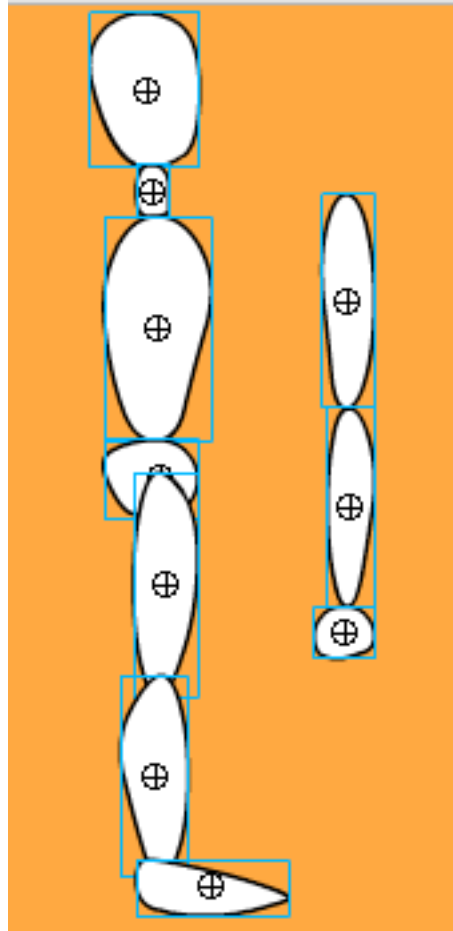


















Assignment 2: Flash Animation – walk cycle

1. On the stage create the complete human body (in profile) divided at the main joints. Your body need not look like mine, so long as all the component parts are there. I have created a rather simple marionette-type body consisting of the following separate parts: head, neck, torso, waist, upper arm, lower arm, hand, upper leg, lower leg, foot (see below).



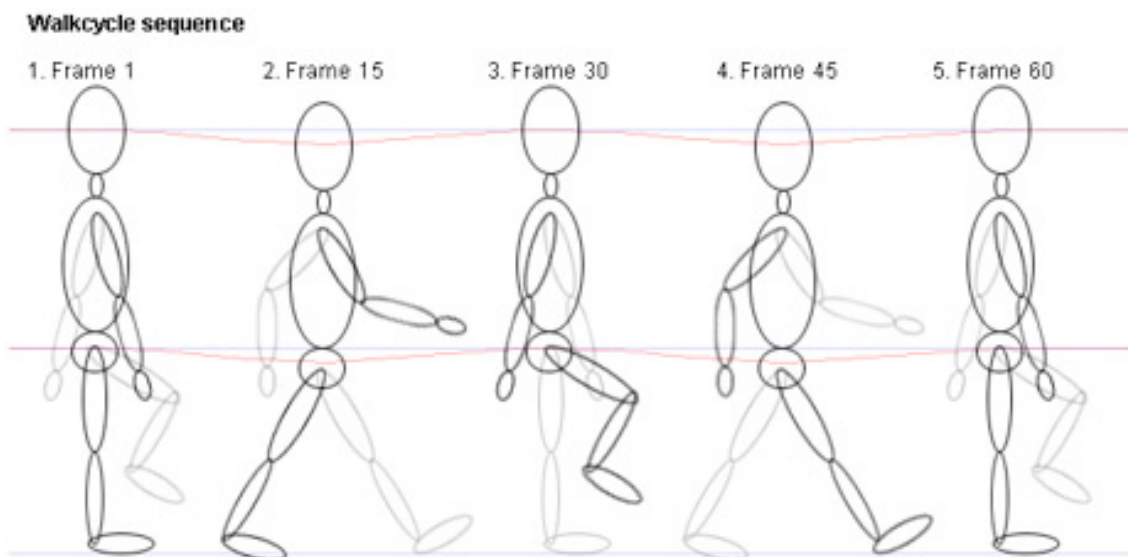
I have created all these parts side by side so that I can 1) determine a relative body size and 2) make sure the parts “fit” together. It is best to create the head, then select it (fill and stroke) and turn it into a graphic symbol (F8) and THEN create the neck, turn it into a graphic symbol and so on so that overlapping shapes don’t subtract from other shapes when moved.

