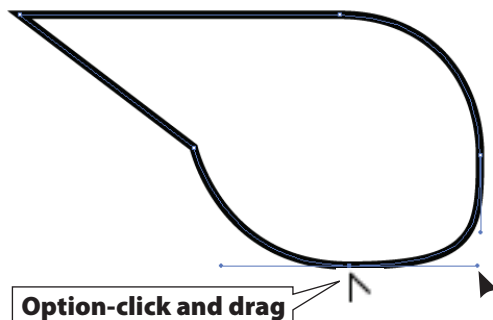
Clicking on the point will delete the point.

ADDING POINTS

New anchor point

Placing the Pen tool over any part of a selected stroke will cause a plus sign to appear. Clicking on the stroke will add an anchor point.

CHANGING FROM STRAIGHT TO CURVED

Option-click and drag

Place the Pen tool over a point and hold down the **Option** key. The cursor will change to the **Convert Anchor Point** tool. Clicking and dragging on a straight anchor point will add handles to it; clicking on a curved anchor point will remove its handles.

Changing stroke and fill colors

CMYK Sliders

FILL/STROKE ICONS

Stroke active

Fill active

The **Fill/Stroke icon** is in the Color Panel and also at the bottom of the Tool Bar. Choose to make the stroke or fill active by clicking on the lower right or upper left boxes respectively.

Change the fill and stroke colors of a selected shape by clicking on a color in the Swatches Panel, or by mixing a color using the sliders in the Color Panel.

COLOR PANEL

Choose the color space for the sliders from the popup menu at upper right. Drag the sliders, or type in percents in numerical fields.

You can also click on a color in the Spectrum, or on the No Color icon.

SWATCHES PANEL

Swatches can be colors, textures or gradients. Choose which types to show by clicking on the Swatch Kinds icon at the bottom.
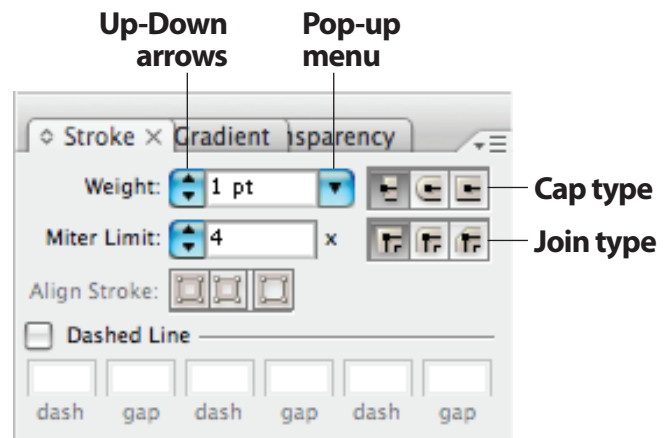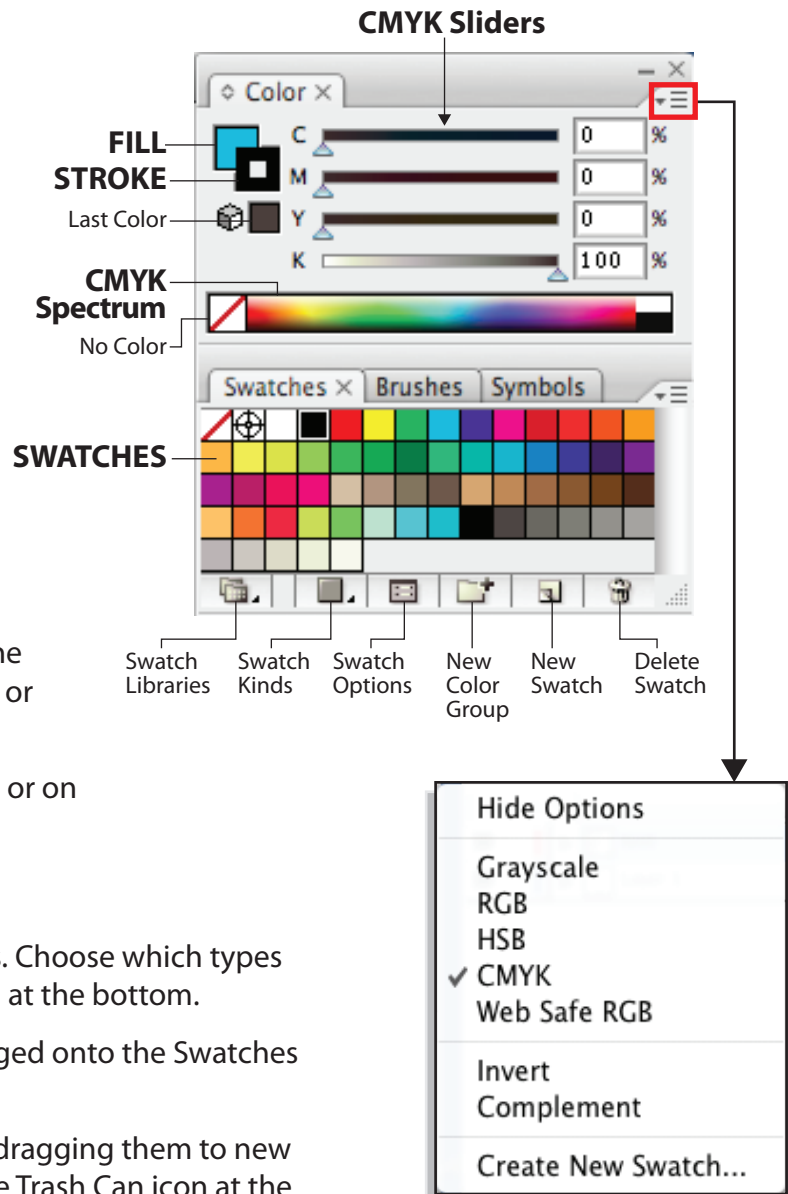
A color mixed in the Color Panel can be dragged onto the Swatches Panel to save it as a new swatch.

