Computer Animation Lab: 04

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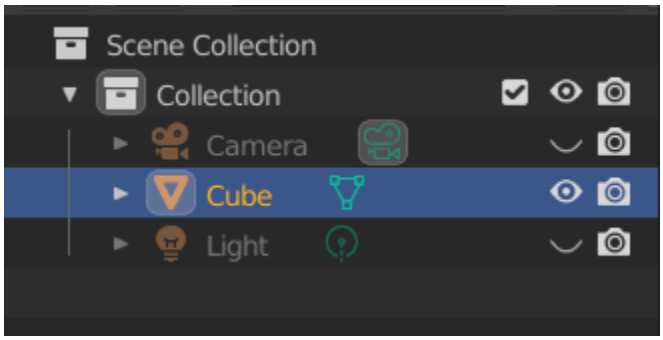
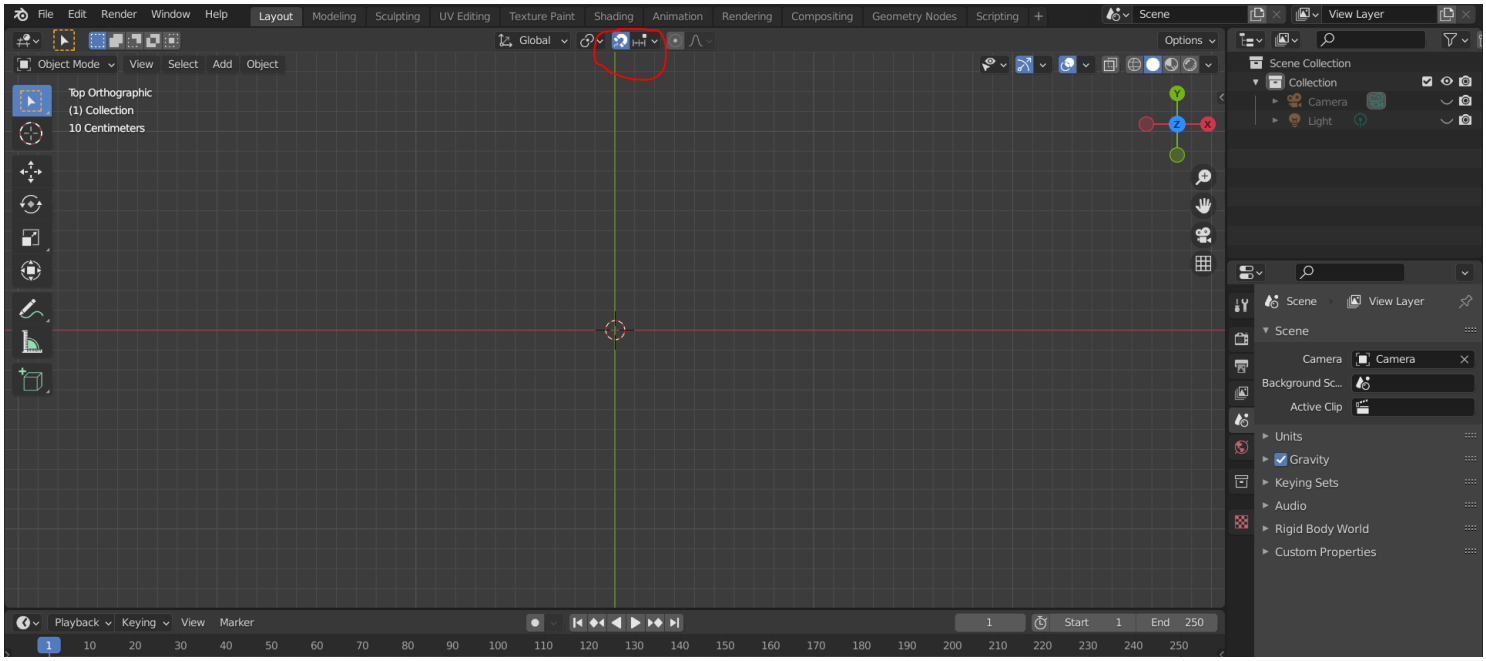
Solar System in Blender

