

DARK SCARAB TUTORIALS

Blender 3D: Dissolving Objects

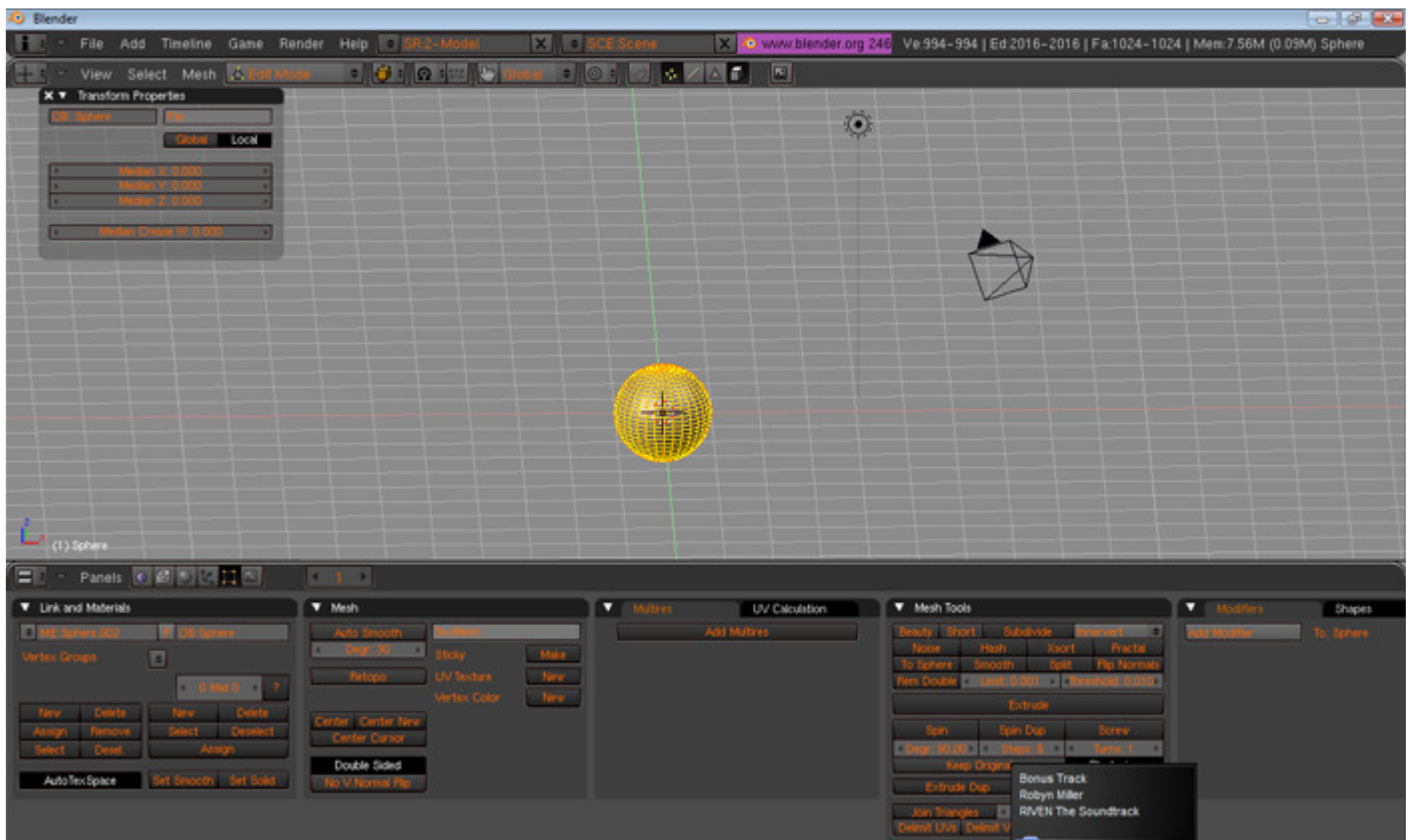
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For this tutorial I will have the worded directions along with the exact keystrokes it takes to get the step done. If you are fluent enough with Blender you may not have to look at the keystrokes line. Each step within the keystrokes line will be highlighted like this: **Example**. Arrows will indicate that you should be following a menu path.

