

THIS IS AN ASSET MAKING TUTORIAL

THAT DEALS WITH TEXTUREING AND PREFAB-MAKING

-----READ ME----- !

This only represents a general workflow of realistic textured objects.
You can use any replacement software of your choice if you want.

For sculpting:

Zbrush || Mudbox || Sculptris || Blender etc.

For Re-typo and UV mapping:

Maya || 3Dmax || Blender || || etc.

For texturing:

Substance Painter || Substance Designer || V-ray || Mari || Photoshop || Blender || etc.

Since we are using **Unity 3D** for the course, all will be then combined as prefab in Unity.

However, if you do feel confidence about using Unreal Engine as your way to go, feel free to export any of these outcomes to **Unreal!**

All should be relatively compatible with each other.

And please excuse my bad grammar and spelling mistakes!!!! If you want to help me revise this simple tutorial by all means please do send me your corrected version lol

Enjoys !

This Tutorial Sample will include:

Zbrush – Maya/blender – photoshop – substance painter – Unity

This tutorial will not go in details with any of these software uses. Please please please do refer to some of the **official documents** these software post online to get a better understanding of how to use the program properly without getting too much trouble. (sometimes these trouble could cause you re-doing the whole thing!!!!)

For sculpting part:

I will not go into details with how to use Zbrush as a start.

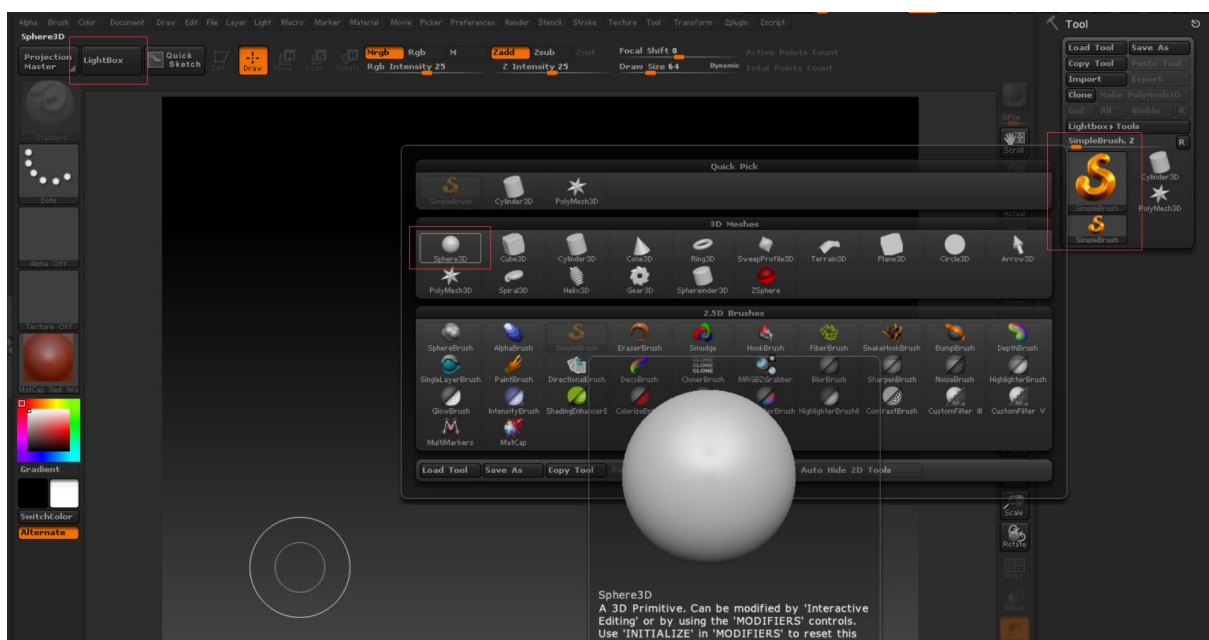
If you do find using **Zbrush** frustrating and confusing in general, you can either

1. Reference tutorial session with Pixologic: <http://pixologic.com/http://docs.pixologic.com/user-guide/3d-modeling/>
example ↑ ↑
2. Take snapshot about the specific problem you run into and ask me (or someone else) about it.
My email = ygao02@risd.edu.

Starting with Creating a sphere for sculpting.

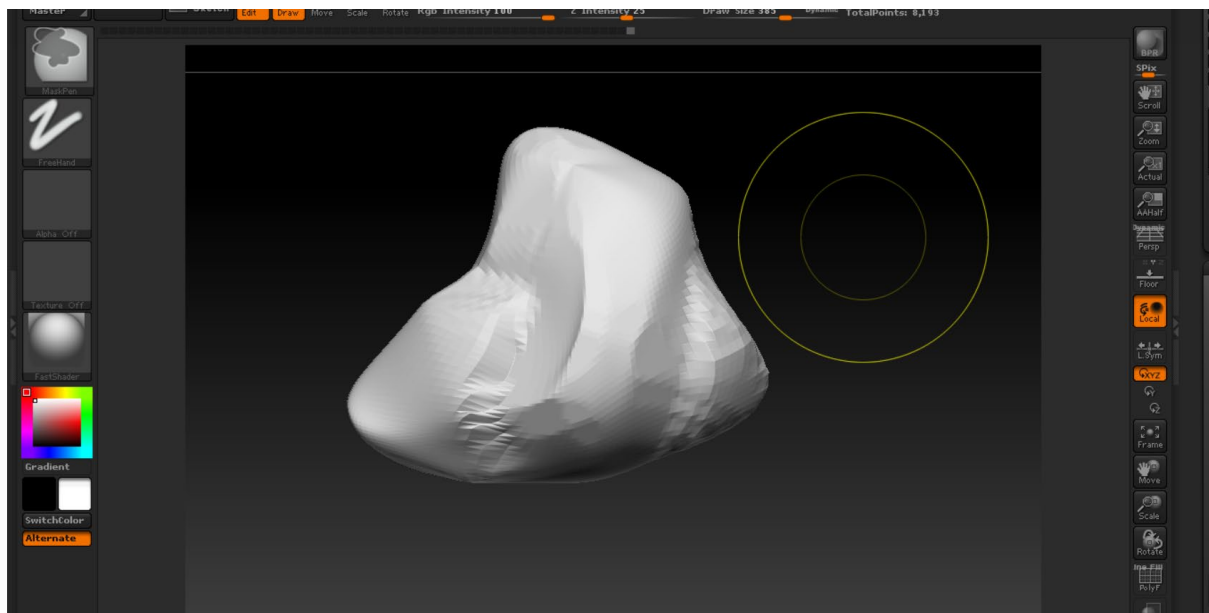
I use the default sphere or the polyclay sphere in the lightbox panel.

Both works fine as a base.

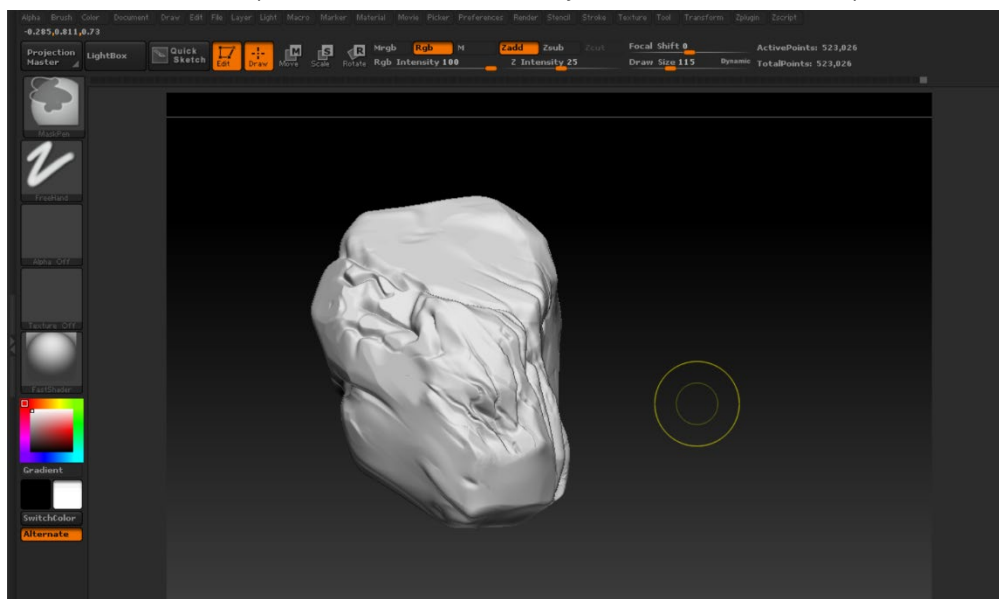


Using sculpting tools like claybuild or move or blob +deformation panel, I make the basic shape of the parts I'm building.