Material and Textures Setup

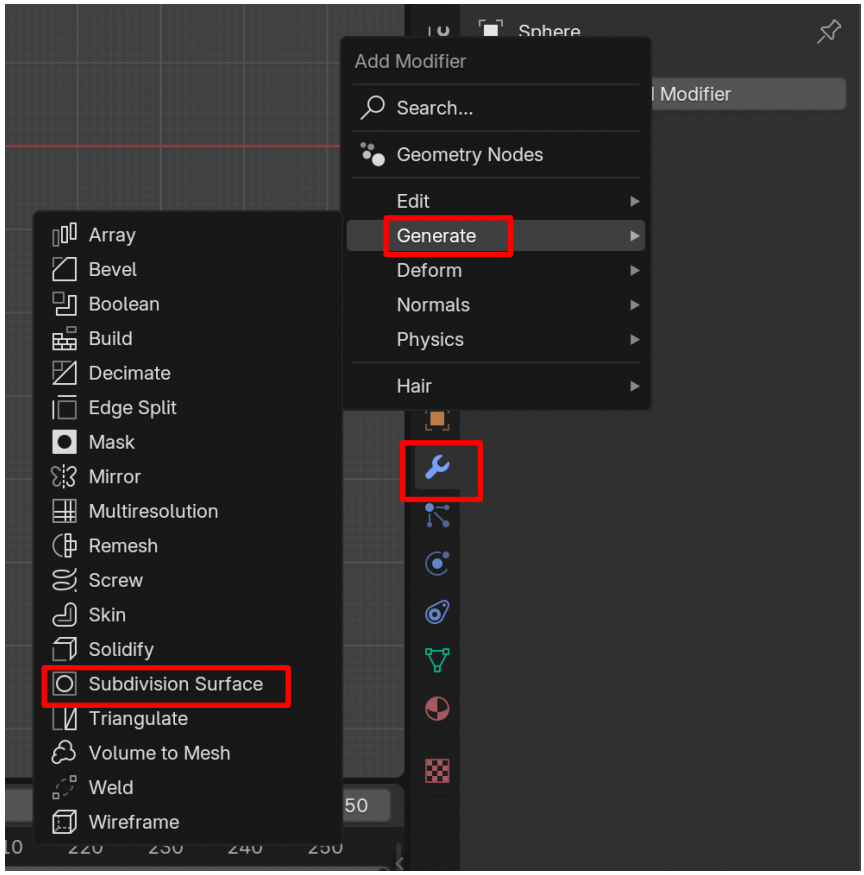
1. Hide the light and camera.

