

# Chapter 4:

# SELECTING AND MANAGING THOSE SHAPES!

## SELECTING OBJECTS

Before you can begin manipulating shapes and other objects in Flash, you'll first have to select them. Selecting is fairly easy, but there are a few

things that you'll need to keep in mind. Most important is this: Flash doesn't behave as other graphics programs do when it comes to this sorta stuff. So, when you begin working with selections, it's really about figuring out how Flash behaves more than learning how to make simple selections. You'll see how all this works in this section.

*Uhh...we sorta fired our entire intern staff over a jelly sandwich gag gone horribly wrong...so if you catch the odd mistake, let us know over at [tentonbooks.com/improve-ten-ton.html](http://tentonbooks.com/improve-ten-ton.html)*

### HERE'S WHAT YOU'LL LEARN IN THIS CHAPTER

So you've drawn a bunch of shapes and objects—now what? You'd probably like to select 'em, move 'em around, and do stuff to 'em. Well, that's what this chapter's gonna show ya. You'll see how you can select objects with Flash's arsenal of selection tools, then you'll see how you can transform, align, and otherwise manipulate objects. Before the chapter's out, you'll also see how you can combine, group, and manage the stacking order of your objects. Ready then? Let's go see!

Using The Selection Tool .....	666
It's The Lasso Tool .....	584
Movin' Junk Around On The Stage .....	45
Duplicating Your Goods .....	48
Aligning Objects With The Align Panel .....	45
Transforming Those Shapes .....	45
Combining Objects And Makin' New Shapes.	45
Grouping, Ungrouping, And Breaking Apart ...	45
Stackin' Stuff On The Stage .....	45

### Grabbin' At Stuff with the Selection Tool

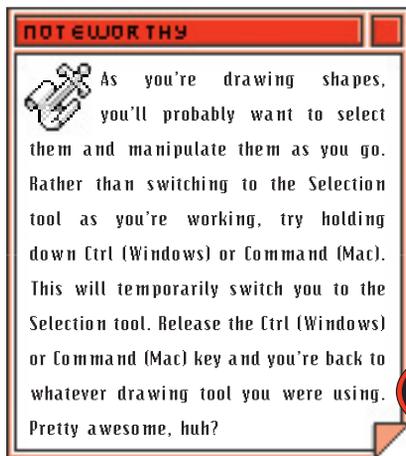
The Selection tool (the black arrow tool in the Toolbox) is the primary selection tool that you'll use in Flash. With it, you can select and move various objects in your movies—stuff like shapes, groups, imported content, symbols, and other stuff. In addition, the Selection tool will also let you curve, straighten, and smooth lines that you've drawn, and manipulate shapes as well. You'll see how all this works in just a moment.

Remember too, that Flash gives you the Subselection tool (the white arrow in the Toolbox) to make selections as well. Back in *"Manipulating Anchor Points"* in Chapter 2

## THE BLACK ARROW SELECTS ENTIRE SHAPES, WHILE THE WHITE ARROW SELECTS PARTS OF SHAPES.

Remember Object Drawing? Check out “Before Ya Go Mental—Understanding Flash’s Drawing Models” in the last chapter for a refresher.

Move a little faster!  
Instead of clicking on the Selection tool in the Toolbox, just hit the V key on your keyboard. Cool huh? Now get back to work!



you saw this guy in action. What’s the real diff between the black and white arrow tools? Well, I think of it like this: the black arrow tool (the Selection tool) makes *global* selections—in other words, this guy’ll select entire shapes, groups, etc. The white arrow tool (the Subselection tool) makes *local* selections—that is to say, a shape’s individual components (its anchor points and direction lines). Does that work for ya?

One other thing, too. Flash has some unique ways of indicating that an object is selected. If a shape is drawn using Flash’s Merge Drawing mode, then when the shape is selected, Flash fills it with a weird lookin’ dotted pattern. However, Object Drawing mode was used, then the selected shape appears within a blue frame. We discussed the Merge Drawing and Object Drawing modes the last chapter. As for selected symbol instances, text boxes, and groups, they appear within a blue frame too.

But ya know, it’s one thing to talk about all this, and it’s another thing to actually do it—so let’s take a looky.

Here’s how to select objects on the Stage:

1. In the Toolbox, click on the Selection tool (the black arrow tool).
2. To select an object, do one of the following:

- To select a fill, single-click on it to select it.

A dotted pattern is displayed over the fill, indicating that it’s selected.

- Single-clicking a stroke will select just the line until it changes direction. For example, if you single-click the stroke on a rectangle, only that side will select. To select the entire stroke, try double-clicking on it.

SEE?  
TOLD YA FLASH  
HAS WEIRD WAYS OF  
SELECTING.

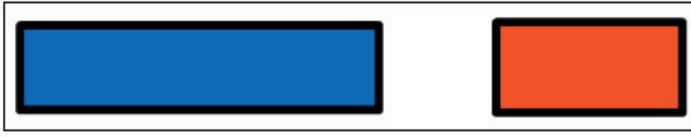


Again, a dotted pattern appears over your selected line.

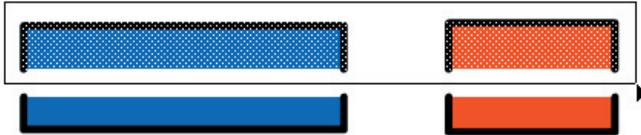
- To select a shape’s fill and outline simultaneously, double-click on the shape’s fill.

A dotted pattern is now displayed over both your shape’s fill and stroke, indicating that they’re both selected.

- Click and drag a bounding box around a shape (or several shapes) that you’d like to select.



When you select objects using a bounding box, only those that are enclosed in the bounding box are selected. If part of a shape is contained in the bounding box, only that portion of the shape will be selected. In other words, you can use this technique for cutting shapes apart; or for totally screwing up your work...



Now all of the above techniques will work, assuming that your shapes have been drawn with Flash's Merge Drawing model. However, if you're makin' use of Object Drawing, you can select shapes (including their fills and strokes) just by single-clicking on them.

This works just the same as any normal graphics program. In fact, you can also click and drag a bounding box around your shapes that have been created with Object Drawing as well. Unlike dragging a bounding box around shapes that have been drawn with Merge Drawing (which we talked about above), Flash won't cut your shapes apart; it'll just select 'em.

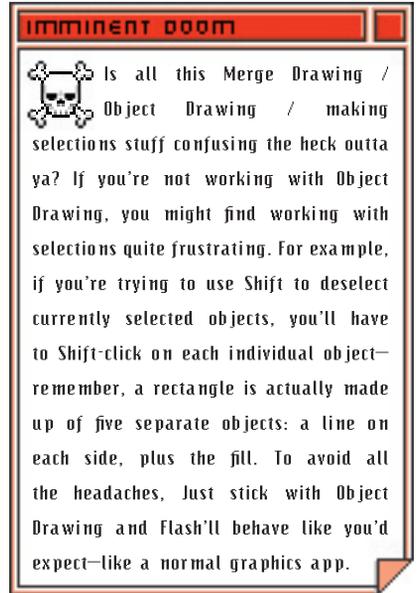
Shapes that have been created with Object Drawing turned on, as well as groups and symbols, highlight in blue to indicate that they're selected.

