

# Beginning Flash 8/Flash CS3

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Anyone can learn Flash with the right teacher. Mindy McAdams provides a short overview of the Flash interface and shows you, step by step, how to:

- Import and animate graphics
- Use text correctly in Flash
- Script buttons for Timeline control
- Jump from segment to segment in nonlinear fashion

## Starters: Set up the FLA

1. Open the Flash application.
2. Set the width of the movie to 600 pixels and the height to 450 pixels.
3. Set the frame rate to 15 fps.
4. Set the background color to sky blue.
5. Save your file.

If you don't know how to do this, watch the three tutorials here:

<http://flashjournalism.com/tutorials/>

## Part 1: Tweened animation and text

**File:** Space Shuttle

**Image:** [http://www.nasa.gov/returntoflight/system/system\\_Orbiter.html](http://www.nasa.gov/returntoflight/system/system_Orbiter.html)

**Image:** Mindy McAdams (clouds, shot in Florida)

### A. Tweened animation (1)

1. Import the image file (to Stage).
2. Convert to **Symbol** (VERY IMPORTANT!). Select **Graphic**. Be sure to *name* it!
3. Add frames to timeline (determines length, in seconds).
4. Frame at end must be a **keyframe**; all other frames (except Frame 1) are *just frames*.
5. Position the symbol in Frame 1.
6. Position the symbol in final frame.
7. Add **motion tween**.
8. Save your file.
9. Test movie (this spawns a SWF file): **Ctrl-Enter** (Win) or **Cmd-Return** (Mac).
10. Adjust the symbol as needed in either or both keyframes.

We will use the **Free Transform** tool to change the **size** of the symbol instance (starts small, ends big).

## B. Practice with layers

1. Add a new layer and **name** it (always name your layers).
2. Import an image file (to Stage); this will be the background.
3. **Align** the image to fill the background (image is 600 x 450 and so is our Stage).
4. Change the layer order (background on the bottom).
5. Add a new layer and **name** it (always name your layers).
6. Import another image file (to Stage); this will be the foreground.
7. **Align** the image to left edge and bottom edge of the Stage.
8. Save your file.
9. Test movie: **Ctrl-Enter** (Win) or **Cmd-Return** (Mac).

We are using photos, but these images could be JPGs generated by Illustrator or from a 3-D graphics program. You can import BMPs, PNGs, and JPGs into Flash.

## C. Practice with image file size

1. In the Library, double-click *shuttle.png* to open the Bitmap Properties dialog box.
2. Choose **Compression:** Photo (JPEG).
3. Uncheck the box “Use document default quality.”
4. Change **Quality** to 50.
5. Adjust the bitmap properties for *clouds\_full.jpg* the same way.
6. Adjust the bitmap properties for *clouds\_foreground.jpg* to a **Quality** of 70 (this image looks bad at 50).
7. Save your file.
8. Test movie: **Ctrl-Enter** (Win) or **Cmd-Return** (Mac).

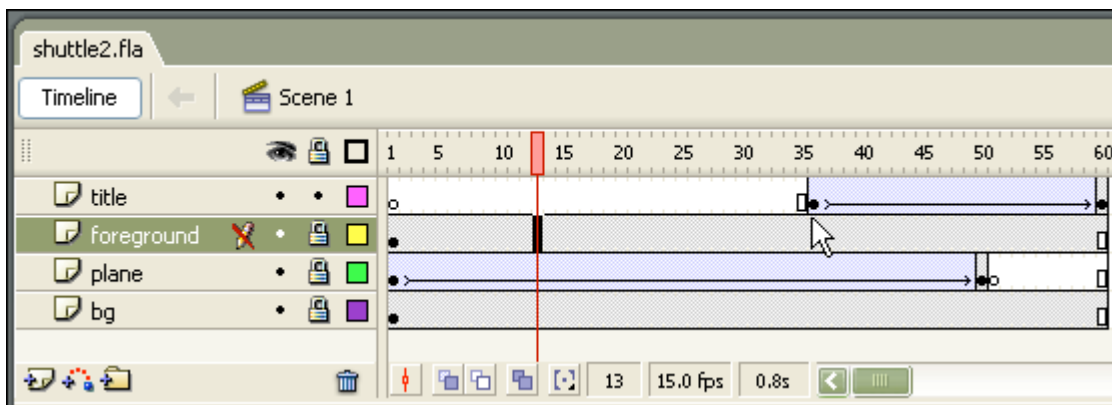
Test the outcome for the **file size** of the SWF by changing the bitmap properties for *clouds\_foreground.jpg* to **Compression:** Lossless (PNG/GIF). My SWF was 164 KB in that case. When I set the bitmap properties for *clouds\_foreground.jpg* to JPEG and 70, the final file size was 30 KB.