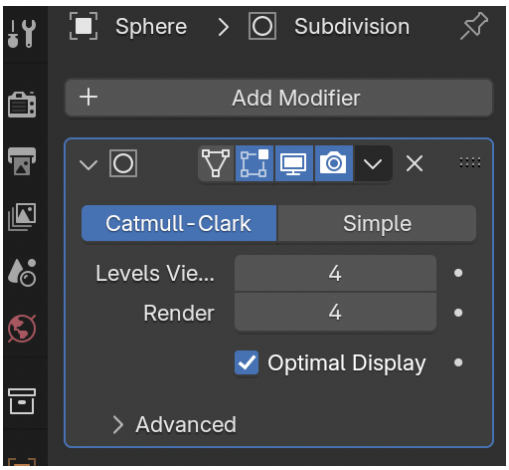


2. Delete the cube.
3. Go to z-axis view.
4. Turn on grid snapping.

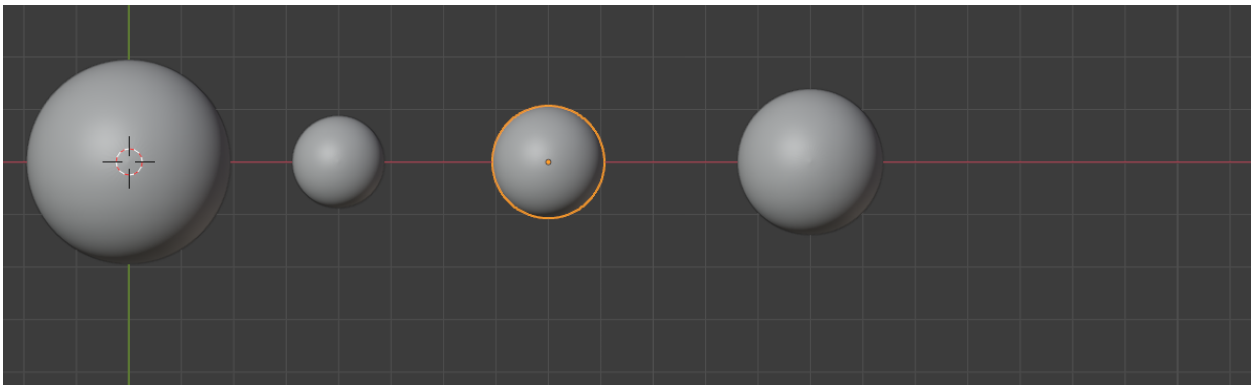


5. Add → UV Sphere.
6. Go to modifier properties → Add modifier → Generate → subdivision surface → set level view and render to 4.