3. To select additional objects, hold down the Shift key and click on them.

The objects become selected along with any other objects that were originally selected, as indicated by the dotted pattern or blue highlight, depending on the type of objects you're selecting. Shift-clicking a shape that's currently selected will deselect it.

4. If you'd like to deselect your object(s), just click in an empty part of the Stage.

Alternatively, you can choose **Select > Deselect All**, or just hit the Esc key.



Select everything on the Stage in one shot by choosing **Edit > Select All**, or hit **Ctrl+A** (Windows) or **Command+A** (Mac). Using **Select All** selects all objects on all layers (except those that are locked or hidden). We'll talk more about layers in Chapter 8.

Wanna get rid of an object? Select it; then ruthlessly pound your Delete key while yelling "Die bastard!" For the passive-aggressive types, choose Edit > Clear; then go pick some flowers.

Easy stuff huh? Alright, we should take a quick look at a few of the modifiers that come with the Selection tool, found in the Options area of the Toolbox. Here goes!

## A FLASH BENDER: CURVING LINES AND MESSIN' WITH CORNERS

In addition to selecting stuff in your Flash movie, the Selection tool will let you do a few neat things in terms of bending lines and manipulating shapes. Let's take a quick look at how this works. First, you can curve a line—the line itself can be the outline of a shape, a freehand line that you've drawn with the Pencil tool, or any other line you've created. To get this to work, make sure the line you want to bend is not selected; then hover the Selection tool over it. When a small curve appears beside your cursor, try clicking and dragging. Flash will bend the line for you.



If you can't get it to work, double-check that your line isn't selected before you try clicking and dragging on it. Kinda neat.

Next, you can add corners in the middle of a line that you've drawn. Just hold down Ctrl + Alt (Windows) or Command + Option (Mac) and click and drag on a line, just as you did above. Rather than bending the line, this time a corner is added to your line, which you can then drag around and position where you'd like. This comes in handy whenever you want to add extra corners to the shapes you've drawn.

Finally, you can manipulate the corners of shapes that you've drawn. This time, bring your cursor over the corner of an unselected shape. When a small corner indicator appears beside the cursor, click and drag to pull the corner of your shape inwards and outwards. Easy, right? This is perfect for reshaping your objects and getting them exactly as you'd like.

### The Selection Tool's Smooth and Straighten Modifiers

When you make a selection with the Selection tool, you'll notice two modifiers appear in the Options area at the bottom of the Toolbox, Smooth and Straighten. These two fellas are also known as the Shape Recognition modifiers. In fact, you might remember our discussion about Shape Recognition back when you saw how to use the Pencil tool in Chapter 2. There, you saw how you could have Flash recognize basic geometric shapes when you drew with the Pencil. Well, Shape Recognition works the same for the Selection tool; only difference is that with the Pencil tool, Shape Recognition occurs right away when the object is drawn, whereas with the Selection tool, you'd use Shape Recognition on a line or shape that you've already drawn.

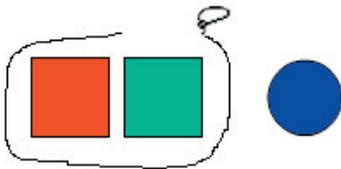
To get this to work, you'll have to start with a line or shape that you've already created. Next, select your object with the Selection tool. At the bottom of the Toolbox, repeatedly click the Smooth or Straighten modifier. Smoothing removes anchor points along the line, thus simplifying it and making it less bumpy. On the other hand, Straighten takes curves out of lines, making them, well, straighter. Easy, right? That's all there is to Smoothing and Straighten!

## Ropin' In Some Shapes—It's The Lasso Tool

Alrighty cowboy, you've seen how to make all sorts of selections using the Selection tool, and you got a handle on a few Selection tool modifiers. How about ropin' in selections with the Lasso tool? The Lasso tool will let you create freehand selections, which is great whenever the Stage is cluttered with objects, and you wanna grab just a few of them—in other words, it's perfect for making more intricate, precise selections. All you gotta do is wind up, then drag a loop around the objects that you're after. Once your objects are selected, then you can move, resize, delete, or otherwise man-handle 'em.

Here's how to use the Lasso Tool:

1. Choose the Lasso tool from Flash's Toolbox.
2. Click on the Stage and drag to begin freehanding your selection's outline.



Notice the line being drawn? That's the edge of your outline.

3. To finish your selection, bring your cursor back to where you'd started; then let go of your mouse.

Any objects that fall within your selection's outline become selected. If you don't bring your cursor back to your starting point, Flash will draw a straight line between where you started and where you finished.

4. To add more shapes to your selection, hold down Shift; then draw out another selection outline.

The shapes you drag around with the Lasso tool get added to your selection. If you'd like to remove a shape from the current selection, switch to the Selection tool in the Toolbox; then hold down Shift and click on the shape.

So there's a look at making different types of selections with Flash's Selection tool, using it's modifiers, and how to make use of the Lasso tool. Pretty straightforward, especially if you've used other graphics apps before. Now on to the next section, where we'll take a look at manipulating and managing your shapes—it's all about transforming, aligning, and more!

**THE LASSO TOOL WILL LET YOU CREATE FREEHAND SELECTIONS, WHICH IS GREAT WHENEVER THE STAGE IS CLUTTERED WITH OBJECTS.**

When the Lasso tool is selected, a Magic Wand modifier appears in the Options area of the Toolbar. Curious? Head over to [tentonbooks.com/flash/magic-wand.html](http://tentonbooks.com/flash/magic-wand.html) to find out more!

**NOTEWORTHY**  
 Just as you saw when making selections with Flash's Selection tool, keep in mind the Merge Drawing and Object Drawing models. If the shapes you're trying to grab were drawn with Merge Drawing, and the selection outline you draw with the Lasso tool intersect shapes, you can cut 'em apart. On the other hand, if you'd used Object Drawing, your intersecting selection outline will select entire shapes.

## OFF TO THE RODEO WITH THE LASSO TOOL'S POLYGON MODIFIER

Are you finding it a little tough freehanding? No problem dude, here's whatcha do: turn on the Lasso tool's Polygon Mode modifier, found in the Options area of the Toolbox. This fella'll make your selections nice 'n pretty like by allowing you to draw out straight-edged selections rather than going at it freehand.

Here's how to use the Polygon Modifier:

1. Select the Lasso tool in the Toolbox.
2. In the Options area at the bottom of the Toolbox, click on the Polygon Mode button.
3. Single-click where you want your polygon selection to begin; then move your mouse to the polygon's next corner and single-click. Continue single-clicking to create your selection's bounding box.
4. To finish your selection, double-click.

Flash ends the selection and highlights any objects that appear within your bounding box.

