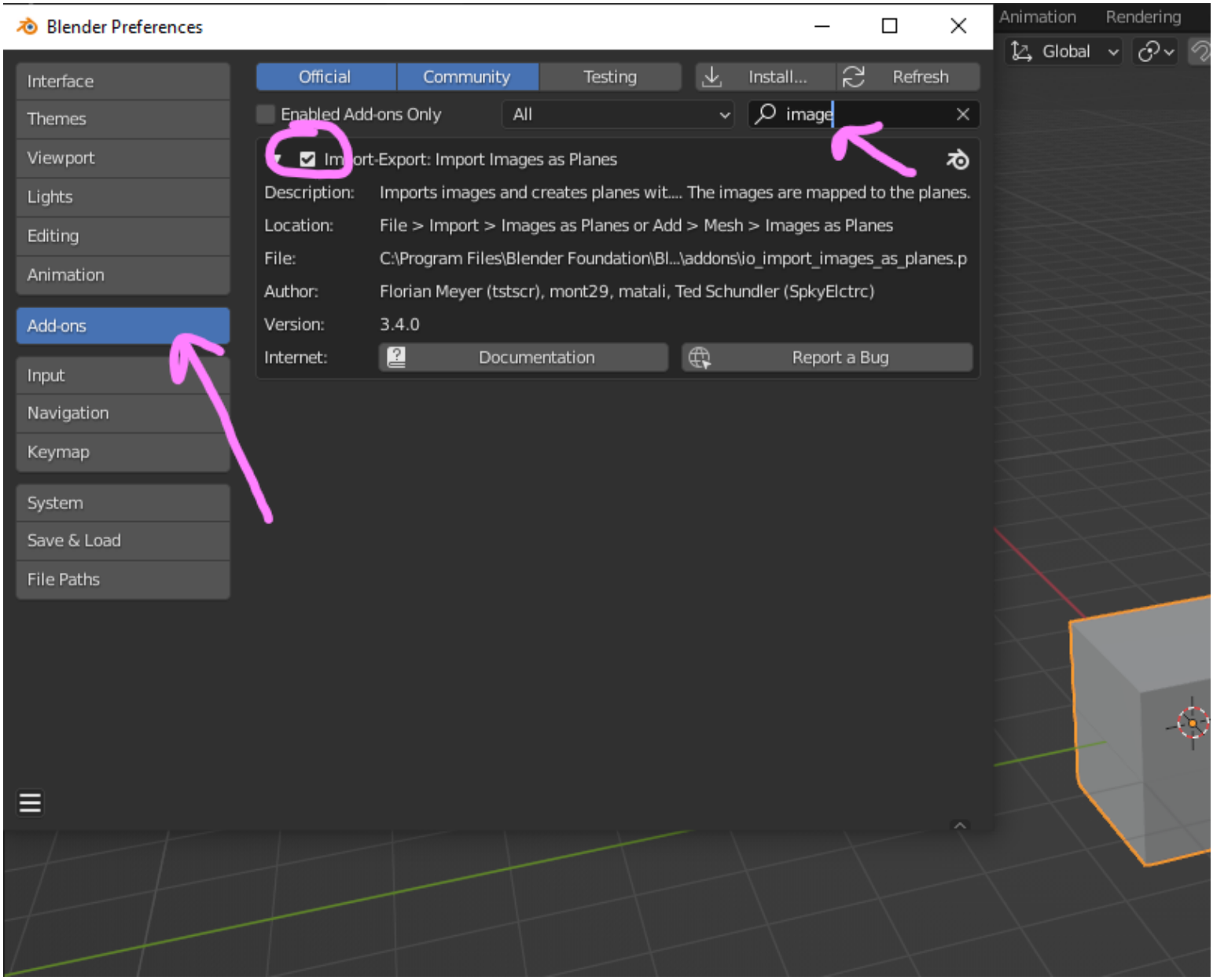
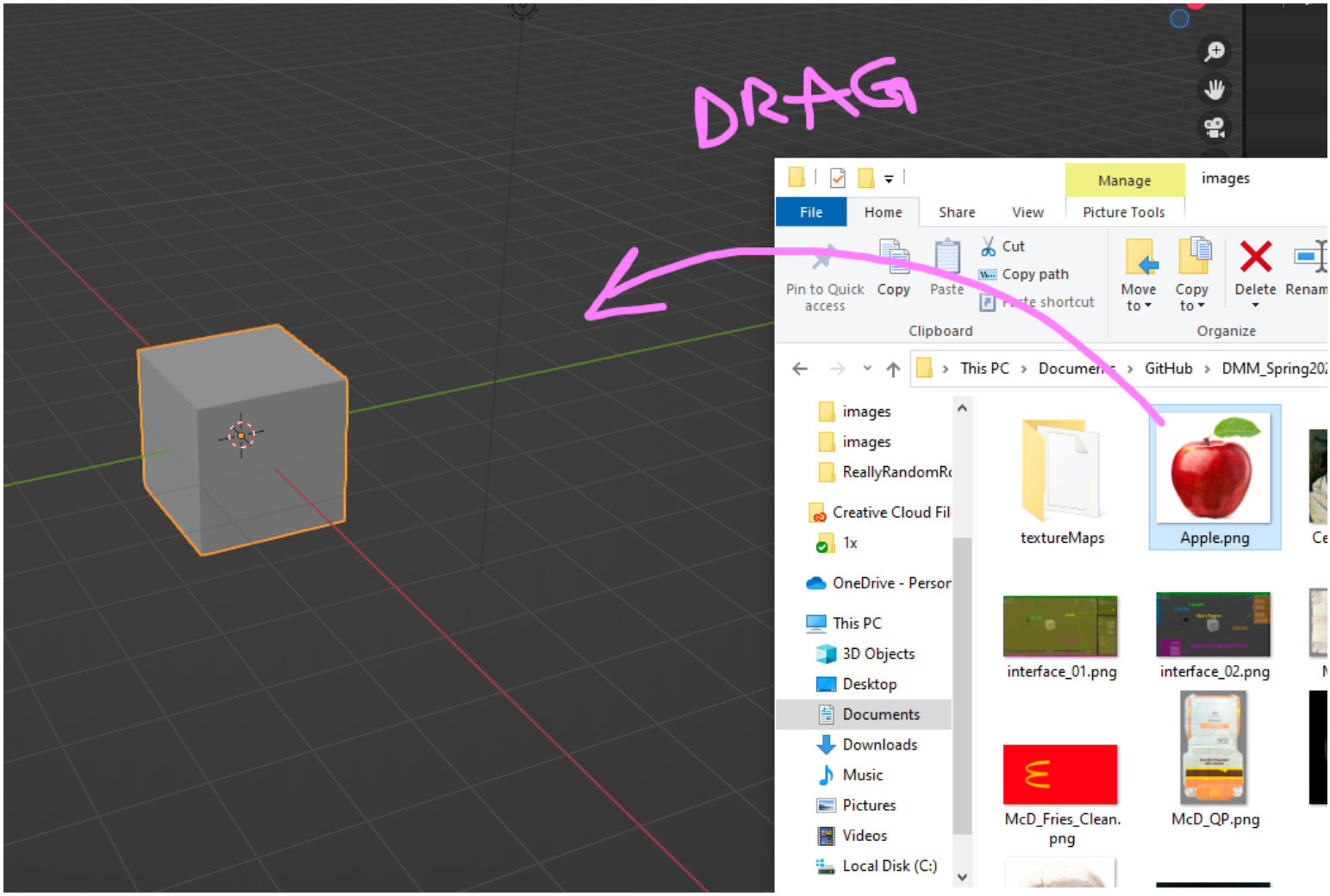
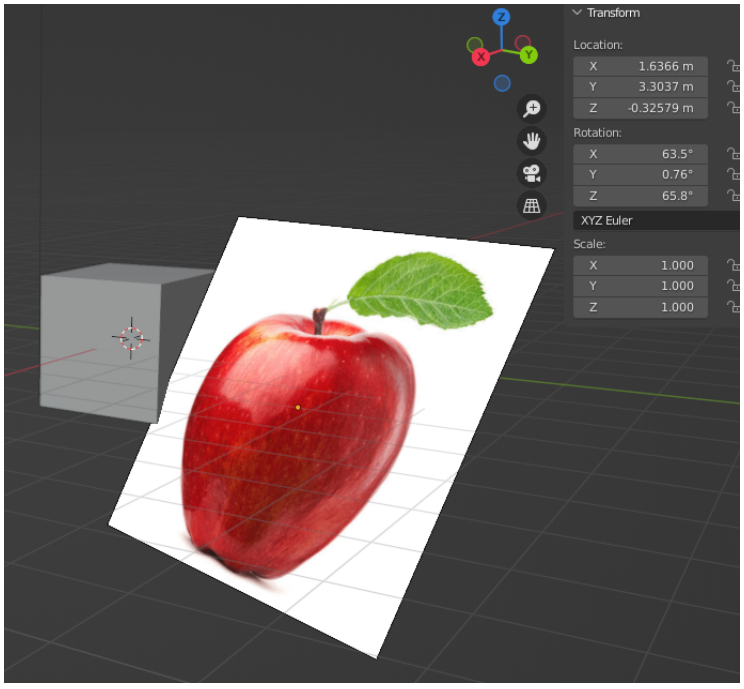
Tips:
Press z key to quickly switch between shading modes
Press ctrl + tab to quickly switch between different modes
—---
Open Blender default view
Go to file -> preferences and enable the “Import images as planes” addon. The addon can be found by searching for it using the search term “images”
Make sure the check mark is in the box and then close the window.