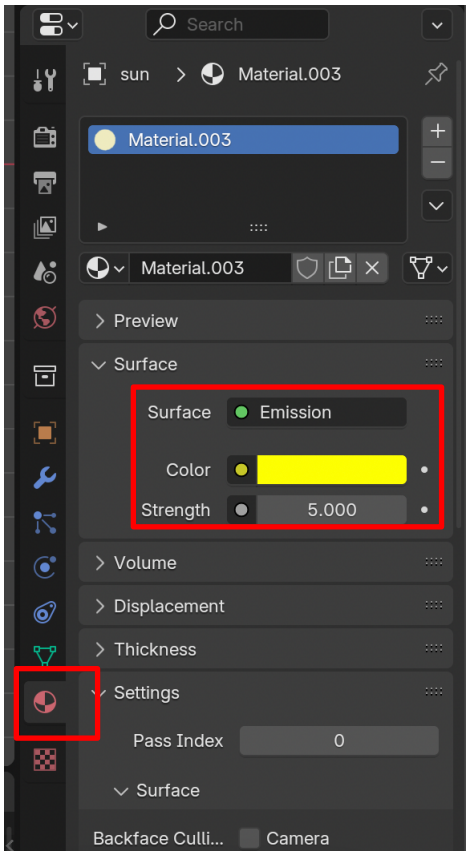




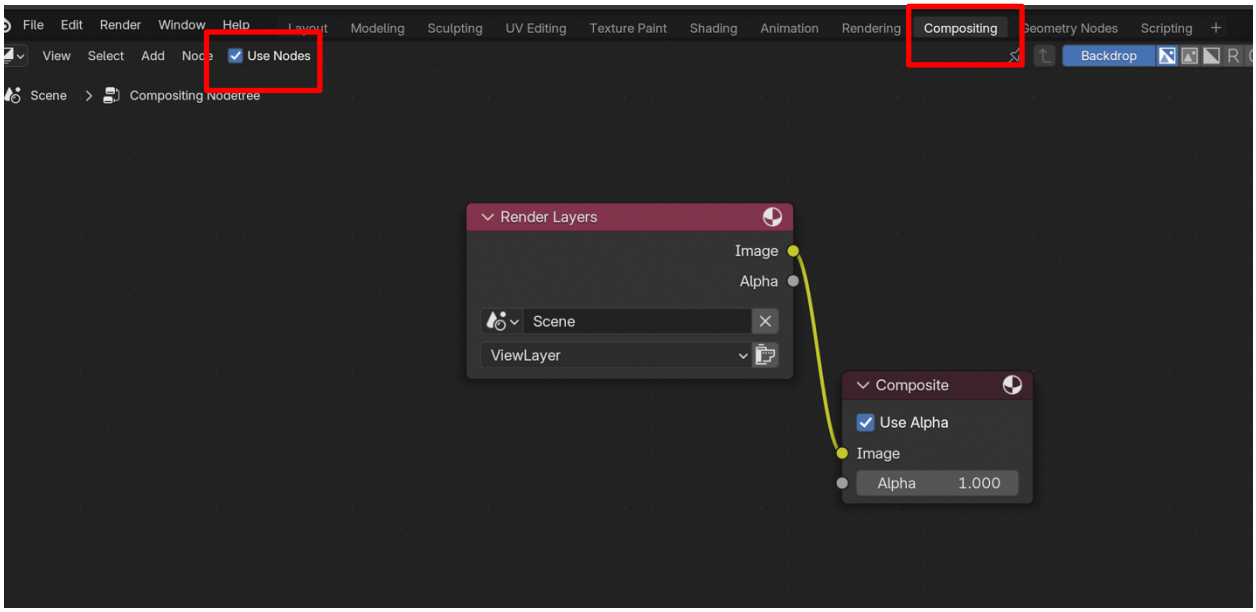
7. Duplicate the spheres, rename each object in scene collection tab.
8. Scale each sphere according to the relative size of the sun and other planets.



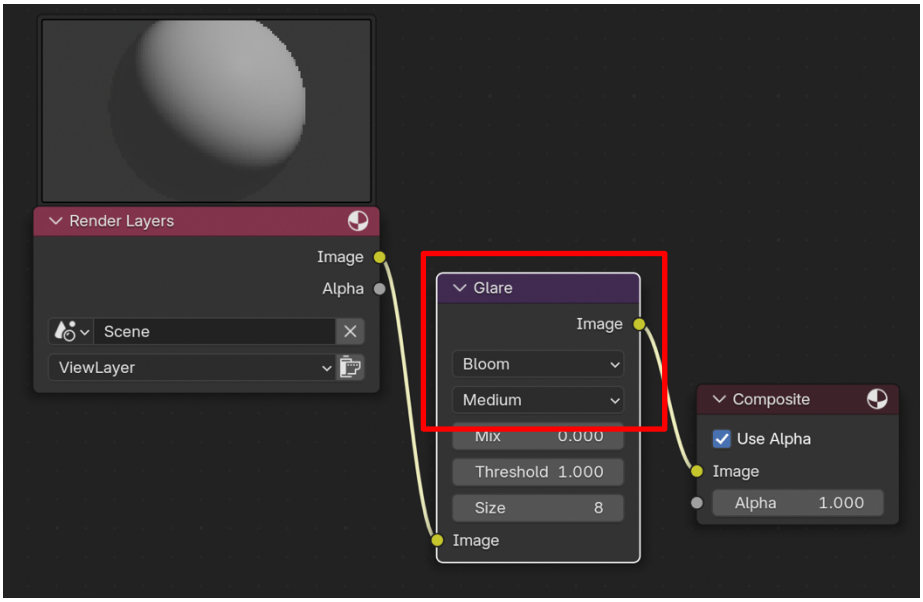
9. Select sun.
10. Go to Materials properties, then click on New → change the base color to Yellow → from the surface option, select Emissions, set the Strength to 1.6.



