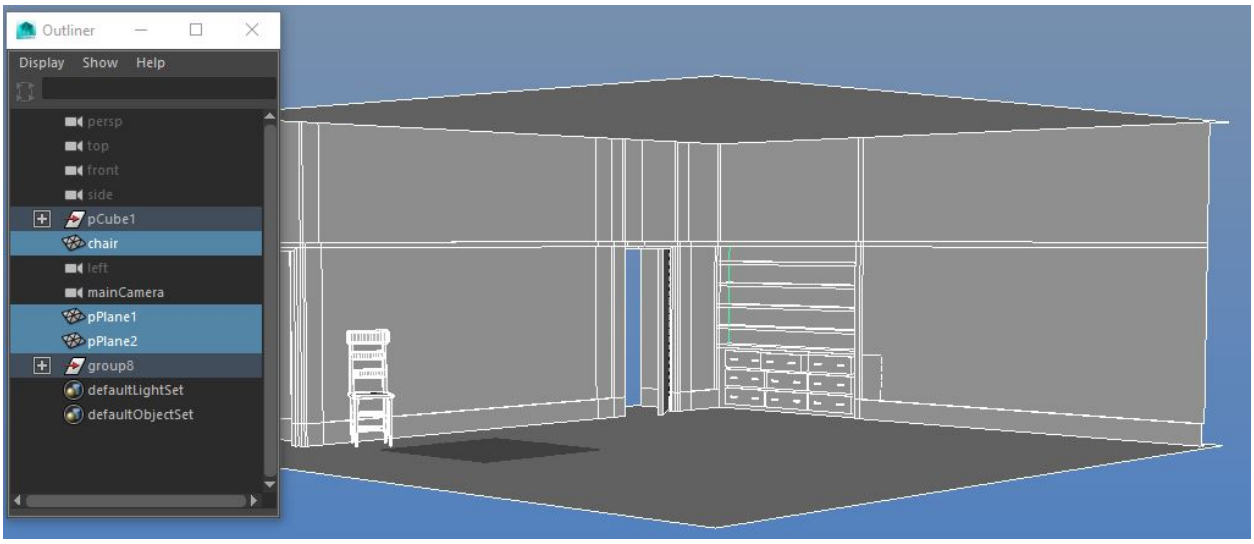
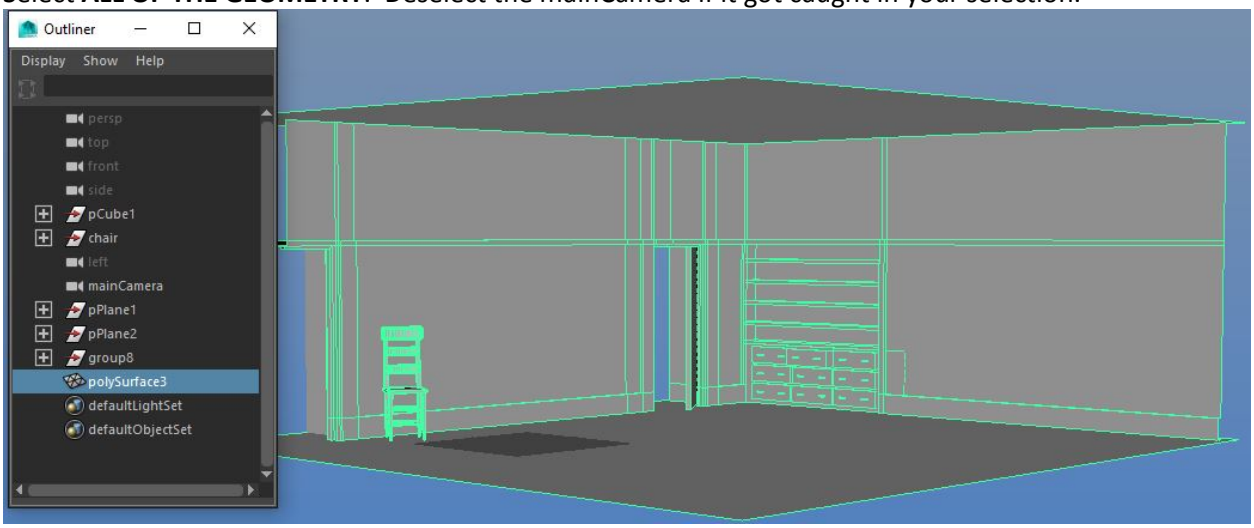
