Reshaping an Object

Let's face it: Unless you are making animations for kindergarteners—and maybe not even then—basic circles, squares, and stars just won't do when it comes to creating shapes. The good news is that you can use those basic shapes to create many types of more complex shapes by manipulating them. There are actually several ways you can reshape and change the properties of your objects, using a variety of methods—selections, the Property inspector, and more.

Reshaping with Selections

If you're like me, you may not be the best artist in the world. That's okay! With Flash, you don't have to be. You can create some wild, wonderful, and wacky shapes through the use of selections. Using either the Selection tool or the Lasso tool, you can select part of an object and then delete that selection to create some interesting shapes. Have you ever seen a pie chart with a section of the pie removed? That's exactly what you'll create here:

1. Start by creating a large circle in the middle of the Stage.
2. Next, create a selection that overlaps the top-left corner of the circle, as shown in Figure 5.12.
3. Position the mouse pointer over the selection, and then click and drag upward and slightly to the left to move the selected piece away from the circle, as shown in Figure 5.13.
4. You can either delete the selection, leaving you with only one shape, or opt to keep them both. To delete the selection—or any selected object, for that matter—simply press the Delete key on your keyboard.

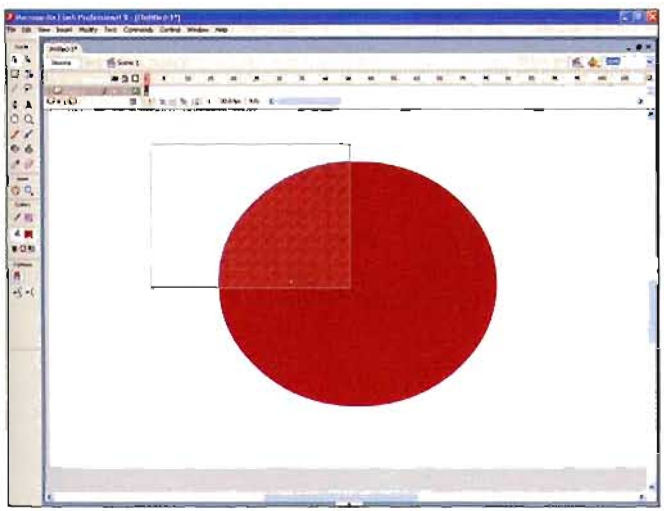

Figure 5.12 Use the Selection tool to select an area in the top-left corner of the circle.

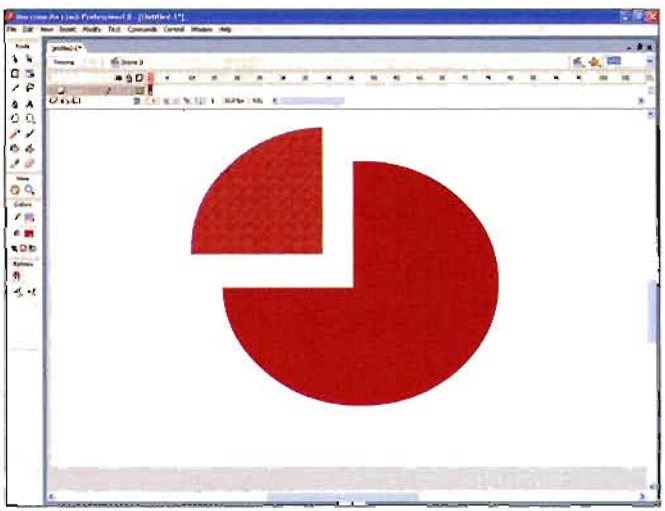

Figure 5.13 By moving the selection, you create two interesting-looking shapes.

CUTTING, COPYING, DUPLICATING, AND PASTING OBJECTS

Once you have an object selected, you can copy it (Ctrl+C), cut it (Ctrl+X), duplicate it (Ctrl+D), or paste it (Ctrl+V) using keyboard shortcuts. Copying and cutting places the selected object on the clipboard; duplicating the selected object means you make a copy of it without putting it on the system clipboard first.