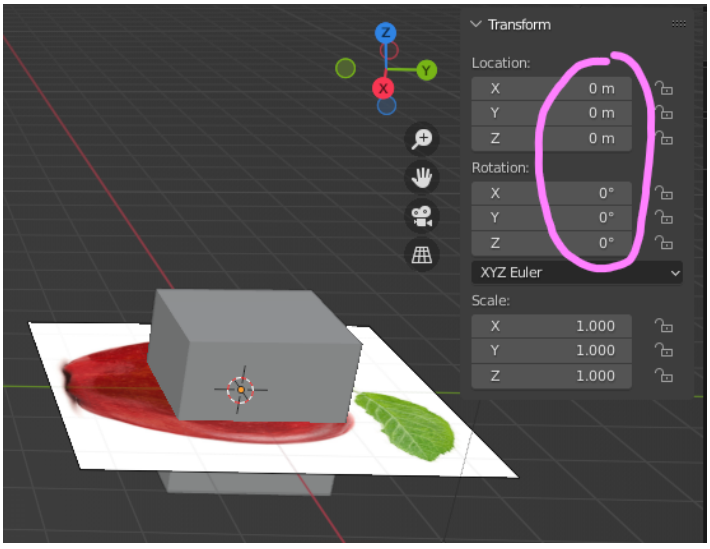



Find the image of an apple in your file system and drag it into the blender window