In this specific case I am making a simple stone (real- real- basic one. Not so realistic at all)

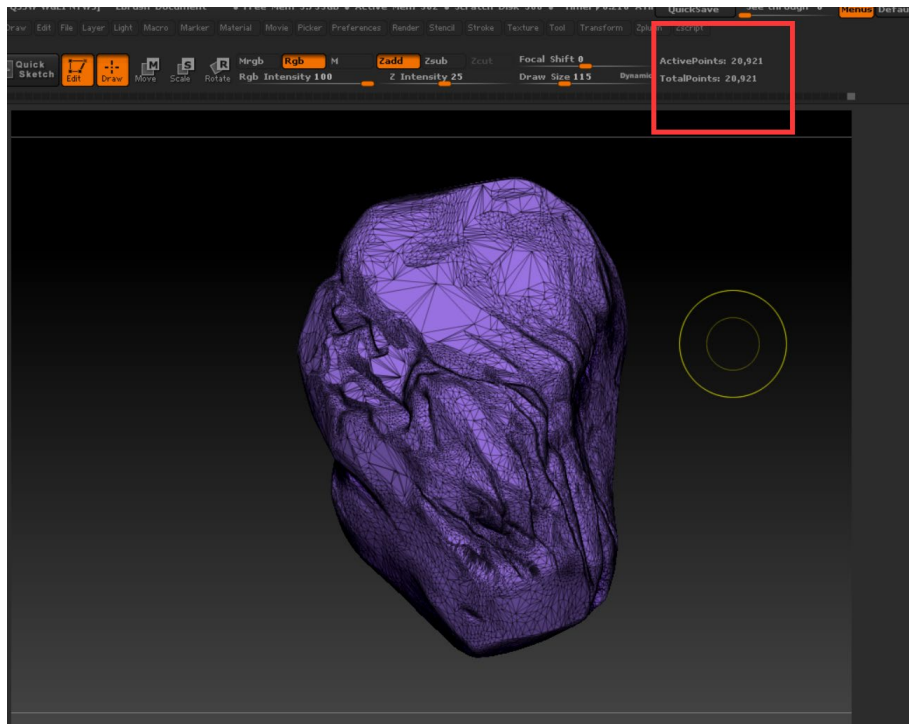


Then I divide the shape several times. Or use dynamesh to build in shapes I want to see.



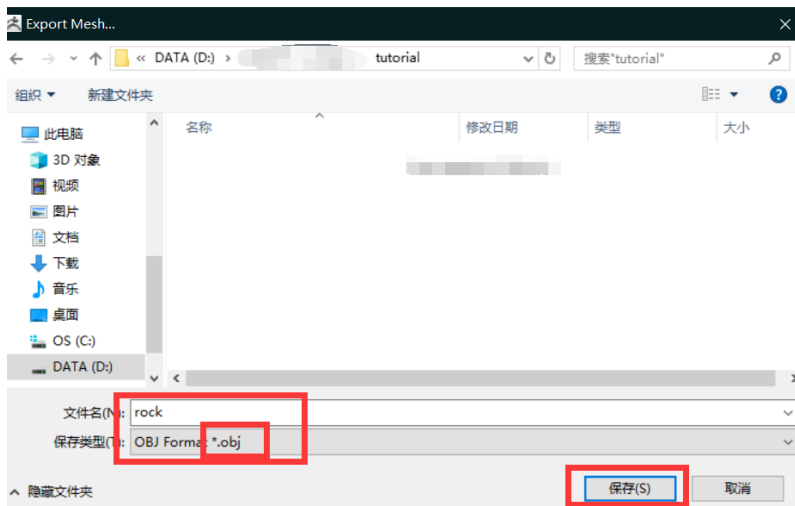
That is such a bad rock.....

Then I decimate the model using decimate master to keep the model less than 1 million polygon.



This is good to other 3d software.

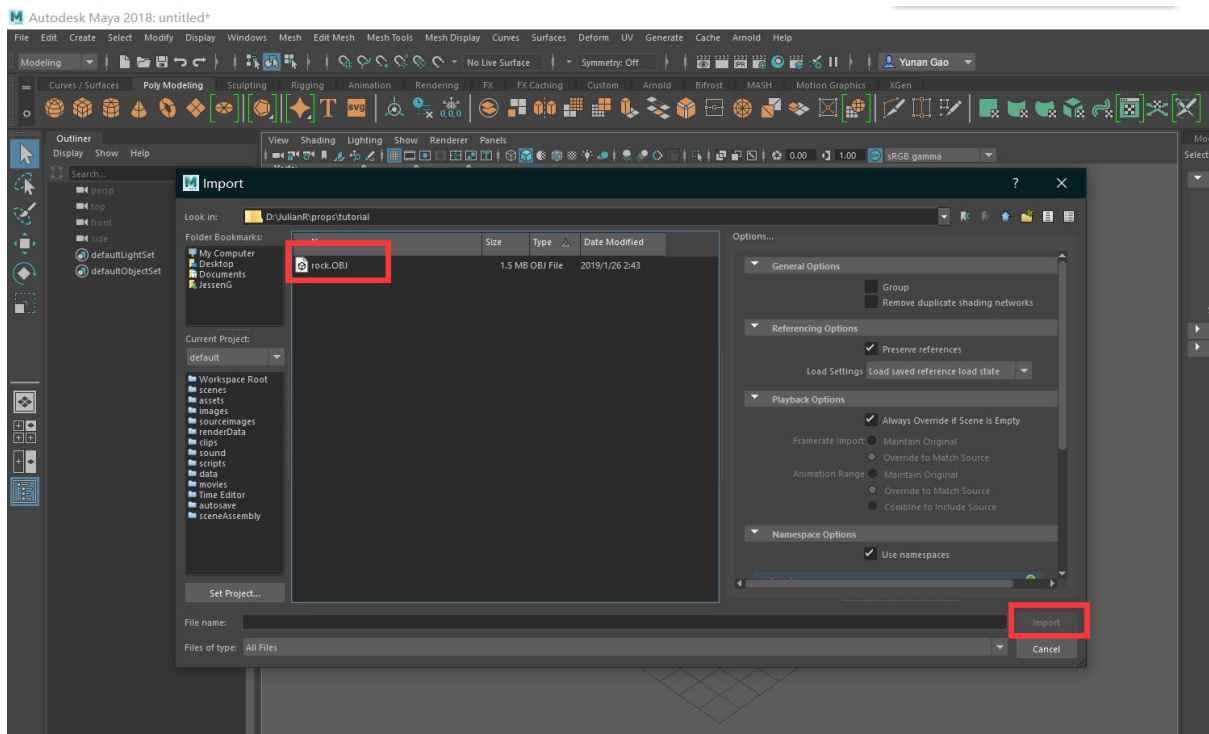
I then export this as a .obj



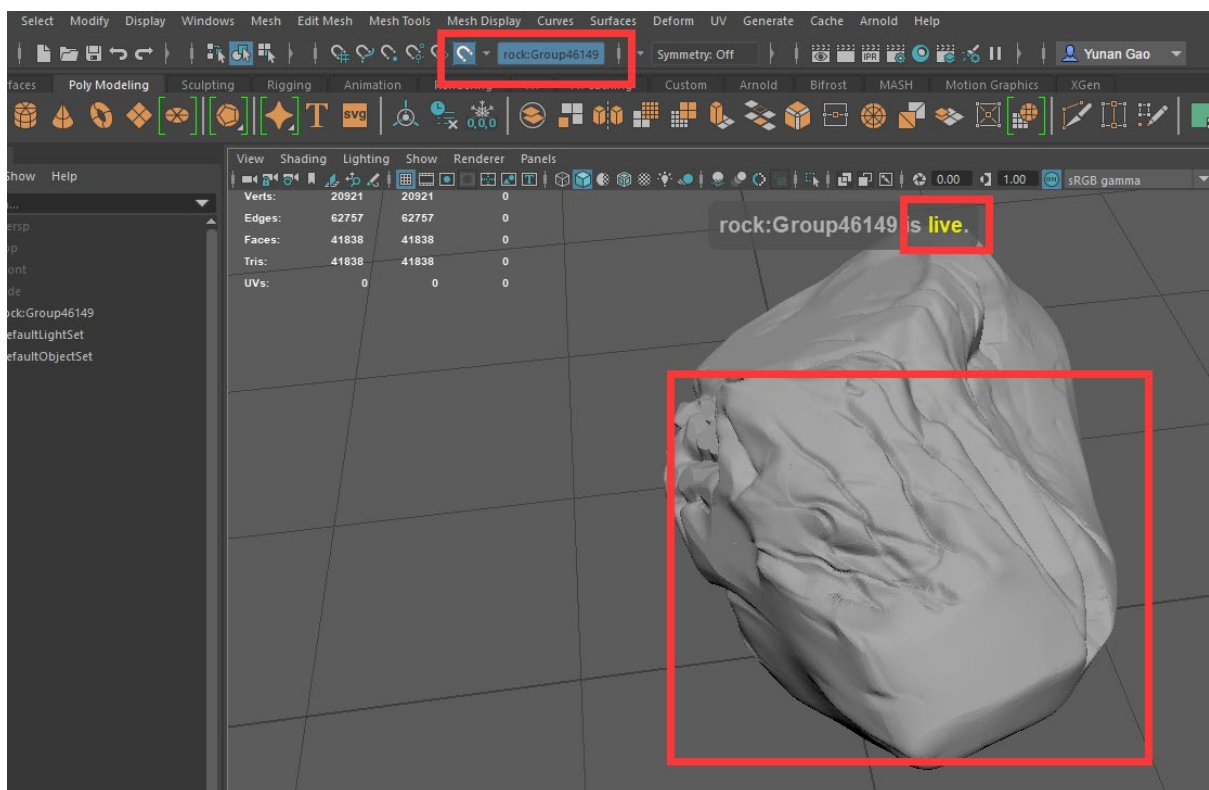
Then I'm using Maya to do retopology.