2. Your final library should mirror the image, below.

Name	Linkage
 left_leg	
 right_leg	
 walk_cycle	
 left_arm	
 right_arm	
▼  individual parts	
 foot	
 head	
 lower_arm	
 lower_leg	
 upper_leg	
 waist	
 torso	
 neck	
 upper_arm	
 hand	

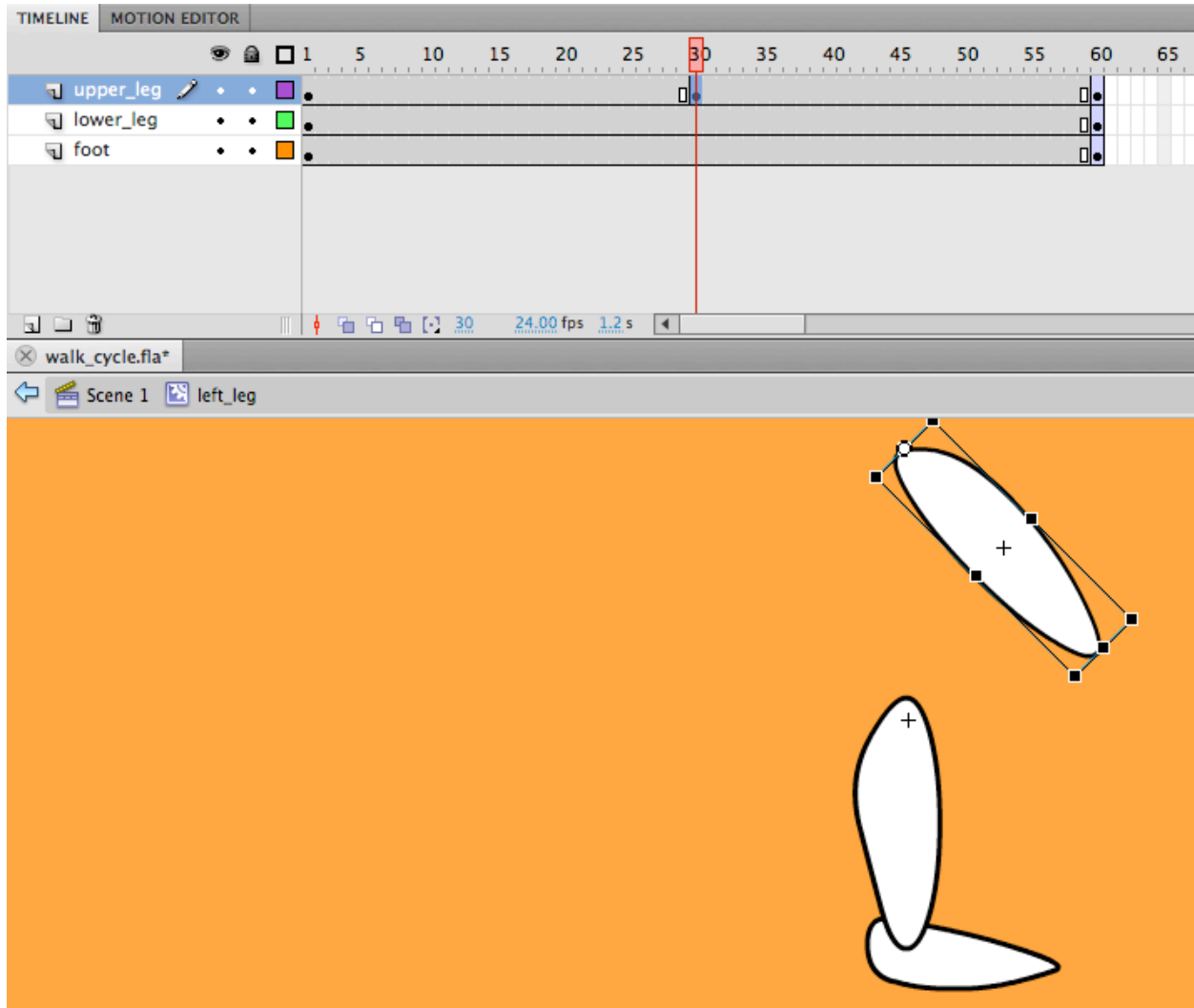
Note that I have created a folder, “individual parts,” to store all the graphic symbols for the body parts. Also note that above the “individual parts” folder are 5 movie clip symbols. This is where you will start to assemble some of the parts into larger systems. You may create these symbols all at once (Apple + F8) and have them empty but ready for construction.