Reshaping Objects with Other Shapes

Another way to create interesting objects on your Stage is to use other shapes. Have you ever made cookies with a cookie cutter? You can apply the same principle to your shapes with Flash, using one shape as a "cookie cutter" to cut away from another. Here's how this works:

Before you begin, make sure the Object Drawing button in the Options section of the Tools panel is not selected.

1. Create two circles, as shown in Figure 5.14. (The two circles don't necessarily have to be the same colors as the ones shown here.)
2. Using whatever method you prefer, select the circle on the right and then move it so that it overlaps the circle on the left (see Figure 5.15).
3. Click any blank area of the Stage to deselect the circle.

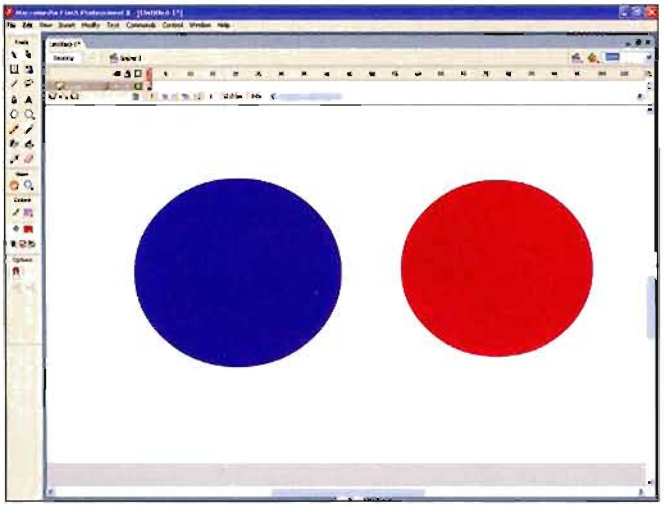

Figure 5.14 Create two circles on the Stage.

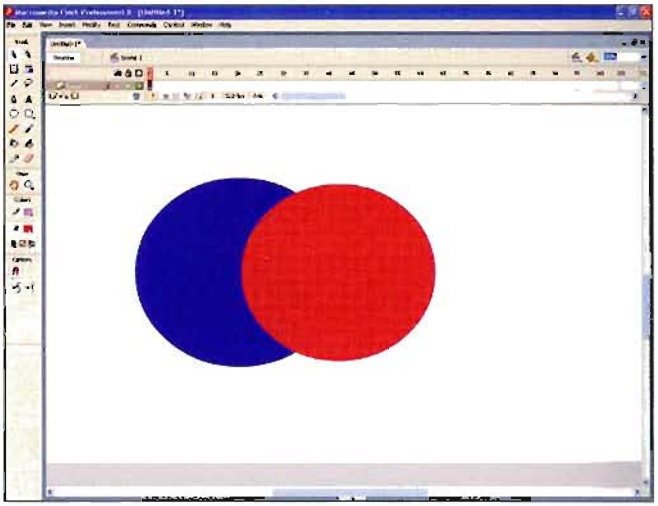

Figure 5.15 Move the circle on the right so that it overlaps the circle on the left.

4. Click the same circle again to select it. Then, while pressing the Shift key, click the outline of the circle to select both the outline and the fill.
5. Press the Delete key; you'll be left with the partial moon shown in Figure 5.16.