Here's something neat too: If you're using the Lasso tool without the Polygon Mode modifier turned on, try holding down Alt (Windows) or Option (Mac) to temporarily turn it on. Ain't that a hum-dinger?!

## MESSIN' IT UP: MOVING, ALIGNING, AND TRANSFORMING OBJECTS

All good so far? Now that you've selected a buncha objects, you can begin doing things to them. In fact, that's the point of selecting objects—ya grab 'em, then go and transform them, adjust them, and so on. We'll take a look at moving objects around, aligning multiple objects to one another, and also how to use Flash's Transform tool. Let's check it out!

### Movin' Junk Around On The Stage

Moving object—shapes, groups, imported content, symbols, etc—is easy as pie. All you gotta do is select the object that you want to move, and drag it around on the Stage. As you move objects around, horizontal and vertical dashed lines may appear when your selected object comes into alignment with other objects. This is called Snap Align, and it allows for fast positioning and alignment. We discussed Snap Align in detail back in the previous chapter.

Here's another neat thing you can do when moving objects: As you drag, hold down Shift. This will limit your movement to the nearest 45-degree angle. This comes in very handy when you want to move objects in a perfectly straight line.

If you'd like more precision when moving your objects, you can set an object's position using X and Y co-ordinates. These settings are found both on the Properties inspector, and in Flash's Info panel (Window > Info).

### NOTEWORTHY



Speaking of snapping, in the last chapter, we talked about Snap To Objects. Remember that when you have the Selection tool activated, you'll get a Snap To Objects modifier in the Options area of the Toolbar. Are ya drawing a blank? Head back to "Gettin' Snippy with Snapping" in Chapter 3.

Using X (horizontal) and Y (vertical) co-ordinates allows you to set the position of an object in relation to the top-left corner of the Stage. For example, if you know your object should be exactly 50 pixels from the top of the Stage and 30 pixels from the left of the Stage, it's much more accurate to enter these values as X and Y co-ordinates than dragging your object manually.

The Info panel allows you to set an orientation for the selected object—what part of the shape will be used in relation to the top-left corner of Flash's Stage. Just left of the X and Y fields, you'll see a Symbol Position area, where you can set your object's orientation. Frankly, it's the most visually confusing setting I've seen in a while.

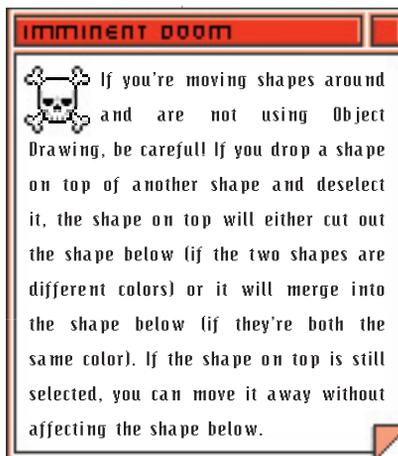
To ensure that your X and Y are using the top-left corner of the object, make sure the icon appears with a square in the top right, bottom right, and bottom left, and that there's a plus in the top-left. Gahh. Go send Adobe a hurtful email, then we'll continue.

## Duplicating Your Goods

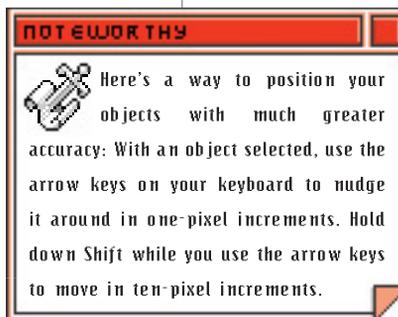
Alrighty, so things are happening here in Flash. But what about cuttin' down on the workload by duplicating some of your content? Well Flash'll letcha do this in a few different ways.

First, you could grab the Selection tool from the Toolbox; then select the object, group, imported artwork, or whatever it is that you wanna duplicate. Next, just choose Edit > Copy, and then Edit > Paste In Center. This pastes a duplicate of your selection in the center of your screen (not the center of the Stage). There's also a second approach to pasting, called Paste In Place. Check out the sidebar *"Keepin' Paste In Line with Paste In Place"* for more.

But pasting is easy stuff though, right? Here's another way to duplicate an object: you could select your object(s) and choose Edit > Duplicate. Flash then drops a duplicate slightly below and to the right of your original object. Easy. And here's one more way to duplicate your stuff, and this one's my favorite: Begin by making your selection; then hold down Alt (Windows) or Option (Mac) and click and drag on your selection. You'll see a tiny plus sign appear beside your cursor, indicating that you're creating a copy of your selection, which then appears where ever you drag it to. How's that for fast?



The Info panel also provides Width and Height fields and displays your cursor's current X and Y position on the Stage (seen just below the X and Y fields).



What—you don't know your Cut, Copy, and Paste keyboard shortcuts? Please step away from your computer! Seriously, they're easy! To Cut, hold down Ctrl+X (Windows) or Command+X (Mac). To Copy, hit Ctrl+C (Windows) or Command+C (Mac). And to Paste, try Ctrl+V (Windows) or Command+V (Mac). Go ahead, you can use your computer again. There's another neat command related to pasting under Flash's Edit menu; Paste Special. Get the low down at [tentonbooks.com/flash/paste-special.html](http://tentonbooks.com/flash/paste-special.html).

Duplicate your shapes even faster by hitting Ctrl + D (Windows) or Command +D (Mac).

## KEEPIN' PASTE IN LINE WITH PASTE IN PLACE

Cutting, Copying and Pasting is no big whoop, right? Like every other program under the sun, these commands are all found under the Edit menu, or you can use your trusty keyboard shortcuts. If you haven't tried it yet, when you paste in Flash (actually called Paste In Center in Flash CS3) your object will be dropped into the middle of the screen. That may be well and fine, but there's another handy way to paste in Flash, called Paste In Place. To give 'er a spin, copy something; then just choose Edit > Paste In Place.

What Paste In Place will do is paste the object in the precise location that it was copied from. In other words, if you cut or copy an object from the top-right corner of the Stage and choose Edit > Paste In Place, the pasted object will appear in the exact same spot, right on top of your original, rather than in the middle of your screen.

So when would this be useful? I use Paste In Place in a variety of situations, but one that comes to mind is when I'm moving objects between layers (more on layers in Chapter 8). Say I've already positioned the object exactly where I want it in the overall layout, but then realize the object should be on a different layer. I could cut it, paste it, then reposition it, but it's a heck of a lot faster to simply cut it and use Paste In Place—it's even faster to hit Ctrl+Shift+V (Windows) or Command+Shift+V (Mac). I get the object appearing in the exact same position, and it's been organized onto another layer.

There's just one word of warning: If you're usin' that pesky Merge Drawing mode and you use Paste In Place, as soon as you deselect, your objects will be merged together into a single shape. So just be careful. Other than that, Paste In Place is a beauty, so keep 'er in mind!