3. Before we begin, let’s study the below 60-frame walk cycle for our reference. I have also linked a pop-out walk cycle below this assignment link on my website so that you don’t have to keep scrolling back-and-forth, here.



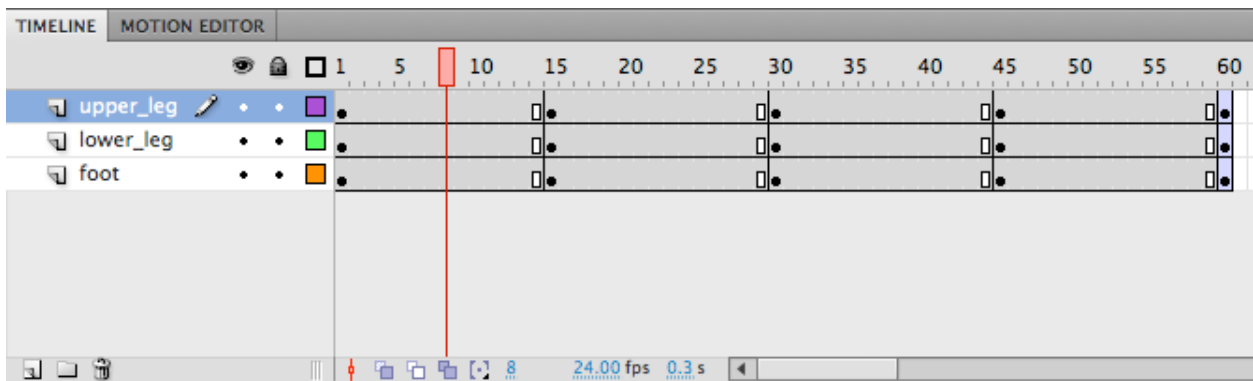
Note that not only do the legs and arms swing back and forth but that the entire body bobs up and down, slightly.

4. Let's start by animating the left leg. You will need to create 3 layers in your timeline for each of the three leg parts (upper leg, lower leg and foot). While still on the first frame, select the Free-Transform tool and move the anchor point (the white circle usually at the center of the symbol) to the top of the symbol where it meets its parent symbol (i.e. lower leg~child, upper-leg~parent).

