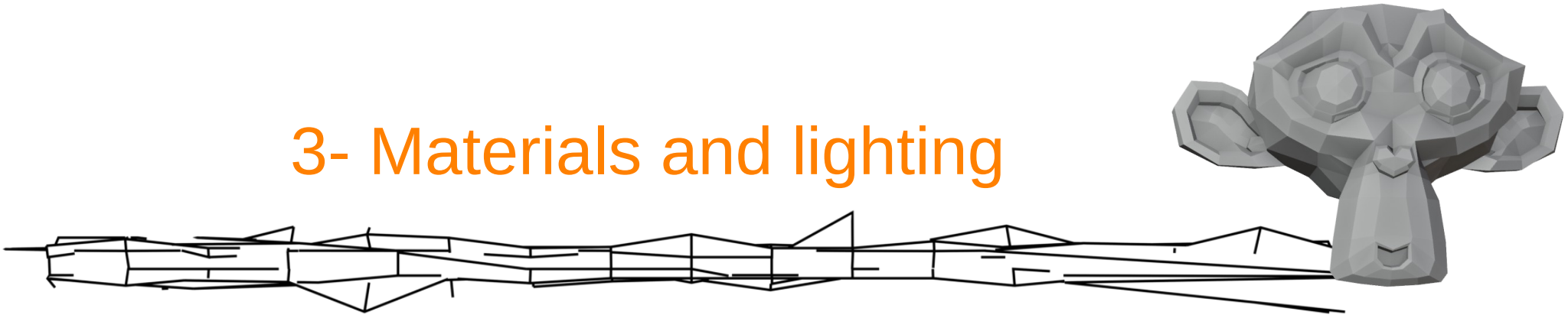
3- Materials and lighting

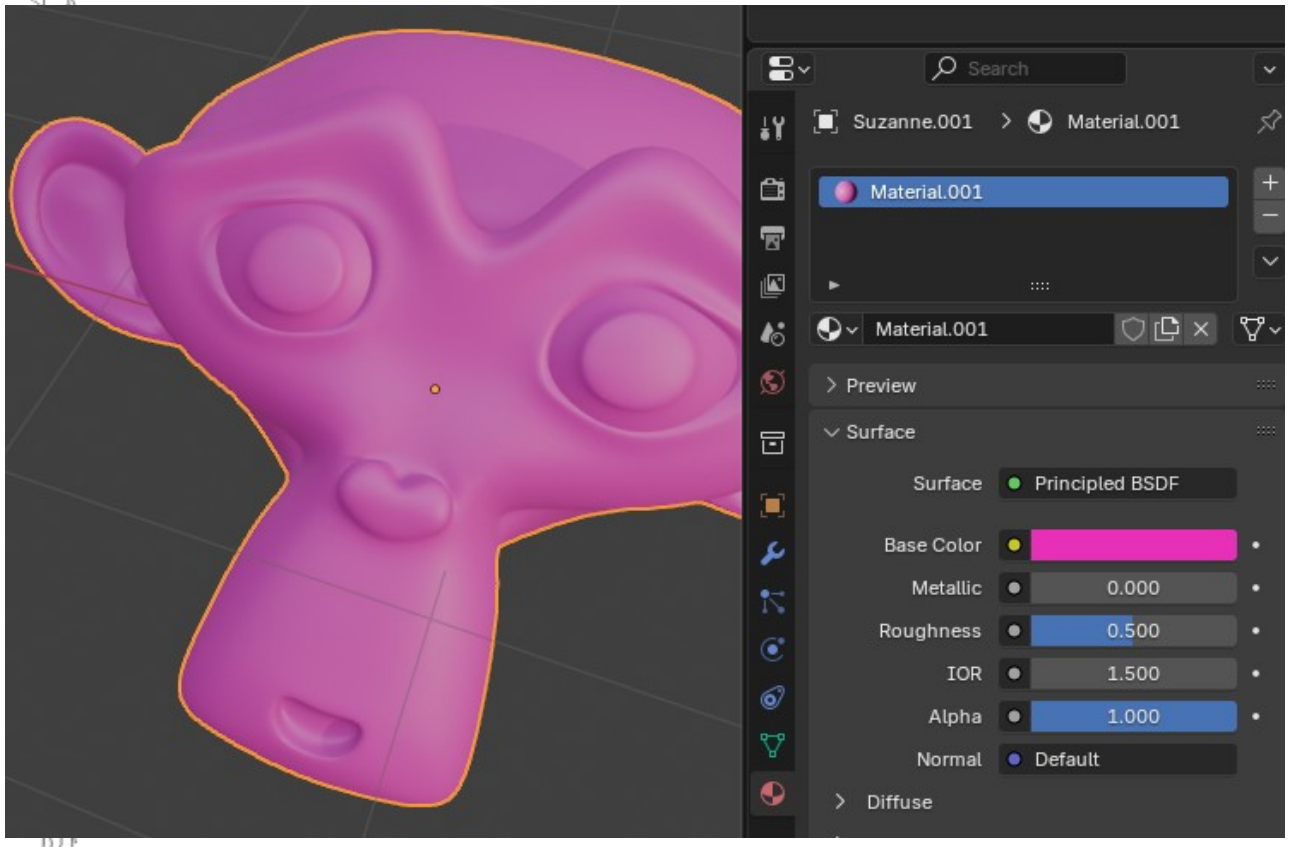


Ordu, 12.05 – 16.05 2025

Outline

- 1 material to 1 object
- 2 materials to 1 object
- Principled BSDF
- Useful tips
- Special shaders