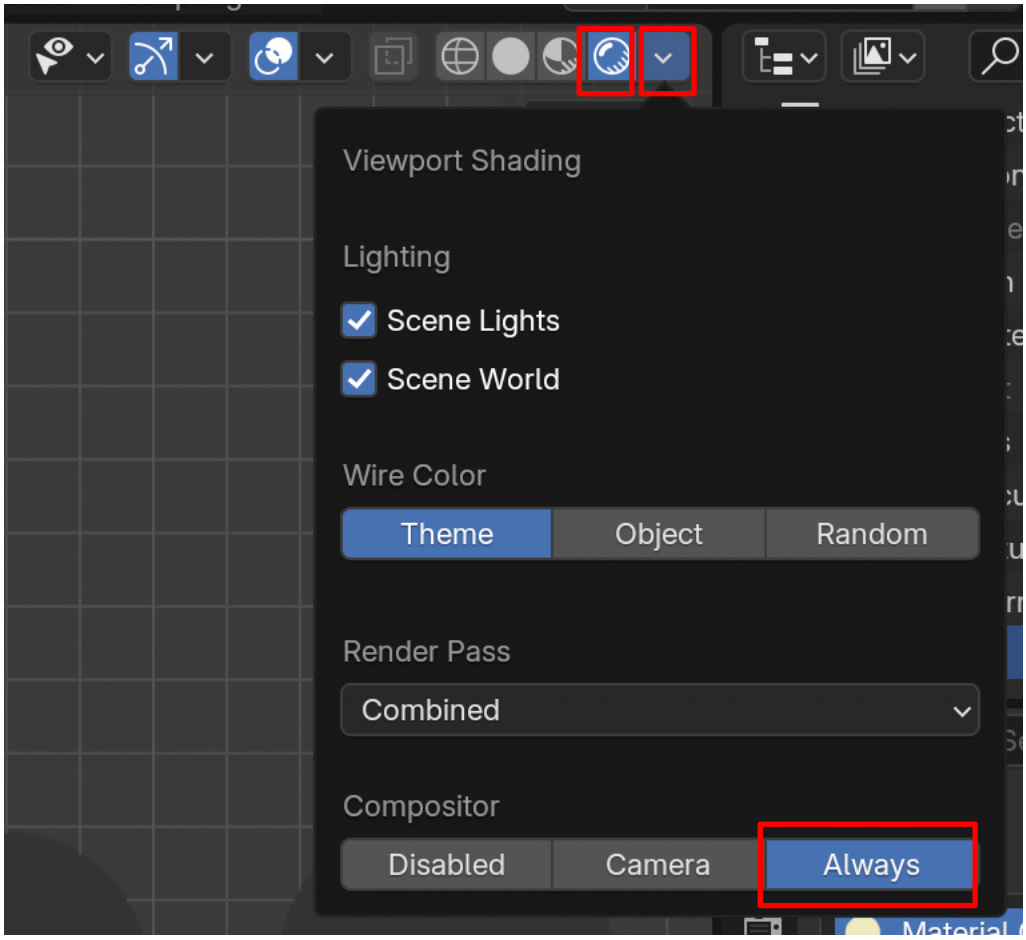
11. Go to the Compositing tab. Make sure to check the Use nodes option.



12. Add → Filter → Glare filter. Insert it between the Render Layers and Composite nodes. Then, change its type to bloom.