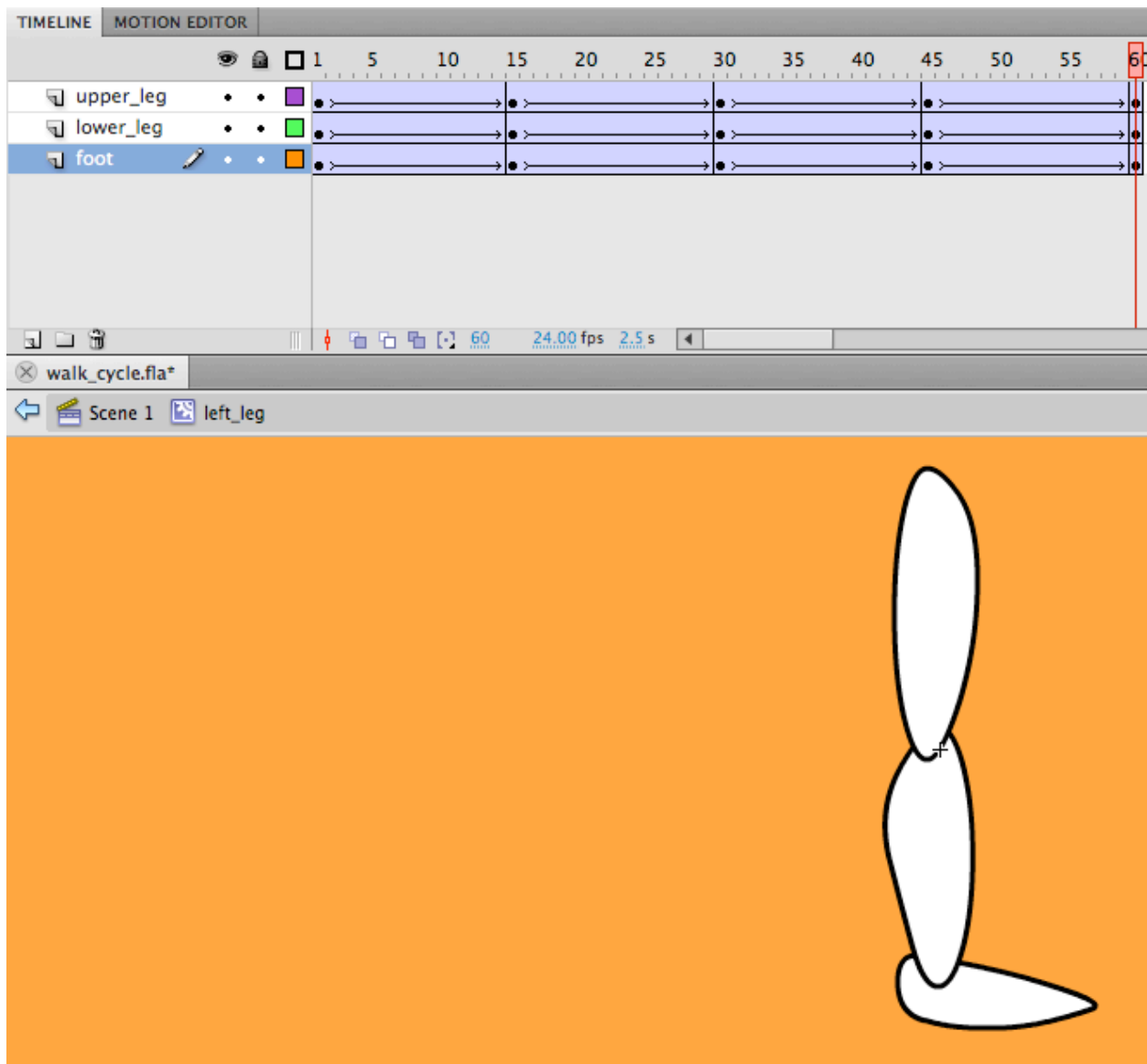


5. Once you have adjusted all the anchor points, then create keyframes (F6) at frame 60 for EACH of the layers. By doing this you are setting up your animation so that it ends where it begins.