Swatches can be rearranged in the panel by dragging them to new positions, or deleted by dragging them to the Trash Can icon at the lower right corner of the panel.

STROKE PANEL

Change stroke width in the Weight field. Use up-down arrows, pop-up menu, or highlight the field to enter a number, such as 2.5 pt.

Check Dashed Line to make dashes, and enter dash and gap lengths in points.

FILL
STROKE
Last Color
CMYK Spectrum
No Color

SWATCHES

Swatch Libraries
Swatch Kinds
Swatch Options
New Color Group
New Swatch
Delete Swatch

Hide Options

Grayscale
RGB
HSB
✓ CMYK
Web Safe RGB

Invert
Complement

Create New Swatch...

Up-Down arrows **Pop-up menu**

Cap type
Join type

Gradients

GRADIENT PANEL

To change a path's fill to a gradient, select the path and click on the **Gradient Fill icon** in the Gradient panel. At first, it will be a generic white-to-black, horizontal gradient, but you can modify its colors and direction. You also have the option of two types: linear or radial.

Changing colors

The gradient slider in the panel has markers on it that determine the colors to be blended. There are two ways to change a marker's color:
• **Drag a swatch** from the Swatches panel onto the marker
• Click on the marker, which will make its color appear in the **Color panel**. Adjust the Color panel sliders to create a new color.

Adding colors

Click anywhere on the Slider, or drag a color swatch anywhere on it, to make a new marker. The markers can also be moved to a different spot by dragging them.

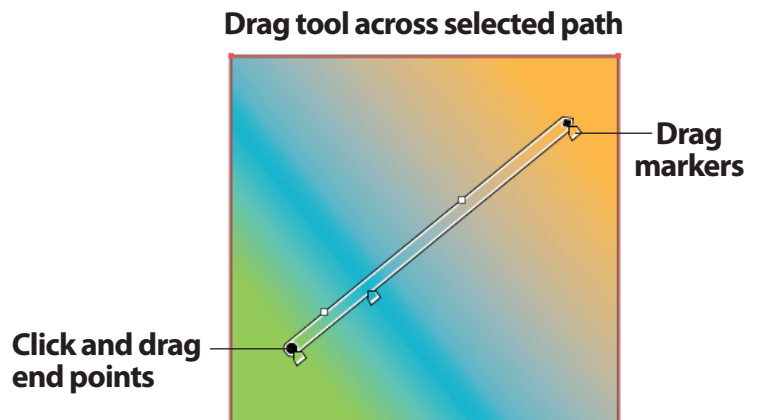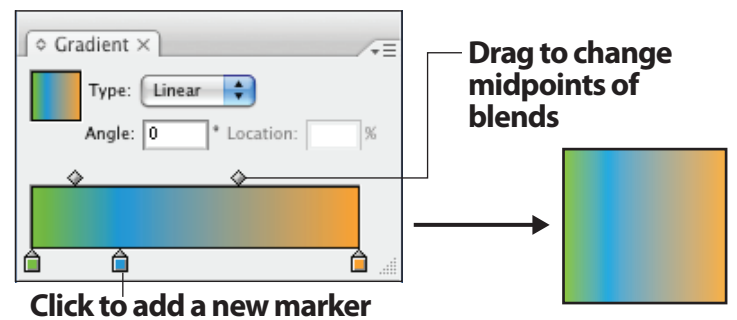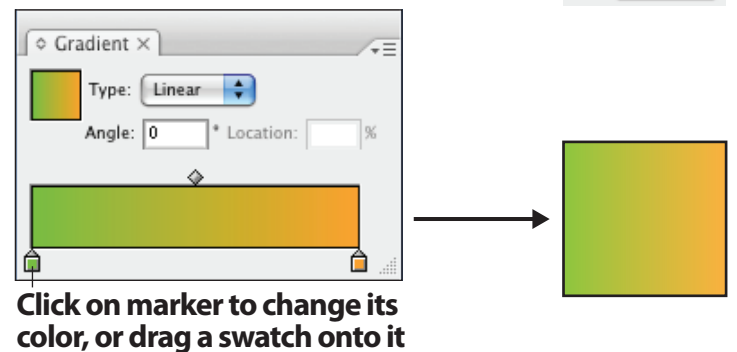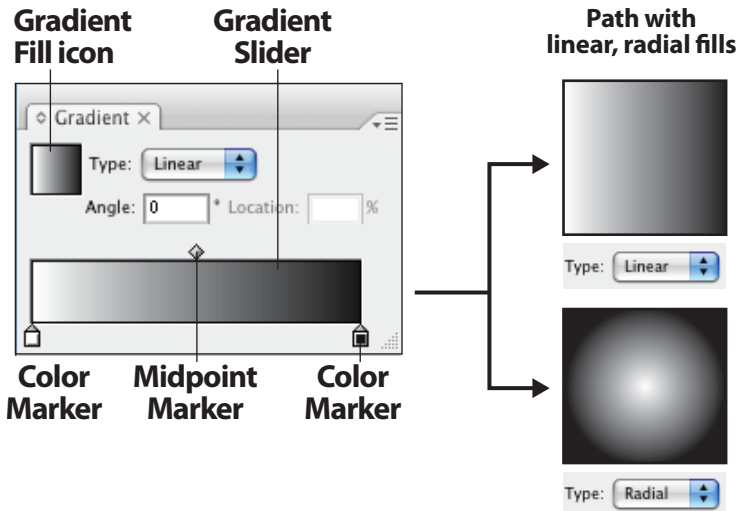To delete a marker, drag it off of the Slider.

