FLASH TASKS:

MAKE A SINGLE FRAME

(1) Double Click on a Layer name (in the timeline) to rename it, and type in ‘Background’
(2) Click on the first individual frame in the layer.
(3) Use the drawing tools to create a simple background such as a window sill, ocean, trees, or whatever you like. If you hold the mouse pointer over a tool or option for a moment, it will give you a brief description. Drawing tools such as the pen have options that will allow you to automatically smooth out or square off your lines.
(LESSON REFERENCE: Help>Lessons> 02 Drawing)
(4) For more control over lines and colors, the ‘Stroke’ and ‘Mixer’ panels at the right side of the screen will alter line and color for whatever object is selected. You can select objects using the pointer tool after you finish drawing them. If the right panels aren’t visible, you can go to Window>Panels and select whatever you want.
(5) Make sure the first frame is still selected, and go to Insert> Keyframe. A black dot will appear in your frame. Keyframes are like fixed points in the timeline that indicate when something changes.

ADD A LAYER

(1) Either click on the tiny (+) button at the bottom of the layer list or choose Insert>Layer from the menus.
(2) Click on the new layer name in the timeline, and on the first frame. Now you can draw another image to animate later: a fish or car or whatever. This image, on Layer2, can be altered without touching the background. If it helps, you can even turn off the visibility of the background by going to the ‘eyeball’ column next to the background layer name in the timeline and clicking until the dot disappears - you
can do the same to ‘lock’ the layer in the next column.

(3) Draw whatever you like. Once you finish creating some small object, select the entire thing by drawing a box around it with the pointer tool. You should see all of its parts highlight. Go to Insert>Convert to Symbol. In the dialog box give your symbol a name and click on the ‘Graphic’ option from the menu.

(4) The best thing about being a symbol is that all the pieces are locked together, and it can be changed as one object (shrunk, skewed or whatever)

(5) Go to Window>Library. The Library will appear at the right side of your screen. Check to make sure that your new symbol is on the library list.

(6) Make sure that your first frame is selected in the Layer, and drag another ‘instance’ of your symbol onto the workspace.

(LESSON REFERENCE: Help> Lessons > 03 Symbols)

**A DIGRESSION ON THE TIMELINE**

A Keyframe indicates that something has changed; you can mark individual frames by placing keyframes in each one. If you want to have the same image appear across a number of frames you can drag the shaded region out so that it covers the right number of frames. If you click on an individual frame and choose Insert>Keyframe (F6) the material in that layer from the previous Keyframe should appear and allow you to change it. There is a difference between ‘blank’ and ‘empty’ frames - Flash will not allow you to insert keyframes into ‘blank’ frames (denoted by a white box). If you have a blank frame or region you wish to erase, you can click on the affected frame and hit ‘backspace’ or ‘delete’ to clear it. Gray blocks on the timeline indicate static regions - places where the graphic remains the same. Later we will see blue, green, and other colors for animations and movement.

**ANIMATION: THE CLAYMATION WAY**

(1) Start with the first symbol frame you made earlier. One way to animate is to insert a keyframe in each individual frame and make small changes in each subsequent scene. While this is time consuming, it is the most flexible method since you can dictate every movement.

(2) Select your symbol. In the second frame, click, and choose Insert>Keyframe. The original symbol should appear. On the ‘Stroke’ Panel, click the Transform tab. Increase the scale from 100% by typing 110% in the box (you have more complex options to play around with as well).

(3) Repeat the process on several subsequent frames. If you want to make more sophisticated shape changes, you can select the symbol and reduce it to component parts by choosing Modify>Ungroup (the Break Apart option produces a slightly different effect).

(4) To play your movie, you can rewind by choosing Control>Rewind, and play Control>Play. You can also manually move the red marker on the timeline to the beginning position and play the movie quickly by moving the marker along the timeline.
**ANIMATION: TWEENS**
‘Tweens’ are a way to interpolate a simple action between two various states of a symbol or object. The three implemented in Flash are: ‘Motion’, ‘Shape’, and ‘Color’. Tweens are an algorithm and particularly in the case of the Shape tween may not do exactly what you expect them to do. The motion tween will make a path between two points and move your object along it (you can also specify the path, or the tween will take the shortest straight line). Color tweens will change the tint of the object over a time period that you specify. Shape tweens change the shape of an object gradually to the shape that you place in the last frame - you can use simple transforms or deselect the symbol or object and make modifications yourself.

The Flash manuals will suggest several different ways of implementing tweens. It can be a little tricky to get them to terminate where you want. I suggest that you first extend the keyframe containing your start point to create a static region of the length you want the tween to be. Then click on the frame containing the ‘end’ symbol. Instead of inserting a new keyframe, open the Frame Panel (Window>Panels>Frame), change the object to the endpoint you want, make sure your object is selected, and click on the Effects tab of the Frame Panel. You will see a pop-up panel for tweens where you can choose the one you want.

For a lesson in Tweening, try the Help>Lessons>Animation.

**NOTES**
(1) Text can be created by using the text tool to drag a box, and typing your text into it - you may have resize the box by dragging on the corner to fit your text in one line. Text colors and formats are governed by the Character panel. It works much like a word processor, except that you can rotate your text.

(2) Flash has an extensive Help Index that you can search for anything you need. Also, there is a basic tutorial as well as the Lessons mentioned above.

**NEXT TIME**
- More animation, including animated object composed of several different timelines (such as a car with wheels that move)
- Buttons and beginning interactive movies.

**COMPUTER OFFICE HOURS: THURSDAY 6:00 PM IN THE LAB**