

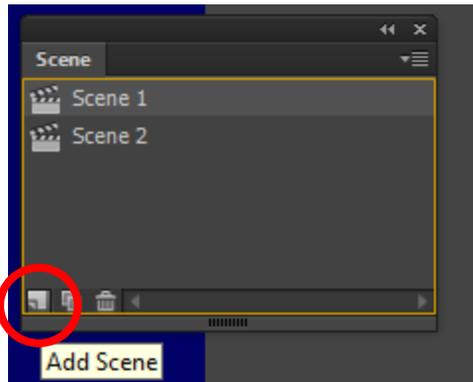
The Disney Project in AS3



Intro: Save the Disney Kit

Download the **Disney Kit.fla** from the website. It has all the graphics that you'll need in the Library. Double-click to open it in Flash. Immediately, *File > Save as* and save a copy in your Digital Tools folder.

PART A: Scenes in Flash

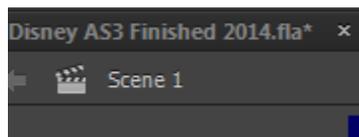


Scenes are used to break down a movie into smaller, more manageable sections. It helps keep the movie organized. Each scene has its own timeline. Like a movie script, these scenes can be considered “acts” in the movie. Scenes play in the order they are listed in the Scene panel and can be rearranged (just drag and drop). If a stop action is inserted in a Scene, the movie will not continue to the next Scene.

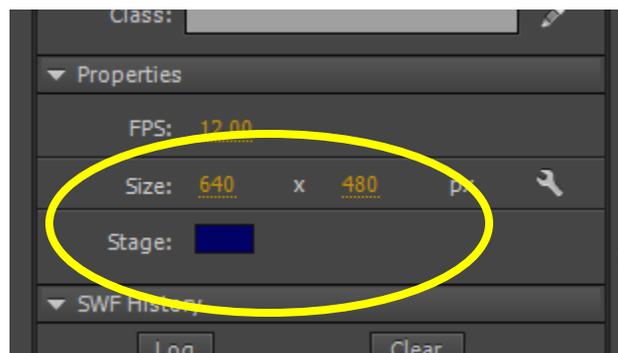
For this movie, we will have two scenes: Scene 1 and Scene 2. Open the Scenes panel (Shift+F2 or click **Window > Scene**). Insert a second scene by pressing the plus sign and name it *Scene 2*.

When all is said and done, your Scene panel should match the one above left.

Open Scene 1 (just click on it) and pay attention to where the name of the Scene is.



To change the background color (which, incidentally, applies to ALL Scenes), be sure the arrow tool is selected and click the Background color swatch in the Property panel (Property Inspector). Select the darkest blue you can find.



Also in the Property Inspector, set the size for your movie. The default is 550x400. It is probably a good idea to bump that up to **640x480** for most movies (or bigger).

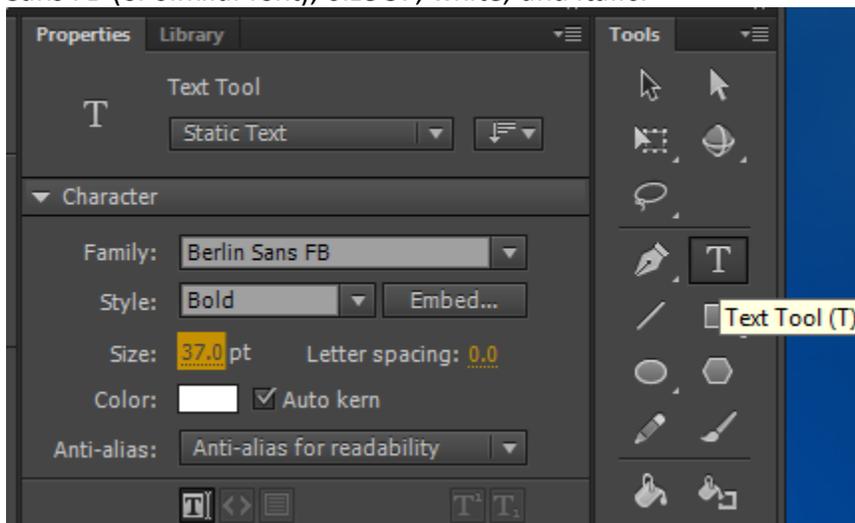
PART B: Text in Flash

Text boxes have three different types—static, dynamic, and input. For this tutorial, we will only be using **static text**. That means it is ‘plain old text.’ Be sure your Property Inspector says static as the type or the text box will not work properly.

For this movie, our introductory Scene is going to be something simple--words fading in and flying out. So, let’s get started!

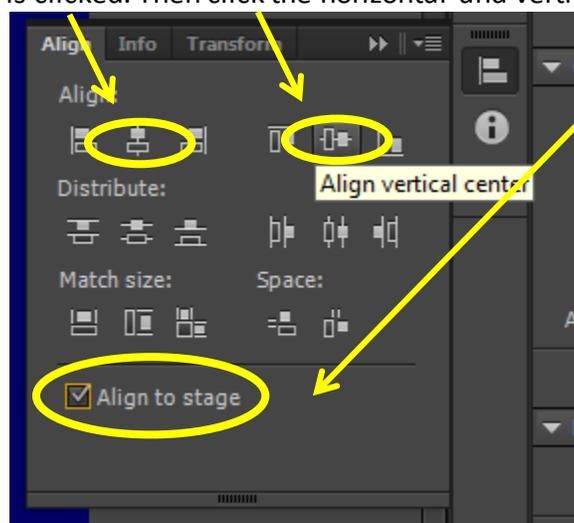


Click the Text Tool . In the Property Inspector, set your text type to static, font to Berlin Sans FB (or similar font), size 37, white, and italic.



Click in the middle of the Stage (the big area in the middle of the screen) and type PRESENTING... Click the arrow tool and then click back on the words you just typed. They should get a blue box around them.

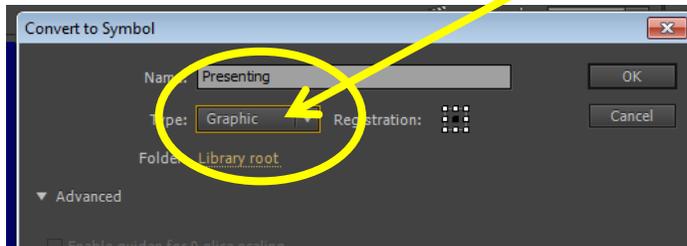
Now, let’s center this puppy. Bring up the Align panel (**Window > Align**). Be sure that the button under “**To Stage**” is clicked. Then click the horizontal and vertical alignment buttons.



