

Duration: 4 min

The Pieces

The Animation

The Reflection

Computer Graphics Final – Fire Animation

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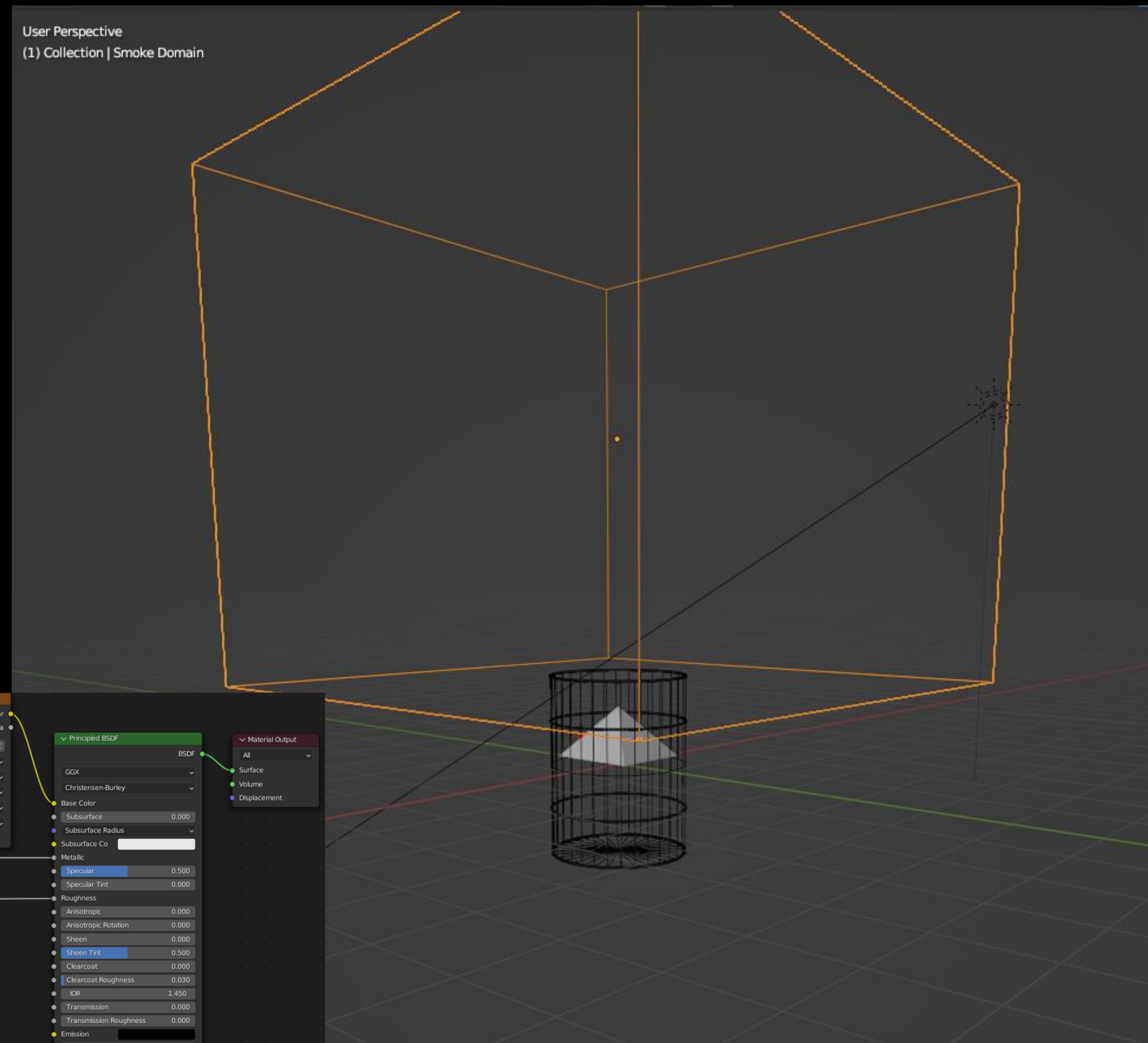
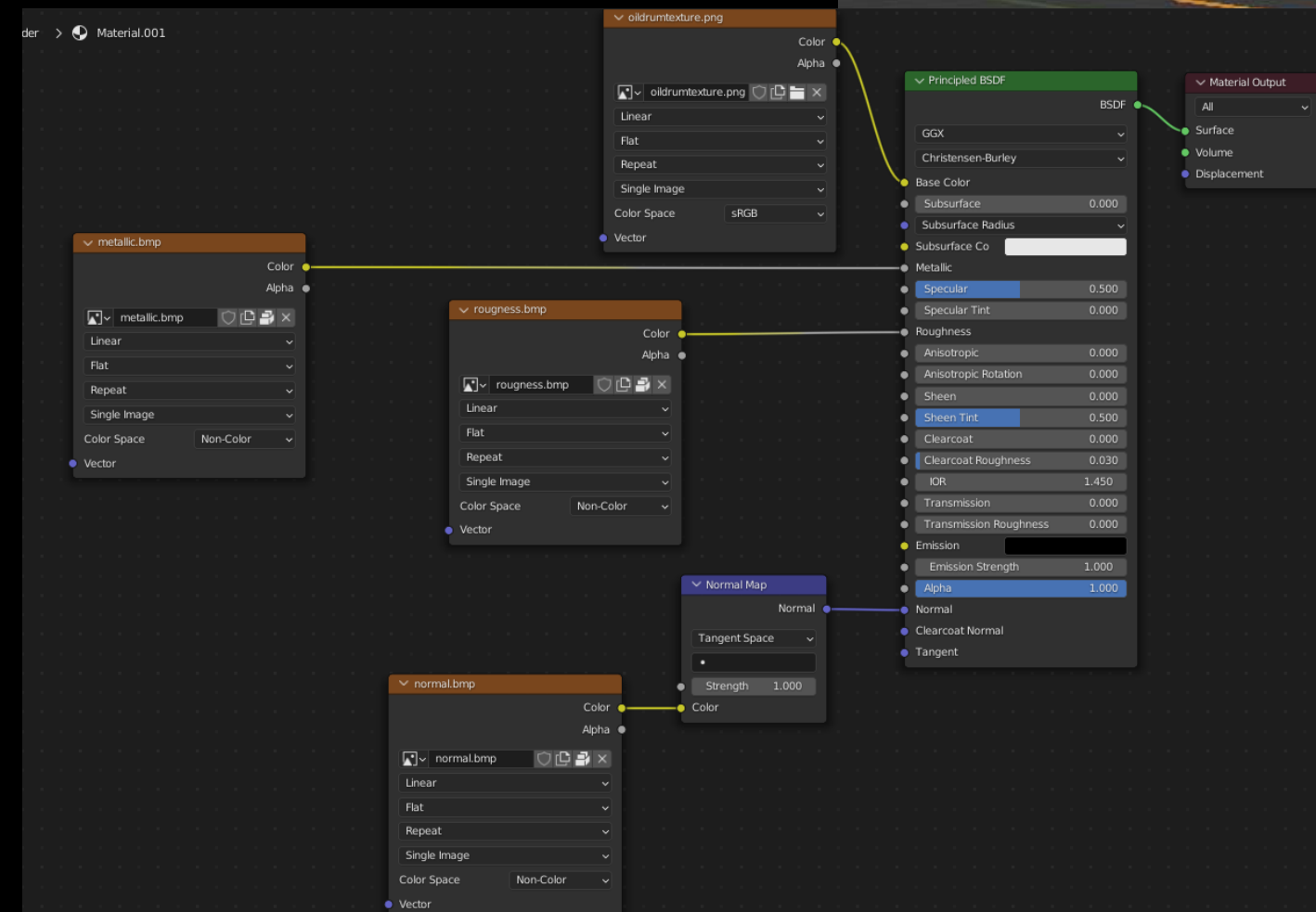
Fire and...