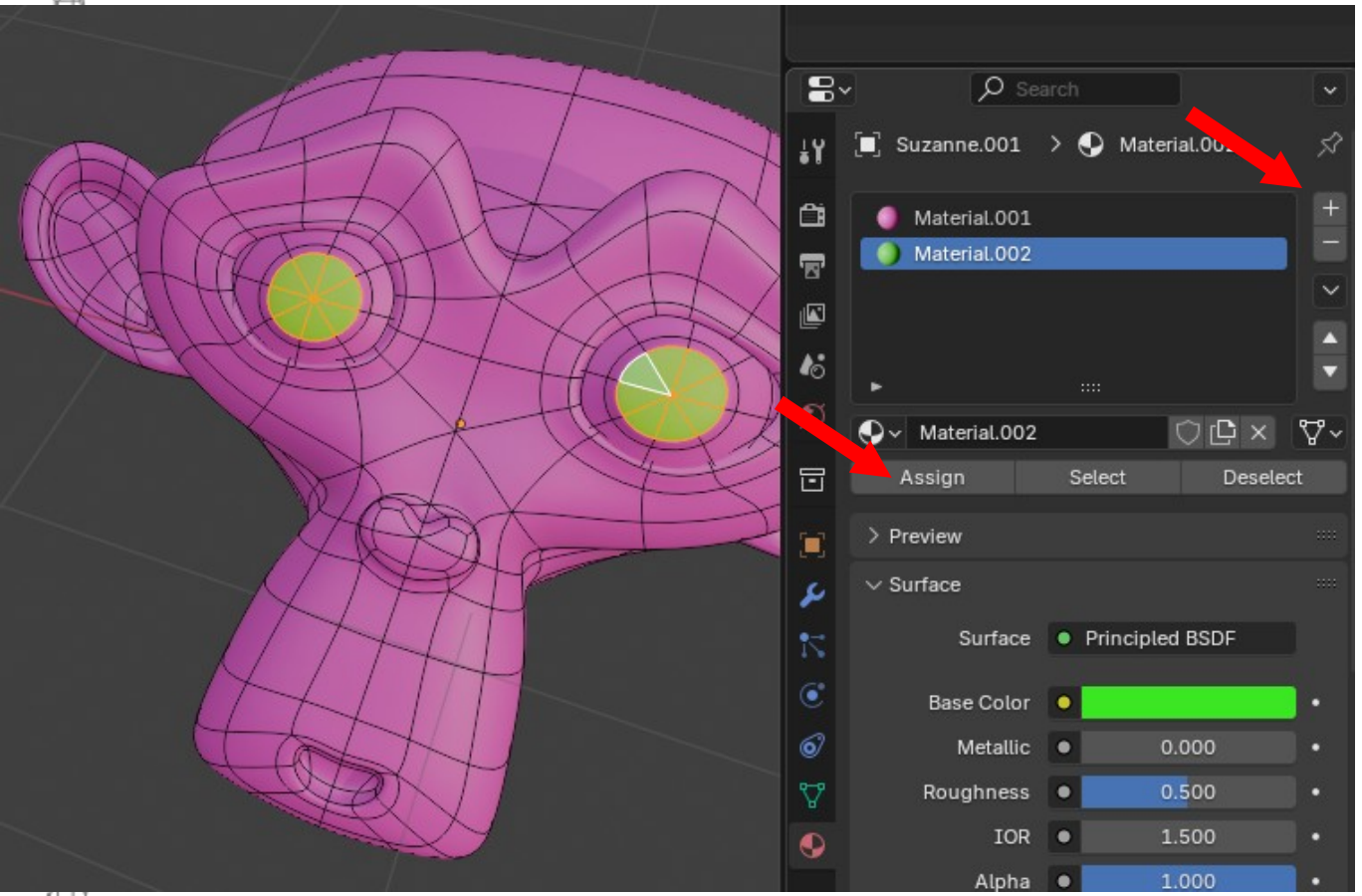
1 material to 1 object



- Select object

- Go to Material options and create a **New** material

2 materials to 1 object

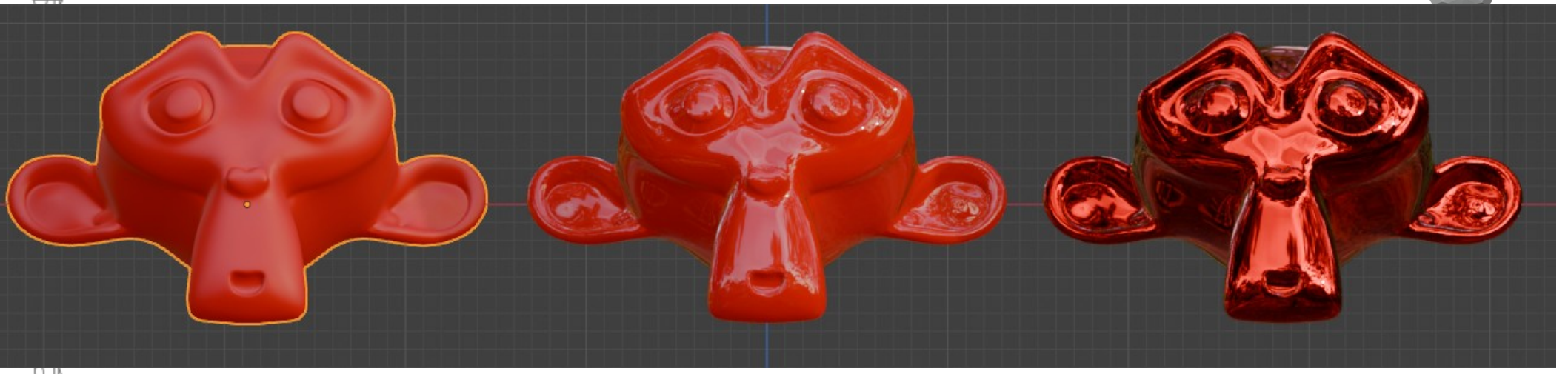


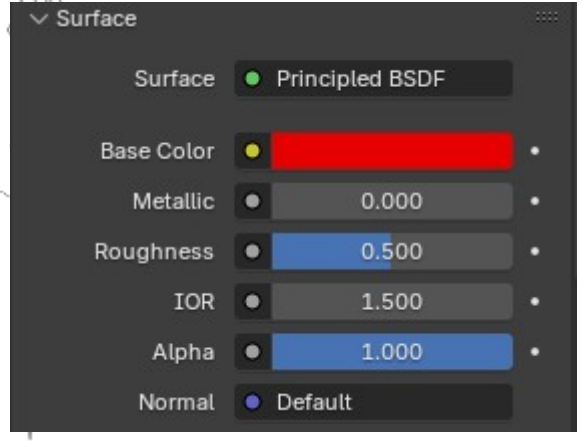
- Add one material to object

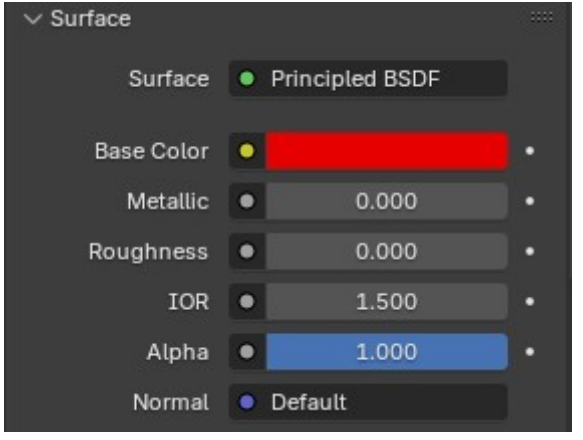
- Create a **New (+)** material

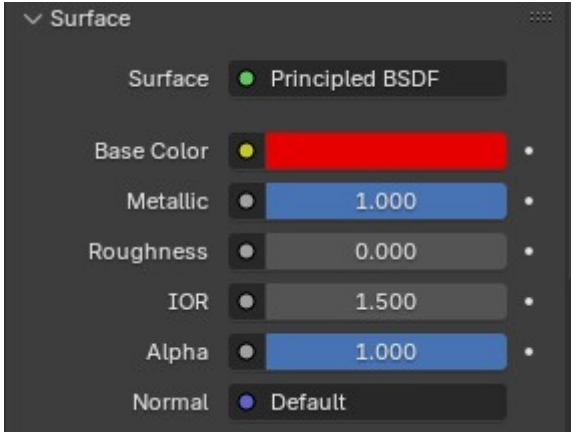
- In Edit Mode, select faces and click **Assign** button

Principled BSDF basics









Useful tips

- Principed BSDF main values:

  Base Color (Overall color of the material)