BIG RULE: In order to apply animation in Flash (called **tweening**), the object **must be a symbol**. There are three types of symbols—graphics, movie clips, and buttons. For this text portion of the lesson, **we will convert the text to graphic symbols**.

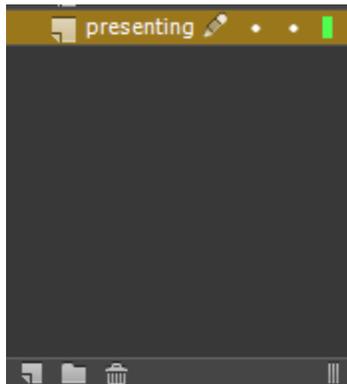
To convert to a symbol, be sure the text is selected with the arrow tool, click Insert, Convert to Symbol (or **press F8**). Then, give it a name, set behavior to **Graphic**, and press OK. Let's name this **Presenting**.

When you create a symbol, it is stored in the library (F11).



Any change made to the original symbol will be updated in your movie. You can use a symbol multiple times.

(notice in the right side picture that there is a little circular target thingie in the middle...this indicates that the text has indeed been converted to a symbol)



Now, let's talk Timeline. At the bottom of your screen is the Flash Timeline. It starts with one layer (Layer 1). You have one item on that layer (presenting). You can rename a layer by double clicking its name, typing in a new name, and pressing enter. Rename the layer as *presenting*.

LESSON: Notice on the timeline that you have a black dot in frame 1. That black dot is a keyframe. Keyframes are frames that have something in them. What's in it? Well, the presenting symbol, that's what! If it had an empty circle in it, that would be a blank keyframe (ready for you to put something in it). If it has an empty square in it, that is a frame. Frames are just continuation of keyframes (they are just "staying up there" for all to continue to see).

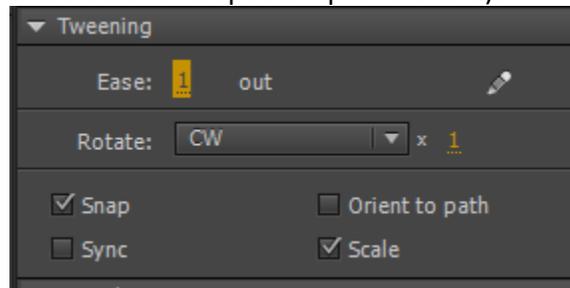
We are going to make the text move now (yippee!). To do that, we need a keyframe that gives us the **starting** line and a keyframe that gives us the **finished** location. So, click on the Timeline in frame 10. Right click that frame and insert a keyframe (**F6**). A black dot should appear. That keyframe is our finished location (with text centered nicely).

So, let's go back to keyframe 1. We want to change the text here so it is invisible if we want it to fade in. Since we made it a symbol, this is easy. Using the arrow tool, single click the text to select it (be sure you are in frame 1). In the Property Inspector, make a change under Color—set it to Alpha. Then, drag the slider down to zero.



The words should disappear, but the blue box should still be there indicating that you haven't messed anything up... you just changed its alpha (transparency value).

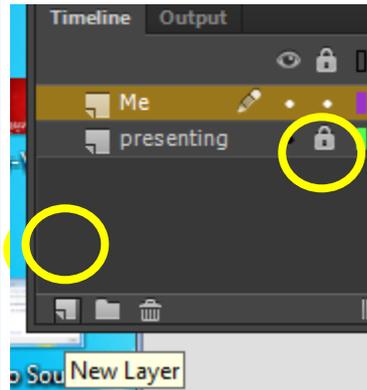
If you "scrub" (fancy word for moving the playhead across the timeline), you will see the words are completely transparent for the first nine frames, but when frame 10 hits, BAM, words. We want them to fade in, so make the following change—click in frame 5 on the timeline (really, any frame between the start and end one is fine). Then, in the Property Inspector, set Tween to Motion. You can also set the rotation (I set mine to 1 CW—clockwise) and the ease (I set mine to -100, which means it starts slower and speeds up at the end).



Now, scrub the timeline and see it in action. You can also press Enter up there and watch it play.

SAVE YOUR WORK!! (File, Save As, save as Disney)

Now, test the movie to see what we have so far (Control, Enter). Notice that the movie just loops and loops. It blinks when it gets to the Scene we haven't created yet. Looping is the default in Flash. (click the LOWER X to close the preview window)



Create a new layer by clicking the leftmost plus sign under the timeline. Name it *ME*. Just so we don't mess up what we have so far, LOCK the *presenting* layer (click the dot under the padlock).

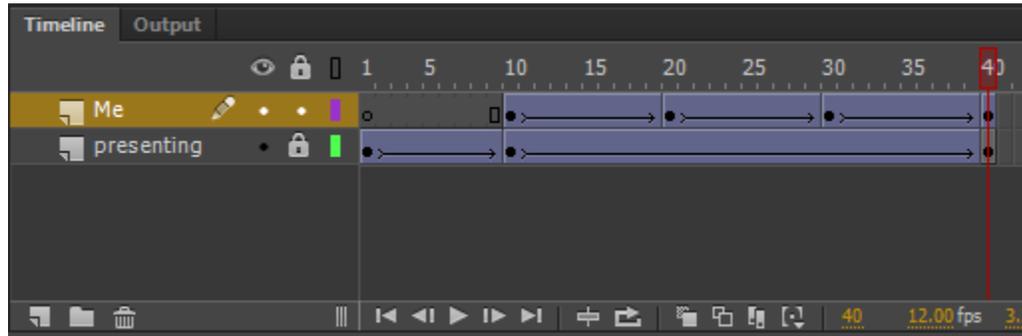
APPLY: Apply what you just learned. Click in Frame 1 of the *name* layer. Create a second text symbol (graphic) called *name_txt* that says **Your Name's Disney Project**. Align center.

Take your newly made text symbol. Click, pause, click and drag the keyframe dot in frame 1 to frame 10. You will see your text overlapping each other, so don't panic. Insert a keyframe (F6) in 20 on the name layer. Then, click back in frame 10 and drag the text off the top of the stage. Then, right click between frames 10 and 20 and **Create Motion Tween**.

