

Assignment 4: Shading and Materials

For this assignment we are going to add materials to your scene. Currently There are some materials that came with the asset pack and have not been assigned to your models. You have the choice to either re-configure these materials (which can get complicated) or creating your own materials.

If you wish to reconfigure:

1. Check to make sure materials are not pink. If they are, then they are using the wrong shader. To fix this select the material and look at the very top of the inspector for a dropdown labeled **shader**. You need to set this to LWRP/Lit. Then it should be gray.
2. Assign Textures to the materials. Most of the materials should be named the same as the textures they represent. Find each texture and assign it to the texture slot in the material
3. Apply the materials. You can either drag the material onto your scene, or you can go into the project hierarchy and select the prefabs you are using. From there, find **Import Settings -> Materials** in the project inspector and check the box labeled **Import Materials**

To make your own materials:

1. Go to **Create->Material** and give it a descriptive name
2. Go to the inspector and adjust values that you like
3. Drag your new materials onto the meshes or prefabs in the scene

To Make Physically based materials:

1. Create a new material as outlined above
2. Find the shader dropdown and set it to **PBR**
3. Adjust the Values as such

If you want to make glowing materials you can

1. Make a new basic material and set emissive up to 1
or
2. Change the shader to **Unlit** and set the color you want

For this assignment you can refer to the unity documentation below:

- <https://docs.unity3d.com/Packages/com.unity.shadergraph@6.9/manual/Getting-Started.html>
- <https://blogs.unity3d.com/2015/02/18/working-with-physically-based-shading-a-practical-approach/>

Requirements:

- Everything in your scene should have a material on it that matches its physical properties (PBR hint hint). You may use materials that you create in shader graph, or you may find textures online (<https://www.textures.com> is a great place to find some materials)
- Make use of an unlit or emissive material. You can make a part of your scene glow, especially near light sources or computer screens

This assignment is out late, so we will make it due along with your next assignment, which will be a relatively short one. This assignment is due **Wednesday 10/30 @ 9:00 PM.**