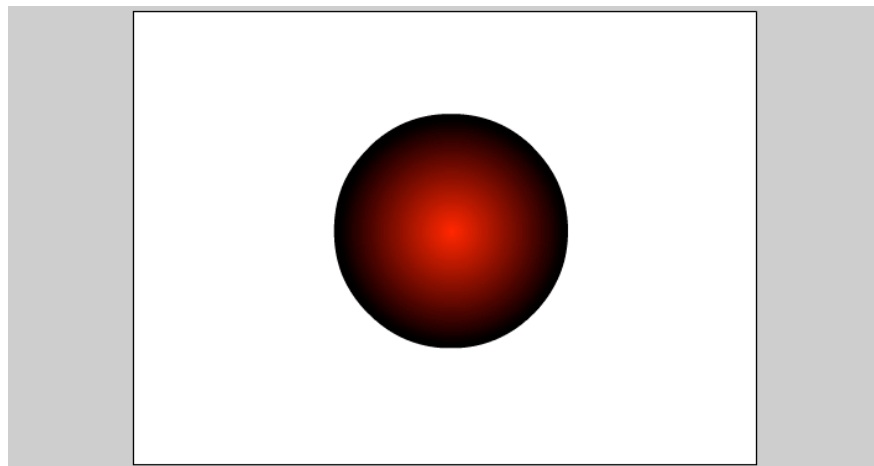




Motion Guide and Masking

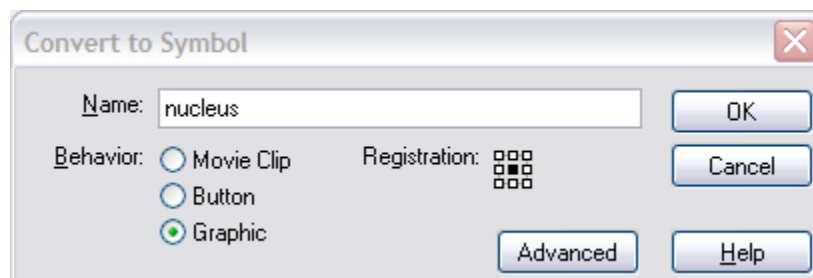
Atom Animation

1. On the Timeline, rename Layer 1 as "Nucleus."
2. Select the Oval Tool (O), select no stroke color and the red gradient fill color. Hold the shift key, and draw a large circle in the center of the stage.

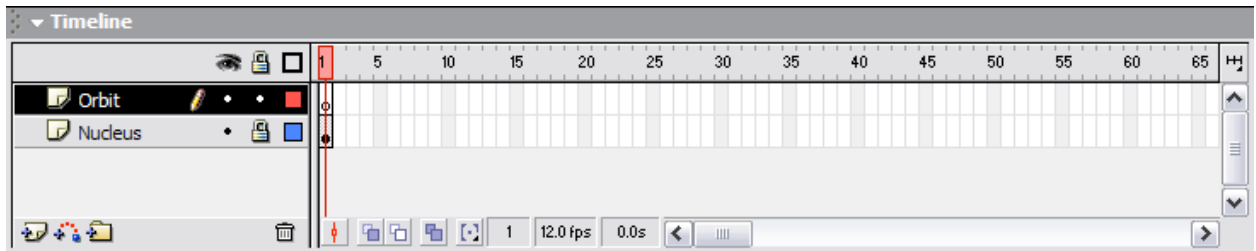


Note: If you need to re-size the circle, use the Free Transform Tool (Q) , hold down the shift key to make sure it is proportional.