Next, let's make it stay up there a little bit and then fade out. Insert a keyframe in 30 and 40. Click the text symbol while in frame 40 and change the alpha to 0%. Insert a motion tween between 30 and 40. Lock this layer.

Now, unlock the presenting layer. Insert a keyframe in 20 and scoot the text up so it will be above the other text. Insert a motion tween between 10 and 20. Then, insert a keyframe at 30 and 40. Click the text symbol while in frame 40 and change the alpha to 0%. Insert a motion tween between 30 and 40.

Your timeline should look like this:



Lock the layer, Save, and Test the Movie.

END SCENE 1 (INTRO)

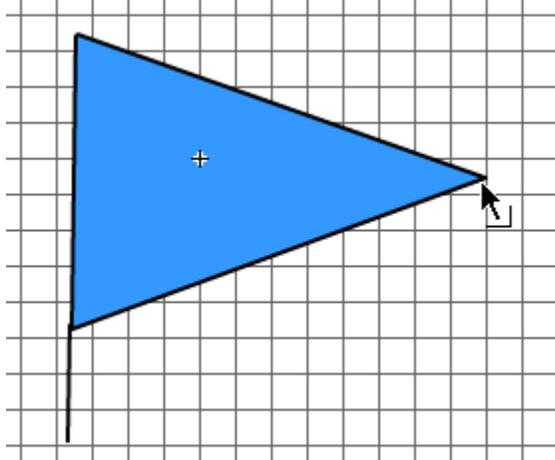
PART C: Drawing in Flash

Flash has drawing tools like many graphics programs. You can use shapes, draw freehand, and create polygons. These are all vector graphics.

Before we get started, switch to our second Scene (click the correct one in the Scene panel—Window, Scene). You'll know you're in the right place if the timeline turns to Layer 1 (don't worry... all your other stuff is tucked safely away in the intro scene).

Instead of working at the main timeline, let's create a symbol first and then drag the completed symbol to the stage. For this exercise, we are going to create a castle. Rename Layer 1 to be *castle*.

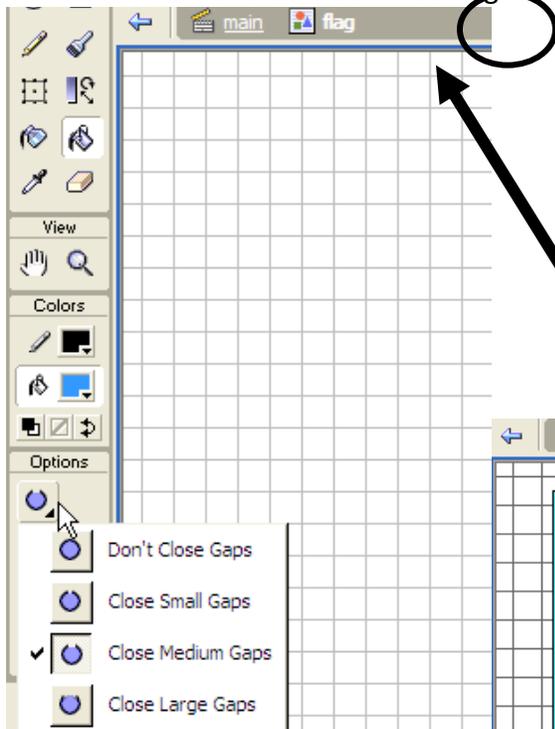
Let's draw our flags. Click Insert, New Symbol. Make a graphic symbol named *flag*. For precision when drawing, turn on the grid (View, Grid, Show Grid). Use the pen tool with a black stroke for the triangle (click to set the points and be sure to double click and close the polygon) and draw the following as big as you want—you can always resize: (if you wish to temporarily change the background color while drawing, that's fine)



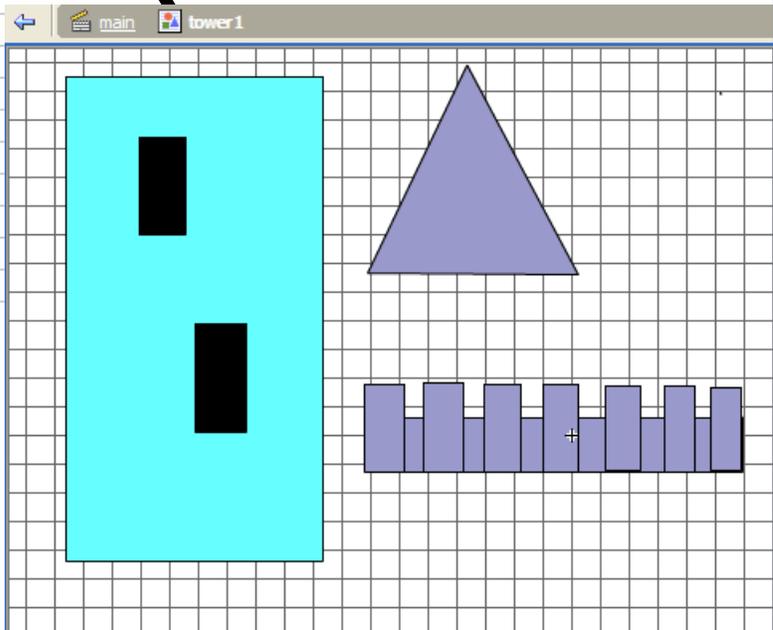
If your symbol is not centered roughly on the crosshairs, you will want to draw a box around the completed flag (using the black arrow) and align it.

NOTE: Use the line tool to draw the “stem” of the flag. See how the arrow has an L beside it when pointing to the corner? You can click and extend the point or adjust it when that appears. Try it! A curvy line by the pointer (when pointing to shapes that are NOT selected) will curve the line.

Next, fill in the flag with the appropriate color (blue). Click the fill bucket, pick your color in the Property Inspector, and then click in the shape. In the event it will not fill, access the special fill tools at the left of the screen. You might need to close gaps.



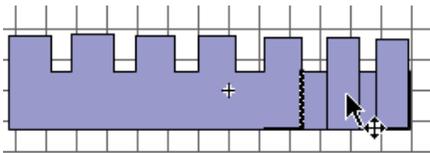
This means you are editing a symbol and are inside the symbol



After your flag is finished, click out of the symbol to return to the *main* scene. The flag should disappear (that’s okay...it’s in the Library). You can no longer edit the flag without getting inside the symbol (double clicking it in the Library).