  Roughness (roughness of the surface for reflection and transmission)

  Metallic (blends between dielectric and metallic)

  IOR (Index of refraction specular reflection and transmission)

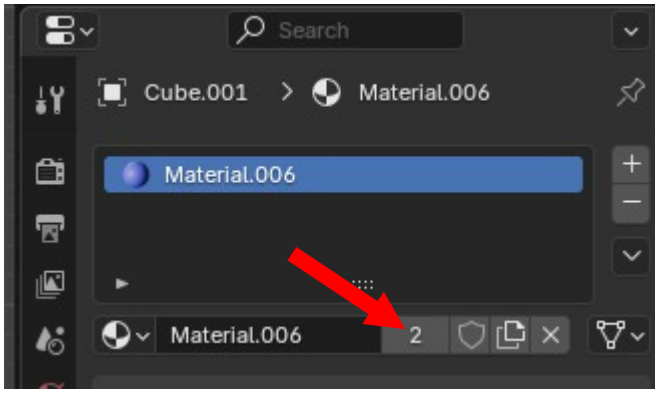
  Alpha (Controls the transparency)

  Transmission (for water and glass)

  Emission (for light emitting objects)

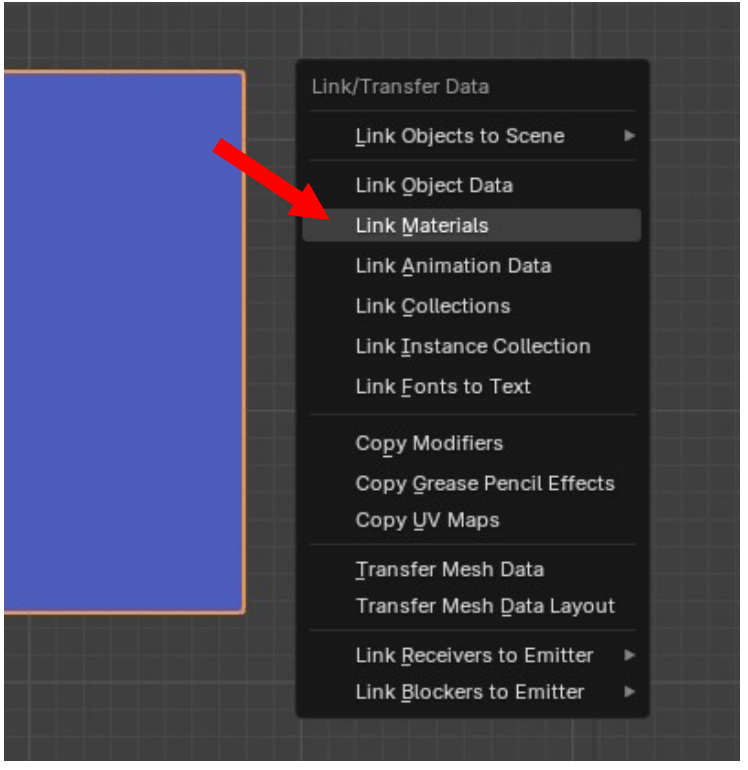
Useful tips

- One material can be used by many object. Number indicates how many objects are using this material.
- If number is clicked, a new material with same values is created