Dissolving something for an animation is quite simple to do in Blender but looks great when it is all done. In order to make an object dissolve we are going to use particles. This allows us to do many different things when your object dissolves. In this case, I will just show you how to make a sphere dissolve and fall to the floor.

Let's begin by opening up Blender and, if you have it, delete the default cube. Go to top view and add a UV sphere. Leave the default settings for the UV sphere as they are.

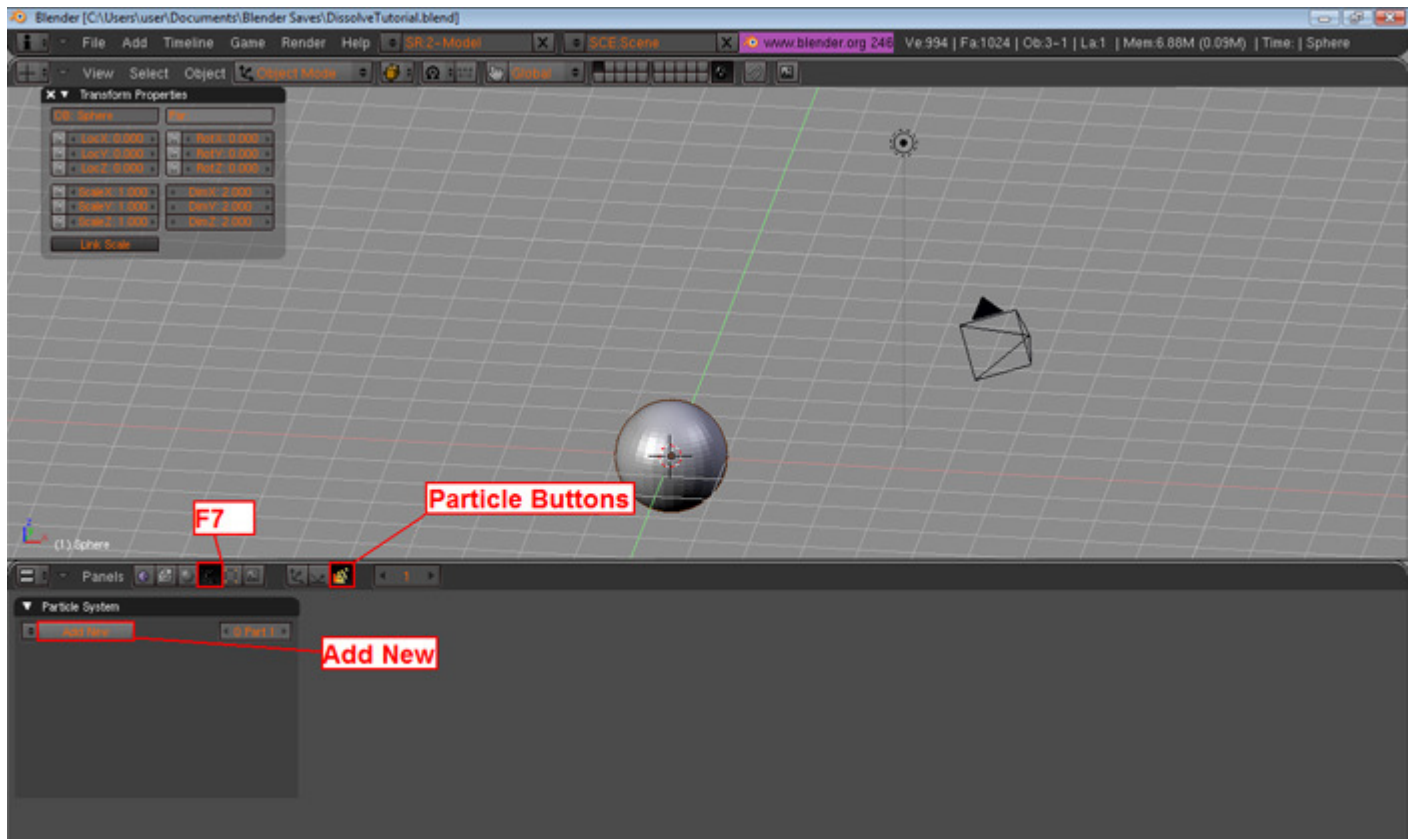
-- 7, Add → Mesh → UV Sphere



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Now that we have our sphere created we want to go into Object Mode by hitting the tab button if you are not already there. Next hit F7 and go to the Particle Buttons. When the buttons have appeared you want to hit Add New. This attaches the particles to the sphere.

-- Object Mode, F7, Particle Buttons, Add New