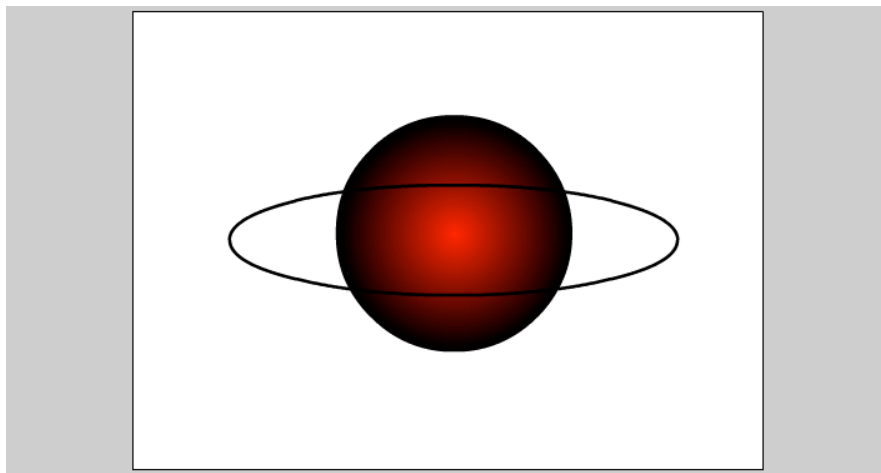
3. Use the Arrow Tool (V) , to select the circle. Select Insert > Convert to Symbol (F8). Select the following behavior:



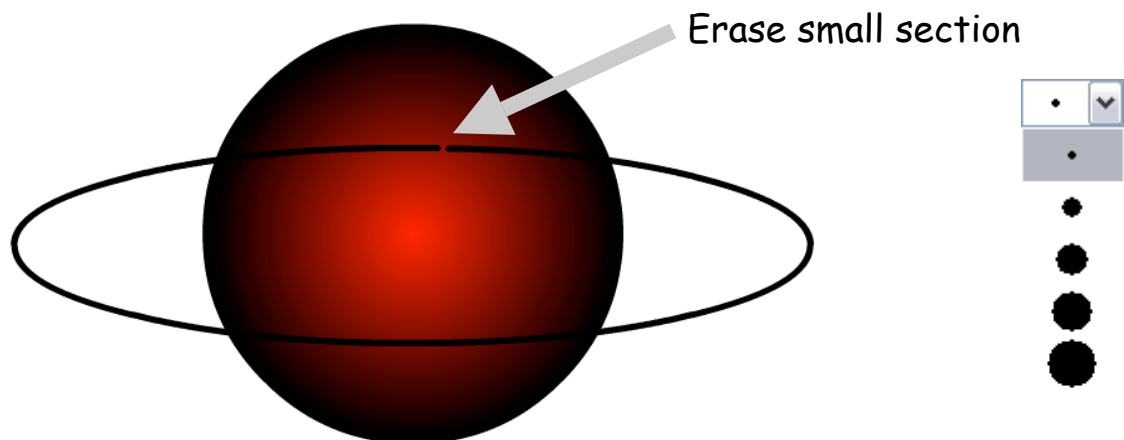
4. On the Timeline, lock the "Nucleus" layer so you don't make adjustments to it. Create a new layer named, "Orbit."



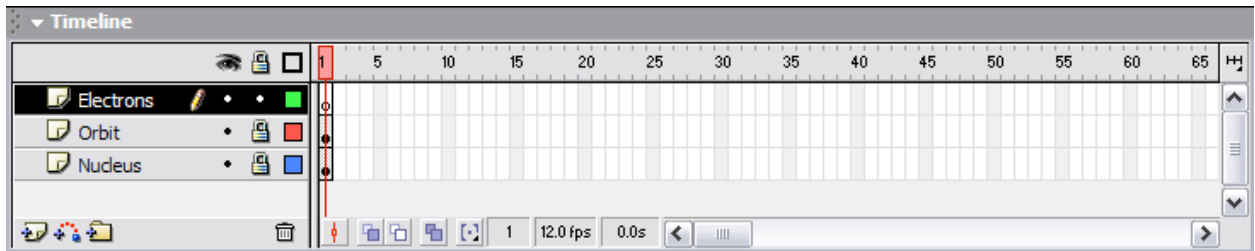
5. Select the Oval Tool (O), stroke black, stroke height 3, fill color none. Draw an oval on top of the nucleus as shown below:



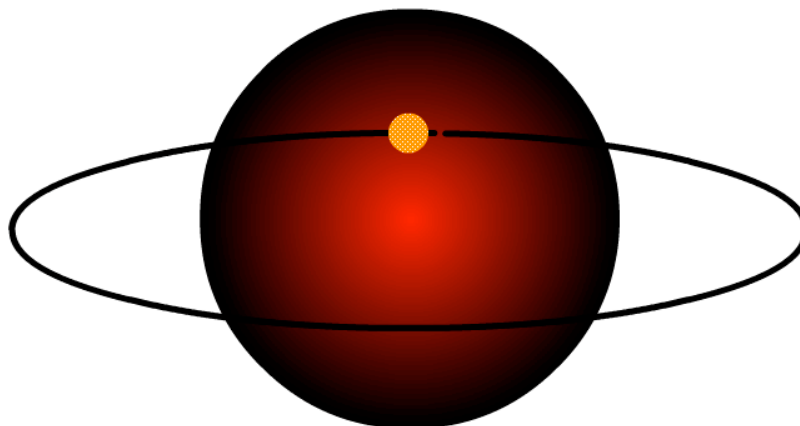
6. Select the Eraser Tool (E), under options, select a small eraser head. On the stage, erase a small part of the orbit.



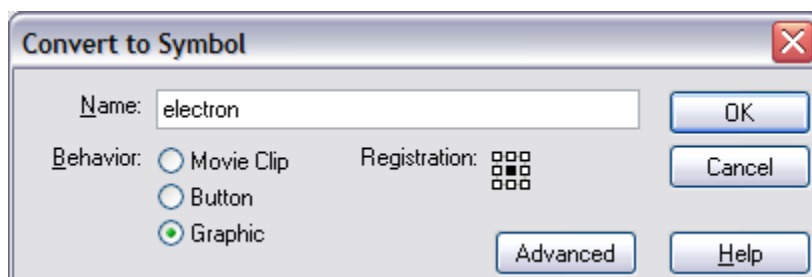
7. On the Timeline, lock the "Orbit" layer. Create a new layer called, "Electrons."



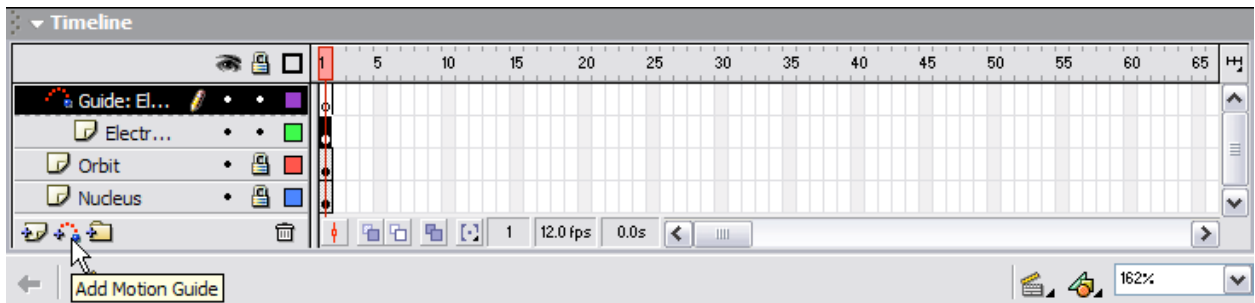
8. Select the Oval Tool (O), select no stroke color, bright orange fill color. Hold the shift key, draw a small circle on the orbit as shown below:
(Note: the small circle is drawn next to the opening of the orbit.)