## D. Tweened animation (2)

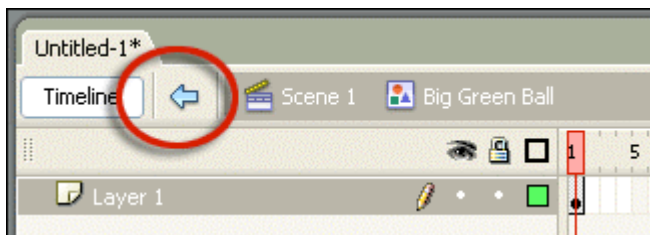
1. Add a new layer and name it.
2. **Lock** all the other layers.
3. Click in the last frame of the new layer and add a **keyframe** there.

4. Select the **Text** tool and create a title for the space shuttle package.  
(Make sure the **Properties** panel says “Static Text”!)
5. Center the title using the **Align** panel.
6. Save your file.
7. Select the title and Convert to **Symbol**. (Why? Because we are going to use a motion tween.)
8. *Add* about 2 seconds of frames (plain frames) after the frame that holds the title symbol.
9. Put a **keyframe** in the final frame on the title layer. (Why? Because of the motion tween! It’s coming soon.)
10. *Extend* the layers for the foreground and background clouds!
11. Click the *first* **keyframe** that holds the title symbol.
12. Change the **Alpha** of the symbol to 0 (zero). Do it in the **Properties** panel, on the Color menu there.
13. Add the motion tween.
14. Press Enter/Return to see the fade-in effect. (Sweet!)
15. Save your file.
16. Test movie: **Ctrl-Enter** (Win) or **Cmd-Return** (Mac).

For the best user experience, make the fade-in sequence overlap a bit with the motion of the space shuttle as it flies out of view (below).



**Tip:** To delete plain frames, click once in the middle of a sequence, hold down Shift and press F5 repeatedly (frames are deleted and the action gets faster).



IMPORTANT! If you ever see a **blue** arrow, as shown above, you have double-clicked and *gone inside a symbol*. (In the case shown above, you are inside a symbol named “Big Green Ball.”) Watch out for this—it is a dangerous mistake!

To return to normal editing mode, when you see the blue arrow, press Ctrl-E (Win) or Cmd-E (Mac)—E for “Edit.” The arrow will be **gray** when you are in normal editing mode.

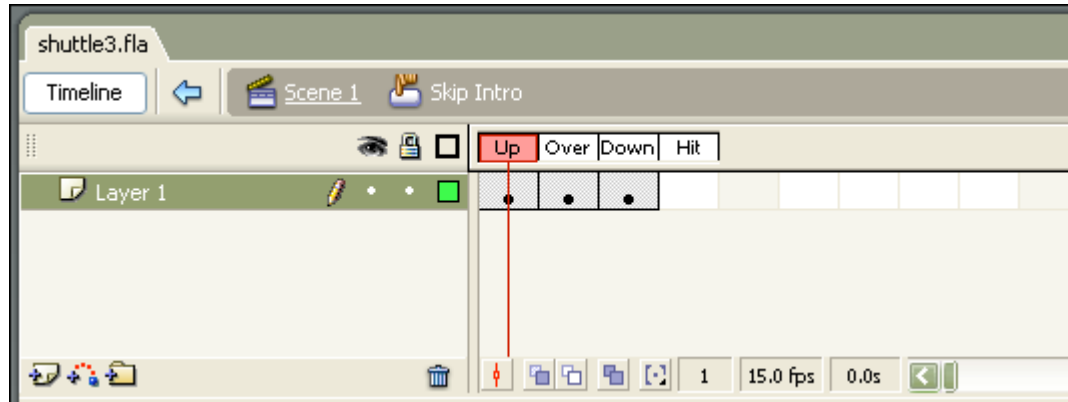
## Part 2: Button, ActionScript, and frame label

Use the same file, or if you like, save it with a new filename before proceeding.