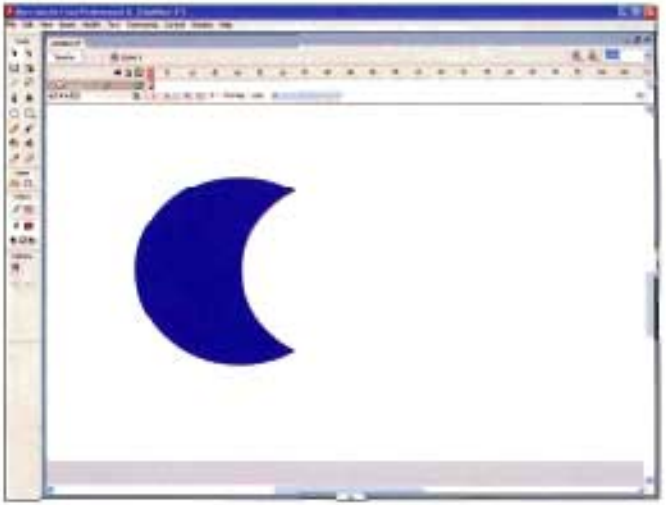

Figure 5.16 You can create interesting shapes by using other shapes as "cookie cutters."

OVERLAPPING SHAPES

Oh no! What happens if you overlap one shape on another—but didn't mean to? Unfortunately, the bottom shape will, in essence, be gone because it can no longer be completely selected. To see what I mean, create a circle, and then create a square that partially overlaps the circle. Try to select the entire circle now—you can't. You can only select the part of the circle peeking out from behind the square. This could pose a problem if you want to use the full circle again. To avoid this problem, press the J key on your keyboard to activate the Object Drawing feature. This will group together the fill and the outline; when selected, the object will stay as one, even if there is another object over the top of it.

CHANGING OBJECT ORDER

The order in which objects appear on the Stage depends on the order in which they are created. For example, say you create an oval and then create a rectangle. If you move the rectangle object over the oval, the rectangle will be on *top* of the oval. If you want the oval to be on top of the rectangle, you'll need to change its order.

1. Click the Oval tool.
2. Click the Object Drawing button or press the letter J to ensure that Object Drawing mode is enabled. That way, you'll be able to select both shapes individually, even when they overlap.
3. Create an oval anywhere on the Stage.
4. Click the Rectangle tool *and create a rectangle on* the Stage.
5. Move the rectangle so that it overlaps the oval. Because the rectangle was created last, it will appear on top of the oval, as shown in Figure 5.17.

6. With the rectangle selected (it will be selected right after you create it), open the Modify menu and choose Arrange to see your arrangement options. They are as follows:
   - **Bring to Front.** This brings the selected object to the front all objects.
   - **Bring Forward.** This brings the selected object forward by one level.
   - **Send Backwards.** This places the selected object behind all others.
   - **Send to Back.** This sends the selected object back one level.
   - **Lock.** This locks the selected object so that it can't be selected or moved.
   - **Unlock All.** This unlocks all your locked objects.
7. Click the Send to Back option to place the rectangle behind all other objects on the Stage, as shown in Figure 5.18.

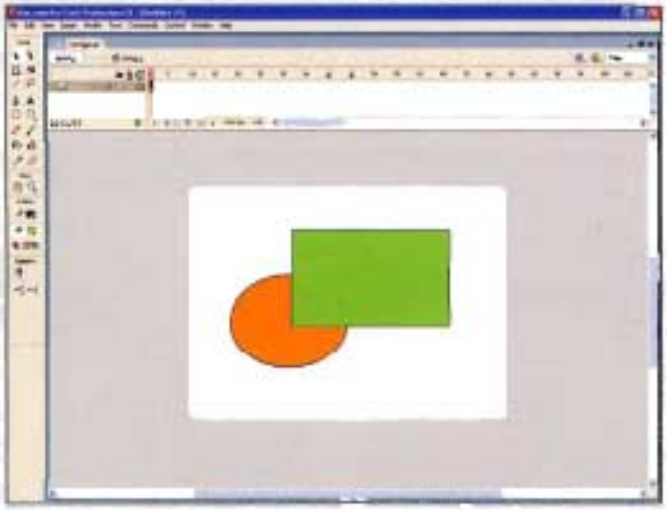

Figure 5.17 Because the rectangle was created last, it appears on top of the oval.