Since it appears we are building Legos here, let's make some more "building blocks for our castle. Use the rectangle tool and the pen tool (for the triangle) to create a new graphic symbol called *tower1* (Insert, New Symbol). Draw the items as shown at right. Use a purple fill for the balcony and top and a light blue for the tower.

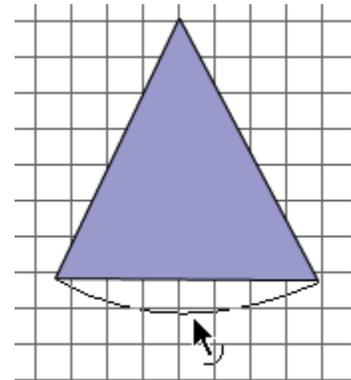
Next, using the black arrow tool, delete the unneeded lines in the balconies by clicking each one and pressing delete on the keyboard.



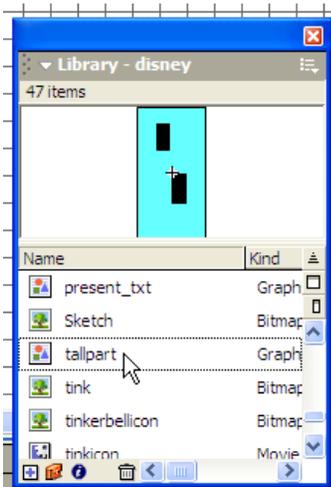
Draw the long (bottom layer, if you will) rectangles first; if you put the smaller rectangles on top and deselect them and try to move them, they will mess things up. Undo if you mess up; don't try to fix it.

Now, let's assemble the tower. We have to be careful about this because Flash is quirky about Legos...I mean, shapes. To select a part, double click it. A single click will select the fill and not the stroke. That's bad. Also, be careful not to lay shapes on top of each other. They delete each other and that's bad, too. To prevent that, we could have created each part on a different layer. Or, we could convert each little part into its own little symbol. Let's do the latter.

With the black arrow tool, double click the rectangle part, press F8 to convert to a symbol, and name it *tallpart*. Now, it's a symbol (in a symbol, mind you!). Do the same for the balcony part. Don't do the triangle topper yet, though. We're going to curve the bottom of it first. Click totally off of the triangle (in the open space). Then, point your mouse to the bottom side and get a curvy indicator. Click and drag.



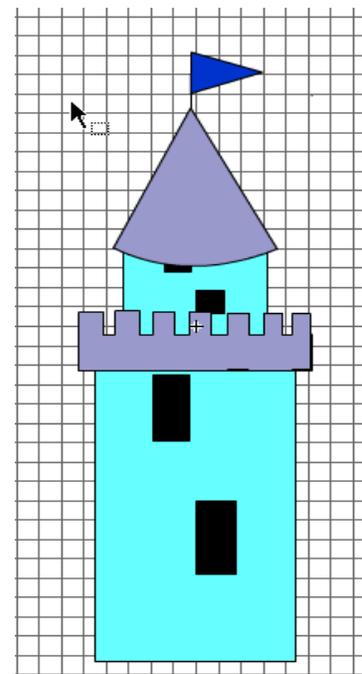
Then, double click the triangle thing and convert it to a symbol called *topper*. Now, all three parts are symbols (in the tower symbol).



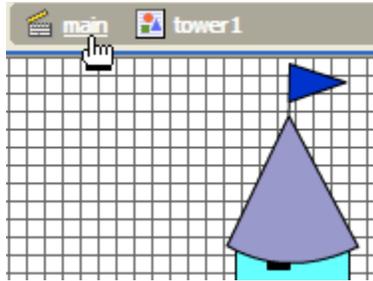
Zoom out. As you assemble the tower, if something is in the wrong order (layering-wise), click the piece and click Modify, Arrange to reorder. To size something up or down, click the piece and then click the free



transform tool and resize. To obtain another piece (Lego), press F11 and drag it from the Library. Assemble your pieces as follows (don't forget your flag from the library!):

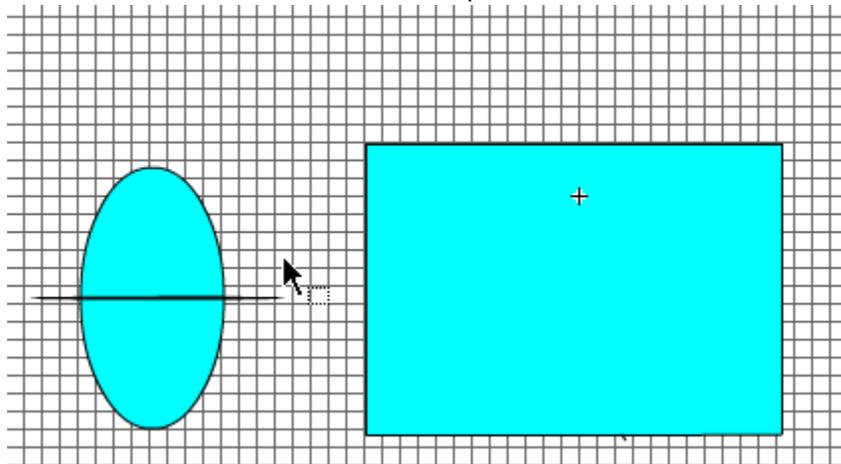


Then, return to the main scene and Save. There should be nothing on the timeline in this scene because we created the symbols in their own windows and stored them in their library.

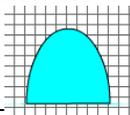


Now, let's make the big castle. Create a new symbol (graphic) called *castle*. We are going to use two layers. Add a second layer and lock Layer 1 (you can rename the layers if you want).