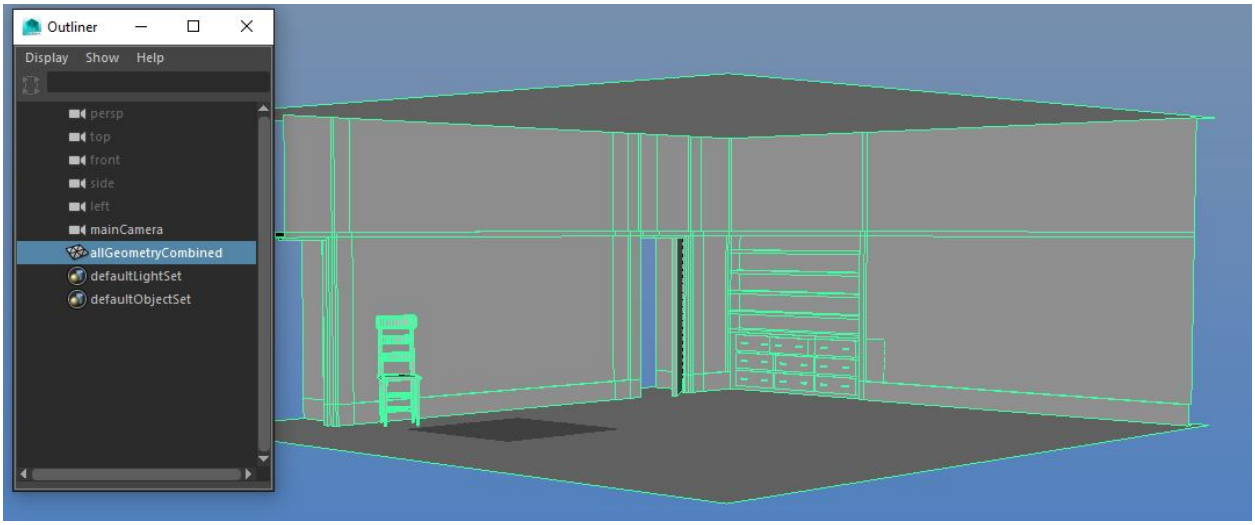
A little help for milestone 1: the UV layout.