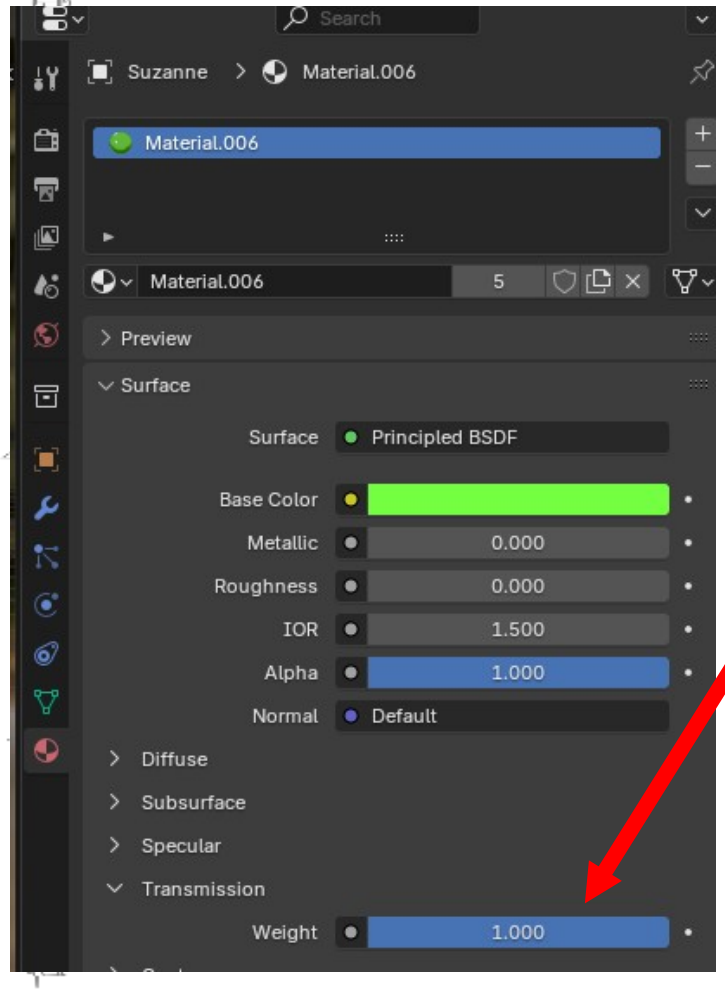


To copy a material to several objects...
- First select objects. Last selected object is the object to copy material from.

- Press **Ctrl+L** and select Link Materials.



Special shaders – Glass/water (EEVEE)