The diamond shapes at the top of the Slider indicate midpoints of blends. They can be changed by dragging, or by entering a percent in the Location field.

Changing direction

The **Gradient Tool** in the toolbar is used to change the gradient's direction. With the path selected, drag the tool across it in the desired direction. The bar that appears across the path is interactive: grab the endpoints to reposition them, and slide the color markers to reposition them.

The direction can also be changed by entering a number in the **Angle** field in the panel.

Gradient Fill icon   **Gradient Slider**

Path with linear, radial fills

Color Marker   **Midpoint Marker**   **Color Marker**

Click on marker to change its color, or drag a swatch onto it

Drag to change midpoints of blends

Click to add a new marker

Drag tool across selected path

Drag markers

Click and drag end points

Arranging paths

There are two ways to move paths in front of
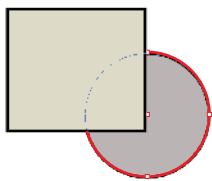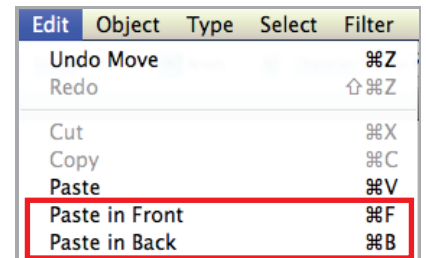or in back of each other:

ARRANGE MENU

Arrange under the **Object menu** gives you four
options to move a path in relation to others on the
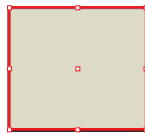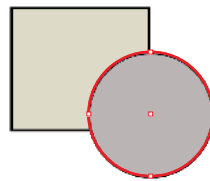same layer.
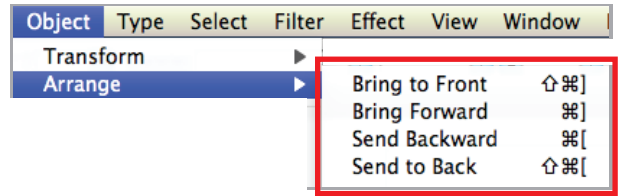
PASTE COMMANDS

Paste in Front / Paste in Back commands under the **Edit** menu
allow you to place a path directly in front of or in back of another
path without changing its location on the page:

1. Select circle
and choose **Cut**
under **Edit** menu

2. Select
rectangle

3. Choose **Paste
in Front** under
Edit menu

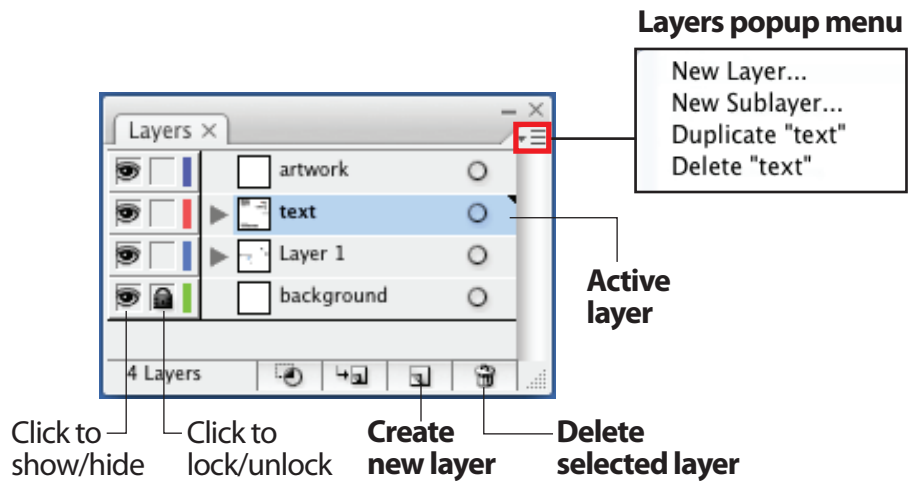| Path options	Paste in front (of selected object)	**Cmd F**
	Paste in back	**Cmd B**
	Lock	**Cmd 2**
	Unlock all	**Cmd Opt 2**
	Hide	**Cmd 3**
	Unhide all	**Cmd Opt 3**

Cmd: Apple key
Opt: Option key

Layers

Paths can exist on any layer in the **Layers menu**, which is where you can create or delete layers, move layers above and below each other, and move selected paths from one layer to another.