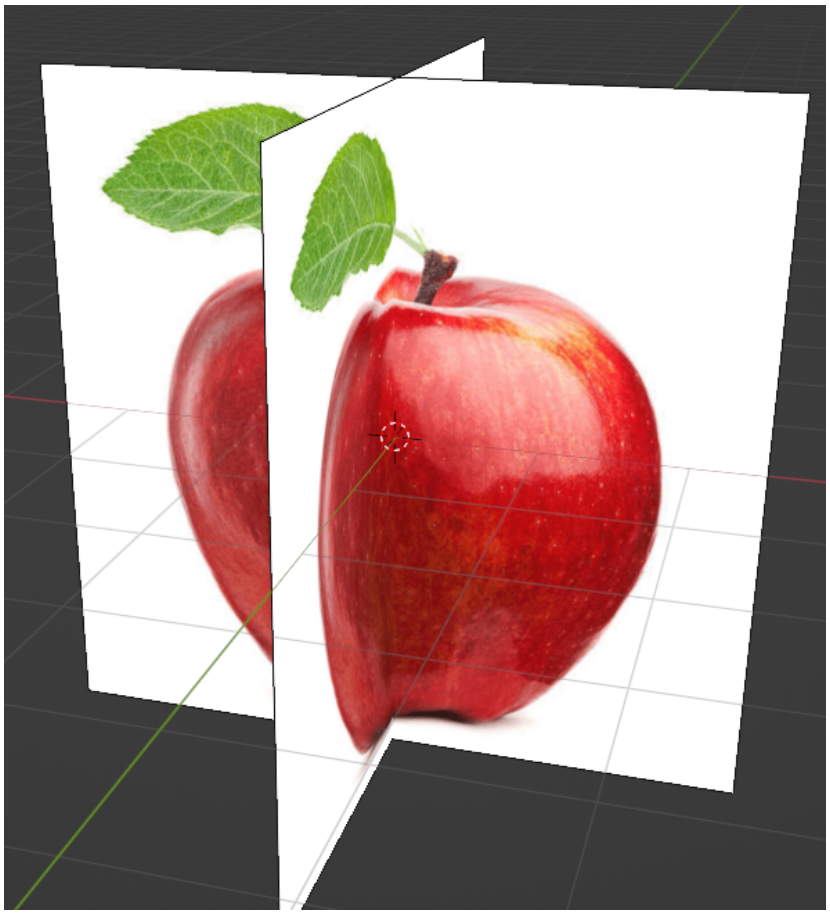

The resulting image is dropped into the workspace at an unusual angle. This needs to be corrected using the transformation settings. Press the N key to see the settings and reset the positions and rotation to 0



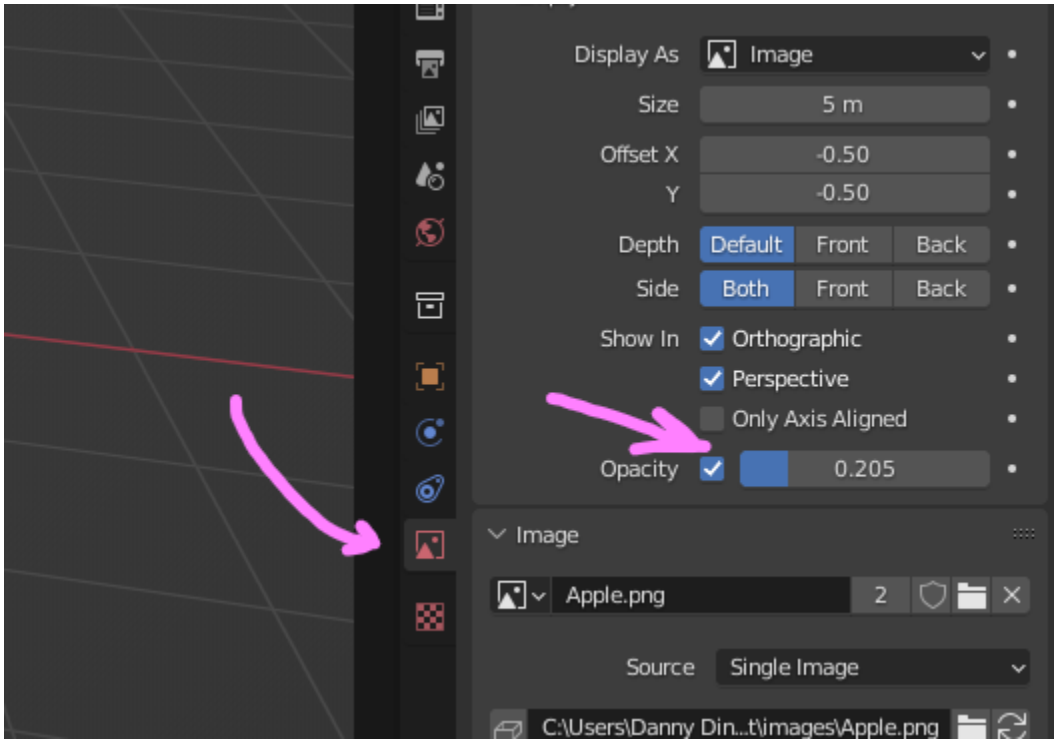




Finally, rotate the apple image to stand it upright on the x axis by 90 degrees. (select the image, press **r** and then press **90** and enter)