Now that we have added the particles to our sphere we will have to make a few adjustments so that the particles are emitted correctly. You can see all of the changes in the image below. Here is what those settings do if you don't know:

Sta: The starting frame of particle emission.

End: The last frame of particle emission.

Life: The life of each particle. This is measured in frames.

Random: This causes the particles to emit randomly from all sides of the sphere. This works the same way with any multi-faced object.

Even: This causes the particles to emit evenly. This is so that we don't have most of our particles emitting from one side of the sphere.

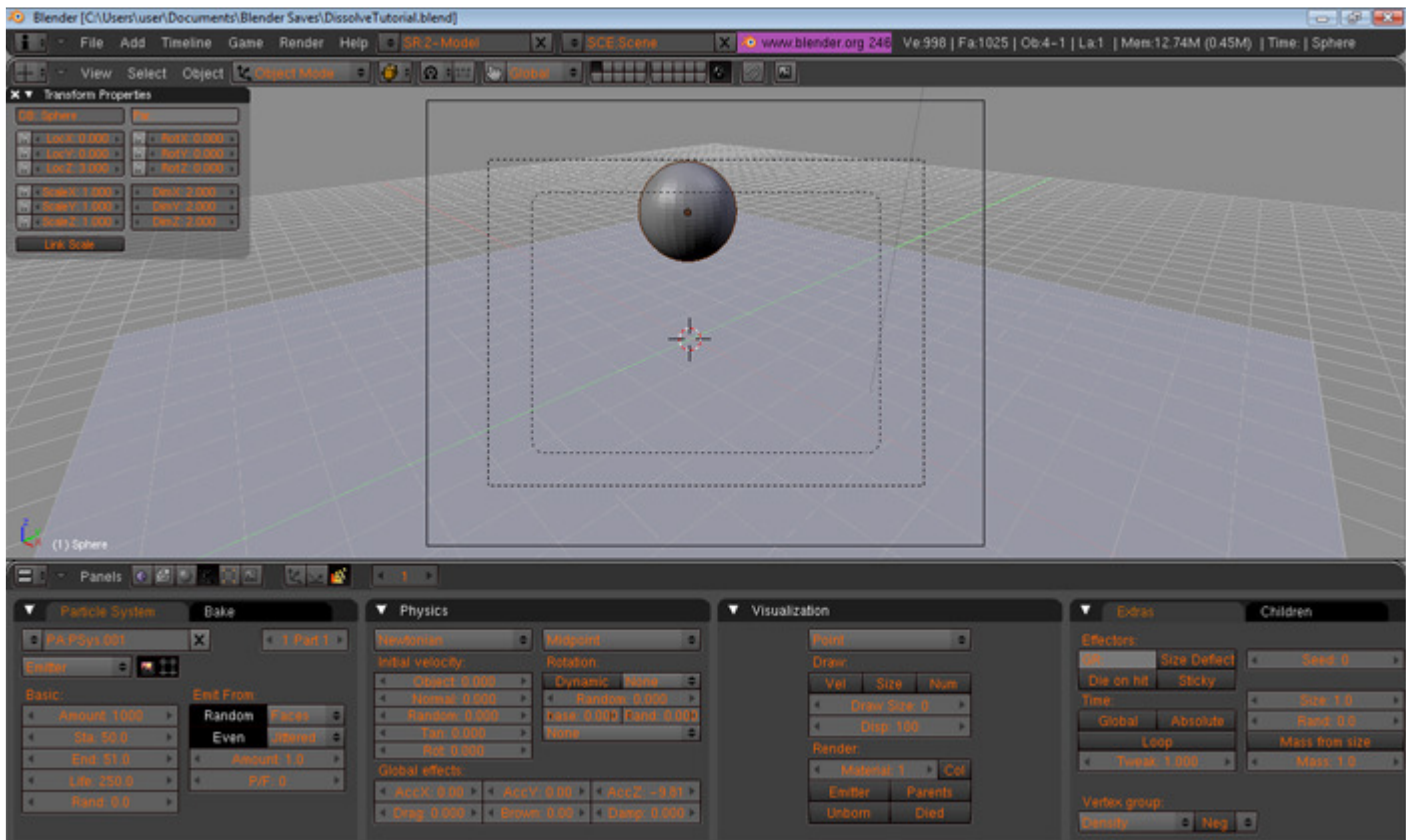
AccZ: This is the acceleration in the vertical direction. This is measured in meters per second per second. Since real gravity is 9.81 meters per second per second we want this value to be the same in the down ward direction, or negative.