Layers popup menu

New Layer...
New Sublayer...
Duplicate "text"
Delete "text"

Active layer

Click to show/hide

Click to lock/unlock

Create new layer

Delete selected layer

Moving layers

Move a layer up or down in the panel by simply dragging it above or below the other layers.

CAUTION! Dragging a layer directly on top of another layer will convert it into a sublayer inside that layer. It will then only be visible by expanding the layer: see Sublayers below. Be sure to drag the layer to a spot in between other layers.
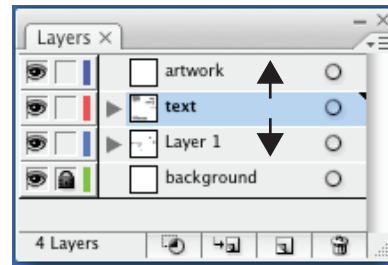
Drag the layer above or below other layers

Moving a shape to a different layer

When a path or group is selected, a small square will appear to the right of the layer that it's occupying. Click and slide the square up or down to move the path or group to another layer.
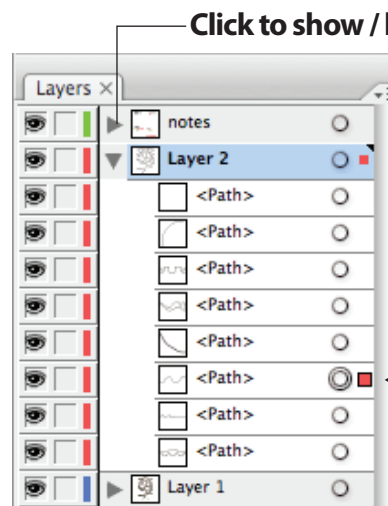
CAUTION! Clicking on the right side of a layer selects all the paths on that layer. Make sure to select the path you want to move first, then slide its square to the desired layer by dragging.
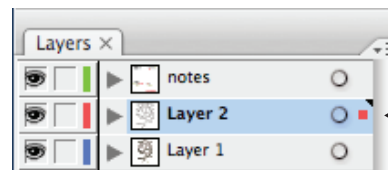
Selected path: Slide square to another layer to move the path there

Click to show / hide sublayers

Sublayers

Each layer has a triangular icon to the left of its name. Clicking on it expands the layer to reveal all the paths on that layer.

Selected path. It can be dragged above or below other paths.
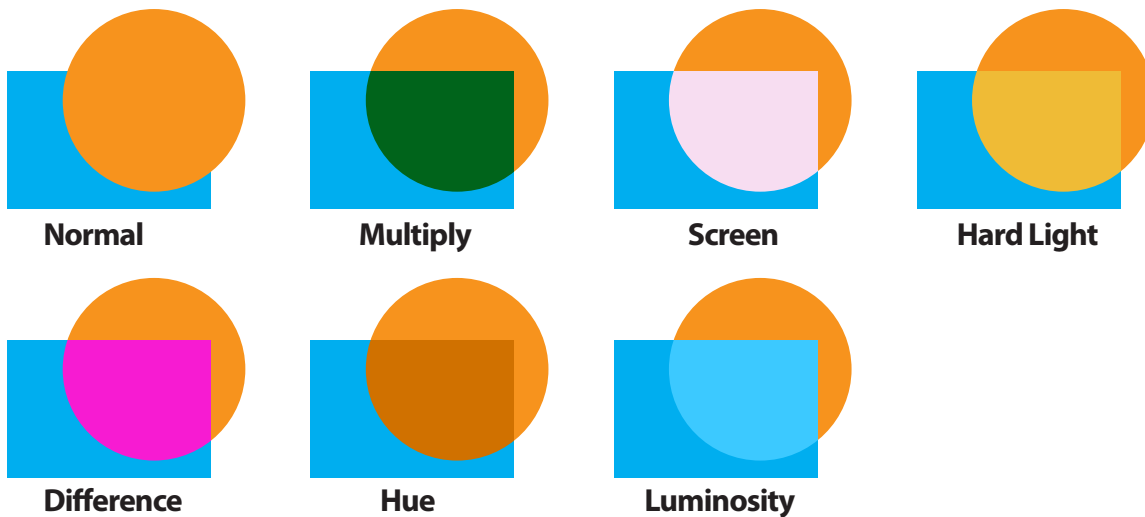
Transparency

BLENDING MODES

The **Transparency Panel** allows you to change how a selected path interacts with paths beneath it. The Blending Modes each have a different effect: Experiment with them to see what they do.