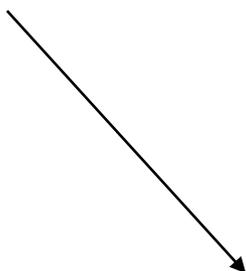
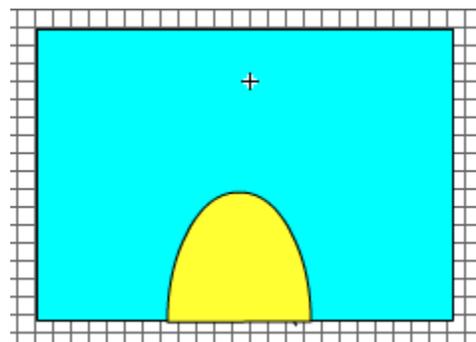
On Layer 2, we are going to create the middle of the castle using a rectangle. Then, draw an oval and use the line tool to bisect it in the middle (this will be used to make our door):



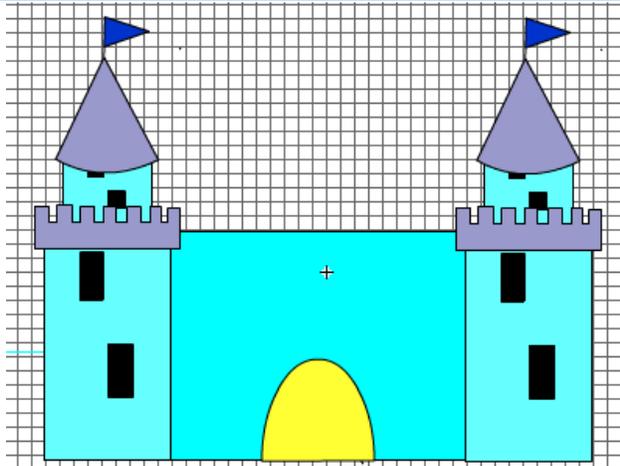
Double-click the bottom half of the oval. Press delete. Delete the extra black line. It should look

like this-- . Then, make the door whatever color you want, double click it, and drag it into place.

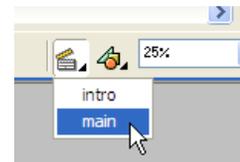
Next, drag two towers out of your library and place them beside what you just drew. Then, delete the top line.



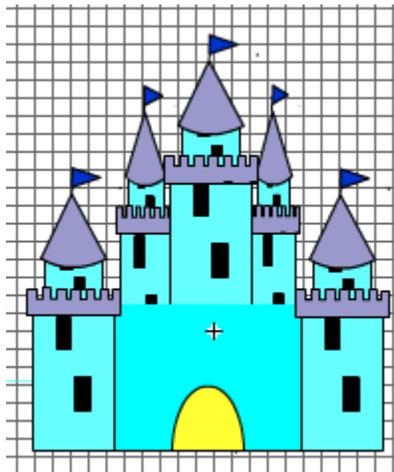
NEXT PAGE



Now, lock Layer 2. On Layer 1, add your towers and build the higher part. Use the free transform tool as needed. When finished, return to the main scene.



Here's my castle— (DisneyWorld, here I come!)



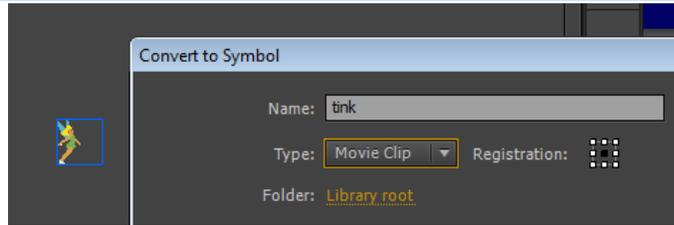
Use Free Transform to resize the castle if it is too big; Use shift to maintain ratio. You may want to use the arrow keys instead of the mouse for more precise positioning.

Drag the castle out of the Library (F11) to the stage (where we named the layer *castle*.. Position at the bottom left. You might want to change your background color back to a midnight blue at this point. Or you can wait...up to you. Lock the castle layer and add another layer called tinkerbell.

PART D: Movie Clips and Custom Cursor

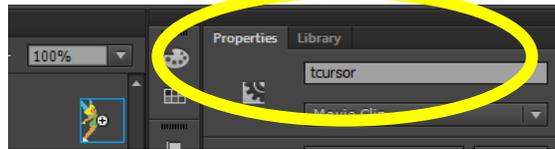
Flash has the ability to customize the cursor. This part will show you how!

Next, let's do something fun. What's DisneyWorld without Tinkerbell? We are going to use a Tinkerbell icon for a cursor. Create a new layer, and call it Tinkerbell.



Click on the *tinkerbell* layer. We want to make Tink our cursor. To do that, she has to be a movie clip. So, let's create a new one. Modify > Symbol (or **F8**) and select **movie clip** as the type. Name it *tink*.

In the editing window, Drag her (tink, the movie clip) onto the stage and just stick her in the corner someplace.



Name this Symbol "tcursor" in the instance box of the Property Inspector.

Select the first Frame of your *tinkerbell* layer. Go to Action panel (If your Actionscript panel is not open, Press "F9").

With Frame1 of your layer selected, type the below script in your action panel (just copy/paste the red text).

/* Custom Mouse Cursor

Replaces the default mouse cursor with the specified symbol instance.

***/**

stage.addChild(tcursor);

tcursor.mouseEnabled = false;

tcursor.addEventListener(Event.ENTER_FRAME, fl_CustomMouseCursor);

function fl_CustomMouseCursor(event:Event)

{

tcursor.x = stage.mouseX;

tcursor.y = stage.mouseY;

}

Mouse.hide();

//To restore the default mouse pointer, uncomment the following lines:

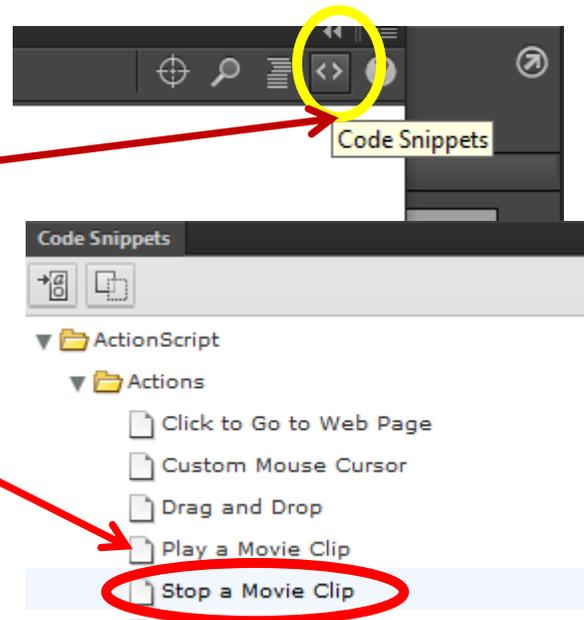
//tcursor.removeEventListener(Event.ENTER_FRAME, fl_CustomMouseCursor);

//stage.removeChild(tcursor);

//Mouse.show();

Let's create (temporarily) a "stop" to this so we can see Tinkerbell in action.