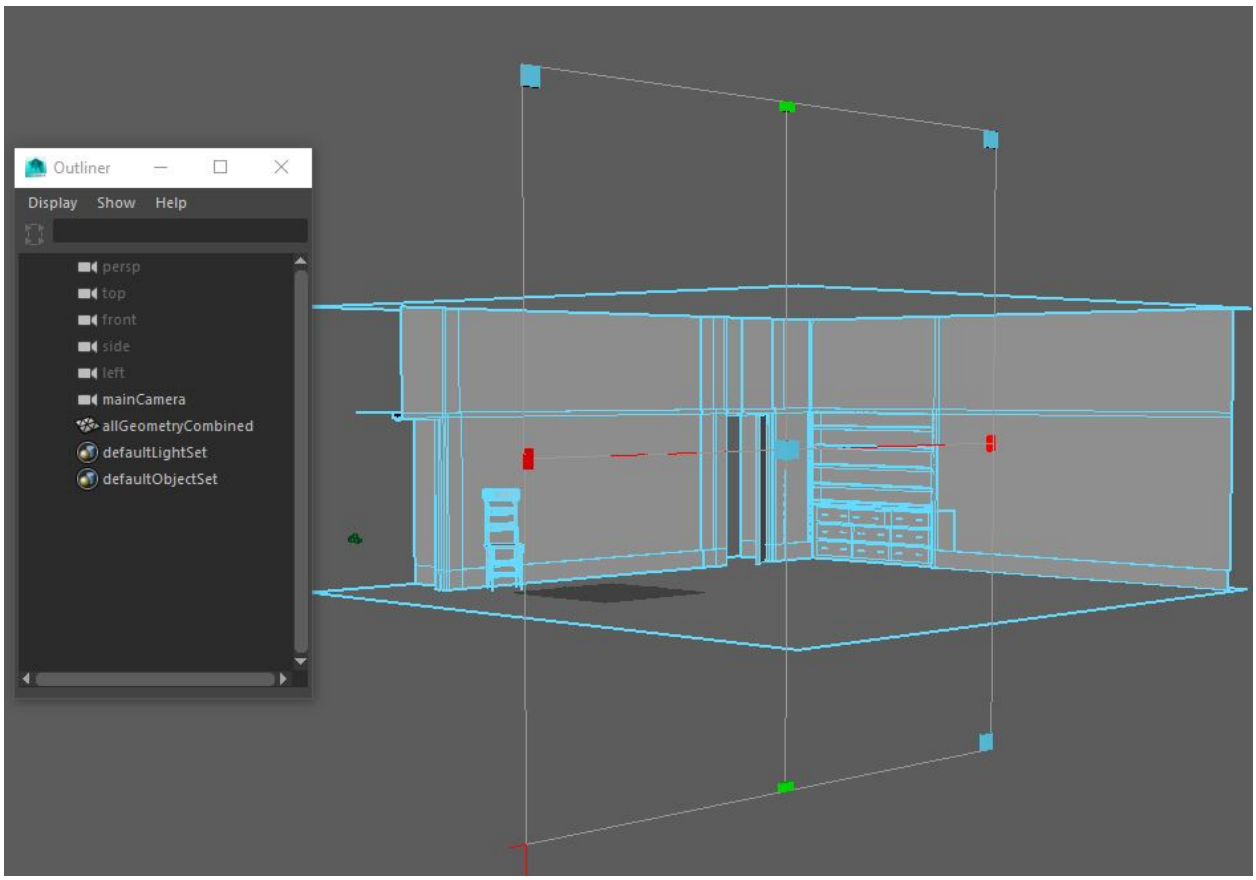


Select **ALL OF THE GEOMETRY**. Deselect the mainCamera if it got caught in your selection.



Combine all of the geometry. Don't leave any geometry out of this combine.