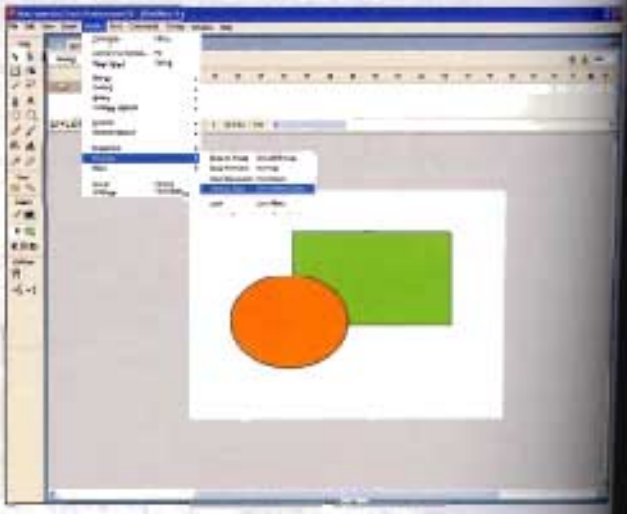

Figure 5.18 When you select the Send to Back option, the rectangle is placed behind the oval.

You can also create interesting shapes by combining two objects together. Give this a try:

1. Create two overlapping ovals with the same color fill and outline, as shown in Figure 5.19.
2. You can also combine two or more objects that *don't* have the same outline color. To begin, create two ovals that overlap, but whose outlines are a different color than their fills, as shown in Figure 5.20.
3. With the Selection tool, click the part of the outline that overlaps the ovals to select it and it alone.
4. Press the Delete key on your keyboard. you'll be left with the shape you see in Figure 5.21.

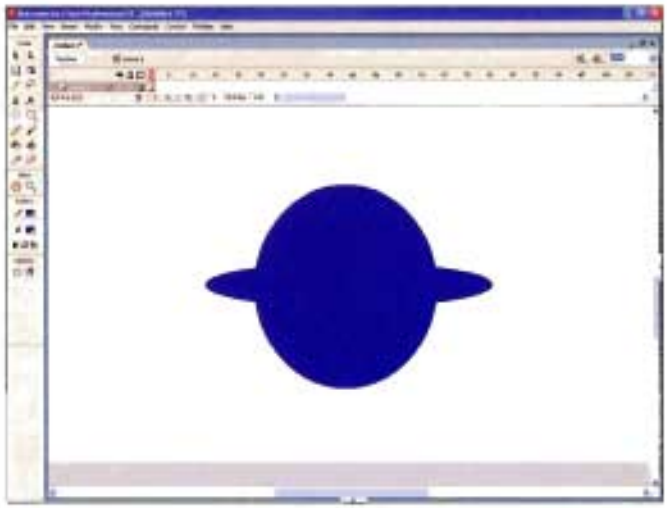

Figure 5.19 When two shapes of the same color and outline overlap, they become as one.

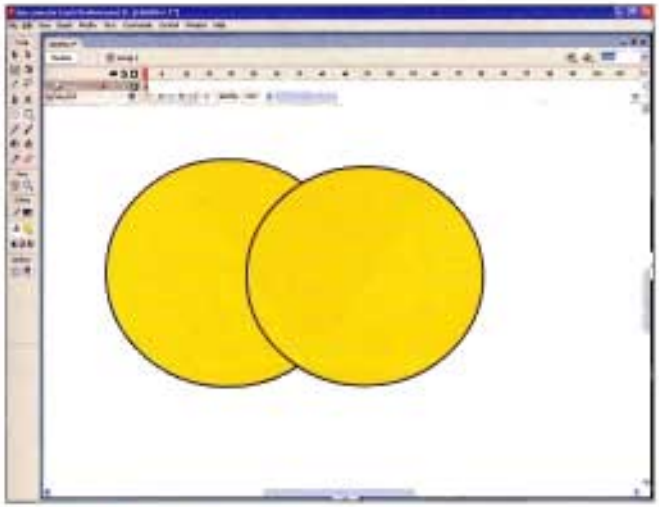

Figure 5.20 When two shapes overlap, you can remove the parts of their outlines that overlap to make one shape.