9. Use the Arrow Tool (V), select the electron the stage and convert it into a symbol by pressing (F8).

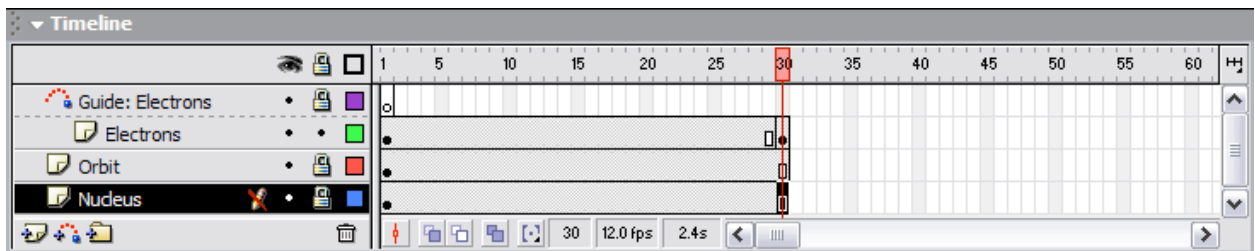


10. On the Timeline, select "Electrons" layer, click on the Add Motion Guide button.

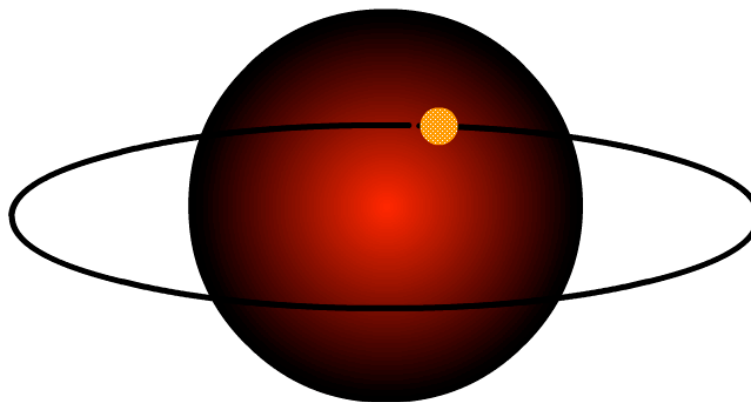


11. On the Timeline, lock the Guide: Electrons Layer. On the Electrons layer, press (F6) on frame 30. On both the Orbit layer and the Nucleus layer, press (F5) on frame 30.

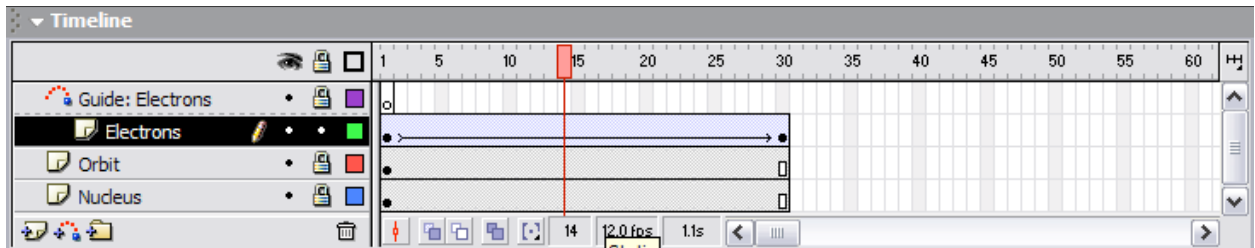
Note: F6 inserts a Keyframe. F5 inserts frames.



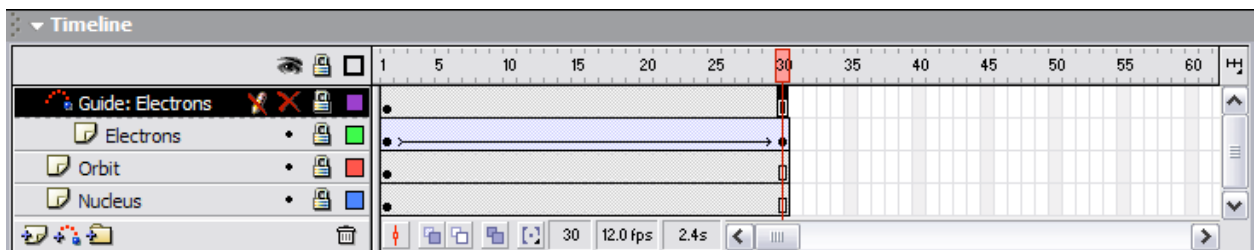
12. On frame 30, select the electron on the stage and move it to the other side of the opening on the orbit as shown below:



13. On the "Electrons" layer, right-click anywhere in between frame 1 and frame 2 and insert a motion tween.

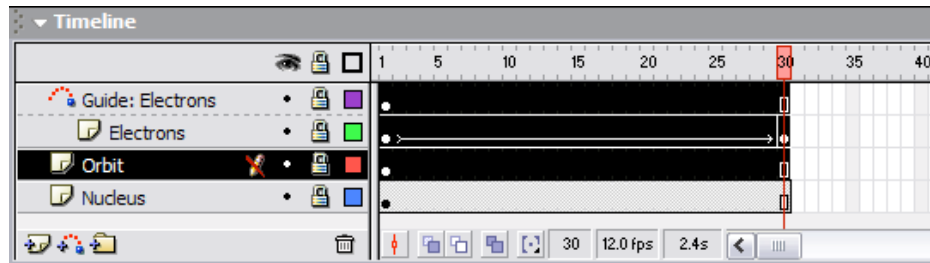


14. Creating the motion guide:
- On the Timeline, lock the Electrons layer.
 - Unlock the Orbit layer. Use the Arrow Tool (V), on the stage select the orbit and choose Edit > Copy (Ctrl+C).
 - Lock the Orbit layer.
 - Unlock the Guide: Electrons layer. Choose Edit > Paste in Place.
 - Lock the Guide: Electrons layer.
 - Hide the Guide: Electrons layer.
15. On the Guide: Electrons layer. Press (F5) on frame 30.

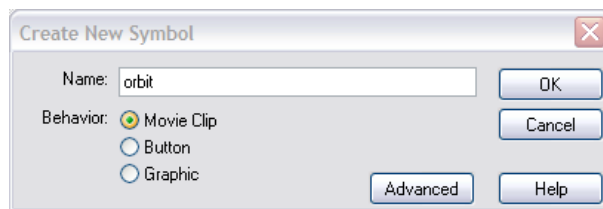


16. Press Ctrl + Enter to preview your animation. Save your work!

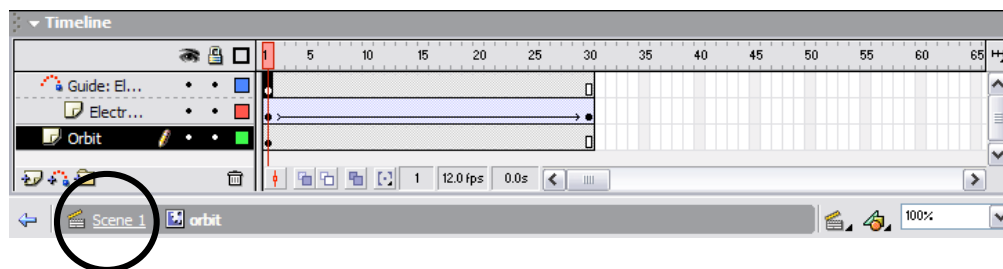
17. Create a movie clip of the orbit and electron.
- On the Timeline, click frame 1 of the Guide: Electrons, hold down the shift key, select frame 30 of the Orbit layer.



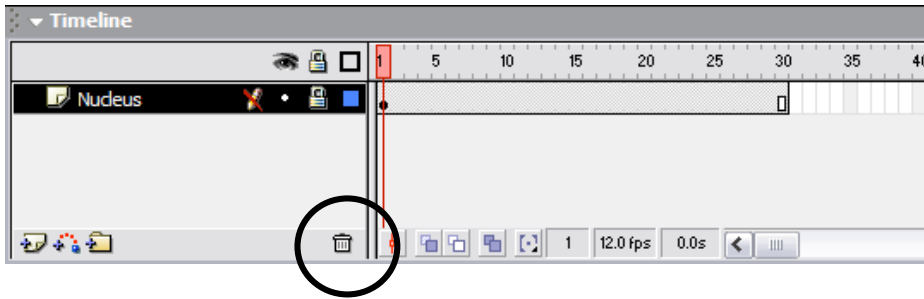
- Select Edit Menu > Copy Frames.
- Select Insert Menu > New Symbol.