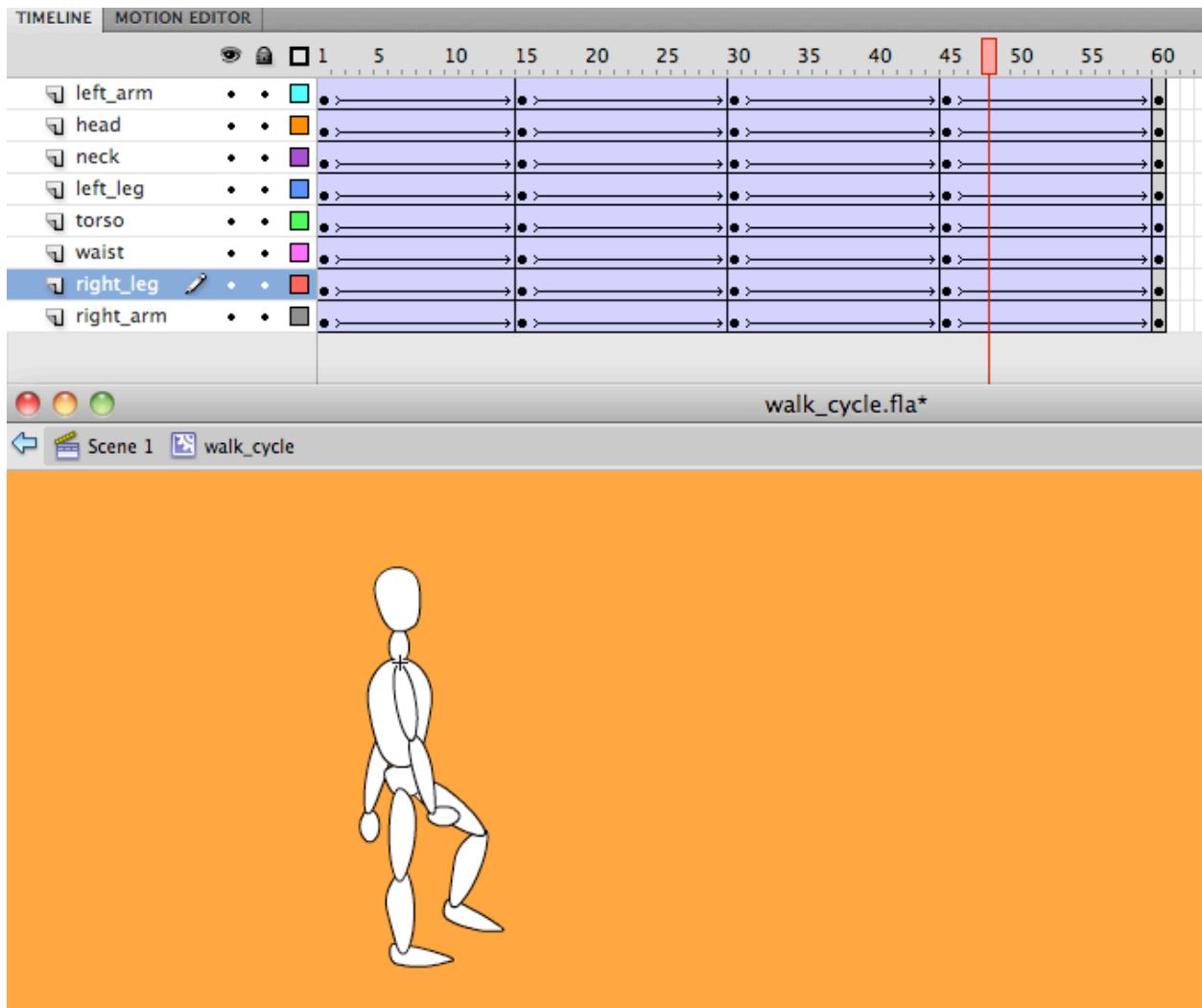
I have called "left_leg" the leg that is closest to us in the above walk cycle image. Start with frame 30 and position the leg as it is in the walk cycle on frame 30. Continue with creating keyframes and making adjustments at frames 15 and 45.



6. Once you have created all the keyframes, then create motion tweens (control click & select motion tween) between all keyframes.



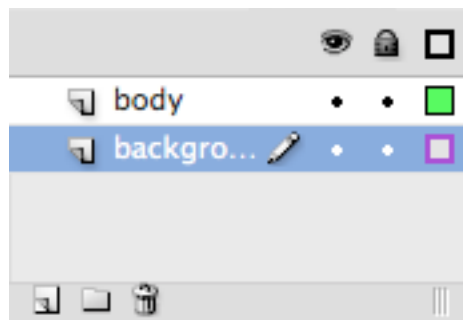
7. Follow these steps for creating right_leg, left_arm and right_arm.
8. Once you have created animations for each of the 4 limbs, you will then assemble the composite body in the “walk_cycle” movie clip.



Note that the head, neck and torso exist on their own layer. It is important to keep the “walk_cycle” layers in the order pictured above so that parts overlap in the animation as they should.

9. You may move an instance of your walk-cycle to the stage and test it (Apple + Return).
10. Once your walk-cycle checks out, position the composite body off-stage left in Scene 1. Then create a keyframe around frame 185 and position the body at this frame off stage right. Finally, create a motion tween. Your composite body should enter stage left and exit stage right.

11. The last stage of this exercise will be to add in a background image. First, create a layer under your walk-cycle layer and name it “background.” Pull a large size photo image off the web. The image should be 1280 X 720 or larger. Save this image in a folder that is devoted to this project. Then import the photo to the stage by FILE > IMPORT > IMPORT TO STAGE (or Apple + R).
12. If your photo is much larger than the stage, you may need to resize the image. The easiest way to do this and know how much of the photo is on the stage is to make the “background” layer transparent. To do this, click on the box icon *within* the “background” layer in the timeline to switch off transparency. In the below image, the purple box outline and grey fill indicates that the layer has been made transparent



You should see on the stage, an outline of the photo, which you can free transform to fit more appropriately on the stage.

13. Now you are ready to export your animation as a .swf file. Simply go to FILE > EXPORT > EXPORT MOVIE into your project folder.