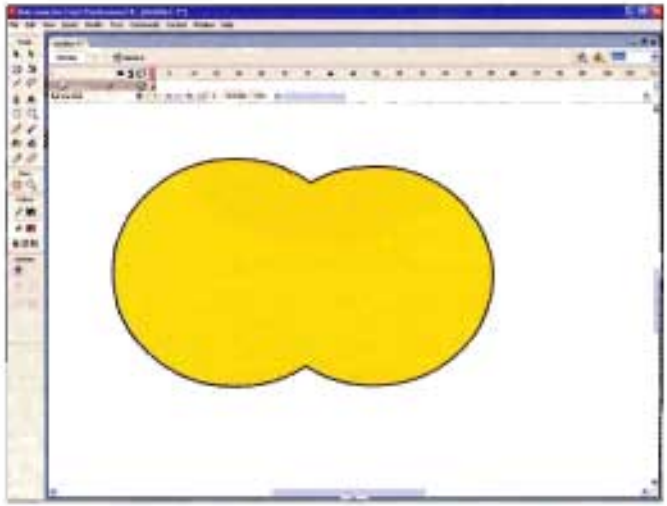

Figure 5.21 When the outline that overlaps the two shapes is deleted, you are left with an interesting-looking shape.

Reshaping with the Subselection Tool

The Subselection tool lets you to change the shape and outline of your object. Your outlines consist of little marks called *anchor points* that make up the shape. The outline of an object becomes like Silly Putty when it is selected with the Subselection tool; that is, you can move the anchor points around to reshape the line segments.

Moving Anchor Points

When you move an object's anchor points with the Subselection tool, the fill of the object will move along with it. Here's how it's done:

1. Create any type of shape.
2. Select the outline of the shape with the Subselection tool. A series of green anchor points will appear around the outline, as shown in Figure 5.22.
3. Position your mouse pointer over any of the anchor points, click, and drag inward or outward. The outline reshaped as you drag. When you release the mouse button, you'll see that not only has the outline changed shape, but the fill within the outline has changed to accommodate the new shape (see Figure 5.23).

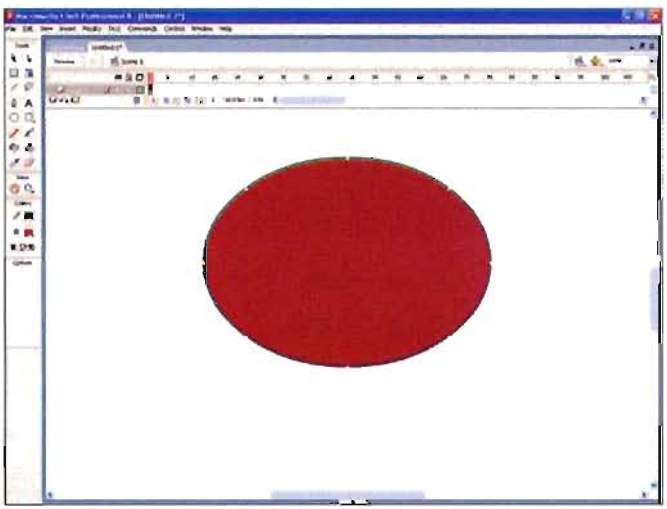

Figure 5.22 When you click an object's outline with the Subselection tool, the anchor points that make up the line appear in green.