### A. The button: Up, Over, Down

1. Add a new layer and name it “buttons” (without the quotes).
2. **Lock** the title layer.
3. Click on the *first* frame in the buttons layer. Note that the *first* frame of a layer is *always* a **keyframe**, without your having to do anything.
4. Select the **Text** tool and type the words “Skip Intro” (without the quotes). Ideally, you should make this button very easy to see, without wrecking the whole aesthetic. (*Make sure* the **Properties** panel says “Static Text”!)
5. *Select* all of that text. Be very careful not to select anything else. (If all your other layers are locked, and the “Skip Intro” is the only thing in the buttons layer, this should be easy to do correctly.)
6. Convert to **Symbol**. But this time, select **Button** instead of Graphic! Be sure to *name* it!
7. Save your file.
8. Select the black arrow (**Selection** tool). Why? Otherwise, you will type more text, and we don’t want that.

9. *Double-click* your “Skip Intro” text. You will go into the special **Symbol Editing Mode**! Your timeline will change to this:



10. Keep the Up frame *just as it is*.
11. Click the Over frame, and add a keyframe there (F6).
12. Click the Down frame, and add a keyframe there too.
13. Do the same for the Hit frame.
14. Click the Over frame, and alter the look of the text. You can even change the text to something else.
15. Click the Down frame, and alter the look of that text. It’s nice if Up, Over, and Down are each different.
16. Save your file.
17. Test movie: **Ctrl-Enter** (Win) or **Cmd-Return** (Mac).

In the exported SWF, see what happens when you move the mouse *over* the button and *off* the button. *Click* the button and *let go*. See how the appearance changes. Now you understand Up, Over, and Down.

## **B. The button: Hit**

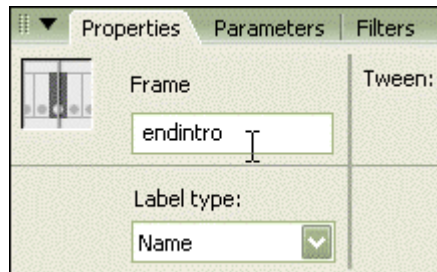
It is best to create a specific “hit area” for any button. This shape determines where the mouse becomes active.

1. Click the Hit frame—this should already be a keyframe because of your actions above.
2. Select the **Rectangle** tool.
3. Draw a rectangle that exactly covers the text. This rectangle will not be visible anywhere except in Symbol Editing Mode, where you see these special frames for a button.
4. Save your file.
5. Test movie: **Ctrl-Enter** (Win) or **Cmd-Return** (Mac).

To exit from Symbol Editing Mode and return to the normal timeline, press Ctrl-E (Win) or Cmd-E (Mac)—E for “Edit.”

### C. The frame label

1. Create a new layer.
2. Name it “labels” (without the quotes).
3. Click the final frame in the new layer, and make a **keyframe** there.
4. In the **Properties** panel, find the Frame field (left side) and type a sensible label there. Do not use capital letters. Do not use spaces. Do not use any punctuation, other than an underscore.