Illustrator's blending modes are identical to Photoshop's. However, in Photoshop they are applied to layers rather than selected paths.
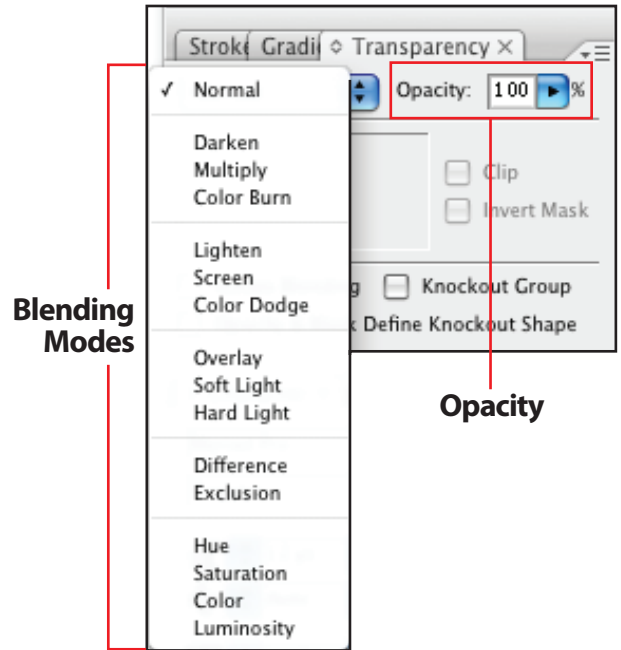
BLENDING MODE EXAMPLES
With orange circle selected:

Normal	**Multiply**	**Screen**	**Hard Light**

Difference	**Hue**	**Luminosity**

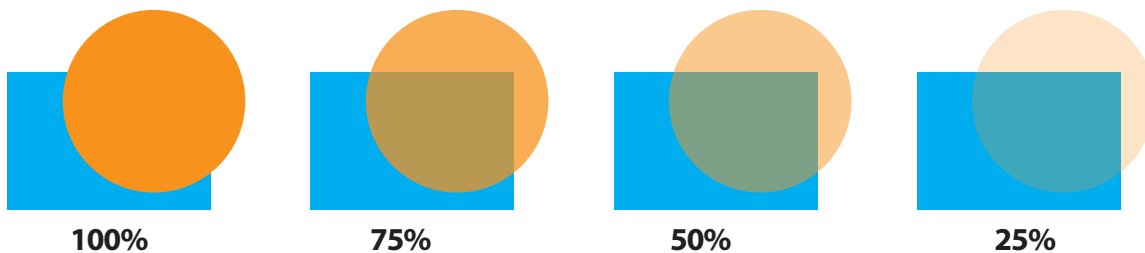### OPACITY

Opacity simply means how transparent a path is, determined by percentage: The lower the percentage, the more transparent the object is.

OPACITY LEVELS

100%	**75%**	**50%**	**25%**

Clipping masks

A clipping mask is a path that acts as a frame or container for something underneath it. Any part of underlying paths that lie outside of the mask will be hidden (although it can still be selected.)
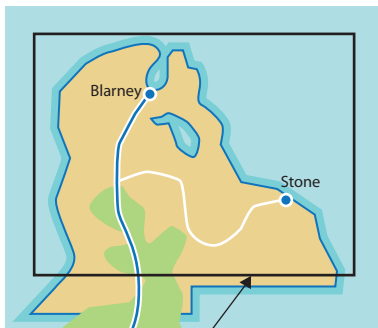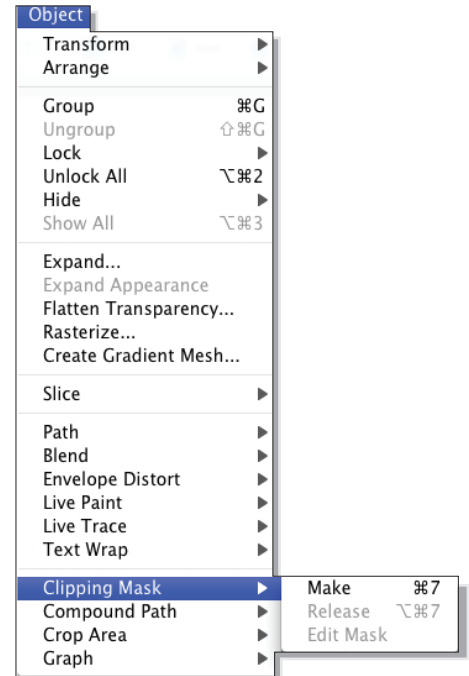
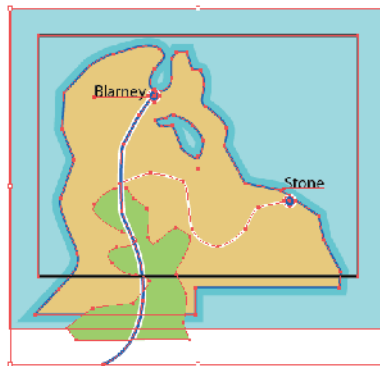The command is under the **Object** menu: **Clipping Mask: Make**.