### **THE ALIGN PANEL WILL HELP YOU ALIGN AND EVENLY SPACE APART OBJECTS.**

*With the amount of precision found in the Align panel, now there's no reason not to drink at your desk!*

### **Aligning Objects With The Align Panel**

So you've drawn out a whole bunch of objects, and now you want to make sure everything lines up nice 'n tidy like. As a matter of fact, there's a fundamental rule in design that says that everything in your layout should line up with something else in the layout. Now you can eyeball all of this aligning, but it's much faster (and much more accurate) to use Flash's Align panel for this type of work. In addition, the Align panel will also help you evenly space apart objects, which is called distributing. Let's have a looky at how all this works.

Here's how to align and space objects:

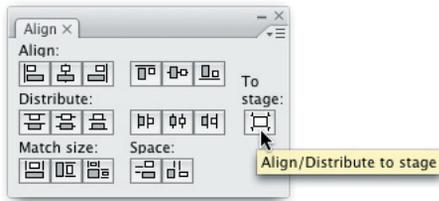
1. If it's not already onscreen, open the Align panel by choosing Window > Align.

Power-users, hit Ctrl+K (Windows) or Command+K (Mac); then gimme a hell-yeah!

2. Select the shapes that you'd like to align or space apart.

Remember, you can click and drag a bounding box around the shapes you'd like to select, or Shift + click the shapes you're after. If you're aligning, you'll need at least two objects. Spacing requires three or more.

3. If you'd like to align or space apart your shapes in relation to Flash's Stage, click the To Stage button on the right side of the Align panel.



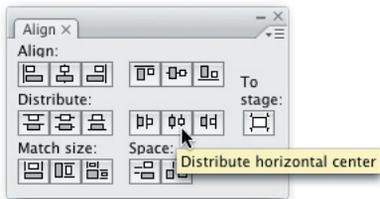
This wee option comes in very handy whenever you want to drop objects in the dead center of the Stage, towards the edges, and so on. Give it a try when you have a moment.

4. Next, do one of the following:

- To align your objects, click on the appropriate button in the Align area of the Align panel.

Horizontally, you can align the left edges, the centers, or the right edges of your objects. Vertically, you can go with top, center, and bottom.

- To space apart your objects, click on the appropriate button in the Distribute area of the Align panel.



You can space apart vertically based on the top, center, or bottom; or horizontally from the left, center, or right.

Flash aligns or spaces apart the objects on the Stage according to the option that you'd clicked.

All good? Now, as a matter of fact, you can use more than one alignment or distribution option in one go. For example, maybe you want to evenly space apart your shapes and line them up, too. I give an example of this in the sidebar *"Geoff's Super-Cool Aligning And Distributing Technique."*

*You can also find all your alignment and distribution commands under the Modify > Align submenu, although this would be a really slow way to work...unless you get paid by the hour!*

## GEOFF'S SUPER-COOL ALIGNING AND DISTRIBUTING TECHNIQUE

Ya know, I seem to suffer from the same illness as other designer-types: My layouts have gotta be bang on the money, absolutely perfect. And so, I drink. But check this out; lemme show ya how I like to distribute, or space apart, objects in my layout so that I know they're perfect every single time. In fact, I don't even trust my eyes anymore—I get the computer to do all the work.

To pull this off, I use the two buttons found in the Space area of the Align panel: Space Evenly Vertically and Space Evenly Horizontally. In this example, let's say we're spacing objects apart horizontally across the stage. Imagine this is like a row of buttons or something. Not only that, but we'll make sure that everything's nice and lined up, too. To get this to work, draw out a series of shapes sorta like I've done below; you'll need at least three. Ready? So 'er goes.

Geoffy's distribution technique—give 'er a try:

1. Take the left-most shape and position it where you'd like your buttons to begin.

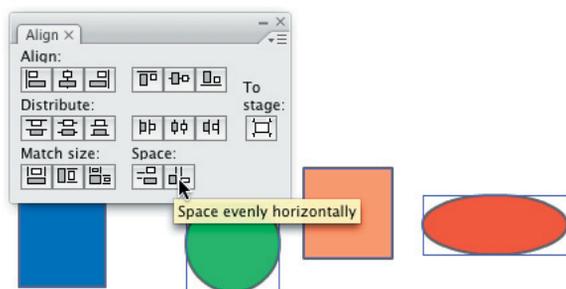
In other words, position the first guy where the row of buttons should start—and hey, maybe they're not gonna be buttons, but you get the drift.

2. Move the right-most shape to position it where the row of buttons should end.

Give yourself lots of space to work with.

3. Select all the shapes that will make up your group of buttons, including the first and last shapes.

4. In Flash's Align panel, click on Space Evenly Horizontally in the Space area.



Bam, evenly spaced! How did Flash do this? He took the position of the first and last shapes, then automatically calculated the space needed between each object. Notice, the first and last shapes didn't move, only the inner ones did. Hang on though, one more thing to do...

5. Still in the Align panel, click on Align Top Edge in the Align area.

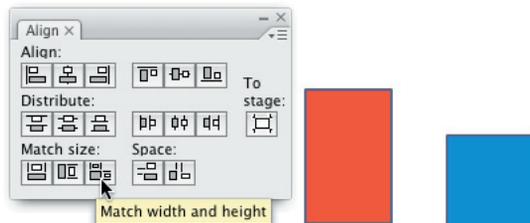
Ka-pow! There you go, all your buttons are perfectly aligned and evenly spaced. Pretty cool, huh? That's how I do it anyway. And the really cool part is that this wee spacing and aligning technique works in just about any graphics program, including Illustrator, InDesign, and others, so give it a try there too. Have fun!

## SAVE TIME WITH MATCH SIZE

Studies show that if your friends and family are a bit on the pudgy side, then odds are you'll match their size, too. And now Flash is on the obese bandwagon too, with its Match Size command. So put down the burger and check this out: you can take any shapes on the Stage and match 'em to the same size as other shapes—sorta like a two-for-one Value Combo. This certainly saves time in Flash, but just make sure that the shapes that you want to change are smaller than the shape you're matching to.

It's easy to make your shapes morbidly obese, just try this:

1. Select the shapes that you'd like to resize, as well as the shape you're matching to.
2. Over in Flash's Align panel, choose an option in the Match Size area.



The options are Match Width, Match Height, and Match Width And Height. You can also find these options under Modify > Align. Either way, as soon as you click on one of these options, your smaller shapes scale to match the larger shape, instantly packing on the pounds. Unfortunately, in the high-carb lifestyle that we all enjoy, there's no way to slim down shapes; they only increase in size. Now go run around the block and feel better about yourself.

## Transforming Those Shapes

Often you'll have objects sittin' on the Stage—maybe some drawn shapes, imported content, or whatever—and you'll think *"hey, it'd be cool to transform this stuff!"* Well, that's exactly what we'll be doing here.

Probably the fastest and easiest way to transform objects—including shapes, symbols, groups, text; whatever ya got—is to use Flash's Free Transform tool. With it, you can perform all the typical transform commands, including scaling, rotating, skewing, and flipping.