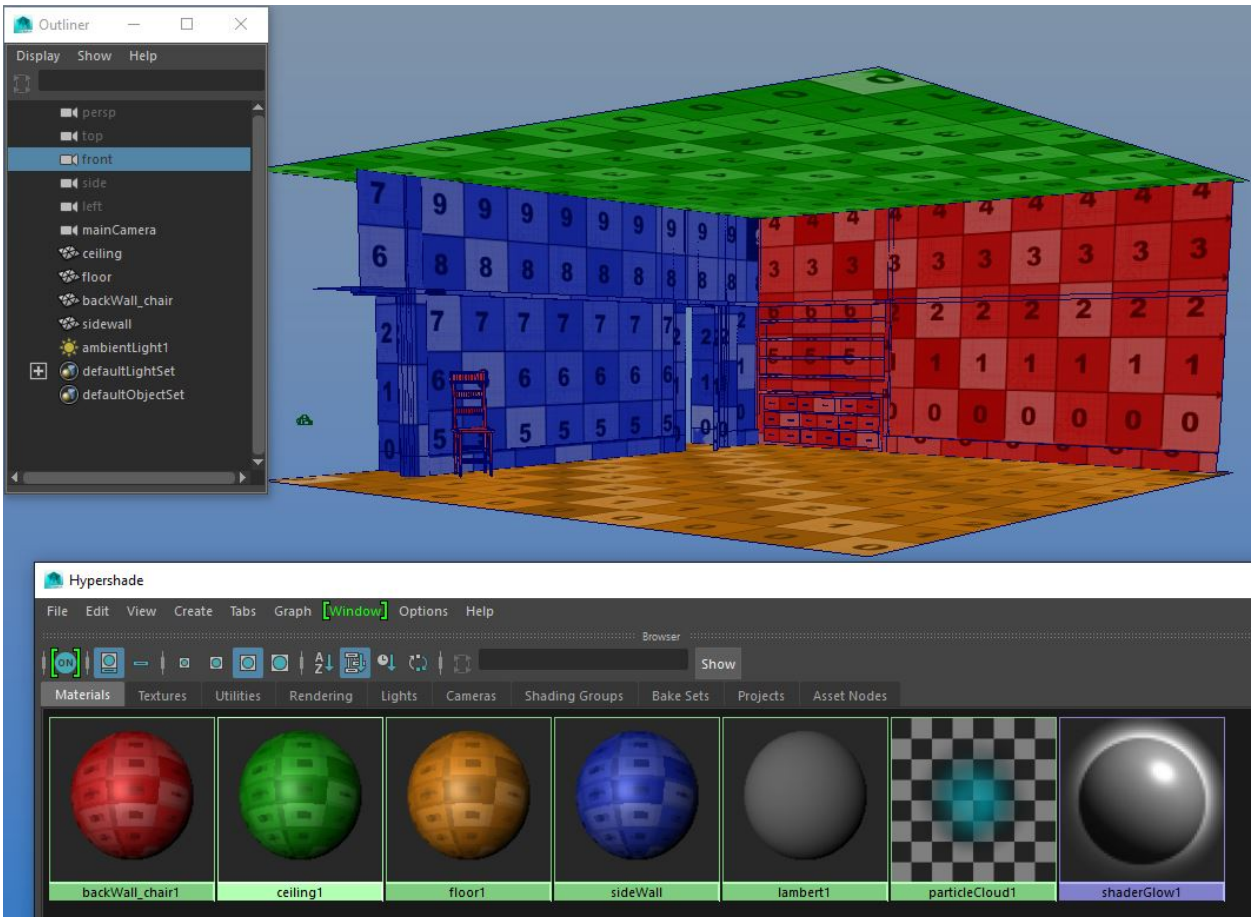




Delete the history on the combine. This will clear-out the empty groups.

Apply a Planar UV projection to the combined geometry. This will create the UVs and help to maintain a uniform scale for all UV sets aka texture sets.

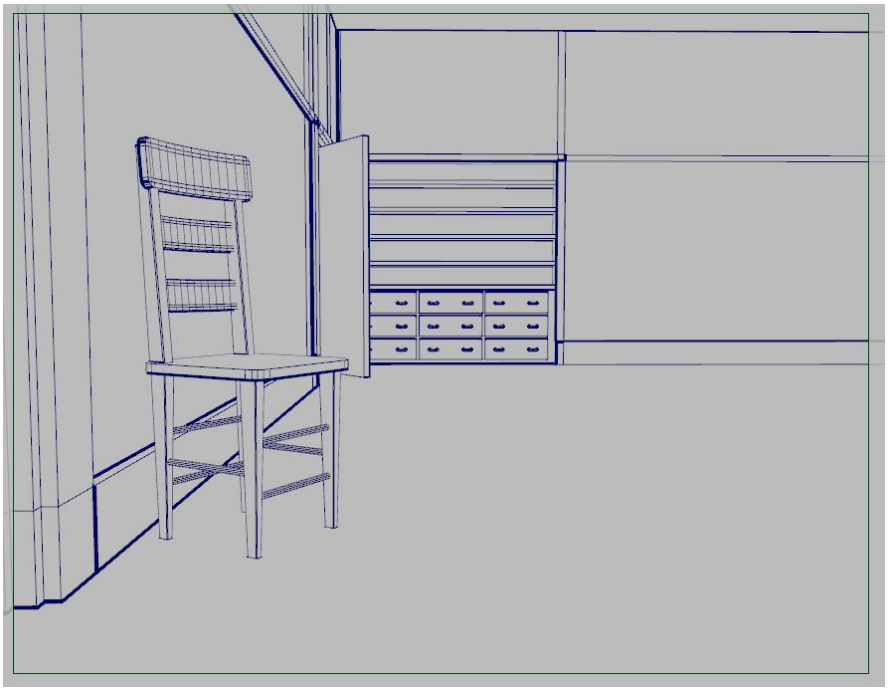
After the Planar projection has been applied to the **Combined** geometry: Separate it and **DELETE THE HISORY ON ALL THE GEOMETRY**.



Divide the geometry into **four**, well thought out groups. Each group will share a UV layout and a set of maps: diffuse, bump and specular.