To make one, select any number of overlapping paths and use the Make command. Whatever is the topmost path will become the mask for all underlying paths.

The keyboard shortcut is **Command-7**.

The Release command is in the same submenu (**Command-Option-7**).

Draw a path that will become the mask

Select all, including the mask path

Make Clipping Mask
Notice that the mask path loses all its stroke and fill attributes

To see, select and modify parts of paths hidden by the mask, you can either release it temporarily, or switch to **Outline View** in the View menu (**Command-Y** toggles between Preview and Outline).

Be aware that selecting paths on multiple layers and applying a mask to them will move them all to the same layer as the mask. It also groups all the paths: Use the Group Selection Tool (White arrow with plus sign) to select paths within the group.
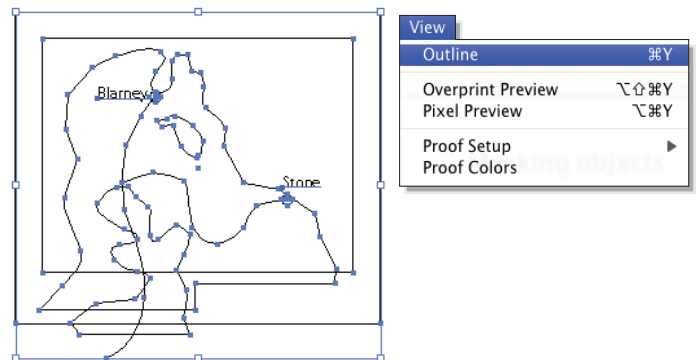
Outline View

Compound paths

Creating a compound path is like cutting a hole in a path. It's made by drawing a path in front of another path, selecting both, and choosing **Make Compound Path** under the **Objects** menu.

The keyboard shortcut is **Command-8**.

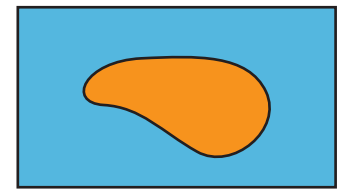The release command is in the same place — that will make the paths separate again.
(**Command-Option-Shift-8**).
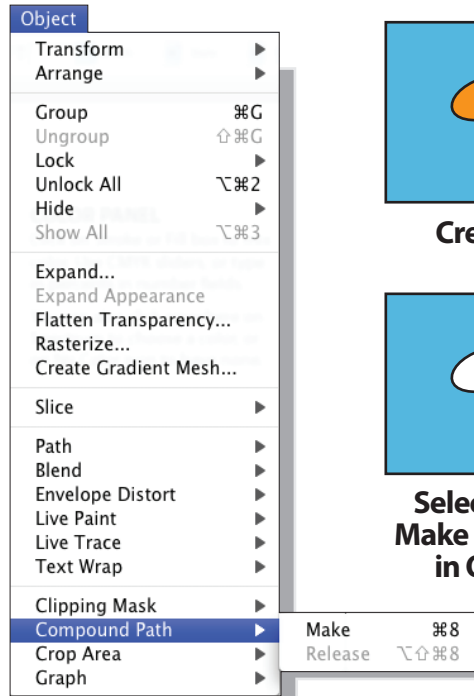
Create two paths
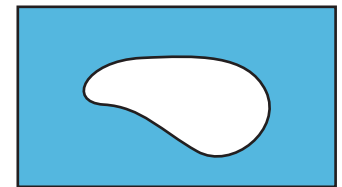
**Select both; choose
Make Compound Path
in Objects menu**

INTERLOCKING PATHS

Draw a circle, copy it and paste it in front of itself, then scale it down. Select both circles and make compound path.

Repeat for the other ring.

Use **Scissors Tool** (subset of Eraser) to cut top ring where it intersects bottom ring. Select cut sections with **White Arrow** and delete. Use **Pen Tool** to connect inner and outer parts.

1. Create shapes
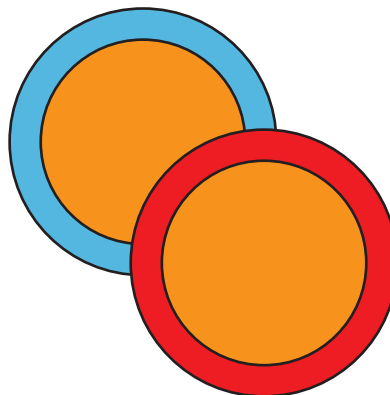
2. Make Compound Paths
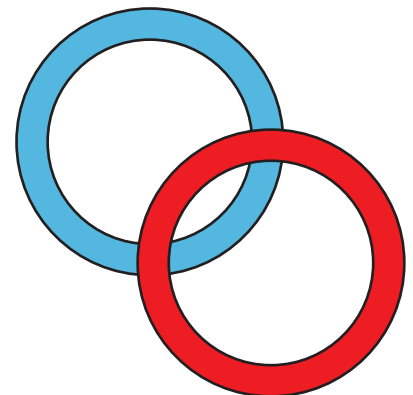
**3. Cut top ring
with Scissors tool**
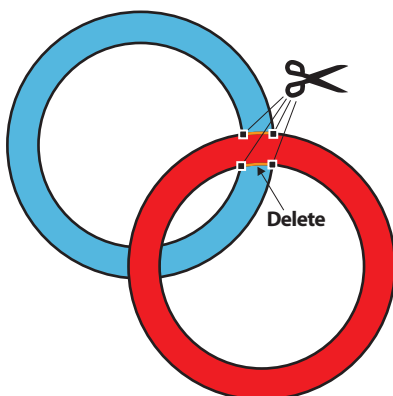
Delete