In addition to using Free Transform, you can also use Flash's menu commands to perform various transformations, which we'll talk about in just a sec. But let's take a look at Free Transform first.

Ready for the Free Transform tool? Then try this:

1. Begin by selecting the object or group of objects that you'd like to manipulate.

Remember, you can use the Free Transform tool on a shape that you've drawn, an imported graphic, a symbol instance, text, or whatever else you'd like.

**FLASH'S FREE TRANSFORM TOOL ALLOWS YOU TO ROTATE, SKEW, AND MANIPULATE OBJECTS.**

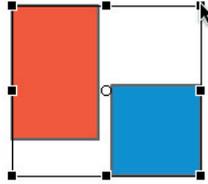
Are ya up on Photoshop's Free Transform? Then this'll be eahh-zay!

2. From Flash's Toolbox, select the Free Transform tool.

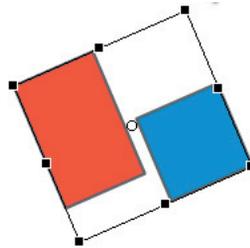
You can also go the long way and choose Modify > Free Transform. Either way, Flash displays a bounding box around your object with resize handles on all four sides, and in all four corners.

3. Do any of the following:

- To scale the width and height of your object, drag on a corner handle. Hold down Shift to scale the width and height proportionally.



- To stretch your object wider or taller, drag on a side handle. Hold down Alt (Windows) or Option (Mac) while you drag to scale the opposite side in unison.
- To rotate, bring your cursor just outside one of the bounding box's corners; when your cursor changes to a circular arrow, click and drag. Holding Shift as you drag will constrain your rotation to the nearest 45-degree angle.

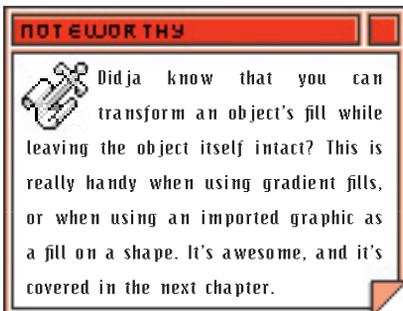


- To skew your object, bring your cursor over the edge of the bounding box, between the resize-handles. When your cursor changes to a pair of parallel arrows, click and drag.
- To flip your object horizontally or vertically, drag a side handle across the object to the opposite side.

Flipping works best on imported graphics, text, symbols, or groups.

4. To remove applied transformations, choose Modify > Transform > Remove Transform.

*You can also move an object while using Free Transform. Just bring your cursor anywhere inside the bounding box (except over the white circle in the center; we'll talk about that wee fella shortly); then click and drag.*



## HERE'S SOME OTHER NIFTY STUFF YOU CAN DO WITH FREE TRANSFORM

You're new buddy, Free Transform, is one talented fella. In addition to rotating, skewing, scaling and all that good stuff, he'll also taper the edges of your shapes, and totally distort the heck out of different objects. This stuff might not come in handy every day, but it's cool to know what's possible. Let's check all this nifty stuff out.

To get wreckin' your shapes, try this:

1. Select the shape that you'd like to manipulate; then choose the Free Transform tool from Flash's Toolbox.

The Free Transform's bounding box appears around your shape.

2. Do one of the following:

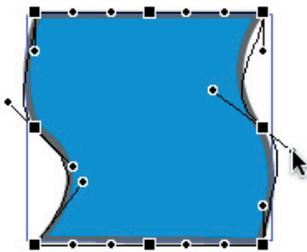
- To taper the edges of your shape, hold down Ctrl+Shift (Windows) or Cmd+Shift (Mac) and drag on any of the bounding box's corner resize handles.

The edges of your shape should taper inwards or outwards depending on which way you drag.

- To distort your shape, hold down Ctrl (Windows) or Cmd (Mac) and drag on any of the bounding box's resize handles.

Dragging on a handle on the side sorta skews your shape. Dragging on a corner tugs the corner.

- To further distort your shape, click on the Envelope modifier at the bottom of the Toolbox; then drag on any of the points that appears around the edges of the bounding box.



objects. Other than that, distort away.

Dragging on these points is a lot like manipulating points drawn with the Pen tool—remember all that back in Chapter 2? Each of the handles on the bounding box is given a pair of direction lines (each with a dot on the end). You can either drag on the handle, or on the dot at the end of the direction line. Is the Envelope modifier not available for you? Don't get your mouse cord in a twist, it won't work on symbol instances, text, or grouped

So now that you've totally messed up your shapes, you might want to pack it in and call it a day—or just undo a whole buncha times. Anyway, there's a few cool things you can do with Flash's Free Transform!

## UNDERSTANDING THE TRANSFORMATION CENTER POINT

Whenever you scale or rotate an object in Flash, a center point is used as a reference point for the transformation. By default, the transformation center point appears as a white circle in the center of the Free Transform frame. But, you might have a situation where you want to scale or rotate from a different center point.

For example, maybe you want to rotate from the top-right corner of an object rather than from the middle. To do this, select the Free Transform tool in the Toolbox; then drag on the white circle that appears in the middle of the frame to a new location. You can even drag the center point outside the Free Transform frame. With the center point placed in a new location, you can now scale or rotate with Free Transform as you normally would. Keep in mind too, that once you deselect and reselect your object, Flash resets the transformation center point back to the middle of your object.

Tranformin' pretty easy? Great. Next up, we'll have a look at a few neat techniques for scaling your objects.

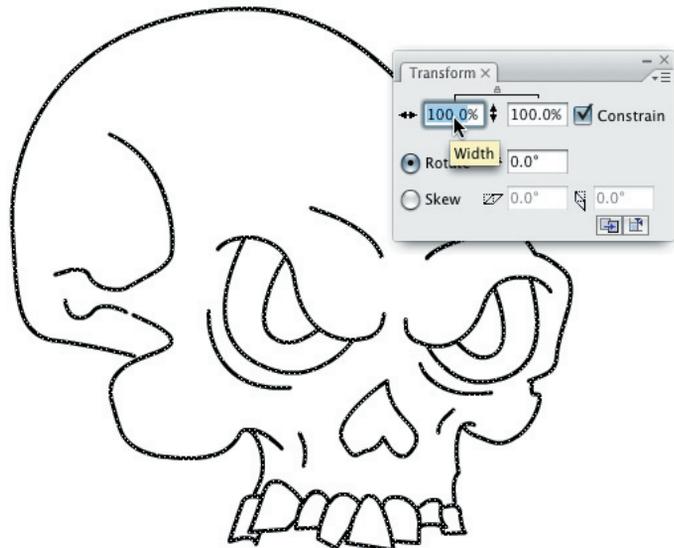
### Scaling Stuff Larger And Smaller

If you wanna scale objects larger or smaller, going with Flash's Free Transform is usually the best way to go. However, Flash provides you with a few other options for scaling as well, each of which allow you more precision and control. So lets take a quick look at a how they work.