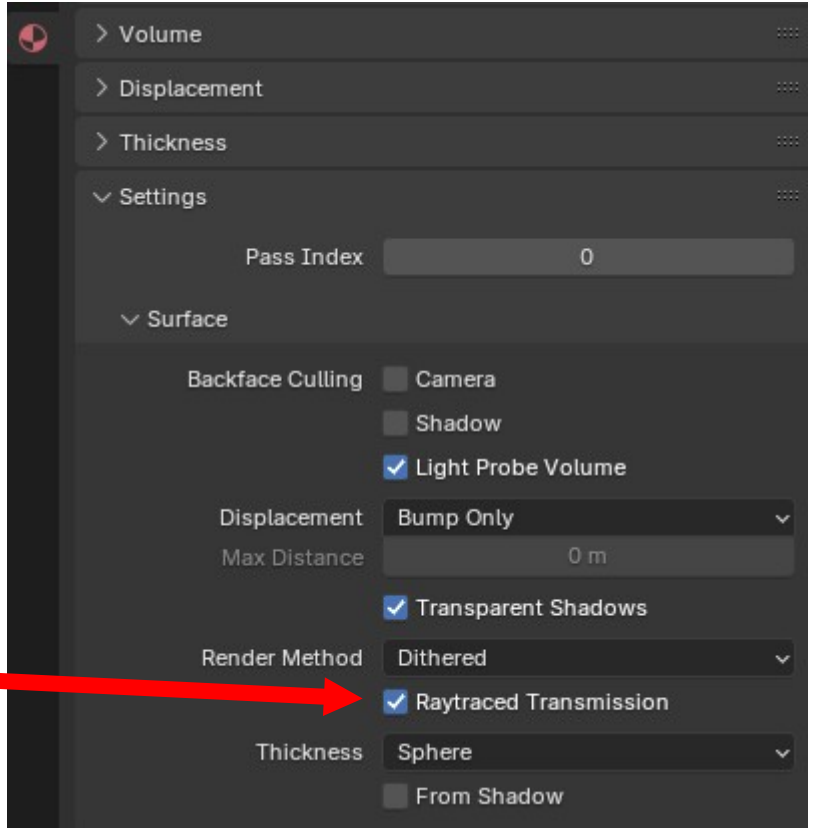


Choose **Base Color**

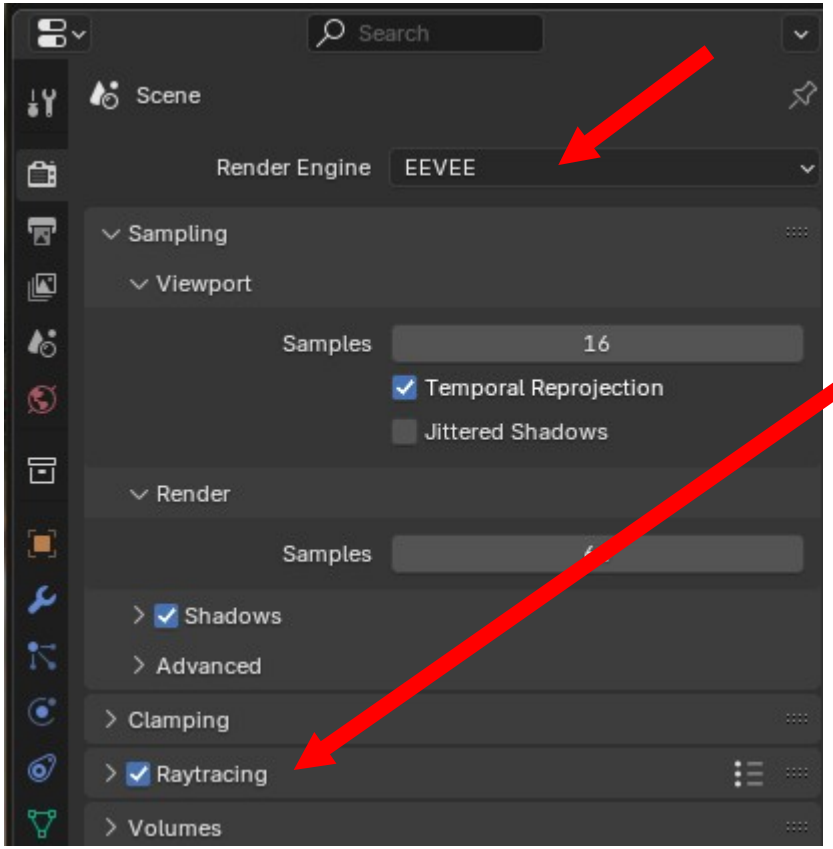
Choose **IOR**

Increase **Transmission** Weight

Check **Raytraced Transmission**



Special shaders – Glass/water (EEVEE)



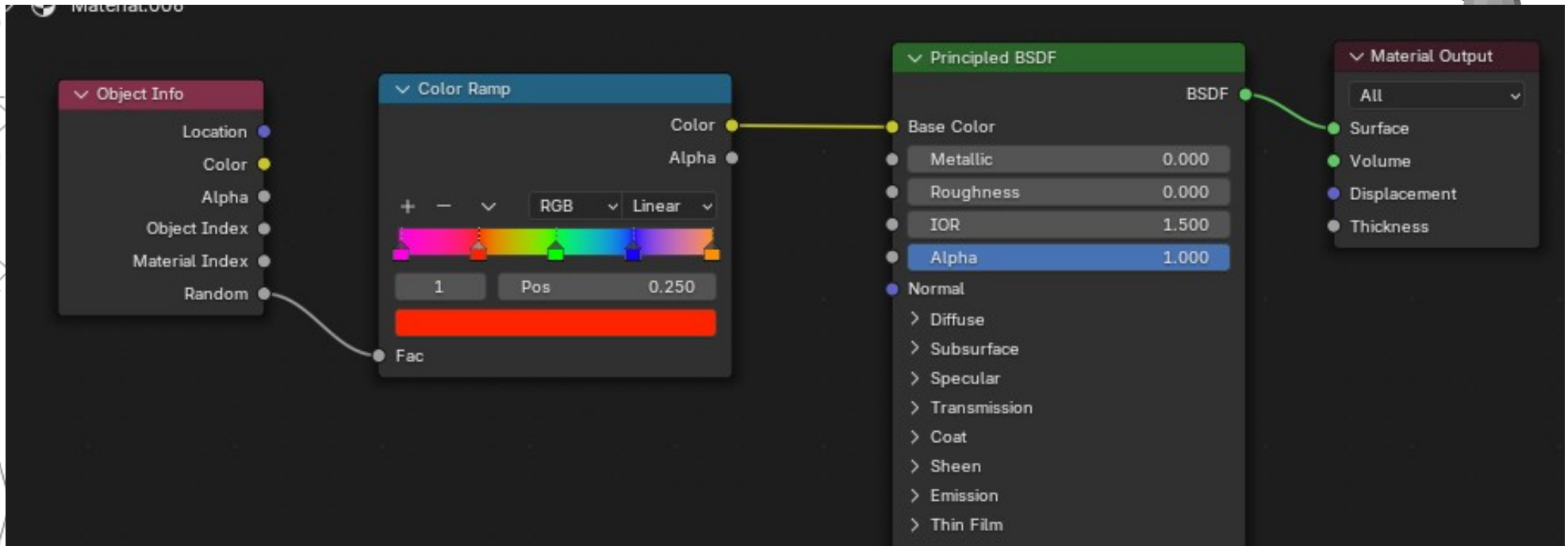
In render engine (EEVEE) settings,
check **Raytracing**

TIP Cycles doesn't need this settings, you can just use Glass Shader, but rendering is very slooooooowwwwwww

Use the Shader Editor

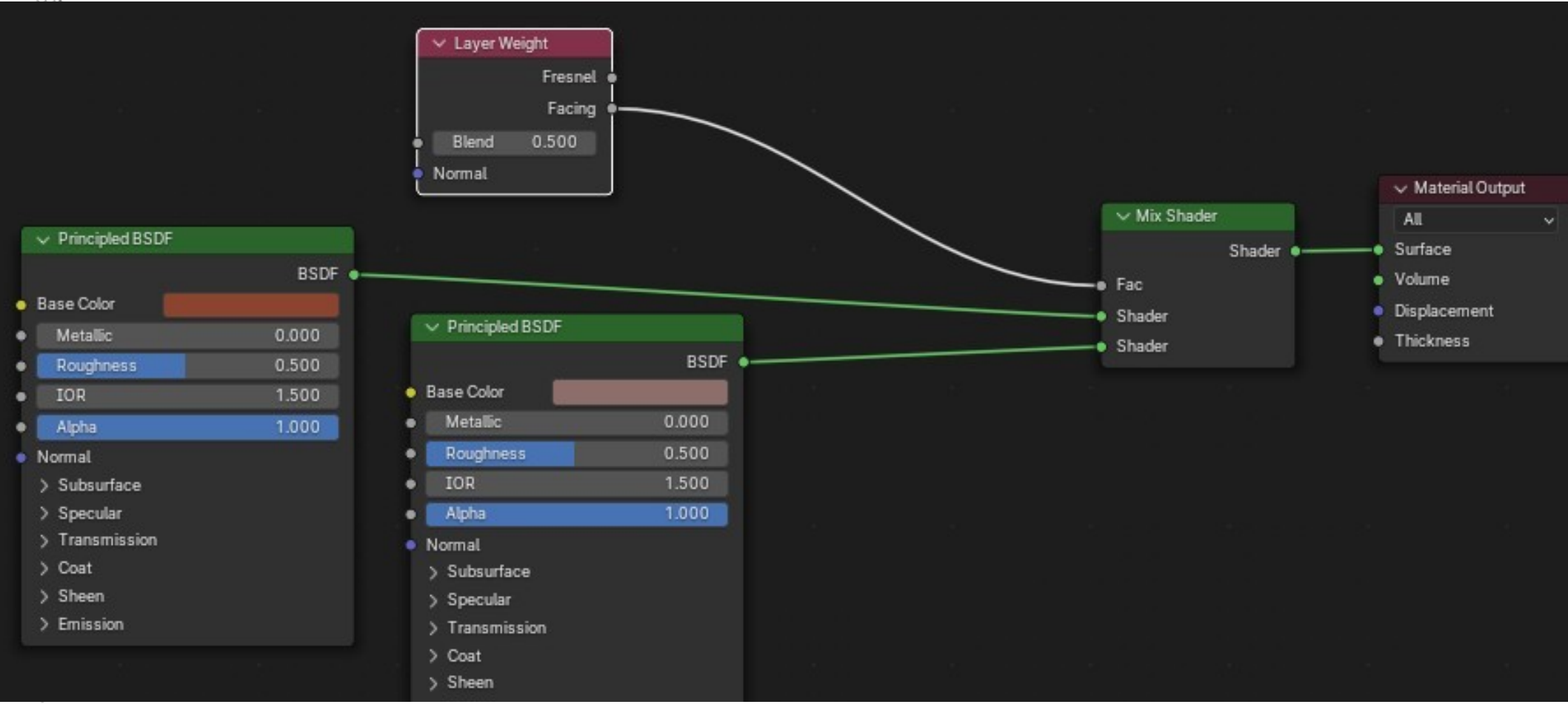
Shader Editor is your friend!