You can also use blender to do this process.

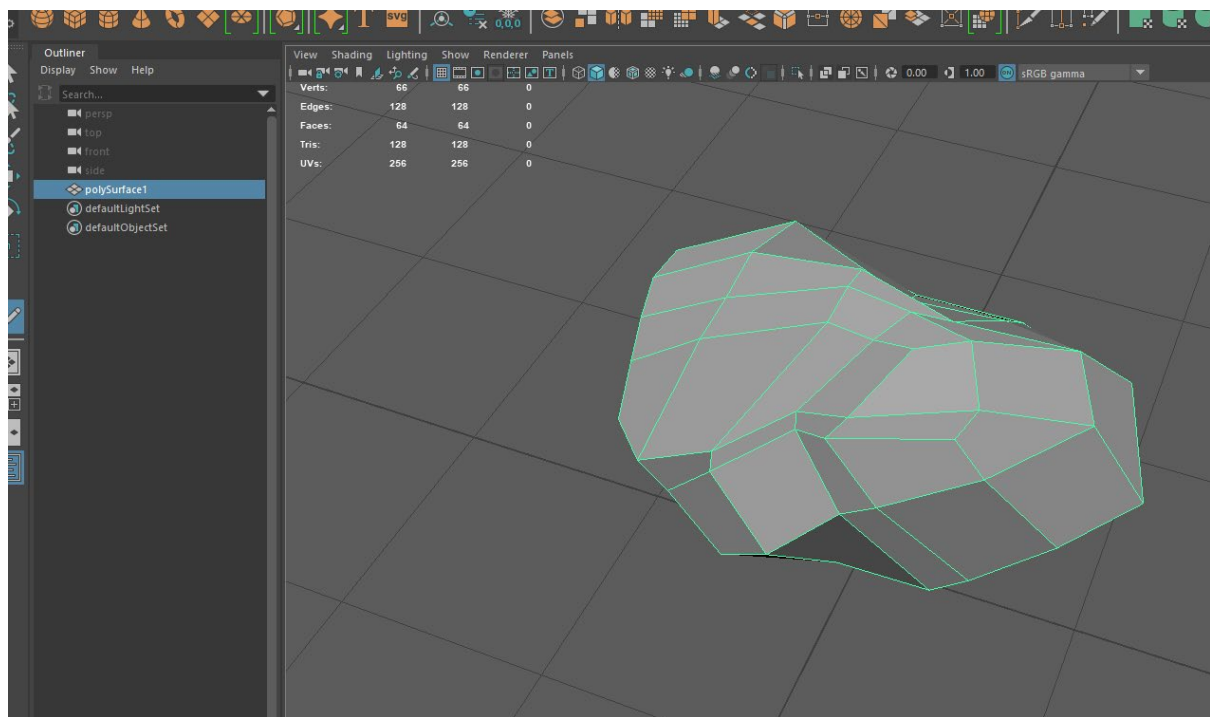
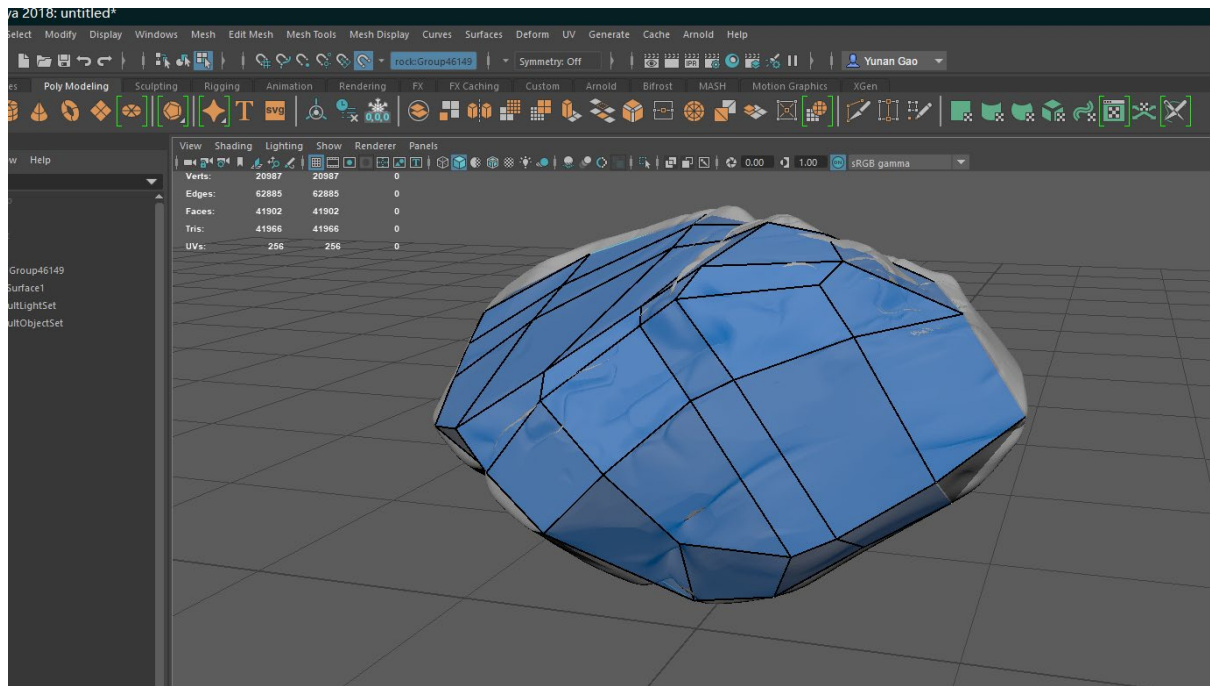
Import the decimated stuff in Maya.



Lock this as a live surface:

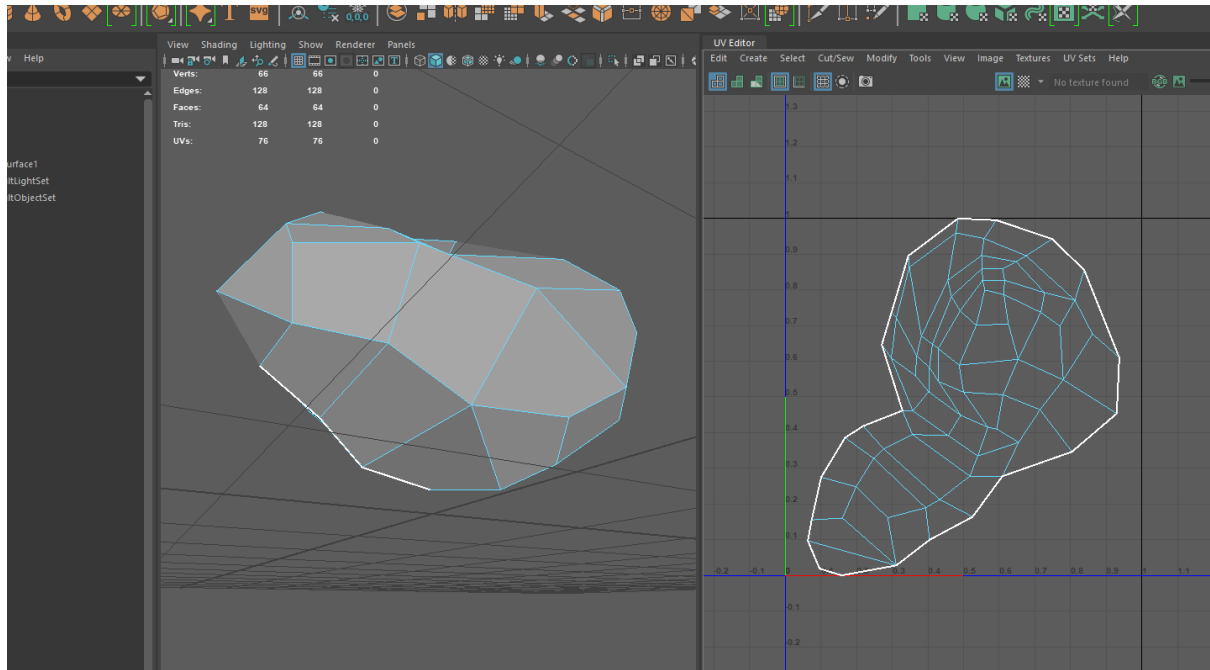


Do a low res- typology accordingly.