In the example above I divided my scene based on the location and size of the geometry: ceiling, floor, backWall_chair and sidewall. I started with the chair in the sidewall group but moved it to the backWall group later because there was more room in the backWall's UV layout.

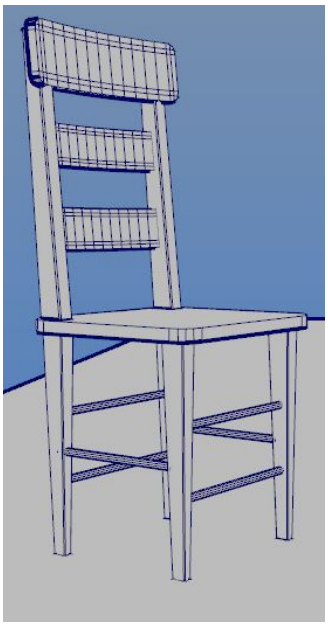
Apply one shader to each group of geometry. Eventually these shaders will be linked to your texture maps. Now would be a good time to delete history and save an iteration.

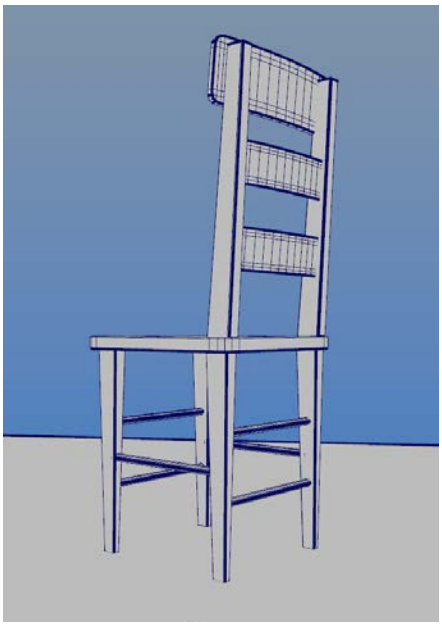


For each group, cut and sew UV edges to divide the geometry into well-constructed shells.

When deciding where to place your cuts:

Consider the camera's view to hide the seams between shells. Avoid making large complex shells. Yes, this will reduce seams, but the size and shape of a complex shell may limit how tightly the UV layout can be packed.





Left: This is the chair from the camera's point of view. The seams I have made are in a thick outline.

Right: This is the chair from the back. I placed as many seams as I could on the backside, away from the camera's view.

Do not overlap any UVs, except where* UVs shells are duplicated.

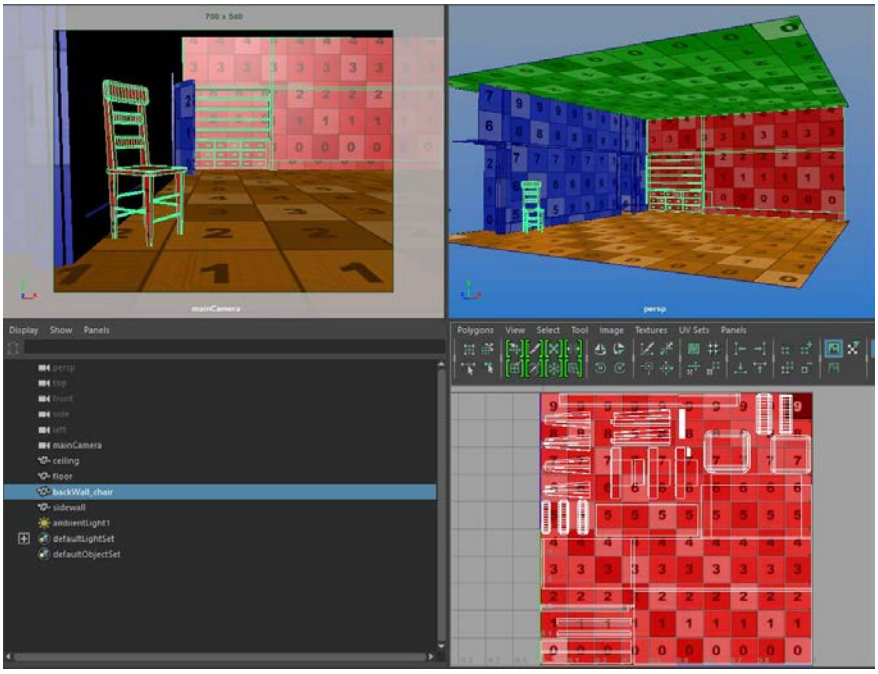
Combine each group before unfolding. Delete the history.