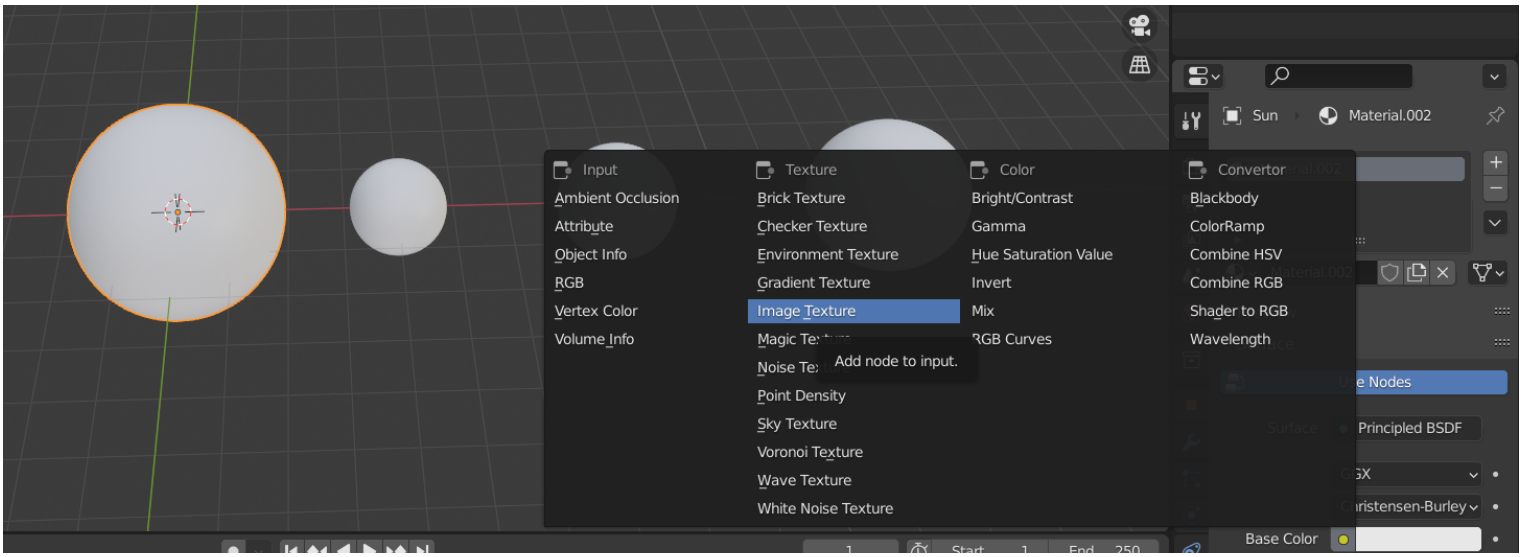


13. Go to the layout tab → select the viewport shading → enable viewport shading from the Compositor.

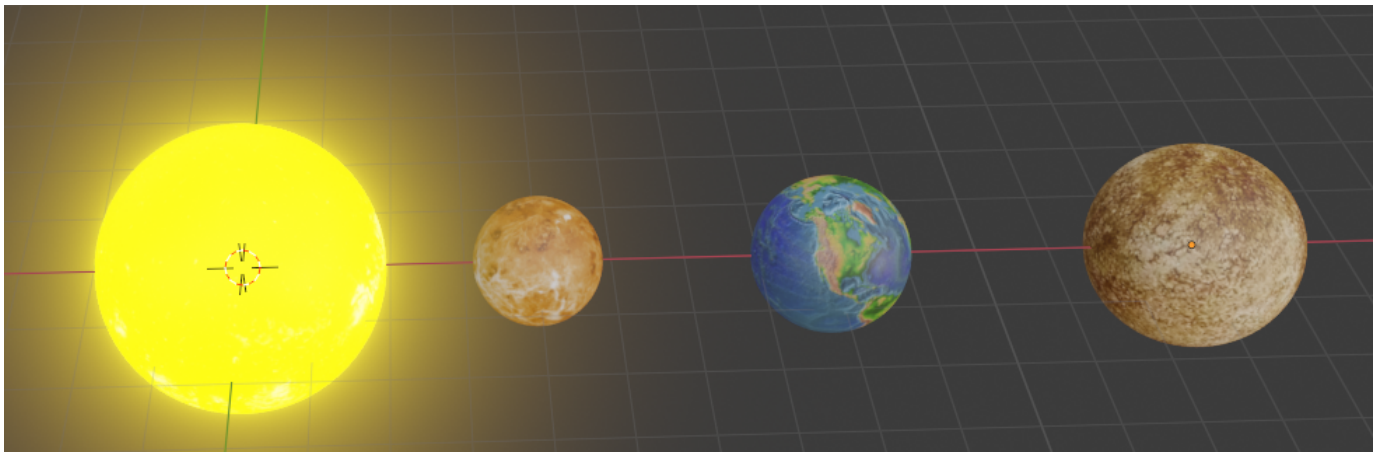


14. You will see that the sun is blooming.
15. Select the sun.
16. Go to Material Properties tab → click New.