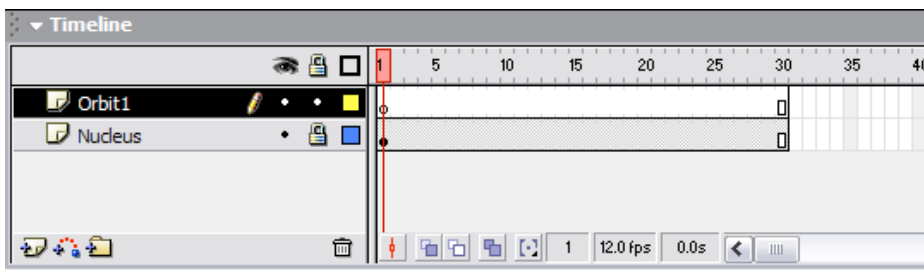
- In the orbit symbol editing mode, on Layer 1, select Frame 1, choose Edit Menu > Paste Frames.
- Return to your movie, by clicking on Scene 1..



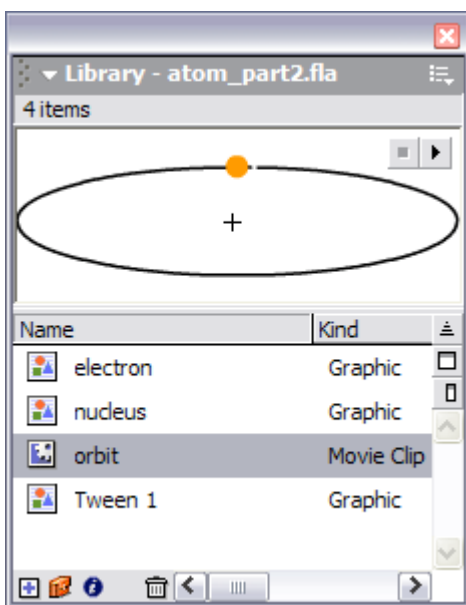
18. On the Timeline, delete the following layers.
- f. Guide: Electrons
 - g. Electrons
 - h. Orbit



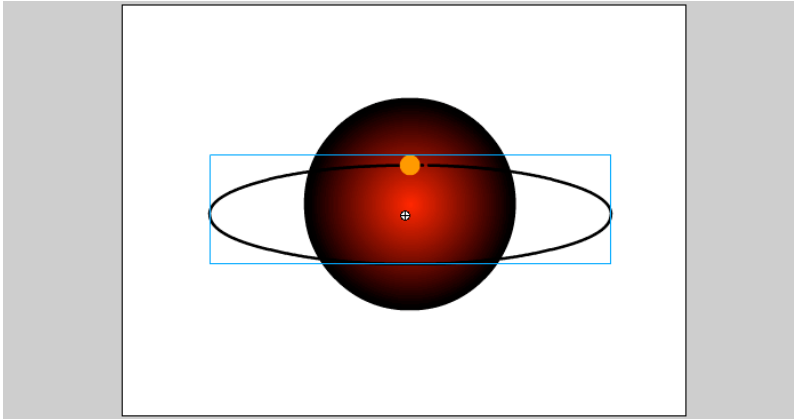
19. On the Timeline, create a new layer called "Orbit1."