First, you can scale a selected object using the Properties inspector. The Properties inspector displays both Width and Height fields, where you can enter in precise pixel values. To ensure that your objects are scaled proportionally, make sure that the padlock beside the Width and Height fields is locked.

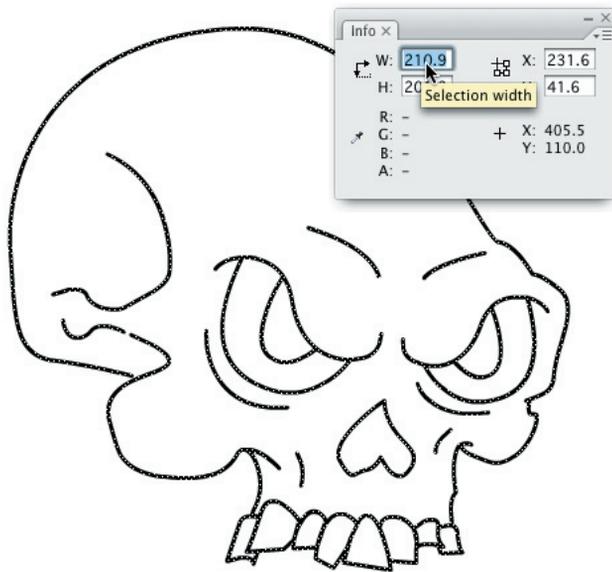
*Don't be a sissy! Hit Ctrl + T (Windows) or Command +T (Mac) to spark up the Transform panel.*

A second way to scale an object is to use the Transform panel (Window > Transform). What's the diff between using the Properties inspector versus the Transform panel? Well here, you can scale your selected object using



percentages. Enter percentage values into the Width and Height fields to scale your shape (enter a value between 0.2 and 900%); then hit Enter. Turn on the Constrain option to keep your widths and heights in proportion. Interestingly, if you'd like to keep your original and create a copy with the transformation applied to it, click on the Copy and Apply Transform button at the bottom-right of the Transform panel. Don't like the transformation that you applied in the Transform panel? No prob—just click the Reset button in the bottom-right of the panel.

Finally, you can use the Info panel (Window > Info) to scale your objects. The Info panel provides its own Width and Height fields, where you can enter in pixel values. But, if you're gonna use the Info panel to set the size of your objects, know that the Width and Height are not proportional to one another as they are in the Properties inspector or in the Transform panel. In other words, changing the width of your object will not proportionally change the height. To me, that reduces its usefulness to one notch above room temperature luncheon meat.



So that about covers scaling. What, still getting over that luncheon meat comment? Next up, we got some rotating to do.

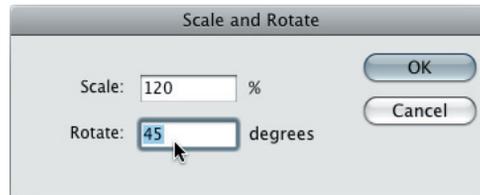
### Precisely Rotate Those Objects

As you saw earlier, rotating with the Free Transform tool is a breeze. But once again, maybe you want a little more control and precision when you rotate. Not a problem. First, you can use Flash's Transform panel (Window > Transform). With an object selected, make sure the Rotate option is activated; then enter in a value between 1 and 360 in the Rotate field and hit Enter. To rotate clockwise, enter in a positive value. To rotate counter-clockwise, enter in a negative value.

*Oh yeah, you can also hit up Modify > Transform > Scale, where you'll get a bounding box around your object. Click and drag on those handles, and don't forget to hold down Shift to constrain your proportions.*

*Don't forget those two helpful buttons in the bottom-right of the Transform panel: Copy and Apply Transform, and Reset.*

You can also rotate using a few menu commands. You could choose Modify > Transform > Rotate 90° CW or Modify > Transform > Rotate 90° CCW to rotate in 90-degree increments clockwise or counter-clockwise. And one of my favorites: Modify > Transform > Scale and Rotate. When you choose this command, the Scale and Rotate dialog box appears, which allows you to scale using a percentage, and rotate your object all in one shot. Now that's economical!



How do you mirror and flip shapes? Glad you asked—keep reading!

### Mirroring And Flipping Shapes

*Don't forget, you can also flip using the Free Transform tool.*

Sometimes, you might want to flip an object horizontally or vertically—that is, mirror the object up or down, left or right. This is easy stuff. Just choose Modify > Transform > Flip Vertical or Modify > Transform > Flip Horizontal, and Flash will mirror your object. You can also flip using the Transform panel. Make sure that the Skew setting is turned on; then type in 180 in either the Skew Horizontally field (to flip vertically) or the Skew Vertically field (to flip horizontally). I know that last bit seems counter-intuitive, but give it a try in Flash. If it's still not making sense, don't flip out—just stick with the Modify > Transform method for flipping.

Huff, okay, one more transformation command to look at, skewing. No not squawering—squawing!

### Skewing Yer Stuff

Skewing, or slanting, an object horizontally or vertically is a simple task. In fact, you saw this earlier with the Free Transform tool. But a much more accurate way to skew is to use the Transform panel. With an object selected, open up the Transform panel (Window > Transform); then make sure that the Skew option is activated. Next, enter values between 1 and 90 into the Skew Horizontally and Skew Vertically fields—positive values skew clockwise, while negative values skew counter-clockwise.

Here's something else you can do: Select an object; then choose Modify > Transform > Rotate and Skew. A selection frame appears around your object, and as the name implies, it'll allow you to rotate and skew your object in one shot. Bring your cursor over any corner-handle to rotate, or over any side-handle to skew.

So there it is, a whole run-down on transforming and manipulating your shapes. As you saw, a lot of this sorta stuff can be done via the Free Transform tool, menu commands, the Properties inspector, or in the Transform panel. I'd say, go with whichever your most comfortable with. Feelin' good? Need a nap? What, are you kidding!? We got combining, grouping, and stacking shapes, comin' up right now!

## **EVEN MORE STUFF: COMBINING, GROUPING, AND STACKING ORDER**

Still feelin' pooped? Hey man, we're almost done here—and besides, you should be finding this shape stuff easy to handle in Flash. As I've said before, it's more about figuring out Flash's odd way for handling shapes, selections, and transformations. It's all easy—it's just different from how you may be used to working.

Now in this section, you'll get a grasp on how to combine your shapes, and also how to group 'em, break 'em apart, and see how stacking order is handled.

### **Combining Objects And Makin' New Shapes**

Somethin' cool you'll find in Flash is a set of Combine Object commands. These guys let you do all sorts of weird and wonderful things to the shapes that you have kickin' around on the Stage. They create some pretty neat results, and come with some pretty funny names, like Union, Intersect, Punch, and Crop. Kinda reminds me of a super-hero team. Anyway, lets take a look at each.