Left: from mainCamera Right: back of chair from persp cam

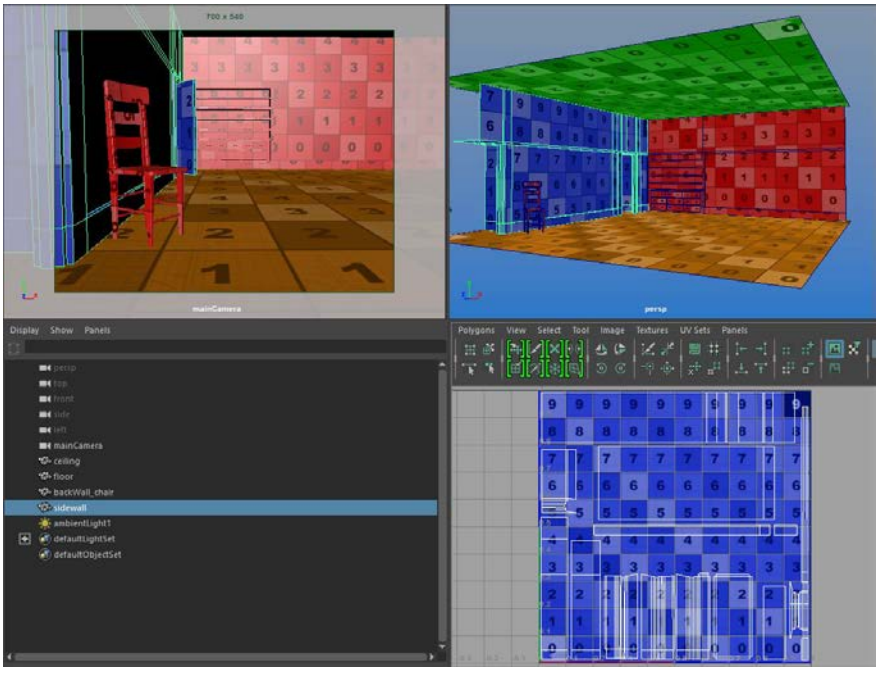
Combine each group before unfolding. Delete the history.

When you are done unfolding the UVs for each group/UV set and fixing any problems you should have four groups or four combines each with clean UVs.

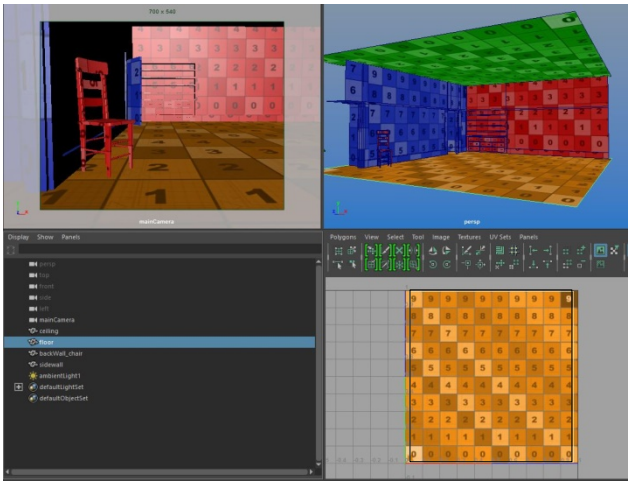
When doing the UV layout for each set: scale each UV set uniformly so that each fits as tightly as possible in the 0-1 space.