20. Open the Library (Ctrl+L or F11)

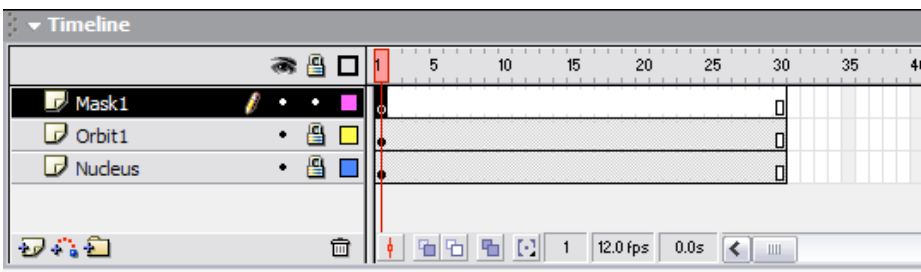



21. Select the Orbit Movie Clip, and drag it onto the stage.



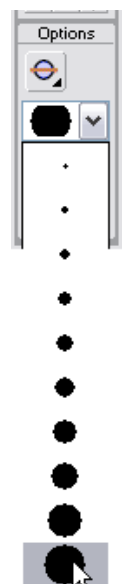
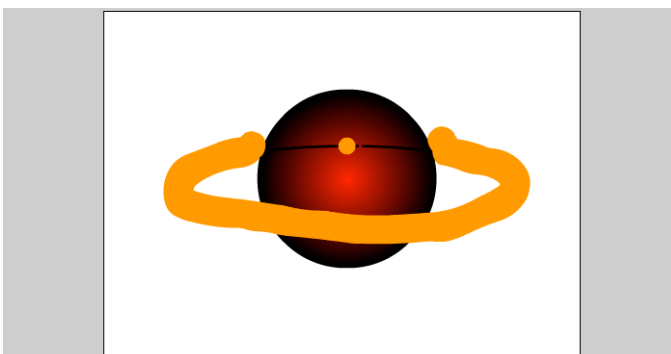
22. On the Timeline, Lock the "Orbit1" layer.

23. Create a new layer called "Mask1."

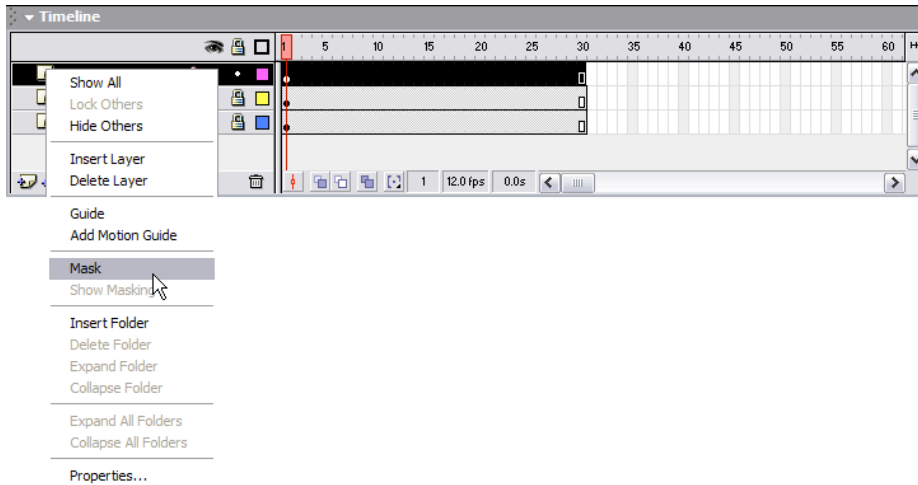


24. In the Toolbox, select the Brush Tool (B) . Under options, select the largest brush head.

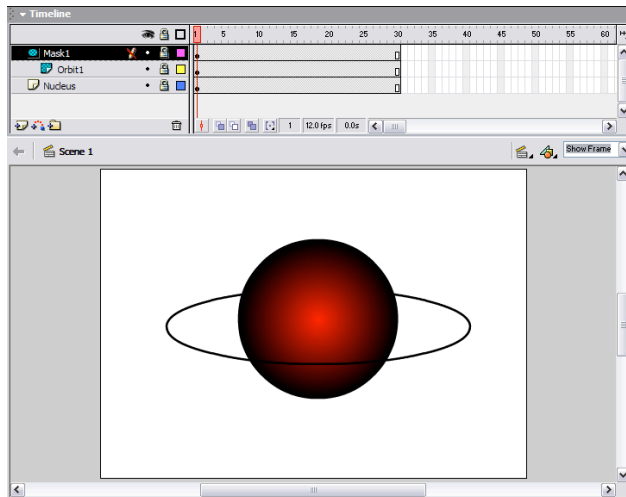
25. On the stage, draw on the orbit as shown below:



26. On the Timeline, right-click on the "Mask1" Layer icon. Select Mask.



27. Choose Ctrl+Enter to test the movie.



28. Create a new layer, called "Orbit2." Repeat steps 6-12 to create another orbit. After step 6, rotate the orbit using the Free Transform Tool. Continue steps 7-12 by creating "Mask2". Save your work!