**4. Delete cut
sections**

Delete

Delete
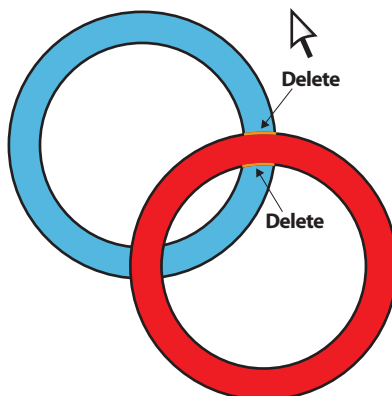
**5. Use Pen Tool to connect
paths**

4 1
3 2
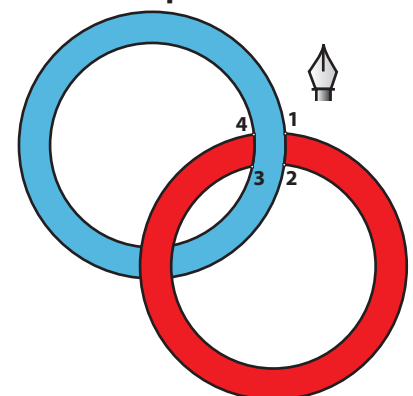
Placing images

Photoshop images can be placed in an Illustrator document to either trace from or to be used as part of the document. The Photoshop document will be nested inside the Illustrator document. But you need to know the difference between the two documents and keep track of them.
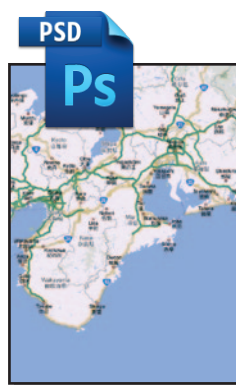
**PHOTOSHOP DOCUMENT:
japan07.psd**

**ILLUSTRATOR DOCUMENT:
japan07_trace.ai**

Workflow

To place a Photoshop image in an Illustrator document:
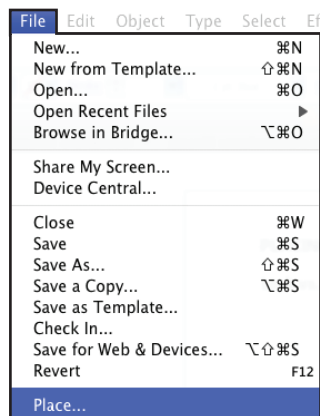
• In Illustrator, create a new, blank document in the desired color space (CMYK or RGB).

• Under the **File** menu, select the **Place** command.

• Locate the Photoshop document and click **Place**. Make sure the **Link** option is checked on.

The two documents should be kept in the same location: on your desktop or in a folder.

Link vs. Embed

When you use the **Place** command, you have the option of linking to the Photoshop document or embedding it. To link, make sure the **Link** option is checked on in the Place dialog box.

IF YOU LINK: The Photoshop document has to accompany the Illustrator document wherever it goes. If you copy the Illustrator document to your flash drive, you have to copy the Photoshop document along with it, to the same place.

The Photoshop document will be **embedded** if the Link option is unchecked. Then, the Photoshop image will become part of the Illustrator document and doesn't have to accompany the Illustrator document if it's copied or moved.

Place dialog box
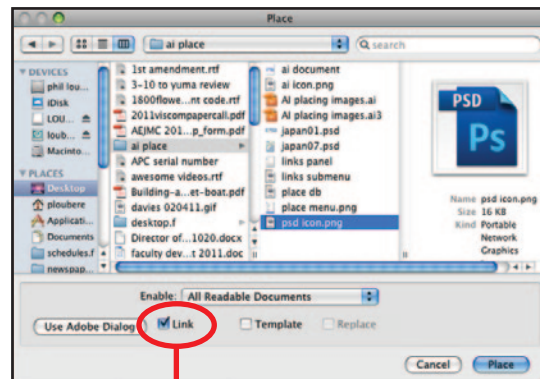
LINK OPTION

Placing images cont.

Advantages of linking:

If any changes are made to the Photoshop document, they'll be updated in the Illustrator document.

Keeps the Illustrator document file size smaller.

Advantages of embedding:

You don't have to worry about keeping the Photoshop document with the Illustrator document.

If changes are made to the Photoshop document, you can still update it, you just have to do it manually through the Links panel.

Links Panel

As you place images in the Illustrator document, they will be listed in the Links panel.