Special shaders – Random color

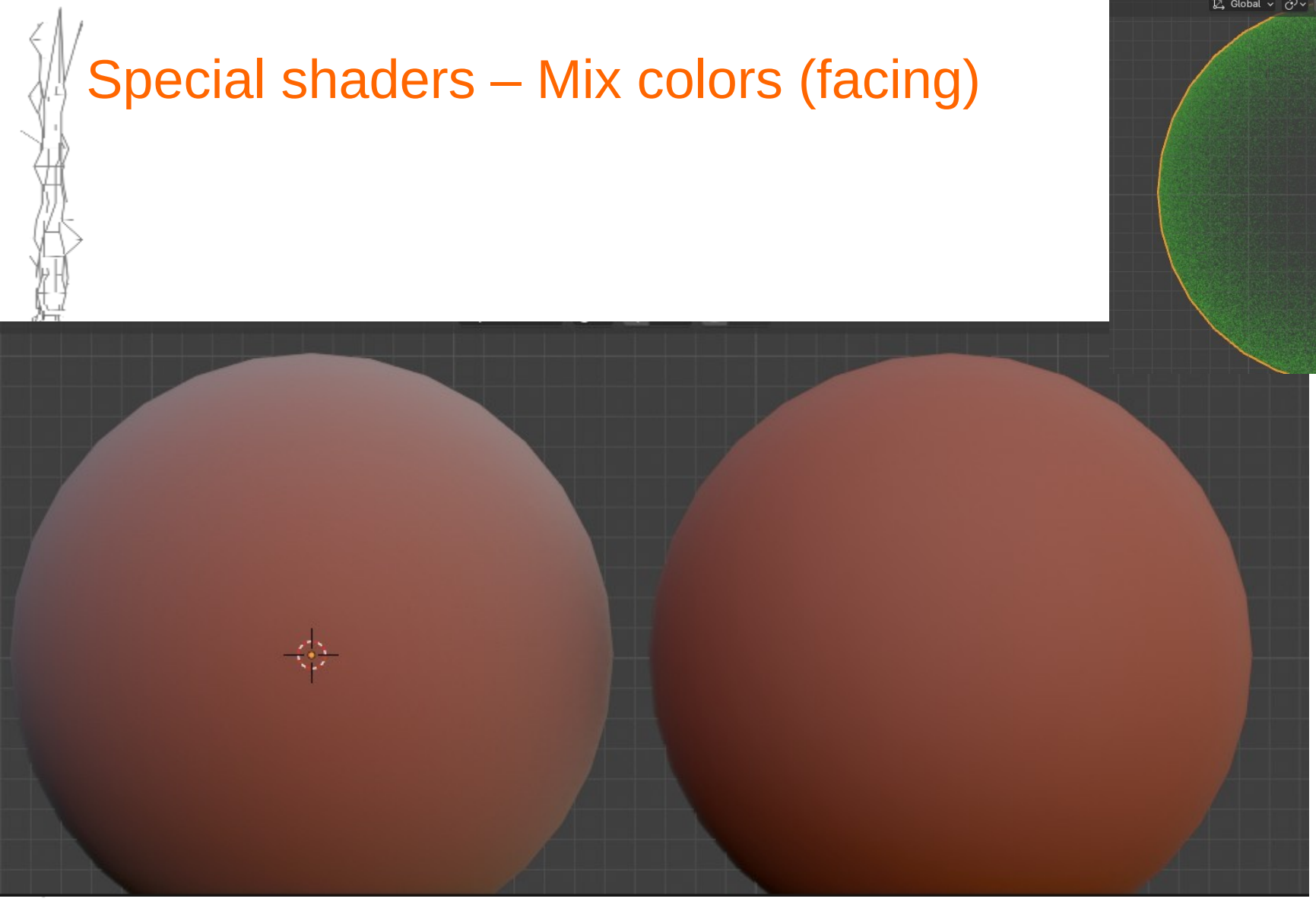


Use **Object Info** and **Color Ramp** nodes.