Insert a **stop action** in that layer so that the scene won't just play for one frame and then restart. Open your actions panel while in frame 1 of the new layer. Type **Stop();** or, while the Actions Panel is open, click the Code Snippets (top right), ActionScript > Actions > Stop a Movie Clip and it will insert a stop action for you.

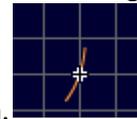


Change your background color to a midnight blue if you haven't already. Save and Test Movie.

Now, let's get to the fireworks (literally!). Lock all layers and create a new layer called *fireworks1*. We are going to use the firework symbols in your Library.

Back at the farm, click and drag *firework_red.gif* out into the *firework1* layer. If you Test Scene, you'll see the firework do its damage, but it's just not quite right. We don't see the firework launch and it just plays over and over...not realistic. And we want to be real!

So, we are going to create a "stick" that launches into the air. Delete the firework off the stage.



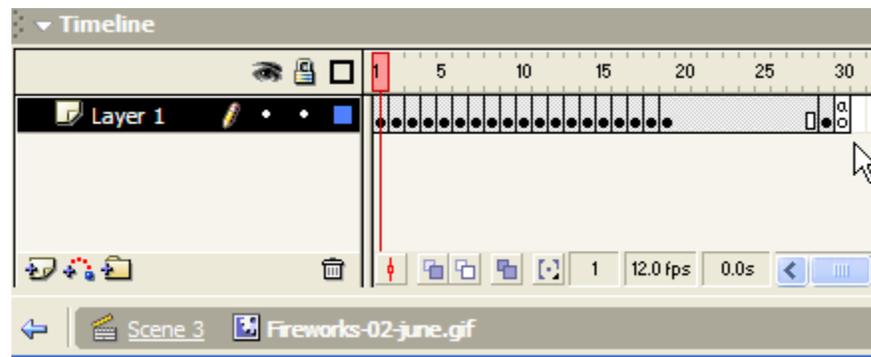
Create a new graphic symbol (*stick*). Just take the pencil and make an orange slash. Return to the scene, zoom in, and drag *stick* out to the stage on the *fireworks1* layer. Place it at the bottom of the screen at the right someplace. Insert a frame at 20 on all layers (click the frame, right click, Insert Frame). Then, insert a keyframe in 20 on the *fireworks1* layer. In keyframe 20, move your *stick* up there to the sky. Insert a keyframe in 21, drag your firework gif from the Library out to the top of the stick and delete the stick. NOTE: Animated gifs import lots of bitmaps; you might wish to hide them in a folder in the Library

Now, we want to make the stick actually move. Click between frame 1 and 20 someplace on that layer and insert a motion tween (Right click, Create Motion Tween). Then, insert a frame in all layers in frame 50.

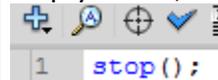
If you Test Scene right now, you'll find nothing happens. That's because we have a stop action in there. So, on the *stop* layer, click pause and click and drag the first frame down to 50th frame. The little A should move.

If you Test Scene right now, it works but your firework loops. That's because it is a movie clip and movie clips always loop, even with a stop action in the movie. However, we can put a stop action INSIDE the movie clip so it will stop.

Double click the firework on the stage (the red dot). Right click in the next empty frame, insert a blank keyframe, and then insert a stop action in the Actions panel **Stop();**



With the black arrow, double click the firework on the stage (the dot). Right click in the next empty frame, insert a blank keyframe, and then insert a stop action in the Actions panel (F9).



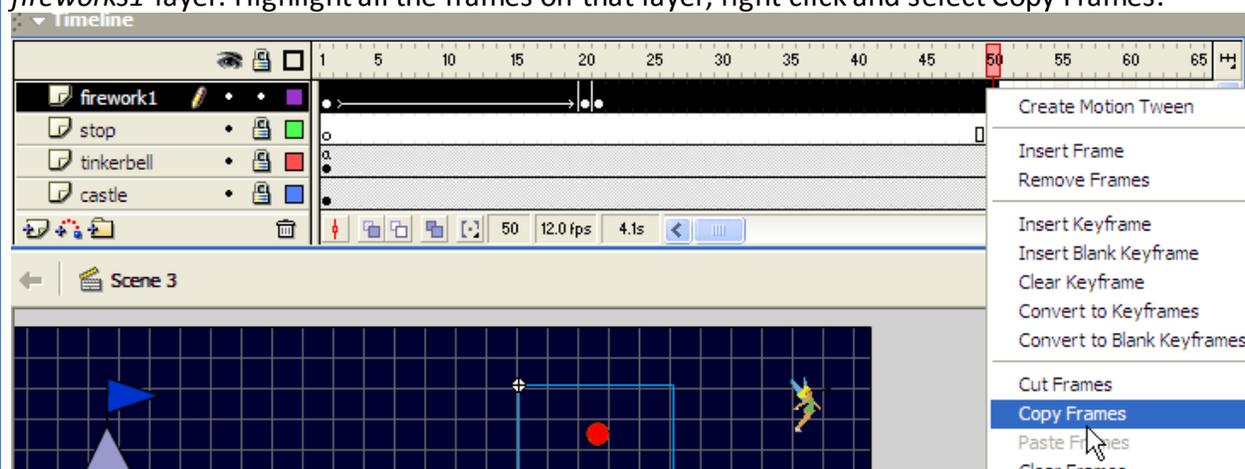
Your timeline should look like that INSIDE the fireworks movie clip. Notice that all those black keyframes are basically frame-by-frame animation from the imported gif. Return to the Scene. Now, Test the Movie and see how it looks!

SUGGESTION:

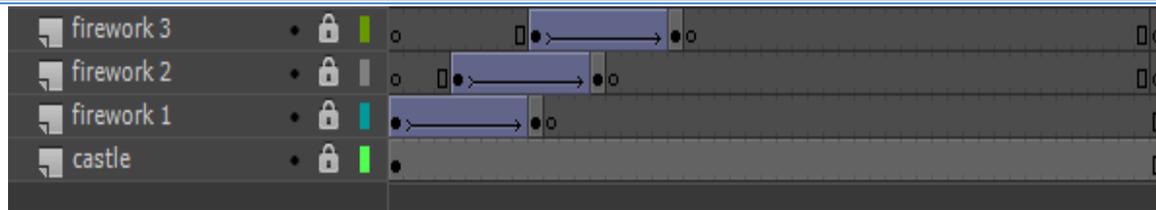
You may find your stick is too small or big. If so, double click and fix it and then return to the main timeline. Any changes made will be forever changed in the Library, too. If you were doing this in a class with more time, I would suggest repetition at this point. Have students create a second firework that starts someplace later in the timeline on a new layer. Make it a different color, even.