The popup menu in the upper right corner offers a list of options for any of the links selected in the panel.

Navigate		
	Fit in window	**Cmd 0** (zero)
	Actual size	**Cmd 1**
	Zoom in	**Cmd +**
	Zoom out	**Cmd -**
	Zoom tool	**Cmd Space bar** (hold down)
	Zoom out tool	**Cmd Opt Space bar** (hold down)
	Hand tool	**Space bar** (hold down)

View		
	Preview/outline view	**Cmd Y**
	Show/hide guides	**Cmd ;**
	Lock/unlock guides	**Cmd Opt ;**
	Show/hide edges	**Cmd H**
	Show/hide page rulers	**Cmd R**

Select		
	Selection tool (black arrow)	**V**
	Direct Selection tool (white arrow)	**A**
	Group Selection tool (white arrow +)	**Opt** (hold down)
	Toggle between black and white arrows	**Cmd** (hold down); **Cmd Opt Tab**
	Lasso	**Q**
	Magic Wand	**Y**

Type		
	Type	**T**
	Tab ruler	**Cmd Shift T**
	Align left	**Cmd Shift L**
	Align right	**Cmd Shift R**
	Align center	**Cmd Shift C**
	Show hidden characters (toggle)	**Cmd Opt I**

Tools		
	Pen	**P**
	Add Anchor Point	**+**
	Delete Anchor Point	**-**
	Convert Anchor Point	**Shift C**
	Rectangle	**M**
	Ellipse	**L**

Transform		
	Scale	**S**
	Rotate	**R**
	Reflect	**O**
	Free Transform	**E**
	Scissors	**C**
	Eraser	**Shift E**
	Eyedropper	**I**
	Gradient	**G**
	Blend	**W**
	Toggle stroke/blend	**X**
	Delete stroke/blend	**/**
	Swap stroke/blend	**Shift X**

Arrange		
	Group	**Cmd G**
	Ungroup	**Cmd Shift G**
	Lock	**Cmd 2**
	Unlock all	**Cmd Opt 2**
	Hide	**Cmd 3**
	Unhide all	**Cmd Opt 3**
	Paste in front (of selected object)	**Cmd F**
	Paste in back	**Cmd B**
	Clipping mask	**Cmd 7**
	Clipping mask release	**Cmd Opt 7**
	Compound path	**Cmd 8**
	Compound path release	**Cmd Opt 8**

Other		
	Select all	**Cmd A**
	Deselect all	**Cmd Shift A**
	Repeat previous action	**Cmd D**
	Make guide (from selected object)	**Cmd 5**

Navigate		
Fit in window	**Ctrl 0** (zero)	
Actual size	**Ctrl 1**	
Zoom in	**Ctrl +**	
Zoom out	**Ctrl -**	
Zoom tool	**Ctrl Space bar** (hold down)	
Zoom out tool	**Ctrl Alt Space bar** (hold down)	
Hand tool	**Space bar** (hold down)	

View		
Preview/outline view	**Ctrl Y**	
Show/hide guides	**Ctrl ;**	
Lock/unlock guides	**Ctrl Alt ;**	
Show/hide edges	**Ctrl H**	
Show/hide page rulers	**Ctrl R**	

Select		
Selection tool (black arrow)	**V**	
Direct Selection tool (white arrow)	**A**	
Group Selection tool (white arrow +)	**Alt** (hold down)	
Toggle between black and white arrows	**Ctrl** (hold down); **Ctrl Alt Tab**	
Lasso	**Q**	
Magic Wand	**Y**	

Type		
Type	**T**	
Tab ruler	**Ctrl Shift T**	
Align left	**Ctrl Shift L**	
Align right	**Ctrl Shift R**	
Align center	**Ctrl Shift C**	
Show hidden characters (toggle)	**Ctrl Alt I**	

Tools		
Pen	**P**	
Add Anchor Point	**+**	
Delete Anchor Point	**-**	
Convert Anchor Point	**Shift C**	
Rectangle	**M**	
Ellipse	**L**	

Transform		
Scale	**S**	
Rotate	**R**	
Reflect	**O**	
Free Transform	**E**	
Scissors	**C**	
Eraser	**Shift E**	
Eyedropper	**I**	
Gradient	**G**	
Blend	**W**	
Toggle stroke/blend	**X**	
Delete stroke/blend	**/**	
Swap stroke/blend	**Shift X**	

Arrange		
Group	**Ctrl G**	
Ungroup	**Ctrl Shift G**	
Lock	**Ctrl 2**	
Unlock all	**Ctrl Alt 2**	
Hide	**Ctrl 3**	
Unhide all	**Ctrl Alt 3**	
Paste in front (of selected object)	**Ctrl F**	
Paste in back	**Ctrl B**	
Clipping mask	**Ctrl 7**	
Clipping mask release	**Ctrl Alt 7**	
Compound path	**Ctrl 8**	
Compound path release	**Ctrl Alt 8**	

Other		
Select all	**Ctrl A**	
Deselect all	**Ctrl Shift A**	
Repeat previous action	**Ctrl D**	
Make guide (from selected object)	**Ctrl 5**	