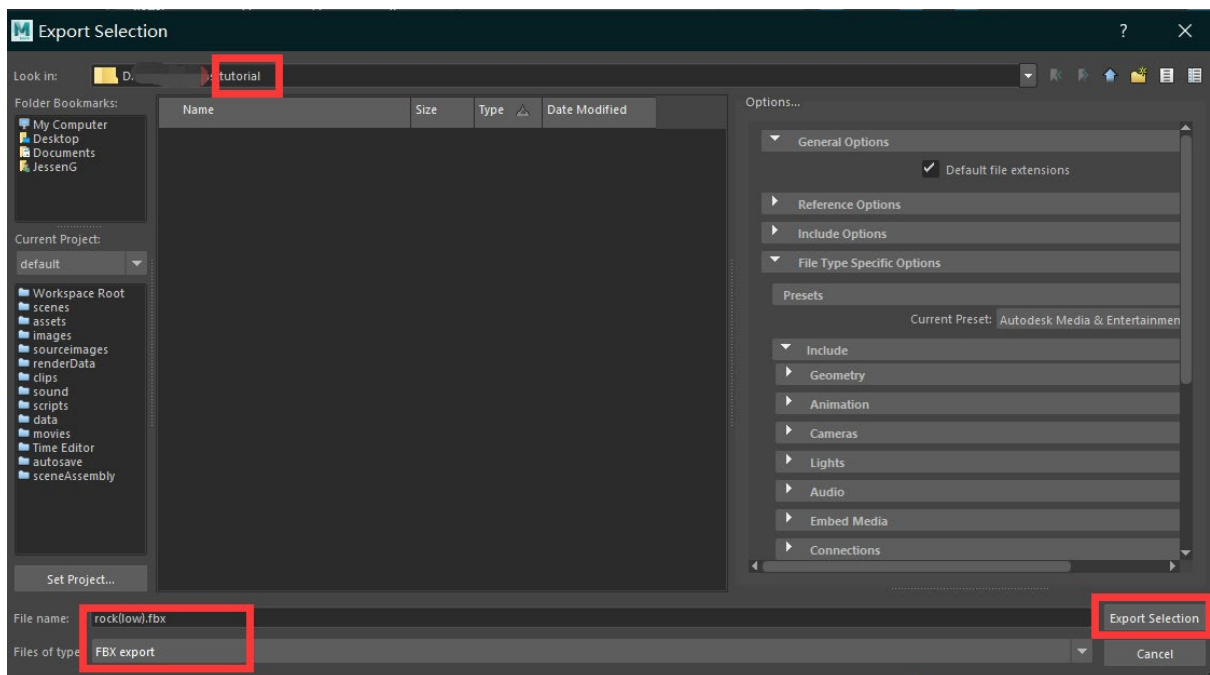


Unfold a UV .

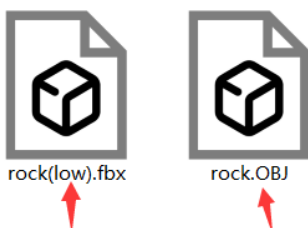
however you feel ok with, but usually keep the cut line somewhere well hidden so no one sees it.



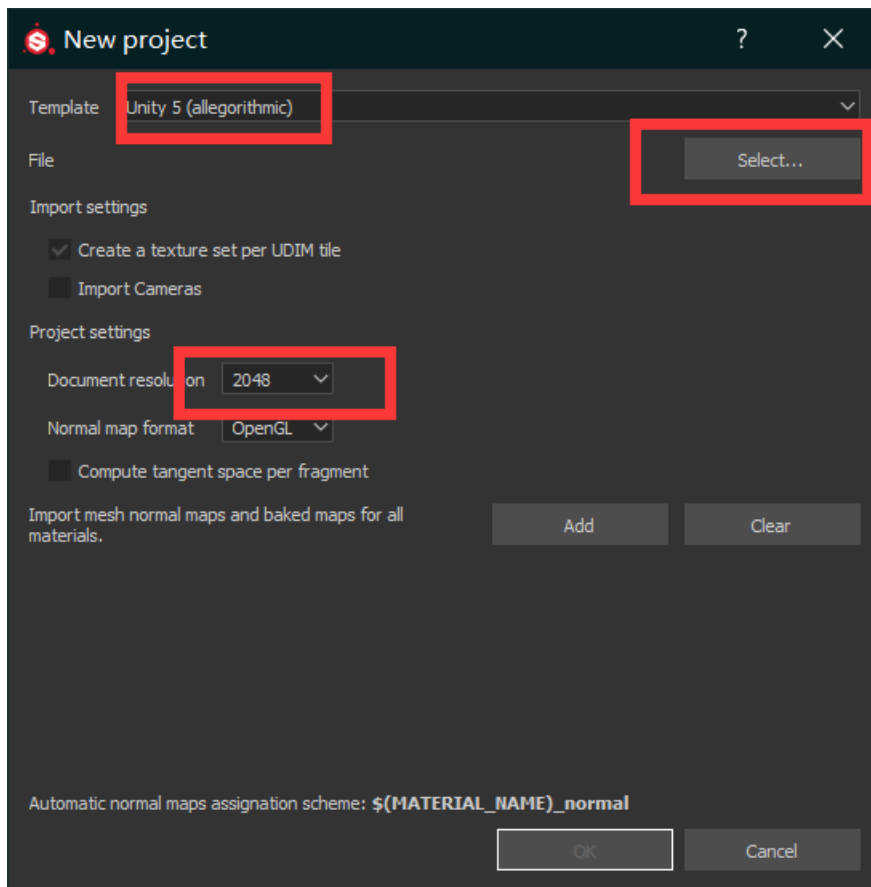
Export the low res item to .fbx format (or obj if you want to sculpt more in Zbrush)



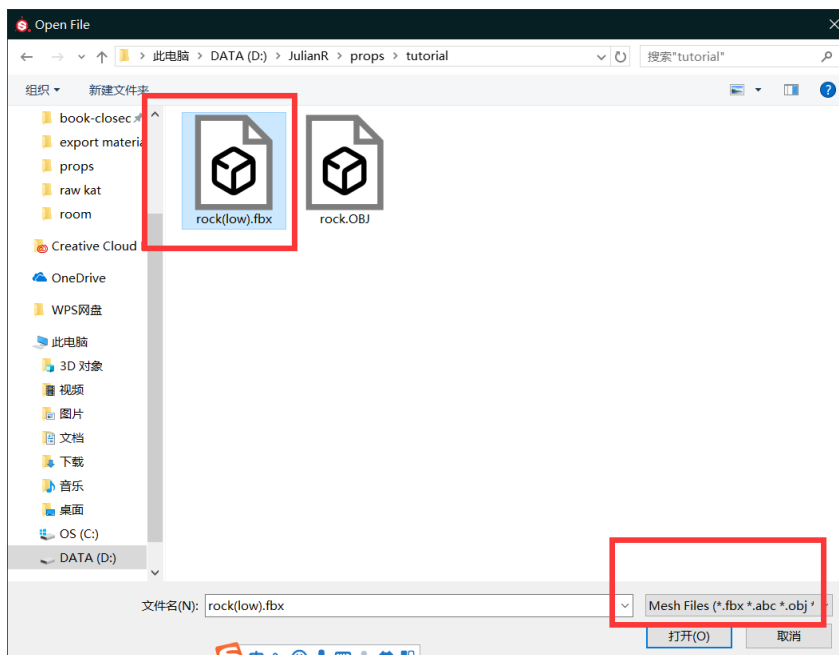
Up to this point, you should have 3d files x 2:

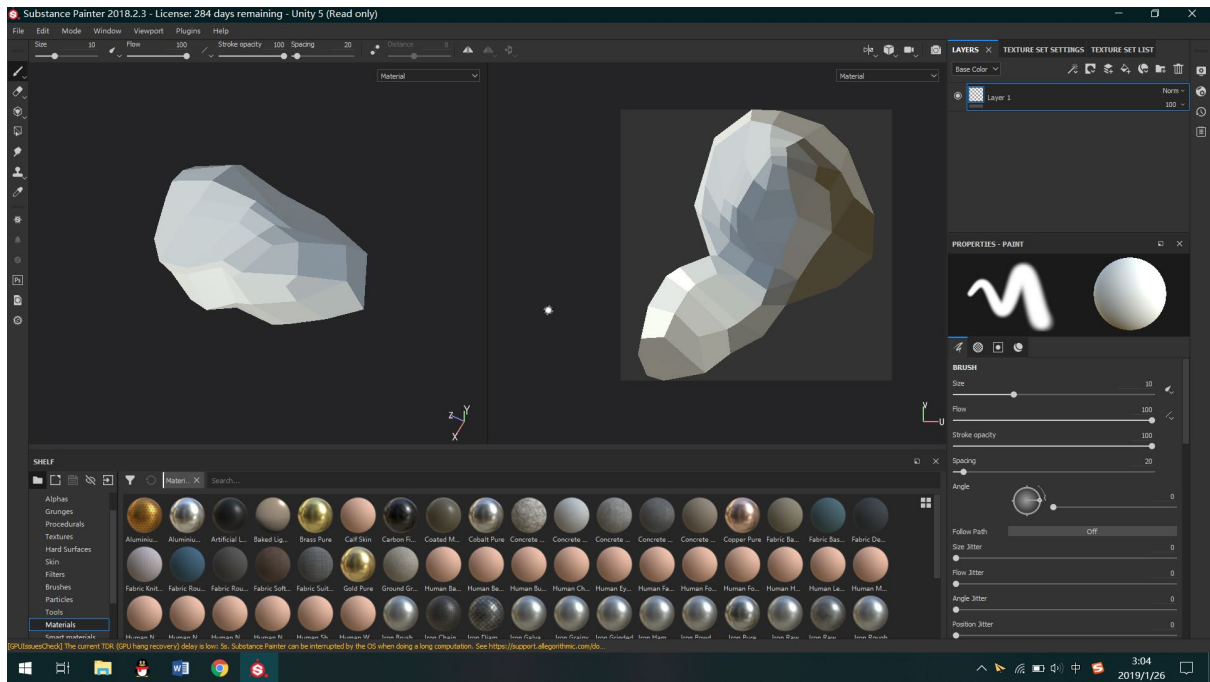


We are using the Low poly rock for Base mesh to import into Unity
And use the High one for details baking in Substance painter.
First import Low poly rock into Substance painter:

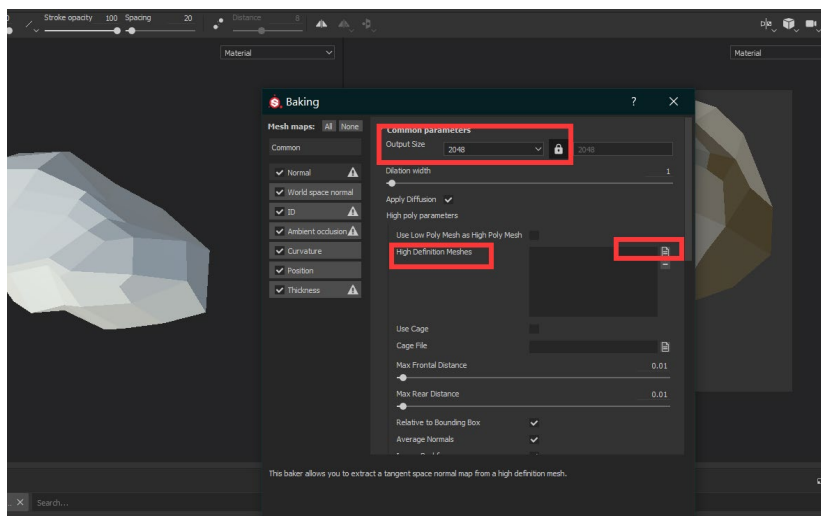
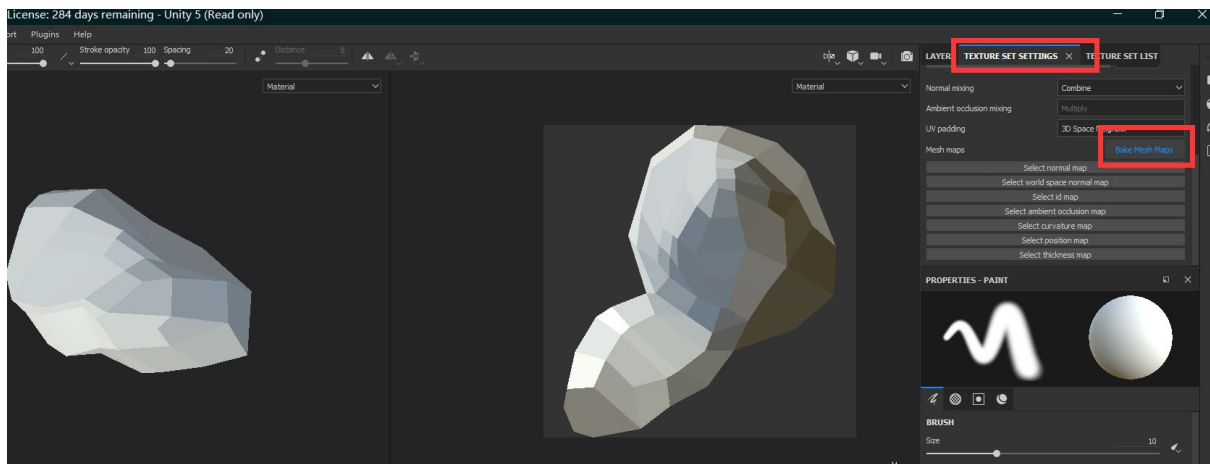


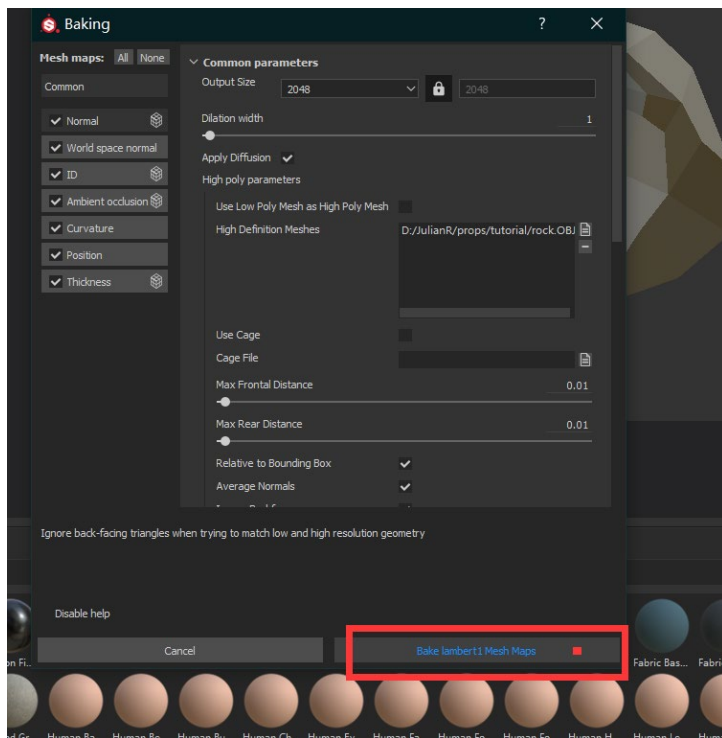
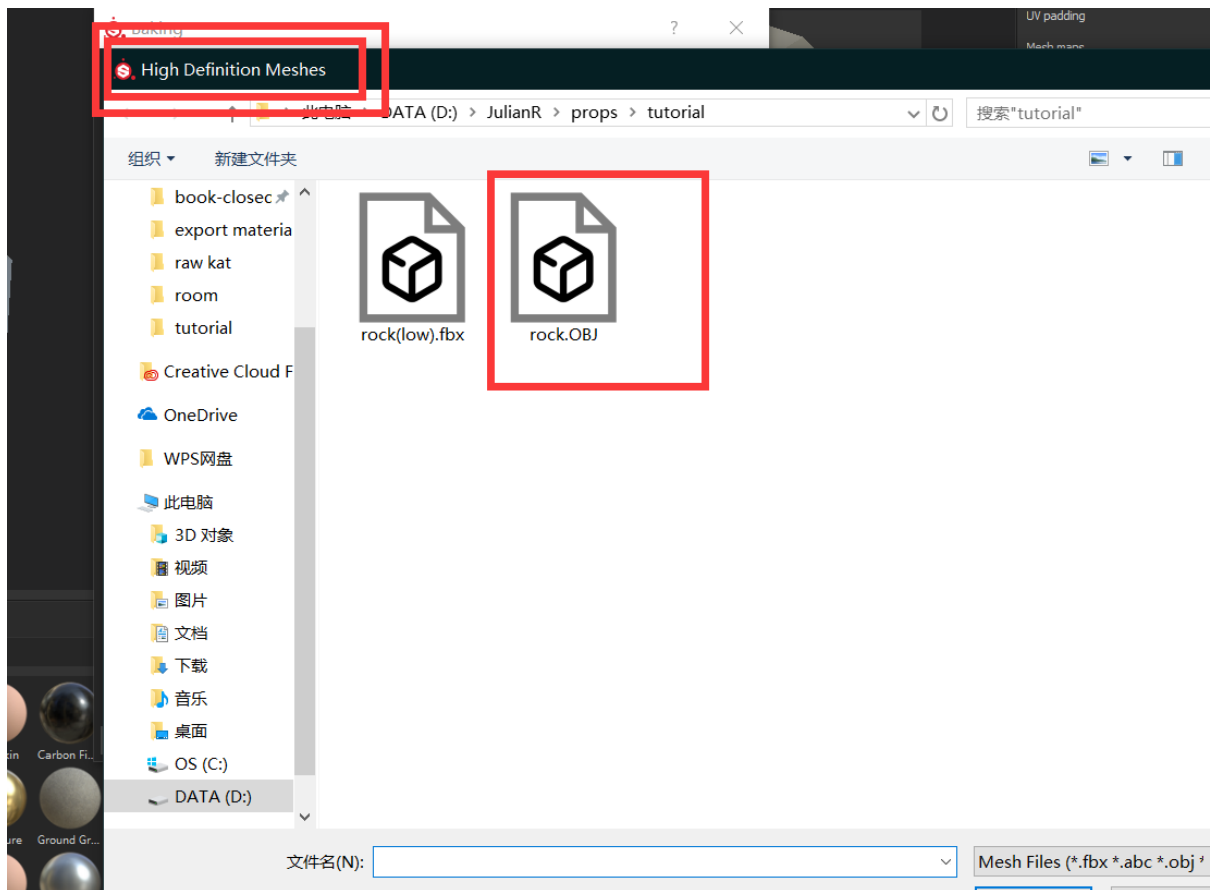
Keep any resolution you like, from 512 to 4096;
Select low poly rock in file selection panel:

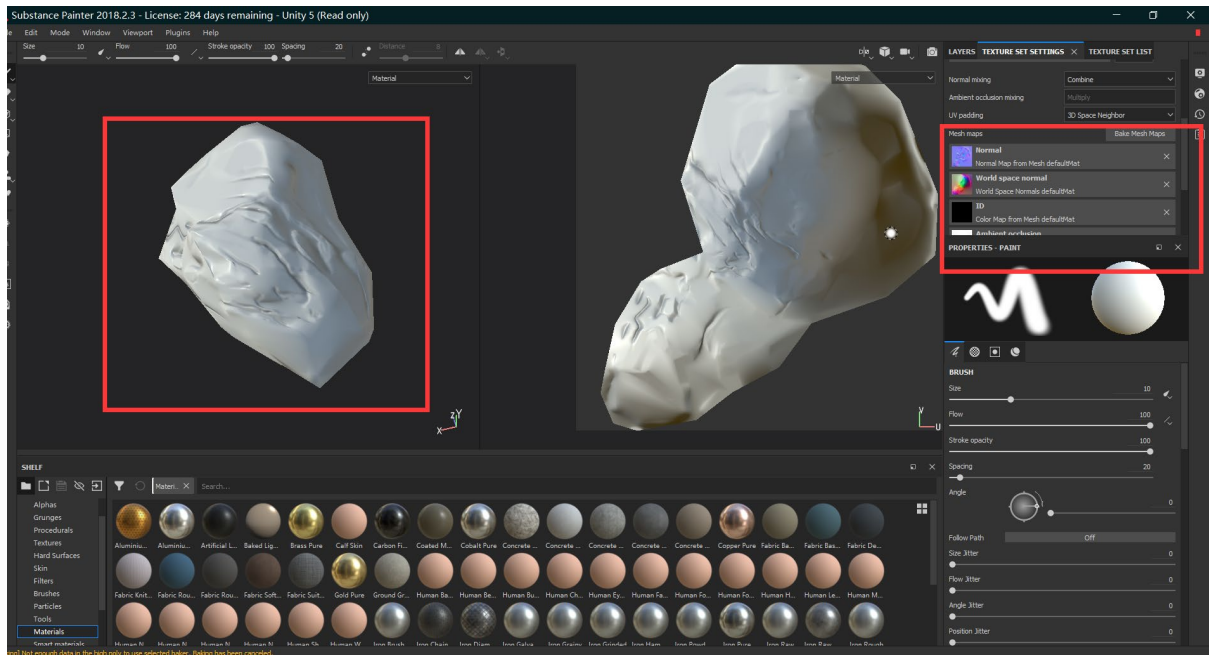




Then bake the high poly details with texture baking setting in SP:

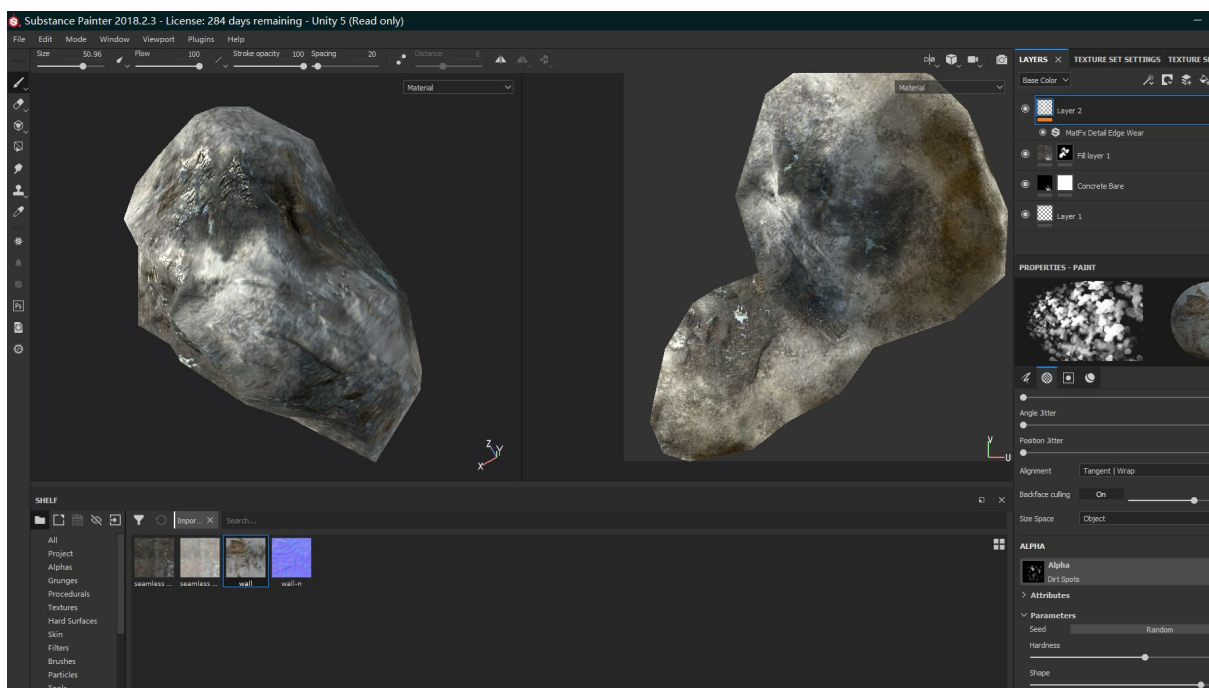






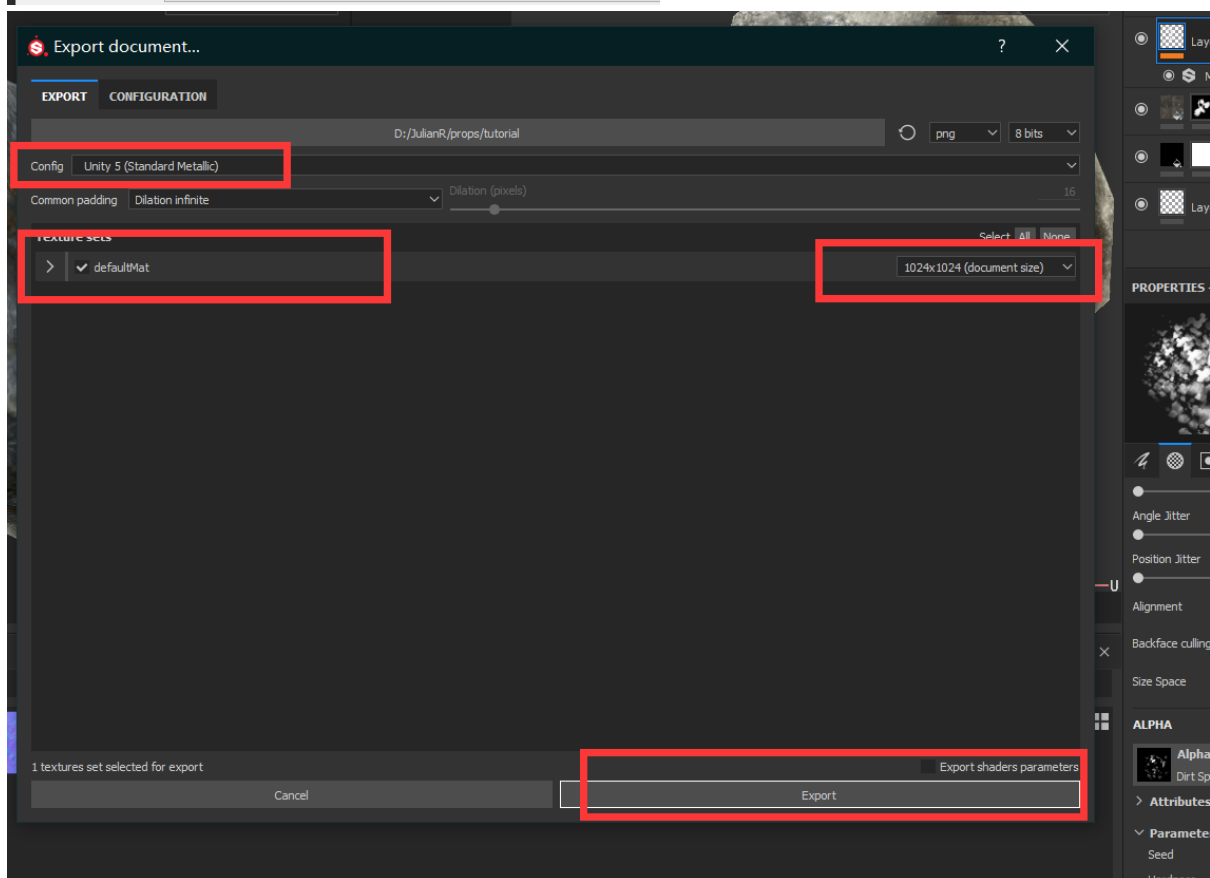
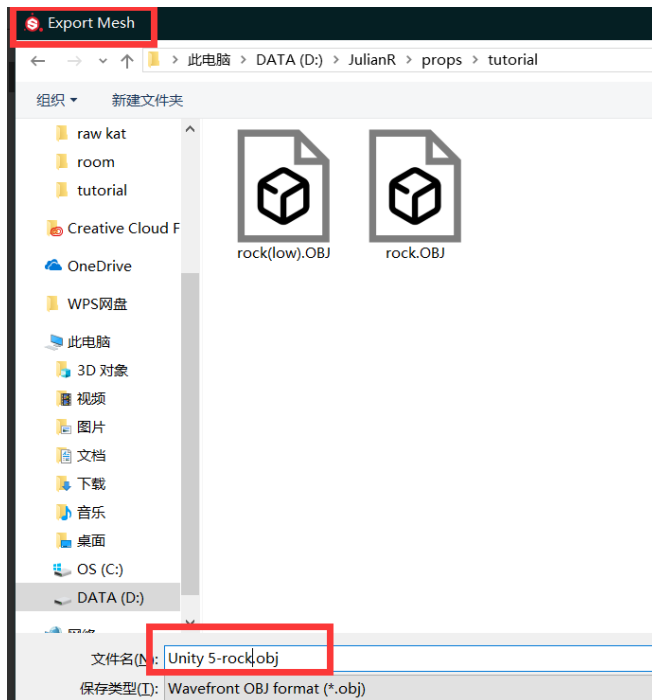
This will give you a low poly model with details you painted.