EXTENSION:

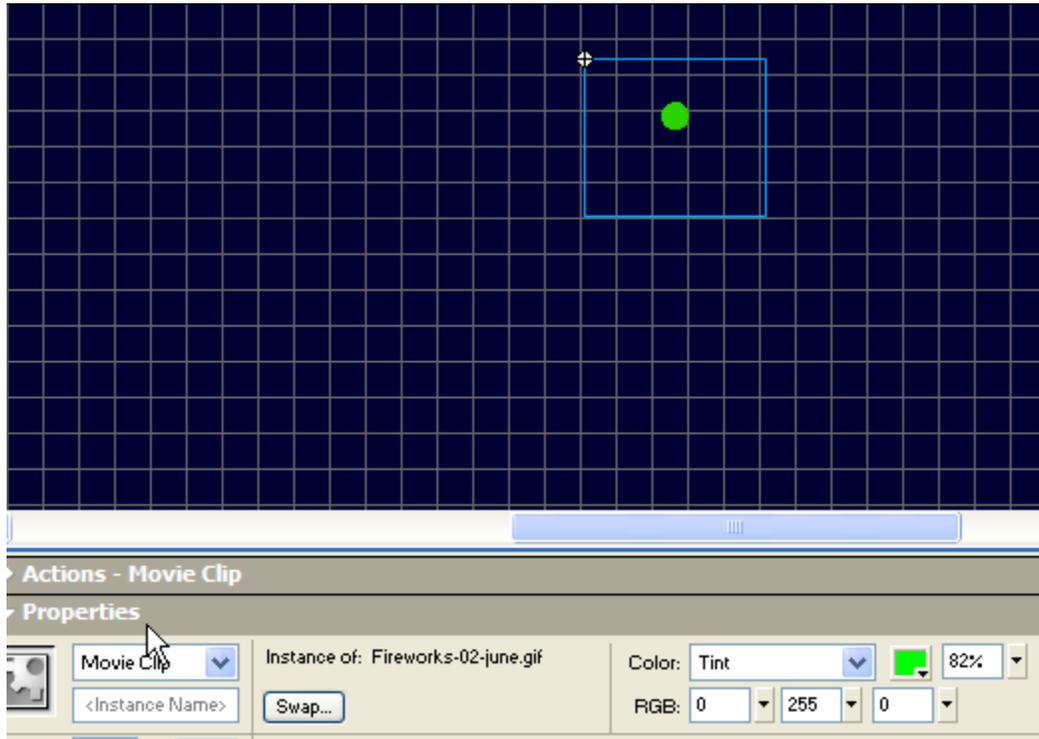
One good thing about Flash is that you can copy things. So, if you have time, try copying the *fireworks1* layer. Highlight all the frames on that layer, right click and select Copy Frames.



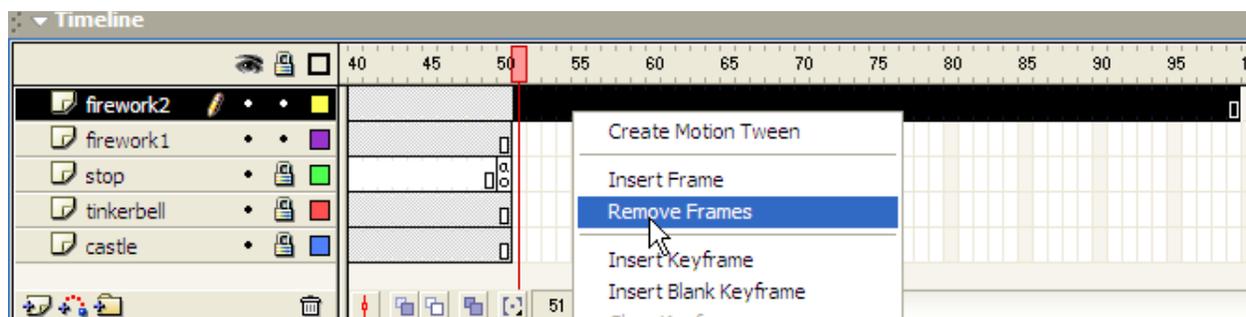
Create a new layer, click in the first frame, right click and select Paste Frames. Then, click/pause, click and drag the keyframes (black dots) so they are staggered more.



Be sure to click in the second of the two dots in a row and move your firework to some other location. You can even click on the firework, go to the Property Inspector, and select Color and change the tint to another color!



If you end up with any extra frames at the end (I did...), highlight those frames, right click, and Remove Frames.

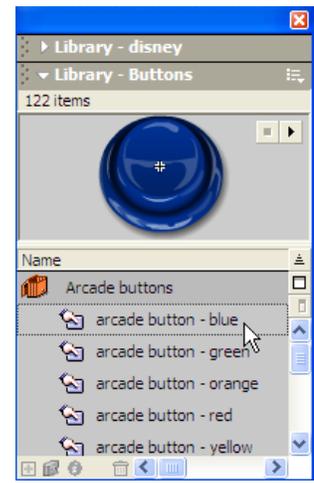
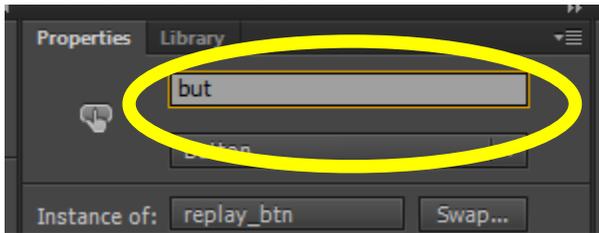


For more fun, obtain a Mickey Mouse gif and add it on a new layer to your scene.
<http://www.mickey-mouse.com/mickeyclipartmain.htm>
(see back page for instructions on how to animate him!)