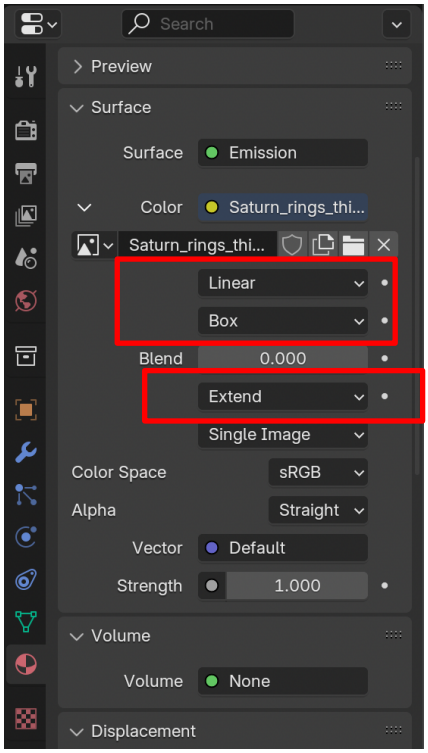
17. At the Base color → click on the small circle → choose Image Texture → click open → choose the sun texture.



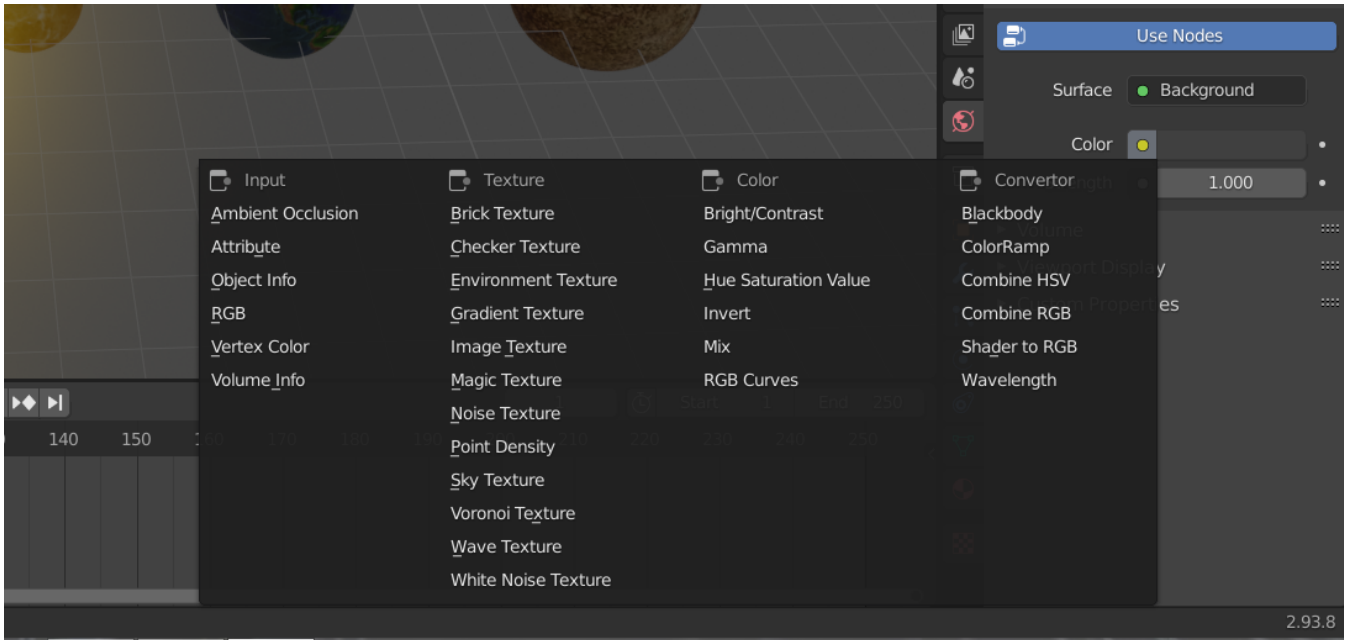
18. Select Venus planet.
19. Go to Material Properties tab → add new image texture.
20. Do the same for each planet. (From step 16)



