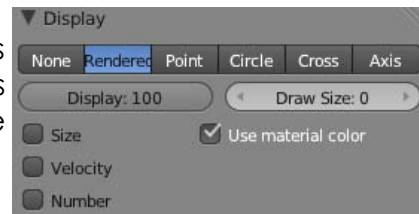


Chapter 13- Particle Systems and Interactions



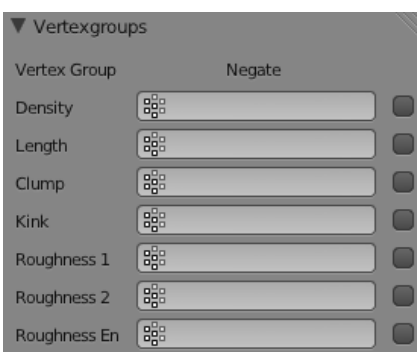
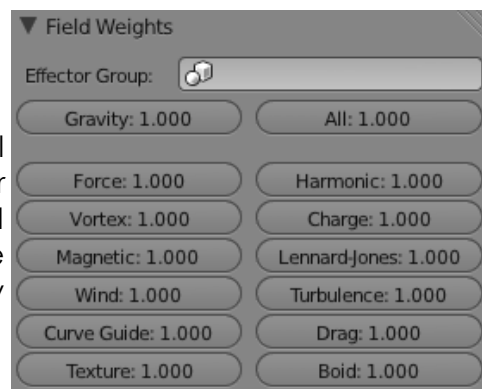
The **Render** panel provides setting for what the particles look like rendered (F12) or animated. If the *Emitter* button is not checked, you will see the particles and not the mesh that they are emitted from. You can also chose to see *Unborn/Died* particles. Particles can also be represented different ways such has *Halo* (material settings), *Line*, *Group*, or an actual *Mesh* Object.

The **Display** panel basically controls how your particles look on the screen. You can have them display what is actually rendered, Points, Circles, Crosses and also the percentage of the particles (helps with work flow).



In the Emission panel, you set the amount of particles you want for your scene, but by setting the amount to a high setting (especially for hair or grass), you can greatly increase render time and slow down working on screen. The **Children** panel can help solve these problems. Basically, children are copies of a given particle so calculations only need to occur for each particle, then copies are made and grouped around that particle to make the scene more full. You can set the clumping, randomness, amount of children per particle and shape.

The **Field Weights** panel allows you to set useful features like *Gravity*, *Wind* and *Turbulence*. For example, if you are making a fire effect, You would want gravity at 0 and give “Z” an amount in the *Velocity* panel. For fireworks, only a slight gravity would be needed.



Vertex Groups can be used to control many aspects in particles. You can develop weights for density and other things. We will look at using groups later in this chapter when we use particles for hair and grass.