*Do you use Adobe Illustrator? If so, Flash's Combine Object commands are similar to Illustrator's Pathfinders.*

## **THE OLD SWITCHEROO: CONVERTING STROKES TO FILLED OBJECTS**

Ya know, at any time, you can convert a shape's stroke to a new, filled object. Why would you want to do this? Well, I use a similar command in Illustrator whenever I want to work with filled objects, not strokes. It comes in handy every so often, especially when you're messing around with different fill effects and so on.

Here's how to convert a stroke to a filled object:

1. Select a line or the stroke on a shape.

It helps if your stroke is nice 'n thick, so you might want to crank up your stroke weight before continuing.

2. When you're good to go, choose Modify > Shape > Convert Lines to Fills.

Flash converts your stroke to a filled shape, but it's kinda hard to tell cuz nothing really changed onscreen. Well, if you glanced at the Property inspector when you first selected your stroke, you'd see that there was a setting for Stroke Color and Stroke Height. After you choose Convert Lines to Fills, the Stroke Color becomes set to none, and the Stroke Height grays out. And now, the Fill Color option becomes available. Now you can go nuts with your new filled shape.

## SOFTEN UP THOSE EDGES

Feeling a little soft? Then put on a little Kenny Rogers and let's take a look at Flash's Soften command. This guy'll feather, or soften, the edges of your selected shapes, creating a nifty effect.

Here's getting' soft with Flash:

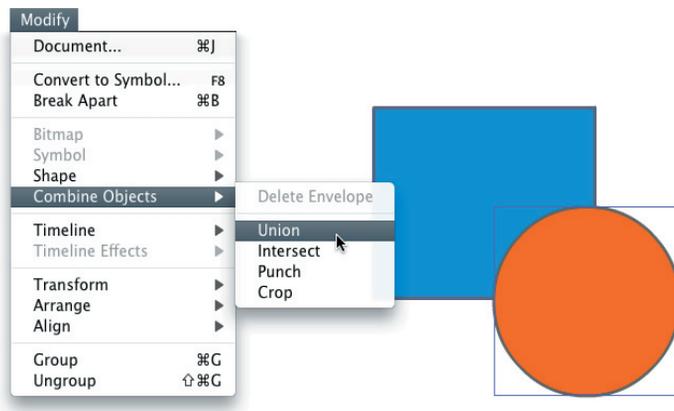
1. Select a filled shape that you'd like to soften.
2. Choose Modify > Shape > Soften Fill Edges.
3. In the Soften Fill Edges dialog box that appears, set the Distance, Number Of Steps, and Direction for your softening.

Distance sets the thickness of the edge softening. A higher number will give a softer edge. Number Of Steps determines how smooth the effect will be—a higher value will give ya a smoother result. Finally, Direction specifies whether the effect will be rendered within the shape's original size (Inset) or beyond the original shape's boundaries (Expand).

4. When it's all lookin' good, click OK.

Flash applies the soften effect to your shape. Pretty neat, huh?

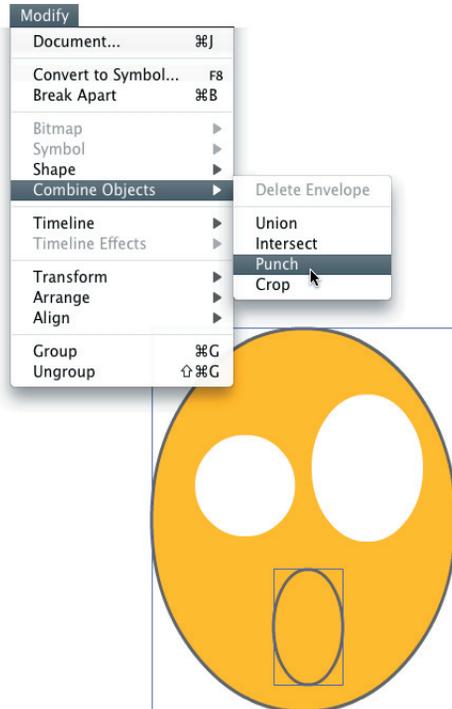
Let's check out Union first. Union allows you to lock two or more objects together and have Flash treat them as if they're a single object. The result is exactly the same as grouping objects, which you'll see in the next section. To get Union to work, select the objects that you'd like to combine; then choose Modify > Combine Objects > Union. Flash encloses the objects with a blue selection boundary. When you try moving one of the objects, they all move together—they're being treated as if they're a single object. To break your objects apart, just choose Modify > Ungroup. Kinda neat.



Second, there's Intersect, which requires two shapes drawn with Object Drawing turned on. This guy will create a new shape based on the overlapping area of two other shapes. Not sure what I mean? Then lets give

it a try. Draw two shapes with Object Drawing turned on, and overlap one over the other. Next, choose Modify > Combine Objects> Intersect. Flash tosses the two shapes and leaves the overlapping area as a new shape—interesting, huh? Useful? Ahh, that’s up to you to decide!

Next up, we have Punch. Punch is very useful for knockin’ holes in other shapes (what the Illustrator crowd calls Minus Front), which comes in real handy when you need some specialized shapes that are otherwise tricky to draw. Feeling hungry? Let’s make a donut. With Object Drawing turned on, draw a small circle over top of a larger circle—think of the circle on top as the cookie cutter, and the circle below as the dough. Select ‘em both; then choose Modify > Combine Objects > Punch. Flash takes the top circle and uses it to punch a hole through the circle in behind, just like that. Yummy!



Finally, there’s crop. Crop uses the object on the bottom to cut away from the shape on top (like Illustrator’s Minus Back pathfinder). Here’s what-cha do: Once again, draw yourself a pair of objects with Object Drawing turned on, and make sure they’re overlapping. This time, the shape on top is the dough and the one below is the cookie cutter. Next, choose Modify > Combine Objects > Crop. The shape below is used to cut away from the shape above.

## EXPANDING A SHAPE’S FILL

Remember Sea Monkeys? Ya put ‘em in some water, wait a bit, and next thing you know, they’ve expanded into a thriving colony—then they all shrivel up and croak. Well, you can expand your shapes in the same sorta way in Flash, just without the sense of loss that ends with a toilet flush.

With the Expand Fill command, you can actually grow or shrink the fills on your shapes, thus expanding or contracting the size of your object. Shapes without strokes work best. Let’s see how it works.

Follow these steps to expand a shape’s fill:

1. Select a shape whose fill you’d like to expand.
2. Choose Modify > Shape > Expand Fill.
3. In the Expand Fill dialog box that appears, type in a pixel value in the Distance field.

This determines how much to expand or contract your shape.

4. For Direction, choose either Expand or Inset; then click OK.

If you choose Expand, your fill grows by the value that you’d entered. If you choose Inset, then your fill contracts by the same value.

There ya go. Not as tragic an ending as Sea Monkeys, but still a pretty cool Flash command!

So there they are: Flash's Combine Objects commands. Use 'em, abuse 'em, and have lots of fun messin' around with your objects! Next up, grouping!

