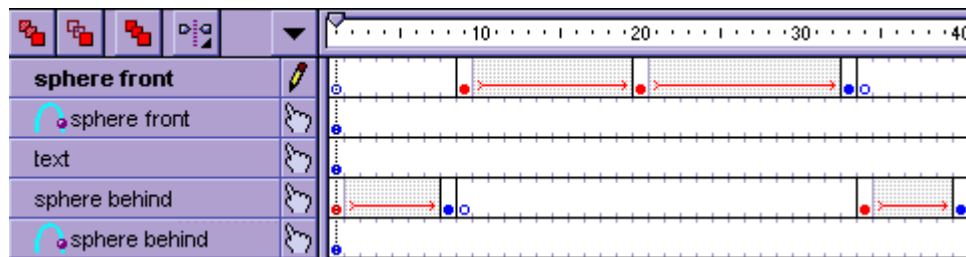# *ORBITING SPHERE EFFECT*



- **SKILL LEVEL:  ADVANCED/INTERMEDIATE**
- Know how to use motion guides
- Know how to use tweening
- Know how to use layers
- Know how to use symbols/edit symbols

This effect is fairly difficult to do.  It's not so much that it is a hard concept.  It's just getting the animation to line up in the right spot.  You see, the hard part is getting the sphere to go behind the text, and then come up to the front.  But don't worry... hopefully this tutorial will shed a little light on it.  It is a little lengthy but that's just because I tried to add a lot of screen shots! And <u>again</u>.... this is just the way I do it. If you find an easier/better way then by all means do it :)

*DOWNLOAD THE .FLA*

## <u>THE TUTORIAL</u>

To start off you should try to dublicate the image I made above.  If you need to analyze it closer download the .FLA that goes along with this tutorial.  Here is a shot of what my frames look like:



1.   OKAY, let's start this off simple.  Create a layer called text and type your text into it.  I used the word Cyberspace becasue I had nothing else better to do *smiles* (Don't worry about the fuzziness around the text like I did above, we won't be covering that here).

2.  Insert a layer <u>above</u> the text layer and call it "Sphere Front".  This will be the area where the sphere rotates in front of your text.  In this layer:

    1.  Insert a keyframe at Frame #9.  Draw yourself a small sphere in this frame and group it.  **NOTE**: If it is not grouped or a symbol it WILL NOT follow the motion path we will be adding a few steps down!

    2.  If you click on the 'Sphere Front' layer properties you will need to select ' Add Motion Guide' from the menu. This will insert the motion guide layer directly below it.  See the picture above ^^.  In Frame #1 of the motion guide layer you will use the <u>Pencil Tool</u> to draw a oval circle around your text  -- Copy the frame when you are finished...



3.  Now, insert a new layer <u>below</u> the text layer called "Sphere Behind".  Add a Motion Guide to this layer.  On the motion guide you will paste the frame that you copied (Step 2-2 from above) and paste it in Frame #1.

4.  In the 'Sphere front' layer at Frame #9 copy your sphere you created earlier and paste it into the 'Sphere Behind' layer at Frame #1 (make sure you are not pasting it into the motion guide).  Shrink your sphere accordinly so it looks nice behind the text.  Let's work on animating the back part of the sphere:

### Step 4-1
First lock all other layers except for both of the 'Sphere Behind' layers.  If you look close you can see where the sphere is right behind the text in the center.  Do this step by first making sure your Snap option is turned on (View > Snap).  Then drag the sphere to the line.  It should have a little circle pop up and it should snap to the line automatically.

### Step 4-2
Insert a *keyframe* at Frame #8.  Notice below how in that keyframe the ball is moved almost out from behind the text but not quite.   Do this and enlarge the sphere just a tiny bit to get a realistic effect.  **NOTE**:  Make sure you are snapping to the line or else this won't work :)  After you are done insert a *blank keyframe* at Frame #9, then double-click Frame #1 and apply Motion Tweening to it.  Make sure 'Orient to Path Direction' is checked.

### Step 4-3
Add a keyframe at Frame #34.  Move the sphere over to the right hand side of the line right before it hits the text.  Scale it up a decent size like the picture to the left.  Double-click Frame #34 and apply Motion Tweening to it.  Make sure 'Orient to Path Direction' is checked.

### Step 4-4
Add another keyframe at Frame #40 and move the sphere right before the point where it initially started.  Scale it down to the size of the first initial sphere and make SURE it is snapped to the motion guide.
AND WE ARE DONE WITH THE BACK LAYER!  If you run through the timeline you should at least start to see the sphere orbiting nicely behind the text.  Now let's go get it to orbit the front which is MUCH easier :)

5.  If you go to Frame#9 on the 'Sphere Front' layer you should already have your sphere there.  Move it to where it starts on the left hand side ( and will rotate across the front to the right).  Make sure that it is snapped to the back line like where you left off.  If you snap it to the front line your sphere will jump from the back point to the front point rather than orbit around the corner. You need to line it up right after the sphere in Step 4-2 from above.  Double-click Frame #9 and apply Motion Tweening to it.  Make sure 'Orient to Path Direction' is checked.

6.  At Frame #20 you will move and scale the sphere to the center of the text.  Double-click Frame #20 and apply Motion Tweening to it.  Make sure 'Orient to Path Direction' is checked.

7.  I won't show the last screen shot but in Frame #33 move the sphere to the right hand side like in Step5 above.  Make sure it is about the same size also :).
    Insert a *blank keyframe* at Frame #34.

8.  THAT SHOULD BE IT!!  Test your movie.  Hopefully it looks pretty cool.  Don't be afraid to ask for help if your stuck also.  We have a [messageboard](#) here that is checked regulary by me and others who can help.