Attention: you still need a certain number of polygons to help the texture shape following the shape.

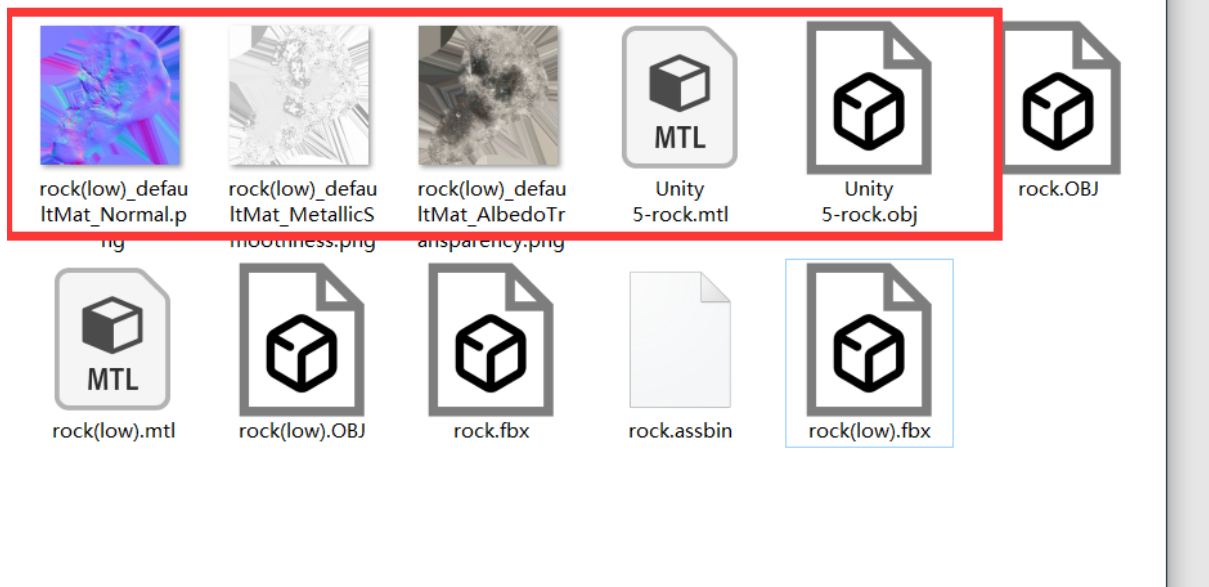


Paint some texture onto it (with reference)

I did this by pure imagination, so it came out very inaccurate. Just for a process reference purpose.



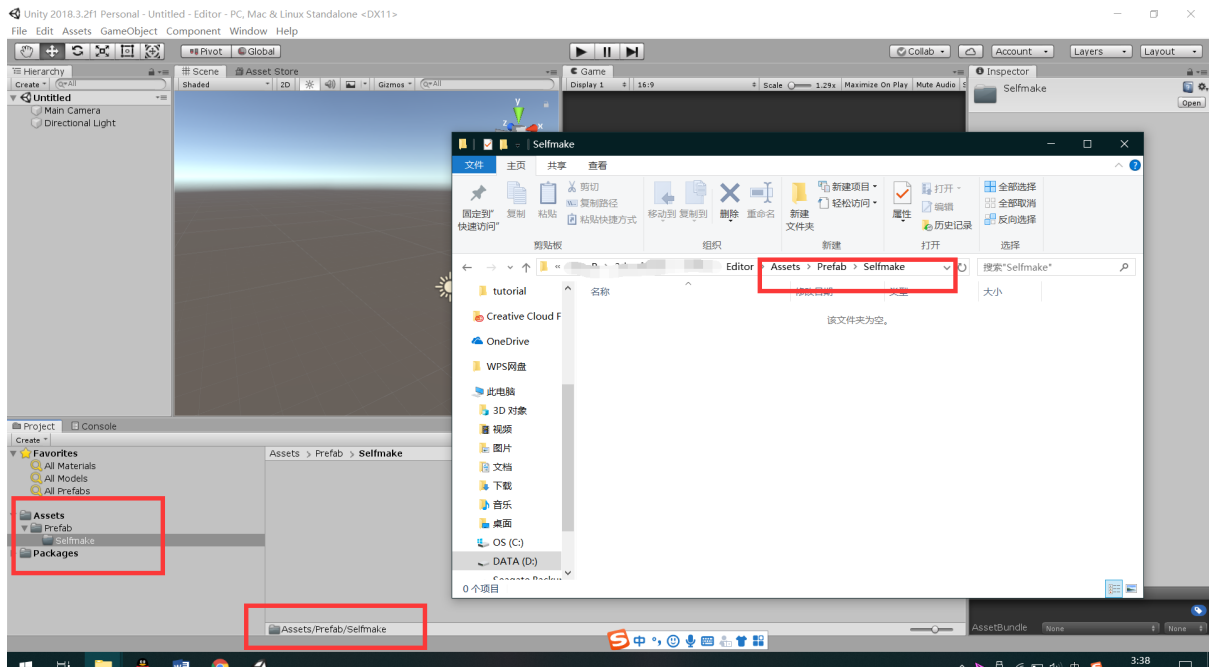
Export both Mesh and Texture set to the **folder you are working with**.

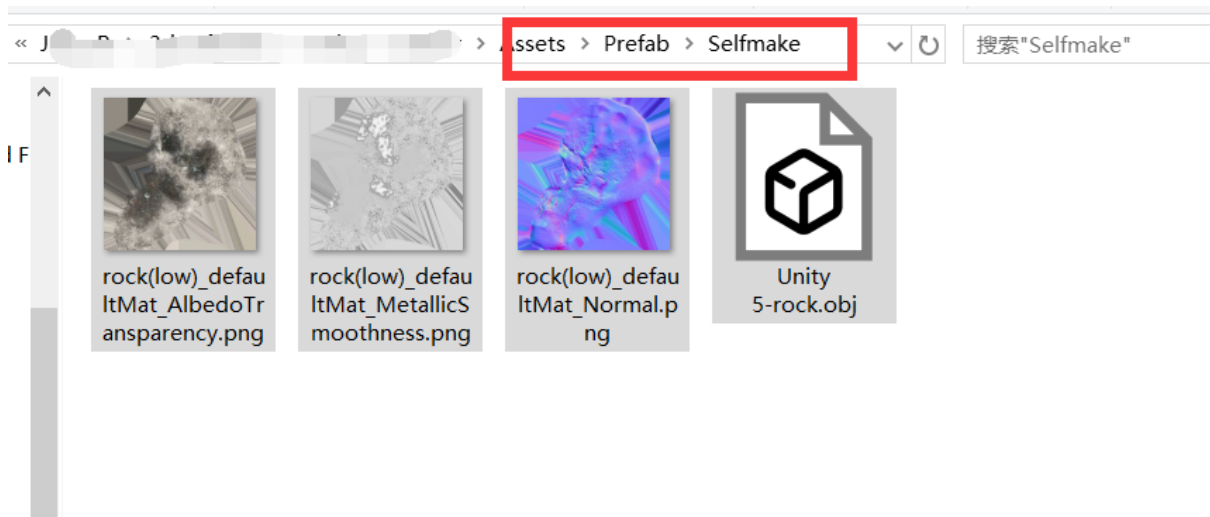


You should get these 3 maps and a .obj (or fbx) file.

Then Sync these files to Unity folder.

- I created a folder Prefab> Selfmade
- Then right click to search for the directory in explorer.