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Now that the particles have been set up, we can add the floor to our scene. Go to the top view and add a plane. In order for it to stop all of the particles we must make it larger, so skew it by about 10. Now the plane goes right through the middle of our sphere. Select the sphere and move it vertically by 3.

-- 7, Add → Mesh → Plane, S, 10, Tab (Object Mode), Select the sphere, G, Z, 3.



You can test your animation out by hitting Alt-A. Wait a bit until it gets to slide 50 and your particles will come out of the sphere. As you can tell the particles go right through the plane. In order for the plane to stop the particles we have to set up an obstacle. Select the plane and then go to the Physics buttons (on the left

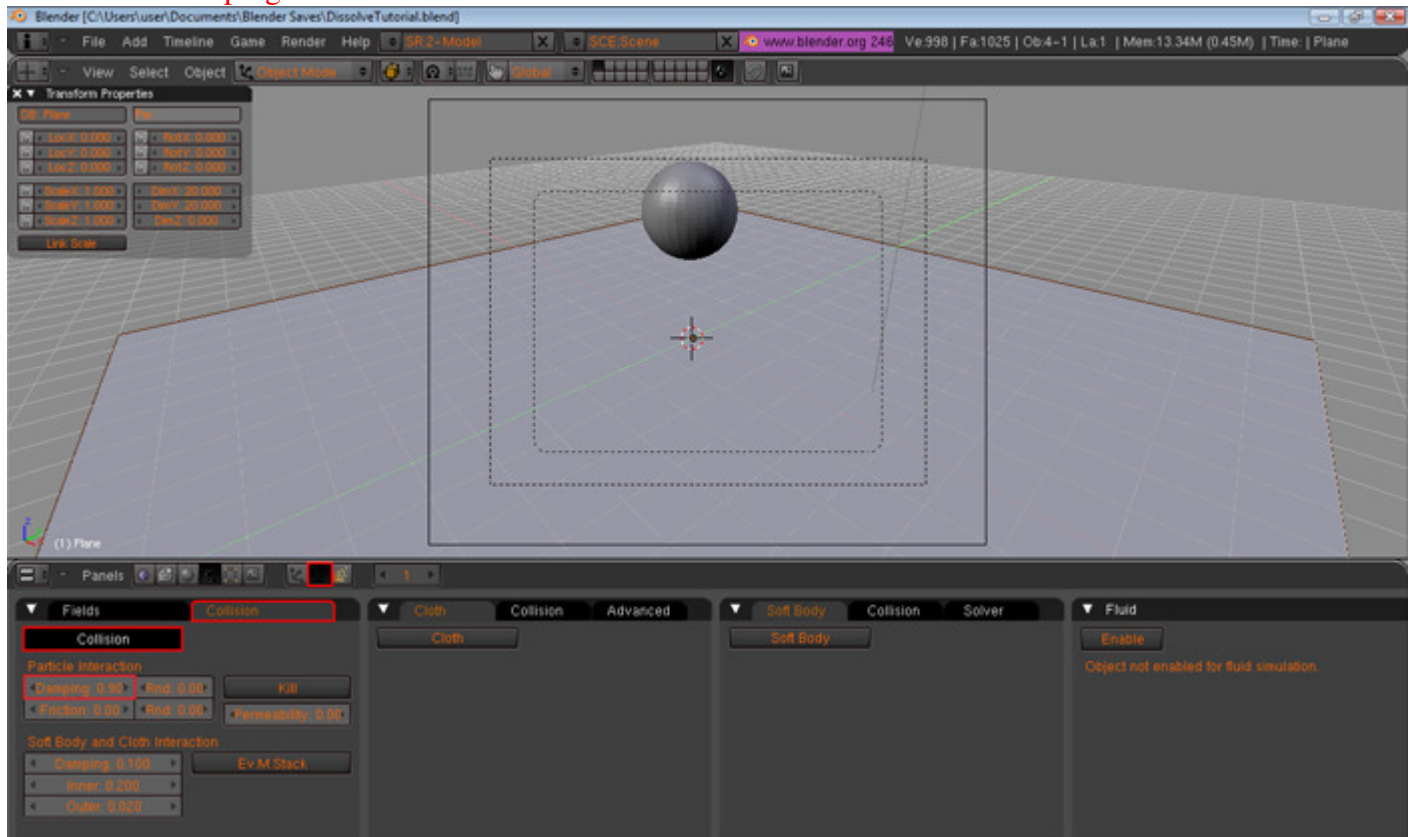
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of the particles button). In there we want to go into the Collisions tab and turn on Collision. Now the particles will not go through the plane.

-- Select the plane, Physics buttons, Collisions tab, turn on collisions.

Another setting to change is the Damping. I have it set to 0.90. This essentially changes the amount of bounce the particles have when they hit the plane. A setting of zero will make it very bouncy while a setting of 1 will have no bounce.

-- Set Damping to 0.90



Now it is time to move on to the animating portion of this. Change your Blender setup to SR: 1- Animation. In order to make the viewer think they are watching the sphere dissolve we must have a sphere visible before frame 50 and then at frame 51 the sphere must be gone. If you render a shot at frame 1 you will see that there is no sphere to be seen. The simple fix is to add another sphere and move it up by 3.

-- 7, Add → Mesh → UVSphere, G, Z, 3.