## Grouping, Ungrouping, And Breaking Apart

*Get speedy with Group and Ungroup by using Ctrl + G (Windows) or Command + G (Mac), and Ctrl + Shift + G (Windows) or Command + Shift + G (Mac).*

Many graphics programs provide a grouping command, and Flash is no different. If you've never worked with grouping before, it's really easy. It's a simple command that allows you to lock two or more shapes to one another, and allow them to be treated as if they're a single object. This comes in handy when you want to organize your objects and layouts.

To get grouping to work, select a few shapes, then choose Modify > Group. Flash places a highlighted border around your shapes, indicating that they're all grouped. Now, you can move, rotate, shear, stretch, and otherwise mash up your shapes as if they were just one—just like Flash's Union command, which you saw earlier. To ungroup your shapes, just choose Modify > Ungroup. Alternatively, choosing Modify > Break Apart also ungroups your objects. We'll talk a bit more about Break Apart in a moment. But there's the long 'n short of grouping. I use this a lot when I'm building and developing my layouts. It's a great way to keep things organized. Okay next up let's talk about editing objects that have been grouped.

So say you've grouped a bunch of objects together, then you realize you want to edit them. No problem—Flash'll let you edit your objects without ungrouping them. Try this: Grab yer Selection tool, then double-click on a shape in the group. Flash takes you inside the group, as indicated by all the other objects dimming on the Stage. Also, take a look at the bottom of the Timeline. It should say "Scene 1, Group."

Now, using the Properties inspector, the transform commands, or any other available tools, make whatever changes to the shapes in your group that you'd like. When you're done, just double-click in an empty area of the Stage, or click the back arrow to the right of "Scene 1" at the bottom of the Timeline. That'll getcha out of the group and back into regular old Flash. Cool huh?



Flash also has a command called Break Apart, which breaks up shapes, imported graphics, text, and other objects into individual components, allowing you to manipulate them individually. To use it, all you have to do is select an object on the Stage; then choose Modify > Break Apart. Depending on the type of object you're breaking apart, you'll get different results. Here's a rundown of some results you'll get:

### Whatcha Select

A shape drawn in Object Drawing mode

A text box (we'll talk more about text in Chapter 6)

An imported graphic (importing graphics is coming up in the next chapter)

A set of Grouped objects

An instance of a Symbol (we'll talk about symbols later on in Chapter 7)

### What Break Apart's Gonna Do

If you break apart a shape that's been drawn in Object Drawing mode, the shape breaks up into its individual fills and strokes, just as if you'd drawn the shape without Object Drawing. Nifty.

If you try breaking apart text, each letter is broken apart into its own separate text box. At first, this might not seem too useful—don't worry, you're not on your own. But try using the Break Apart command again to break up these individual text boxes into filled shapes. Now the letters can be manipulated just like any other shape.

Selecting an imported graphic and using Break Apart results in the graphic being converted to a fill, which can then be manipulated in a few different ways.

Using Flash's Break Apart command on a set of grouped objects has the same effect as choosing Modify > Ungroup.

The connection between the instance and the original symbol is lost, and any elements within the symbol become individual objects.

Had your fill of grouping? The chapter's almost out. But before we get outta here, we gotta talk about stacking order. Let's get 'er done.

## Stackin' Stuff On The Stage

The last topic for this chapter is stacking order, which you may already be familiar with if you use other graphics programs. Stacking order simply allows you to control the order in which objects appear on top of one another on Flash's Stage.

So lets say you draw yourself a few basic shapes. How it works is the more recently drawn objects will always appear on top of older objects. Also, a behavior that's unique to Flash (and this ties back to our conversation in the last chapter about Flash's two drawing modes) is that if you overlap two shapes that use the same fill color, they unite together. If you overlap two shapes with different fills, then the top shape cuts away from the shape below. Of course, this all assumes that you're using Flash's Merge Drawing mode. If you use the Object Drawing mode, Flash behaves just like any other graphics program when it comes to stacking order.

Here's something else that's completely unique to Flash. If you're working in Merge Drawing mode, if you draw regular shapes on top of groups or symbols, they automatically get sent to the back. So, groups and symbols are always placed above regularly drawn shapes in Flash's Merge Drawing

*Having trouble remembering the difference between Merge Drawing mode and Object Drawing mode? I know, it's tricky. Just head back to "Before Ya Go Mental—Understanding Flash's Drawing Models" in the last chapter.*

## LOCKING AND UNLOCKING

As you're working along laying out your movie, you may come to a point where locking the position of a few of your objects come in really handy—especially if you have a lot of objects on the Stage, and it's getting difficult to work with just the few that you're after. Locking down objects makes them unselectable, and therefore, uneditable.

Locking's easy. Try this:

1. Select the objects that you'd like to lock.

Remember, you can use Shift, or click and drag a bounding box around the objects you're after.

2. Choose Modify > Arrange > Lock.

The selection frame around the objects disappears, and the objects are not selectable. Cool!

3. To unlock your objects, choose Modify > Arrange > Unlock All.

Flash releases any selected objects.

As I say, locking is very handy every once in a while. You can also lock the contents of an entire layer, too. Check out Chapter 8 for more on layers.

*Imagine locking is like pinning an object down on the Stage, so that it cannot move—sorta like how my older brother pins me in a headlock and smacks my ears until I tell him he's the best. C'mon man, not in front of the kids!*

### NOT E W O R T H Y



A more sophisticated way to organize and stack your objects is to use layers. Each layer contains its own isolated stacking order, and the layers within your Flash file can always be rearranged. We'll take a closer look at layers later on in Chapter 8.

*Flash packs some keyboard shortcuts to adjust stacking order, too. Just choose Modify > Arrange and take a look at the list of shortcuts for each stacking order command. Now that's the goods!*

mode. Weird. How do you get around this? Take your regularly drawn shape and group it or convert it to a symbol. You'll see some symbol action later on in Chapter 7.

Here's how to re-arrange the stacking order of your objects:

1. Select the object whose stacking order you want to adjust.
2. Choose Modify > Arrange; then choose which direction you want to send the object.

Bring To Front brings your selected object all the way to the front. Bring Forward brings your object forward one step. Send Backward sends the object backwards one step. Finally, Send To Back sends your object all the way to the back of the stacking order.

See how easy that is? There's nothing to it. Flash makes it super-easy to re-arrange your objects on the Stage. Just watch out for that whole Merge Drawing mode versus Object Drawing mode, and how each impacts the behavior of your stacked objects. Other than that, it should be smooth stacking from here on in!

# CHAPTER WRAPPER!

Well, there you go. Once again, another chapter closes and your knowledge and mastery of Flash continues to grow in leaps and bounds. We began this chapter with a look at selecting objects, then it was all about moving and aligning objects, and also transforming them. Finally, you learned all about combining objects, grouping and ungrouping, and lastly, stacking order. Are ya havin' fun? Well hang on, cuz in the next chapter it's all about wrestlin' with imported graphics. Have a nap if you need one, and I'll meet up with you on the next page!