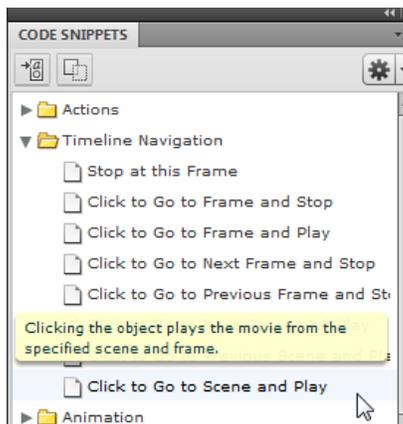
PART E: Replay Button

Want to start a movie over again? How about making a button?! Flash has built in buttons that save you time and hassle. We'll use a premade button to make this part go fast.

1. Lock all your layers.
2. Create a new layer called **replay**.
3. Insert a keyframe in frame 50 on that layer.
4. Pull `replay_btn` onto the stage
5. Size down the button for your page (**Edit > Free Transform**).
6. Now, click on your button and in the Property Inspector, give it the instance name *but*.



7. Now, we need to add some Actionscript to make the button work. Access the Actions panel (F9) and press Code Snippets (top right).



Under Timeline Navigation, choose the bottom one.

8. This puts in a bunch of code for you (yay for Code Snippets and not having to type all that script!). You do have to edit the code to tell it to go to your starting scene (intro):

```
1
2  /* Stop at This Frame
3  The Flash timeline will stop/pause at the frame where you insert this code.
4  Can also be used to stop/pause the timeline of movieclips.
5  */
6
7  stop();
8
9  /* Click to Go to Scene and Play
10 Clicking on the specified symbol instance plays the movie from the specified scene
11
12 Instructions:
13 1. Replace "Scene 3" with the name of the scene you would like play.
14 2. Replace 1 with the frame number you would like the movie to play from in the spe
15 */
16
17 but.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene);
18
19 function fl_ClickToGoToScene(event:MouseEvent):void
20 {
21     MovieClip(this.root).gotoAndPlay(1, "intro");
22 }
23
```

Change Scene 3 to intro
(your scene 1 name)

9. Alternatively, you could copy/paste this code:

/* Stop at This Frame

The Flash timeline will stop/pause at the frame where you insert this code.

Can also be used to stop/pause the timeline of movieclips.

***/**

stop();

/* Click to Go to Scene and Play

Clicking on the specified symbol instance plays the movie from the specified scene and frame.

Instructions:

1. Replace "Scene 3" with the name of the scene you would like play.

2. Replace 1 with the frame number you would like the movie to play from in the specified scene.

***/**

but.addEventListener(MouseEvent.CLICK, fl_ClickToGoToScene);

function fl_ClickToGoToScene(event:MouseEvent):void

{

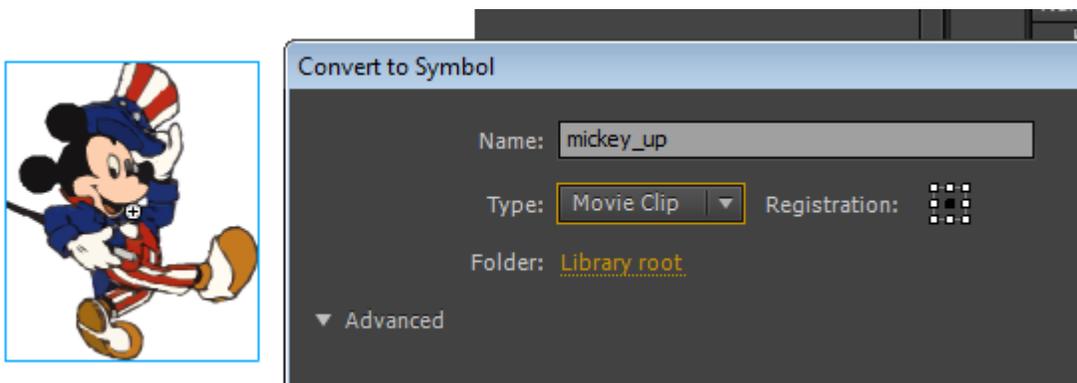
MovieClip(this.root).gotoAndPlay(1, "intro");

}

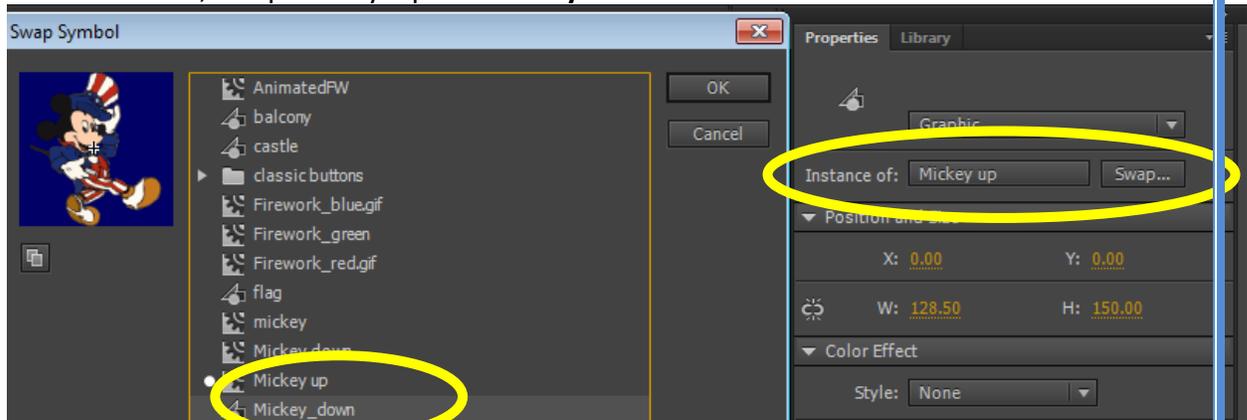
10. One more thing...if you Test Movie, you'll see Tinkerbell goes behind the button. That's because she is on a lower layer. Drag her layer to the top of the layer list and Test Movie again.

Animated Mickey Instructions

1. Locate the patriotic Mickey Mouse in your Library.
2. Create a *Mickey* layer. Drag Mickey_up from the Library onto that layer. (To be safe, lock all others layers)
3. Convert him to a movie clip symbol. While he is still selected (after tracing) press F8. Use the settings below:



4. Double click Mickey_up so we can get inside his movie clip. Rename his one and only layer *kick*. On his timeline, insert a keyframe at 4.
5. On frame 4, swap Mickey-Up for **Mickey-Down**



6. Now, he should be animated. Return to the *main* scene and Test Movie to see him in action! You could make a new layer inside his movie clip and perform other actions, too, such as tipping his hat, blinking his eye, etc. Fun, fun!