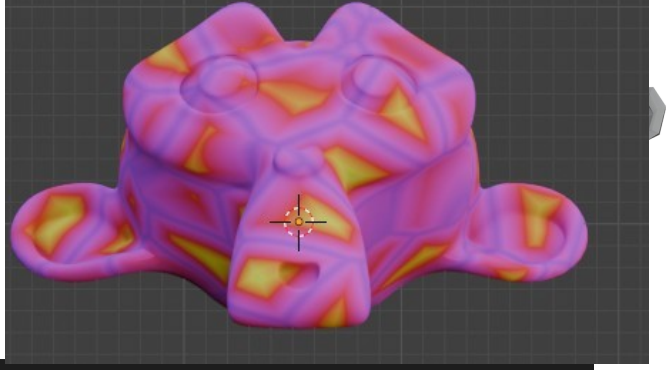
Special shaders – Mix colors (facing)

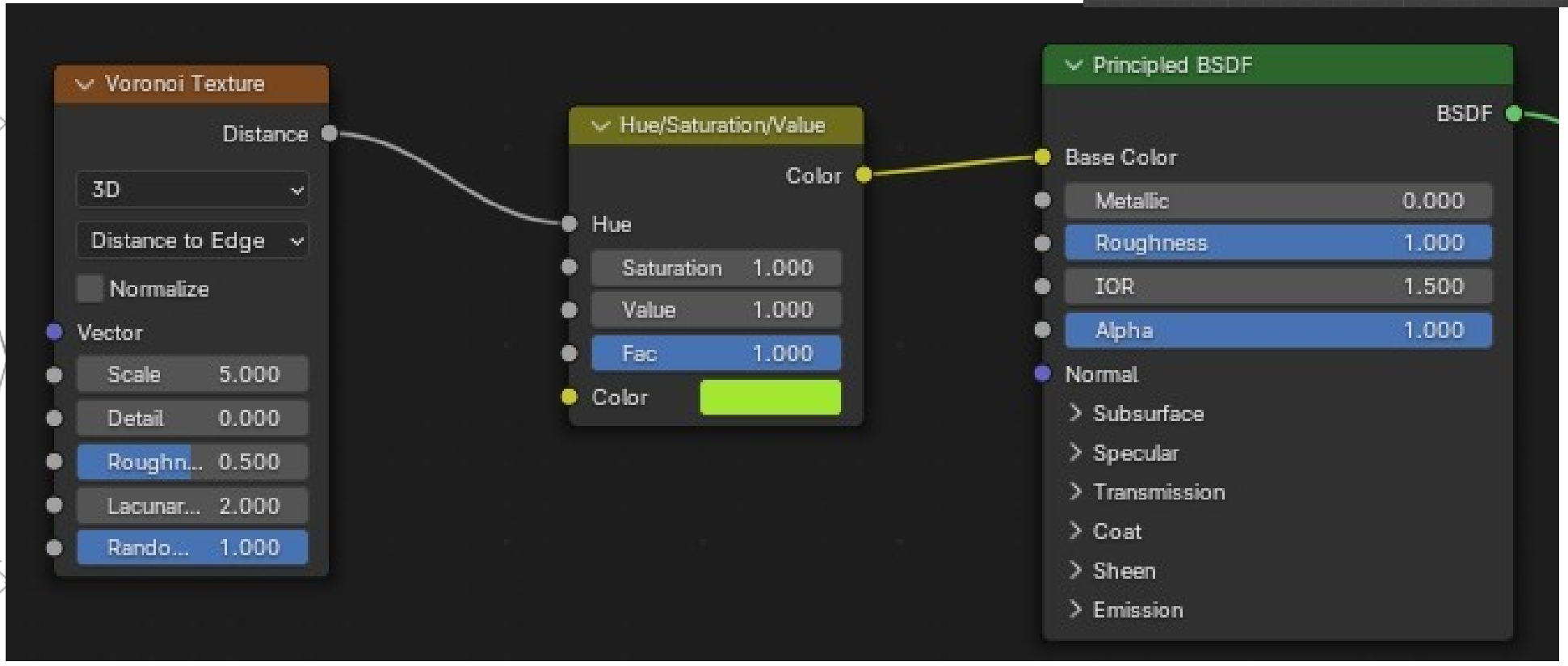


Special shaders – Mix colors (facing)