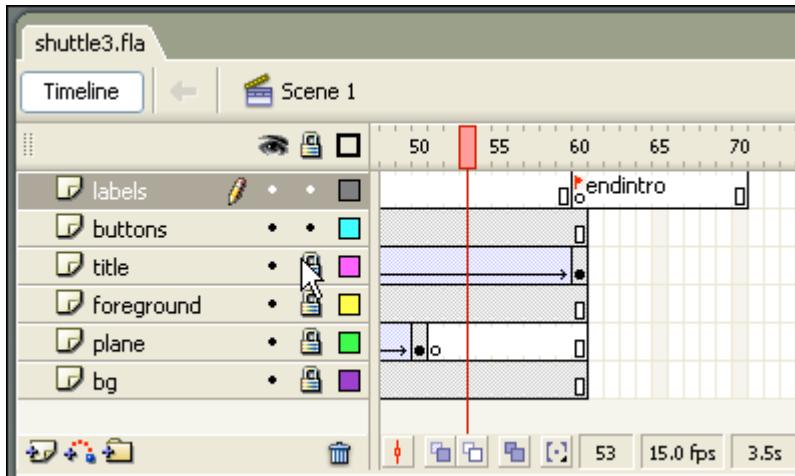
Make up a **frame label** that is logical to you.

Do not use capital letters.

Do not use spaces.

Do not use any punctuation, other than an underscore.

5. Be sure to press Enter/Return after you finish typing it. (This makes the label stick.)



After you have made a frame label, a tiny red flag is visible in that frame. If there are empty frames following it, you will also see the frame label text itself.

On the *last* frame in a layer, you will see the flag *but not the text*.

6. Save your file.
7. Test movie: **Ctrl-Enter** (Win) or **Cmd-Return** (Mac).

### D. Writing ActionScript on a button

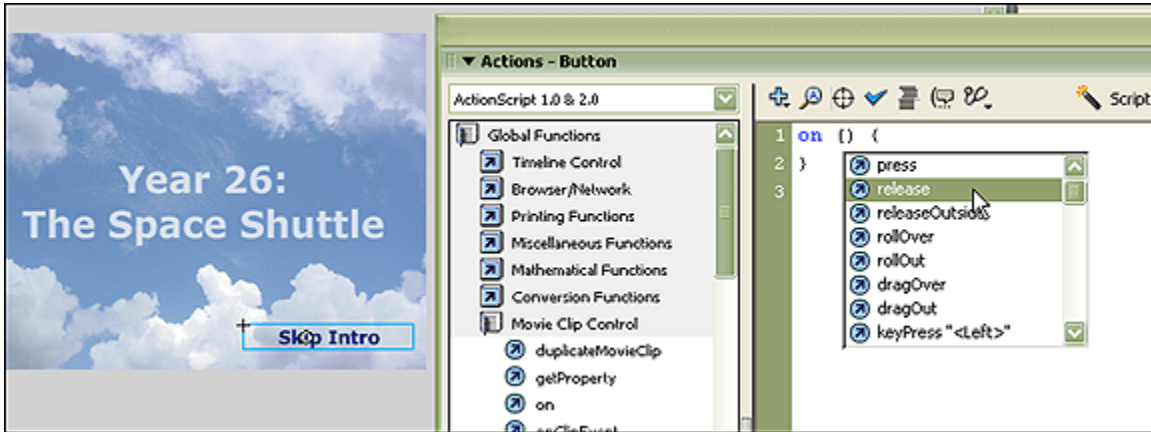
ActionScript 3 *will not allow* you to do what we are about to do here. If your FLA is set to use ActionScript 3, there is a very different procedure, which to me seems like using a \$500 power tool to nail a simple sign on a door.

Therefore, *the first thing you will do* is open **Publish Settings** (File menu) and *change* the **Flash** setting to ActionScript 1 and 2. If you use Flash 8, you probably already have the file set for ActionScript 2, but *check* to make sure.

1. Have a button already positioned on the Stage.\*
2. Click the button *just once* to select it. Then open the **Actions** panel.\*\* (If you see the blue arrow, as explained on page 3, you clicked *twice*. Correct that mistake immediately!)
3. The illustrations **on the next page** show how to “write” script on a button. The instructions to *make the button do something* will appear between the curly braces { } shown at right.
4. First, you **select** “on” ...
5. Then “release” ...
6. Then “gotoAndStop” ...
7. And finally, in between the parentheses, you must type **your frame label**, inside quotation marks.