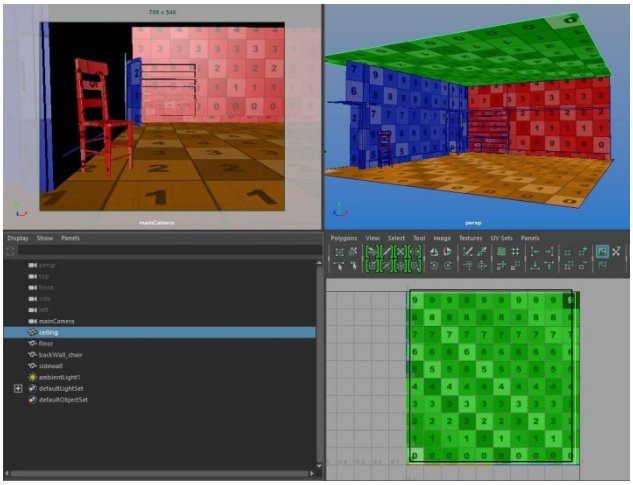


The backWall and chair UV set completed.



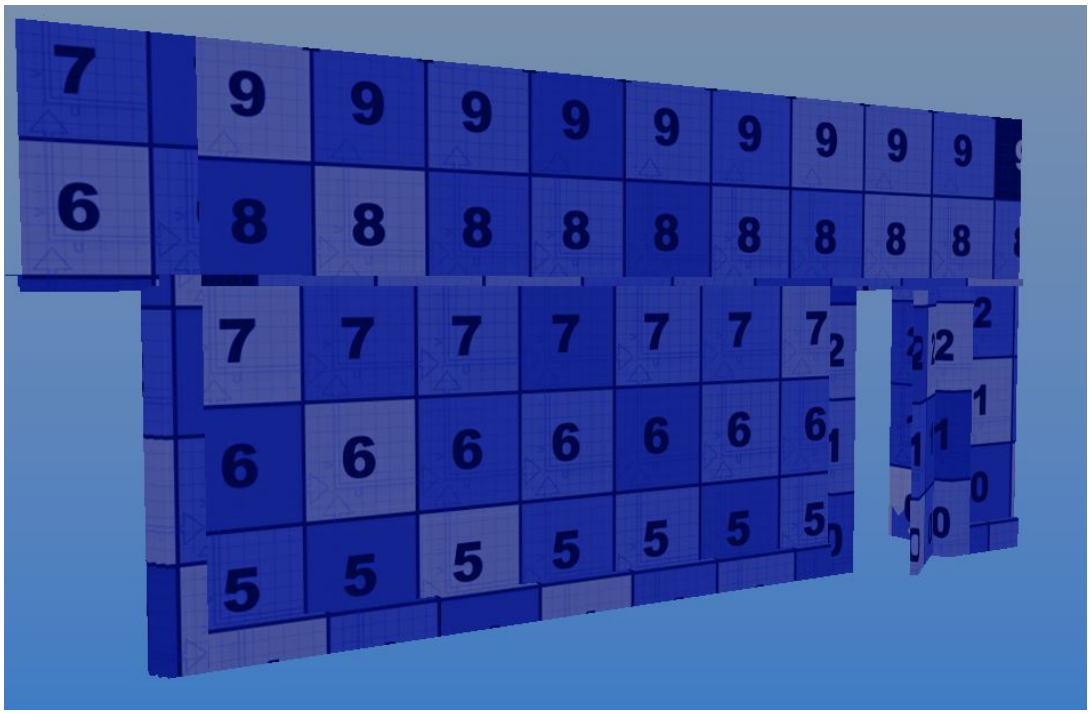
The sideWall UV set completed.