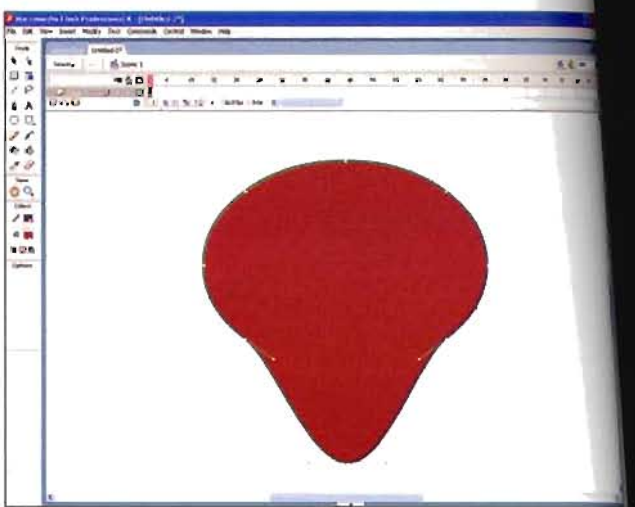

Figure 5.23 By clicking and dragging downward on the bottom anchor point of this oval, I was able to create this interesting shape. Looks like an alien, doesn't it?

Curving Segments

You may have noticed in the last section that when you clicked an anchor point, a short green line attached itself to that anchor point. This line is called a *tangent* and can be used to curve the outline. Here's how:

1. Create any type of shape.
2. Select the outline with the Subselection tool.
3. Click any of the anchor points. A tangent will appear not only on the anchor point you clicked, but also on the two anchor points on either side of the one you selected, as shown in Figure 5.24.
4. Notice the two little green circles at each end of tangent attached to the anchor point. Click and drag any of these circles up or down to curve the line segment. You can repeat this for any other segments, as shown in Figure 5.25.

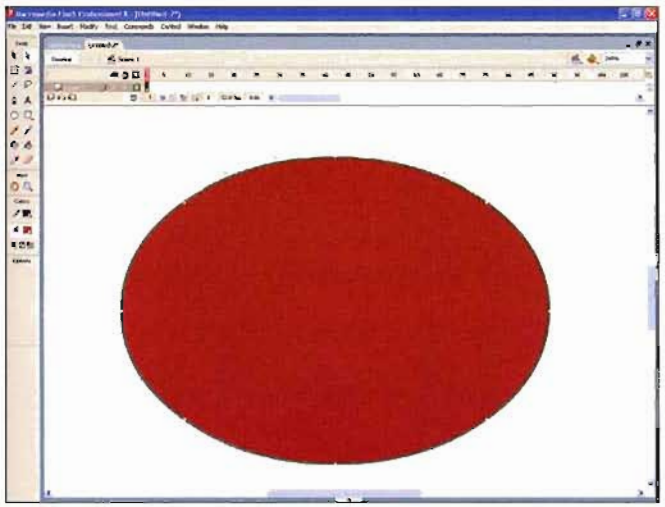

Figure 5.24 A tangent appears across the anchor point that you click.

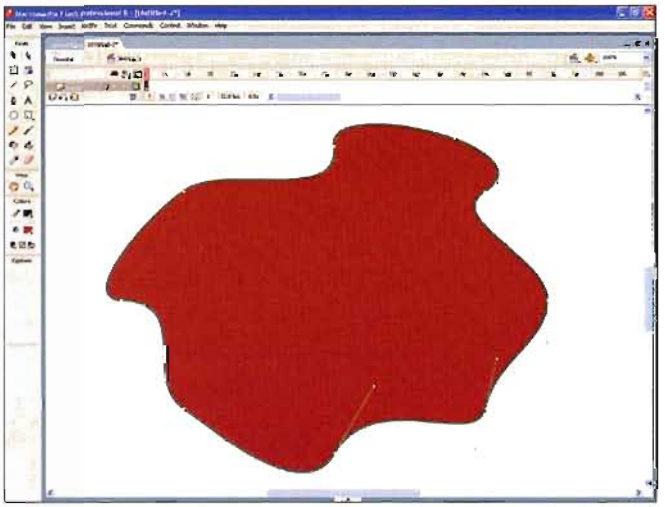

Figure 5.25 You can curve any anchor point to create all sorts of wonderful shapes.