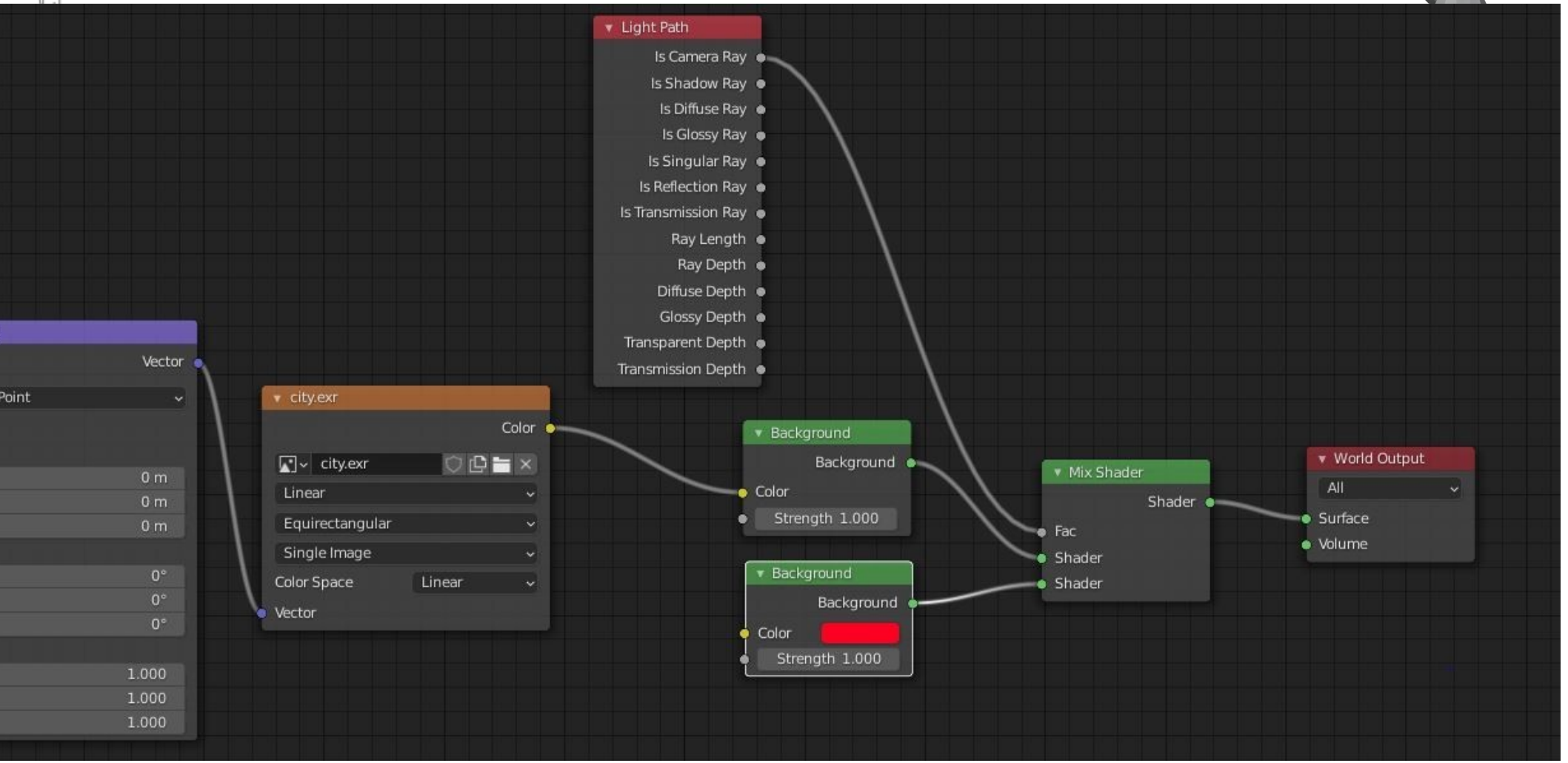
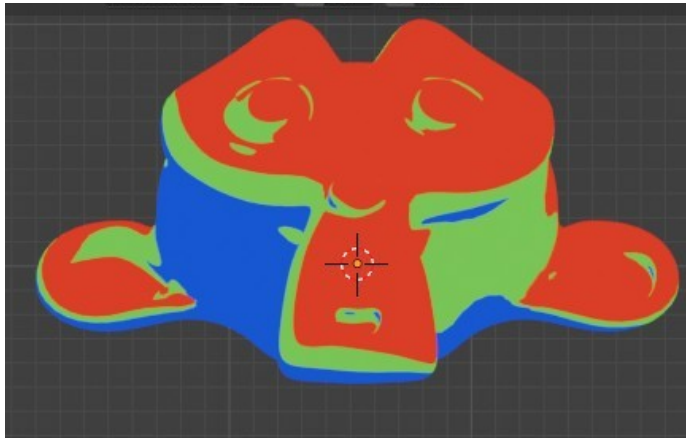
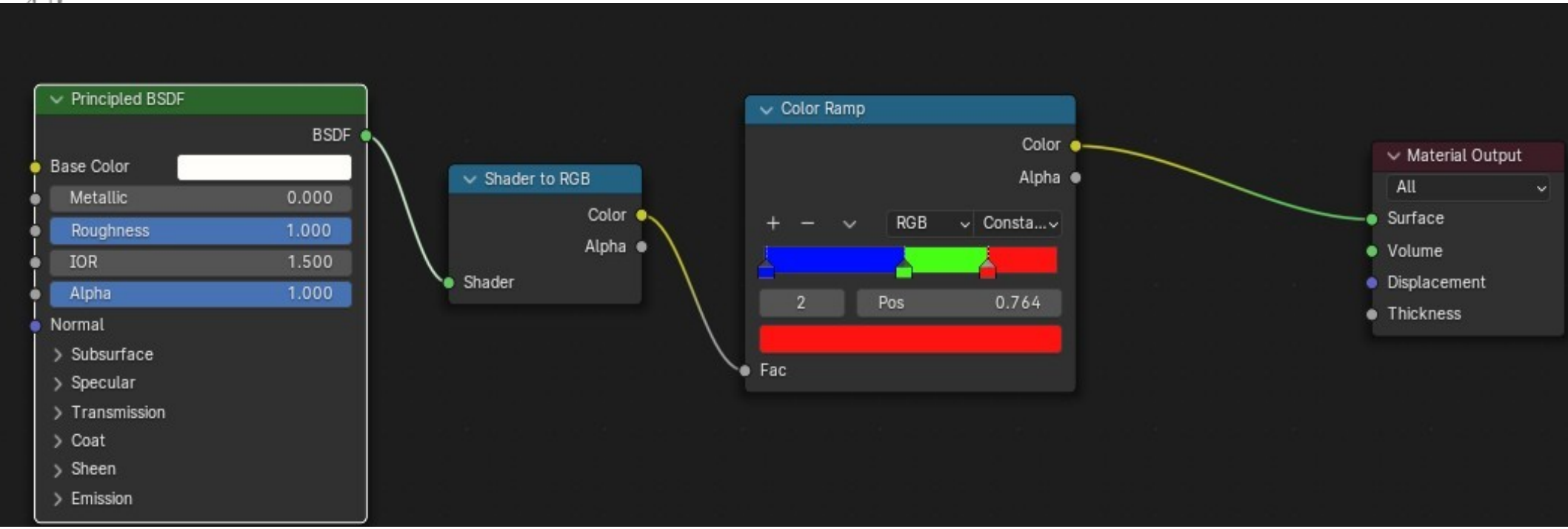


Special shaders – Mix colors (texture)





Special shaders – 2 Backgrouds (1 for lighting)



Special shaders – Stylized