Fire is cool and all, but a good fire is the cause of *something* burning

The few “easy” steps to creating an oil drum..

1. Cylinder
2. Change to a triangle fan cap fill
3. Cut it in half and mirror the only remaining half for... half the work!
4. Edges, bevel tool, bevel tool, bevel tool...

Originally settled for a simple oil drum, realized that I there's other kinds of waste in the world, ones that theoretically burn cooler



Burning Nuclear Waste?!

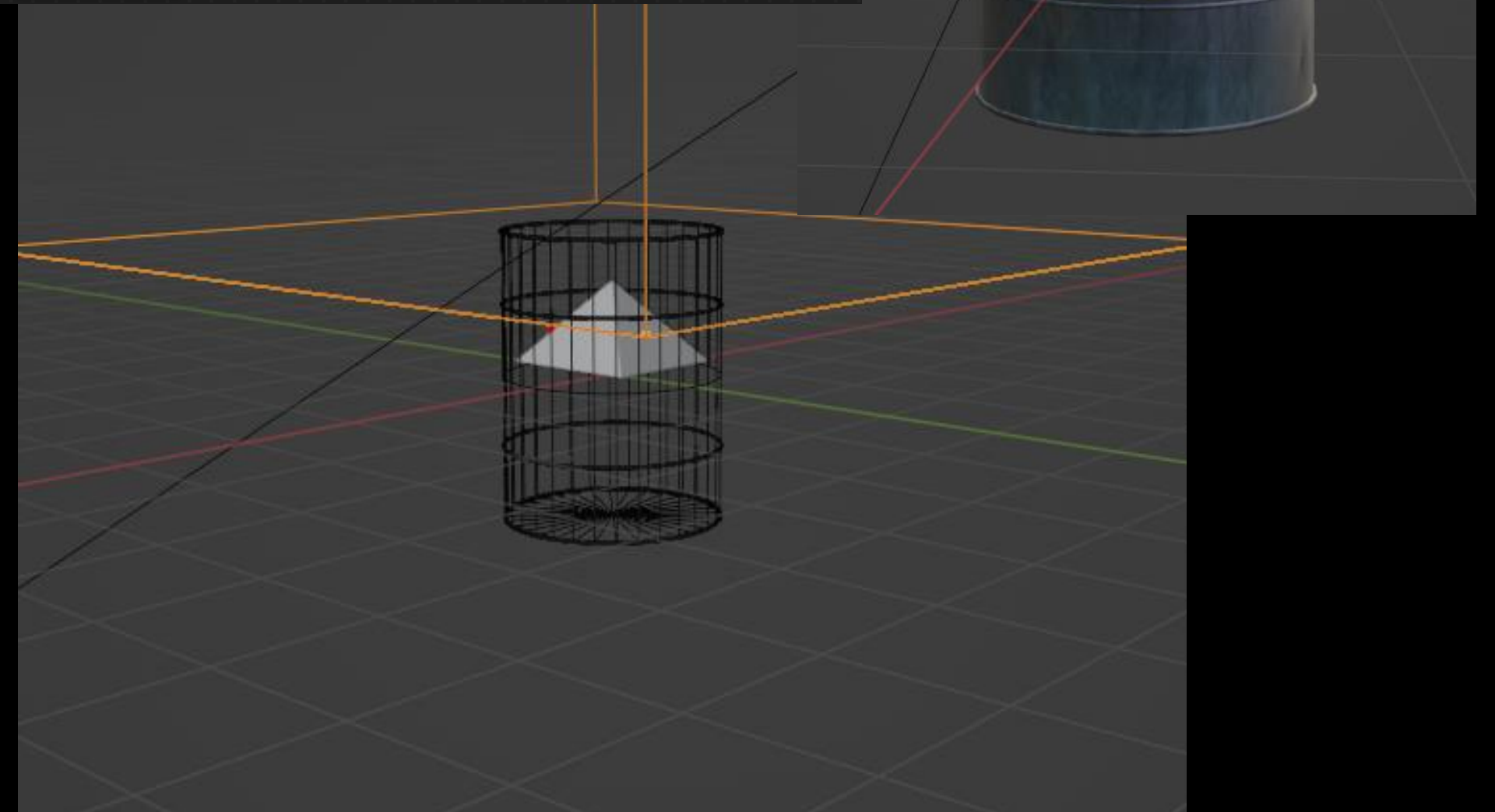
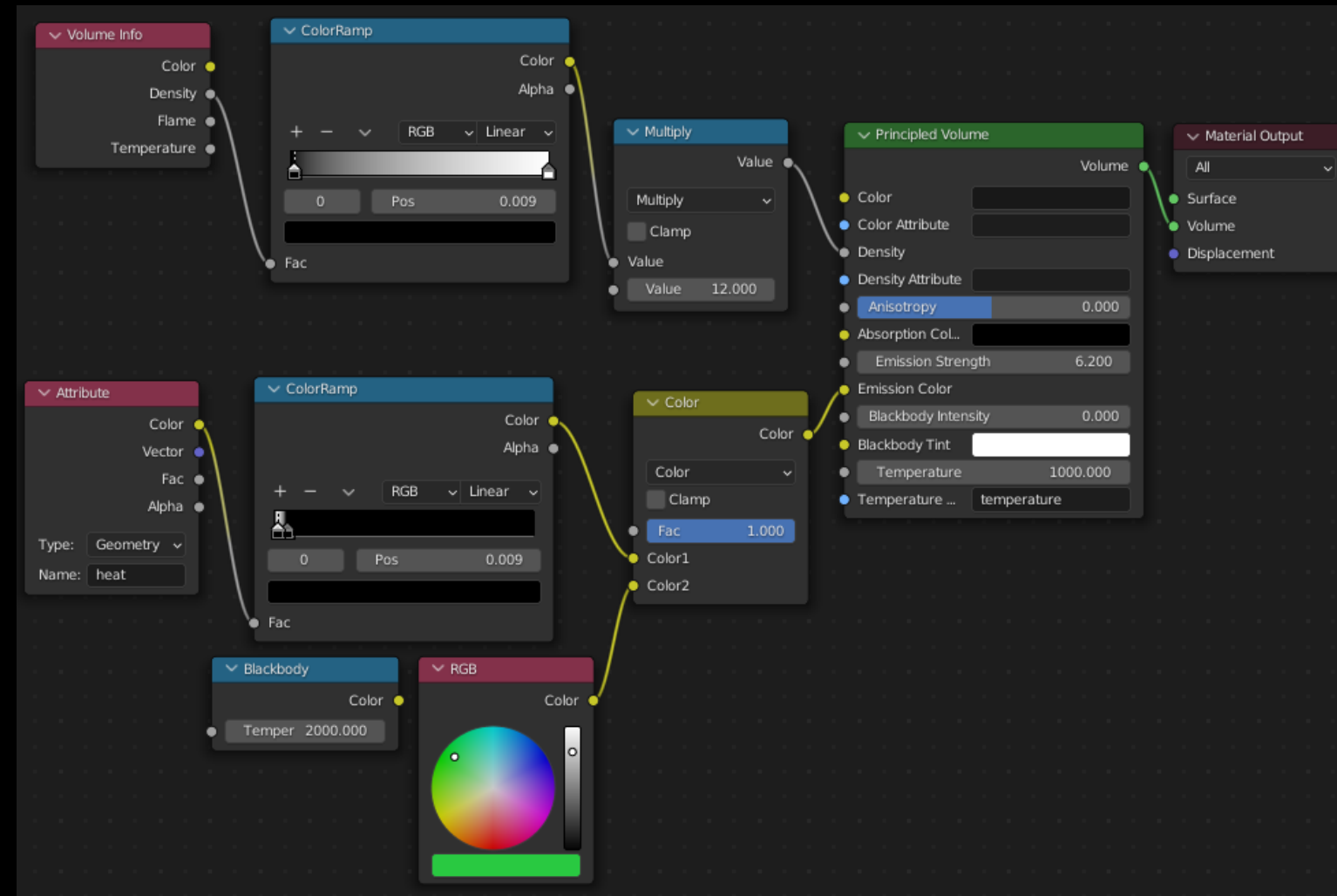
Particle Animation Saves The Day!

By using a modified cube, particles are emitted from the faces of the cube

To further randomize particle spread, the emitting cube is placed low enough for the occasional particle out of 4000 to bounce off the inside on its way out, changing its trajectory

After going through the process of setting up the smoke domain, particle properties, and cylinder properties, it was time to bake.

After running through the baking process way too many times (so many lost hours), there was finally a good enough run to move into adding the shader nodes seen above, changing our fire's properties from colorless gas to nuclear.



The Initial Render



The Better Render



The Animation



Reflection

Time Spent: Too Much

With the final bake + render taking roughly just over 24 hours (I don't know why either), I wish I had the capacities to raise the particle/smoke resolution from 128 to 256

Additionally, the time it takes the fire to "explode" compared to dying out should be much faster, something that can be looked at in my journey moving forward

I'm extremely happy that this is a project that I took on, despite not having a whole lot of direction in the beginning. Being able to creatively adjust was fantastic

Posting a few more digital trees for all the digital pollution caused by this project

Thank You