\* You do not have to build buttons from scratch. Look on the **Window** menu for “Common Libraries,” and then select “Buttons.” There are many to choose from.

\*\* The Actions panel is listed on the **Window** menu. F9 opens it (Win), or Option-F9 (MacBook).



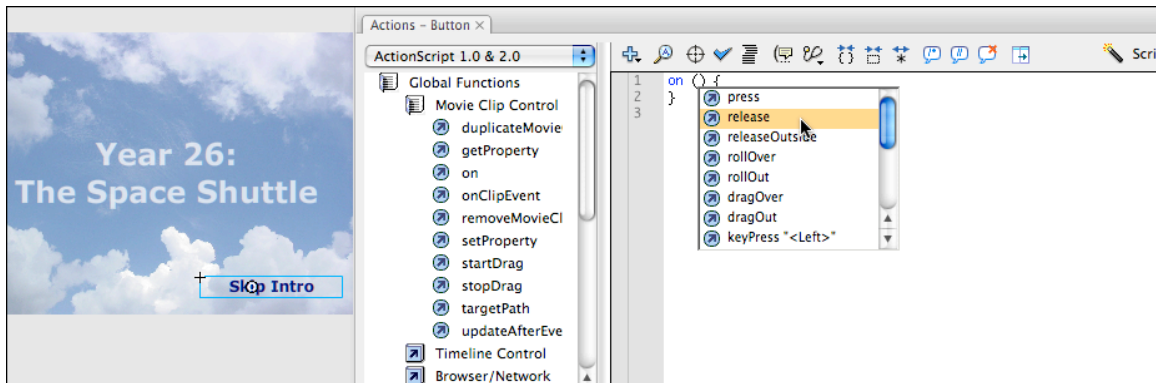
**Flash 8:** `on (release) { }`



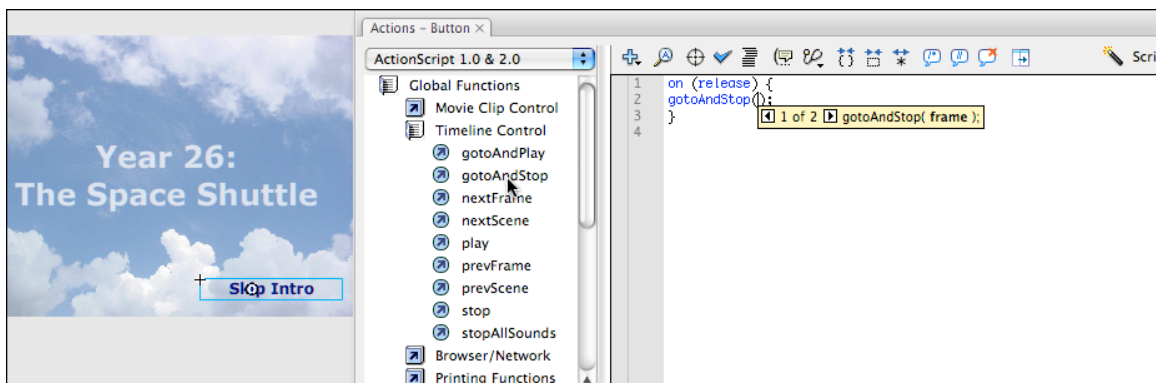
**Flash 8:** `on (release) { gotoAndStop(); }`