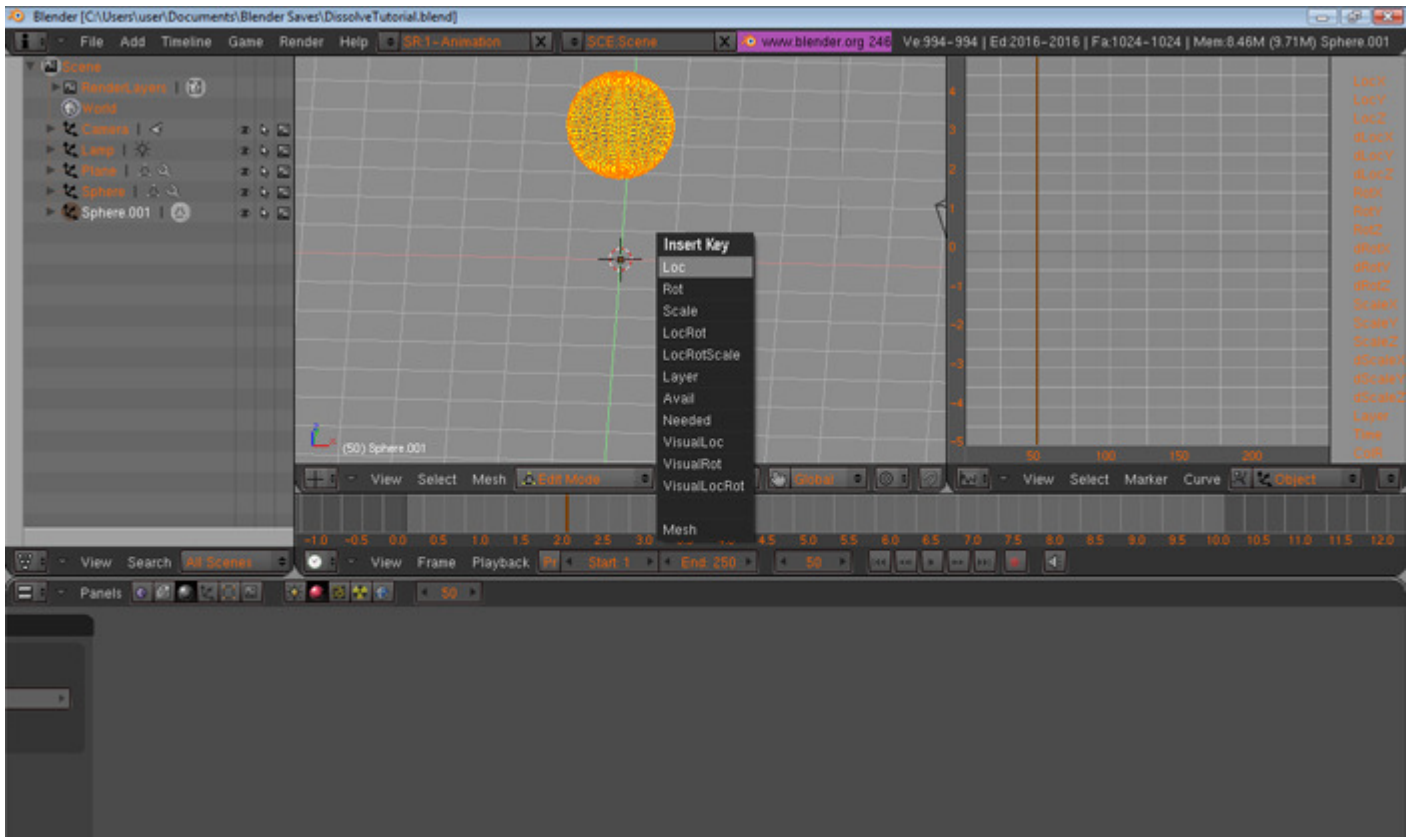
Now we need to make it disappear at frame 51. First go to frame 50 and with your cursor in the 3D viewing window hit I and then select 'Loc'.

-- Go to frame 50, select our new sphere, I, Loc

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Now go to frame 51. Move the sphere in the X direction by 20. This ensures it is out of sight. Hit I and select Loc again.

-- Go to frame 51, select the new sphere, G, X, 20, I, Loc.



Before animating our scene we should shorten the length so we do not have to wait for it to render for too long. Let's bring it down to 125. This is in the timeline window marked 'End:'. Now go to the animation settings by hitting F10 and then all the way to the right you will see all of the output selections. Click on 'Preview' and change the output format to AVI Raw. (The default is jpeg)

-- Change End: on the timeline to 125, F10, Click Preview, select AVI Raw.

Now you can hit the huge ANIM button. Once your animation is done rendering you can 'Play back rendered animation'.

If your scene does not look too nice, or it is hard to see the particles I suggest adding a material to the particles and change the color.

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