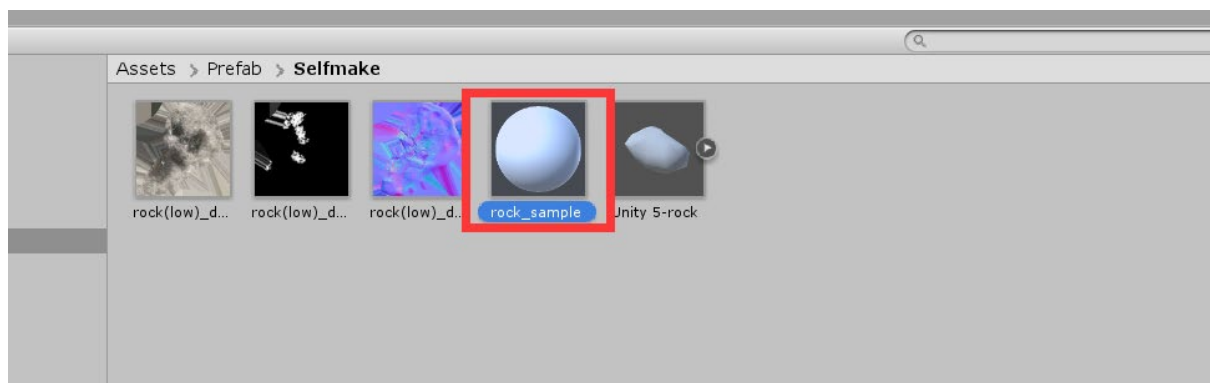




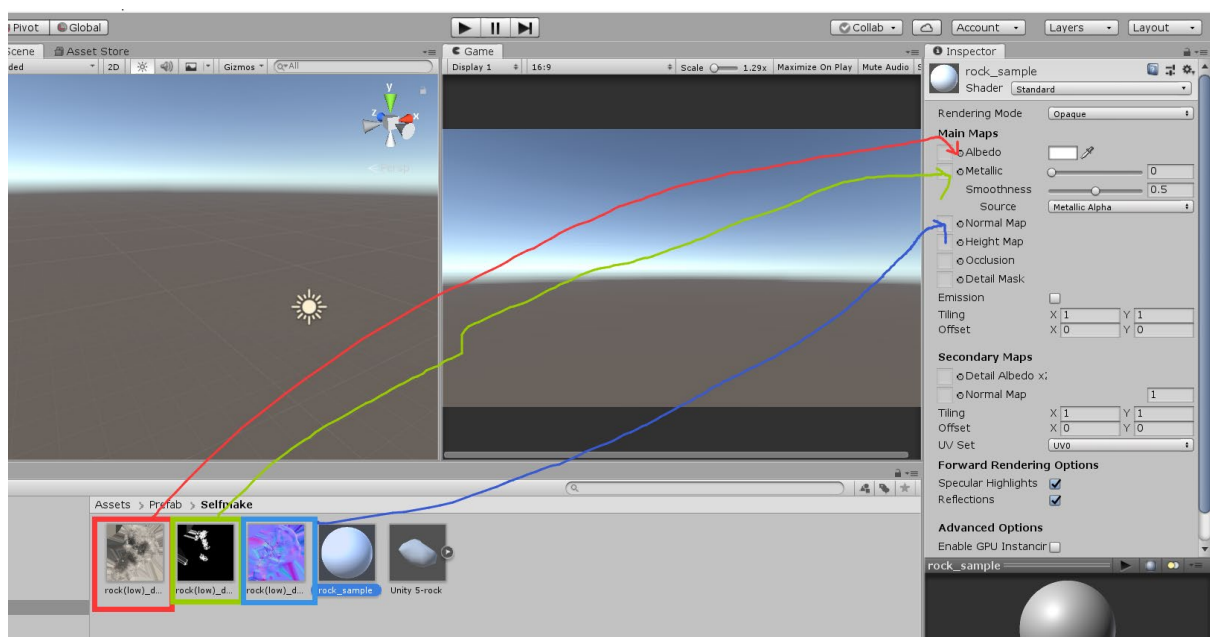
Drag all the material maps and Objects into the folder.

Then Right click to make a new material

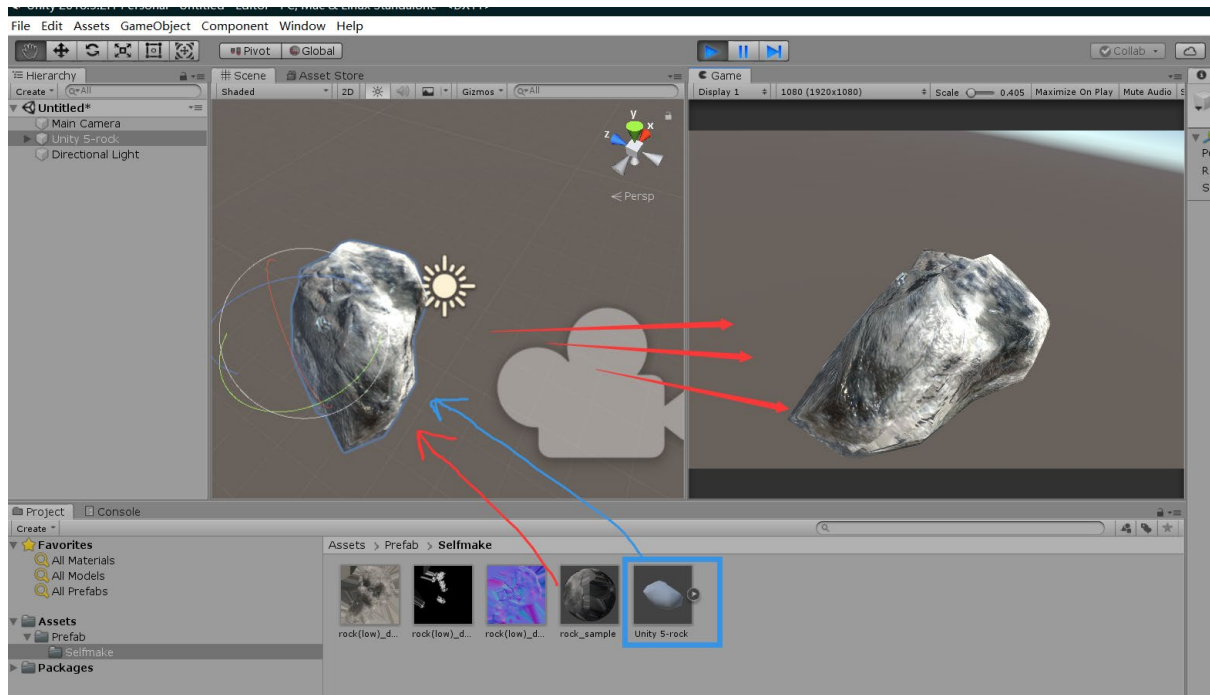
I name it "Rock_sample."



Double Click on the material to bring up panel in inspector.



Drag each map into slots and then drag material to the objects.

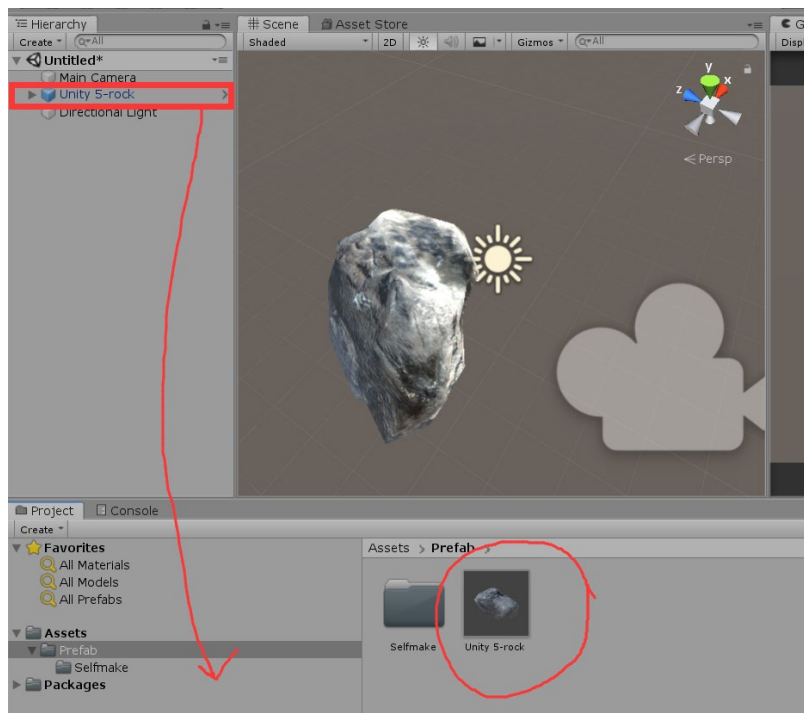


Now you have a complete Objects with Texture.

You can paint different maps for the same object model;

Or you can create complete new assets.

To bind all the maps and materials and mesh into a prefab,



Simply drag the item into the project panel/ asset folder to make a prefab out of it.

Now just drag the prefab around.
You will have multiple rocks with the same texture.

ENJOY!!!!