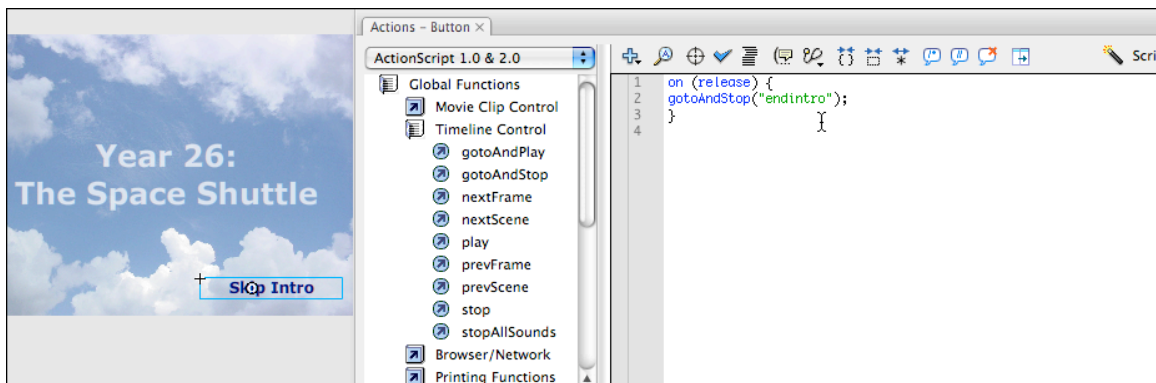
**Flash 8:** `on (release) { gotoAndStop("endintro"); }`



**Flash CS3:** `on (release) { }`



**Flash CS3:** `on (release) { gotoAndStop(); }`



**Flash CS3:** `on (release) { gotoAndStop("endintro"); }`

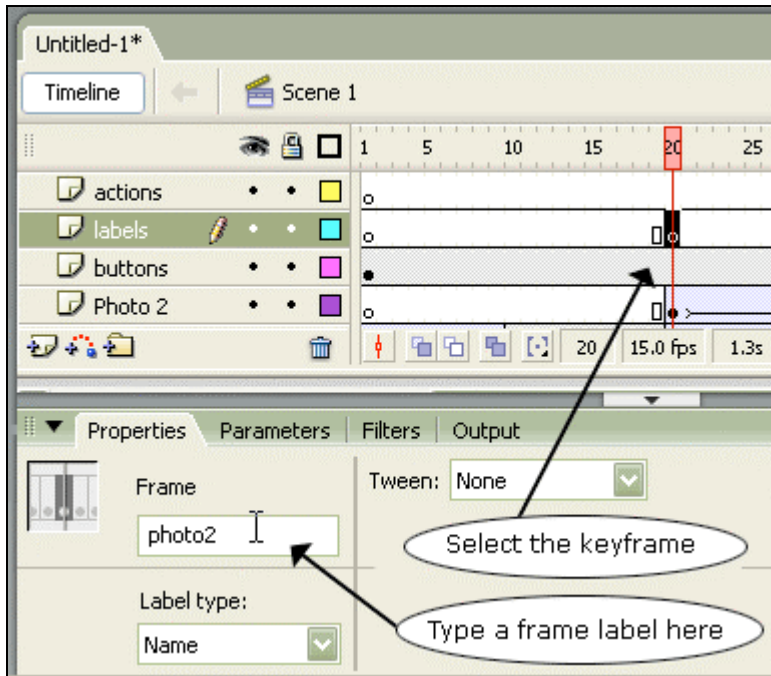
The basic functionality of a button in Flash is this:

- The mouse button is pushed Down.
- If the button is released while the cursor is still on the button (“on release”), something will happen.
- What happens? Whatever you wrote between the curly brackets.

**Frame labels** provide a very common way of jumping from one spot to another spot in a Flash movie.

## Extra Goodness: Learn the Basics

### Frame labels (review)



### ActionScript 1 and 2

Here are some very common scripts you will write on Flash buttons:

<b>SCRIPT</b>	<pre>on (release) {     stop(); }</pre>	<pre>on (release) {     play(); }</pre>	<pre>on (release) {     gotoAndPlay(1); }</pre>
<b>WHAT IT DOES</b>	Stops the movie.	Starts the movie if it was stopped.	Sends the movie back to Frame 1.
<b>SCRIPT</b>	<pre>on (release) {     gotoAndStop("splash"); }</pre>	<pre>on (release) {     gotoAndPlay("launch"); }</pre>	
<b>WHAT IT DOES</b>	Sends the movie to a frame labeled <i>splash</i> and stops there	Sends the movie to a frame labeled <i>launch</i> and plays from that frame onward	

Remember, this is ActionScript 1 and 2 *only*. ActionScript 3 is very different!