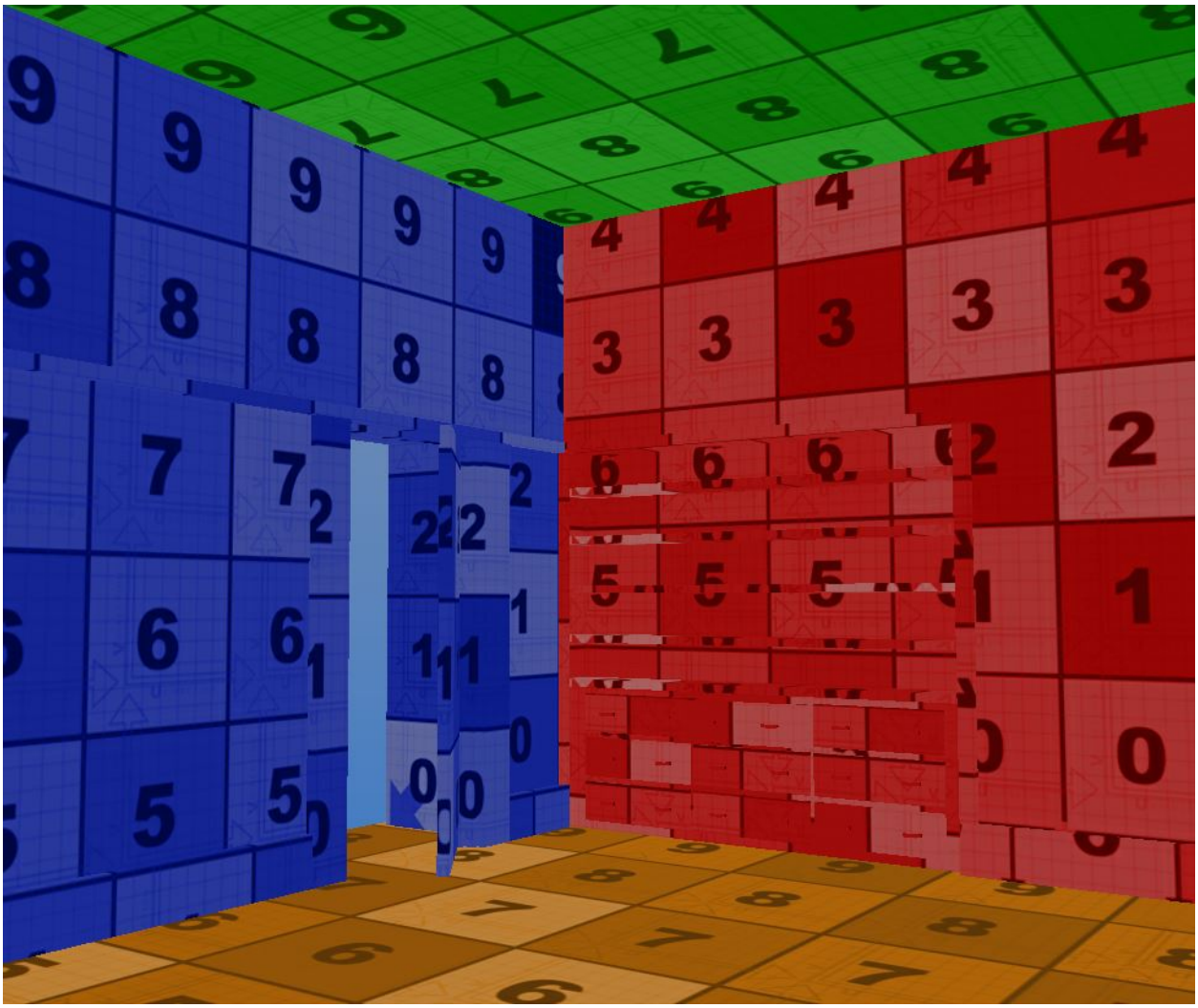


Above are the UV sets for the floor and ceiling. These are the largest meshes in the scene. In order to maximize their resolution I gave each their own UV set.

*I scaled all UV sets up together stopping only when the floor and ceiling filled the 0-1 space. This kept the UV grid exactly the same size across all the geometry



The UV grid should be EXACTLY the same size within the individual UV layouts. Above you can see the geometry in the sideWall UVset. The texture grid is exactly the same size on every face within the layout.



After you have scaled all four sets uniformly, adjust the scale between the sets so that the UV texture grid is *reasonably* the same *between* the four sets.

Above you can see the grid on all four UV sets. The grid is pretty much the same size BETWEEN THE UV sets.

As you work to get to this point you may want **to move some meshes out of one set and into another**. To do this: separate the geometry, select the mesh you want to move and apply the shader assigned to the UV set you want it in. Example: I had the chair in the sidewall. It had the blue texture grid on it. I selected the mesh for the chair and applied the red texture grid. I combined everything in the red set and proceeded to shuffle around the shells to accommodate the chair.