21. For Saturn, we need to add the ring.
22. Add → Mesh → Tours. Set the tours to be around Saturn.
23. Change the materials of the ring as shown below:

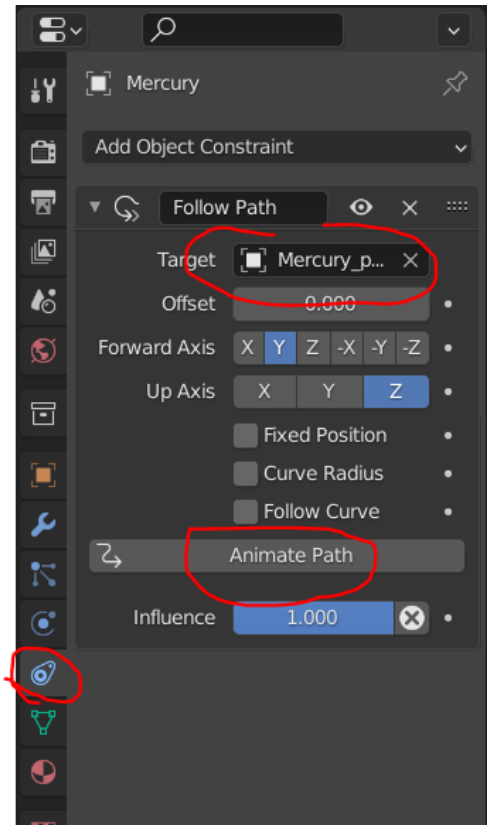


24. We need to make Saturn and its ring one object. Select both Saturn and its ring, right-click → Join.
25. Now, add an environment texture to the world.
26. Go to World Properties → click on the small circle next to color option → select Environment texture → select space texture.

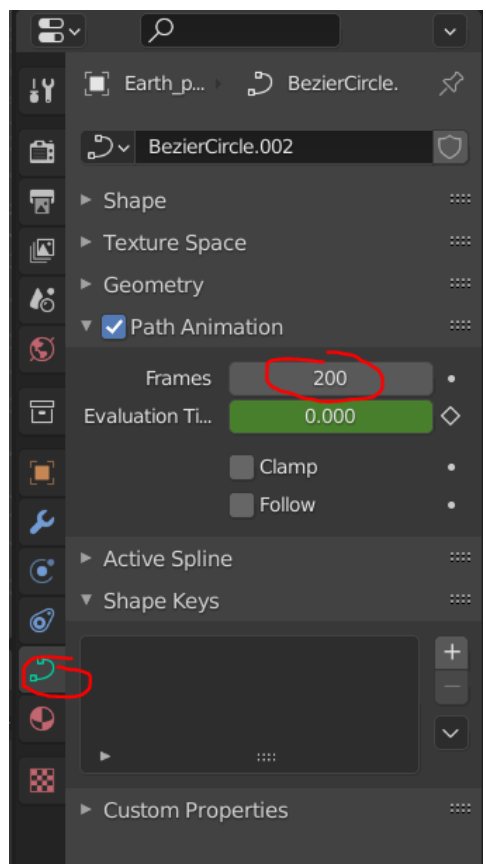


Configuring Animation Path

1. Go to z-axis view.
2. Add 3 circles, Curve → Circle.
3. Scale each circle until it interleaved with each planet, rename the circles in the Scene collection tab.
4. Select a planet, go to Object Constraint Properties tab → select follow path → from target menu, select the corresponding path.
5. Click on Animate Path.



6. To modify the timinig of each path, select a path → go to Object Data Properties tab → go to Path Animation menu → change the number of frames.



set the camera position to X = 27, Y = -25.3, Z = 19.4.