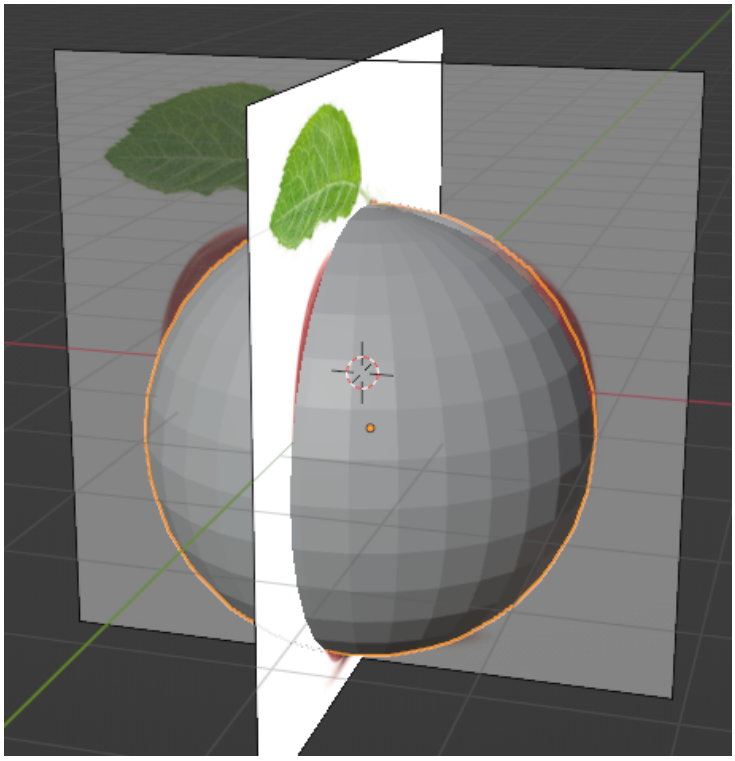
Duplicate the apple image by pressing the **shift+D** key combo and then rotate it in place along the vertical z axis by pressing **r** key  followed by **z** and then typing **90**



Decrease the opacity of the images by selecting the image and then clicking into the “image” tab in the properties panel and sliding the opacity down to a decent level. Do this for both apple images.

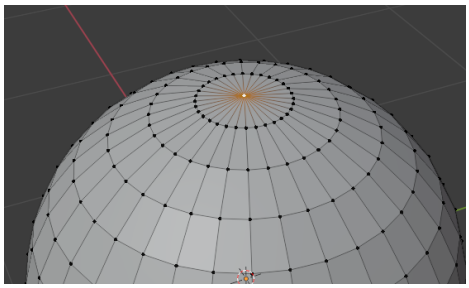


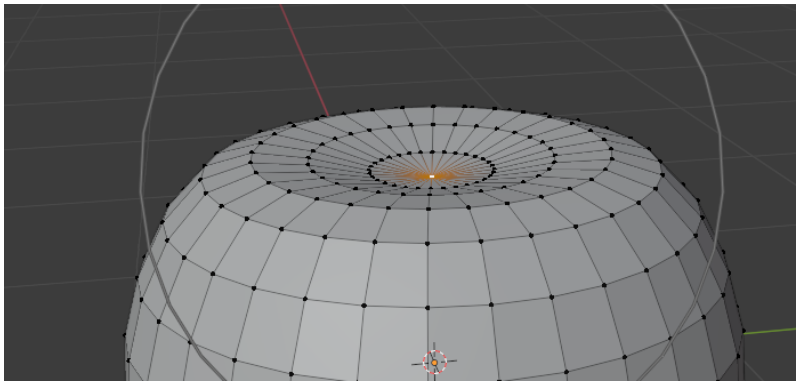

Erase the default cube and add a UV sphere into the scene.
Scale the sphere (s key) until it is approximately the size of the apple and position it downwards a little bit too



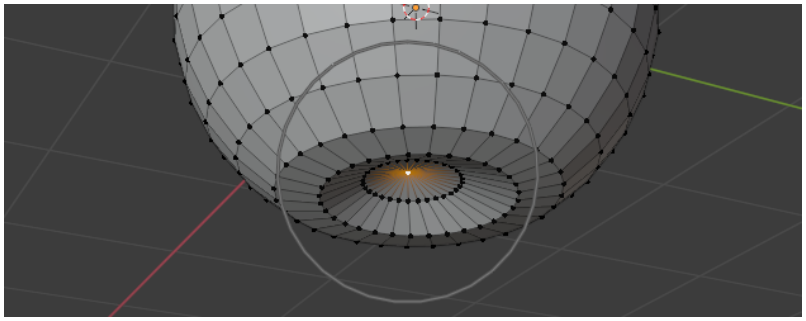
We are now ready to begin forming the sphere into an apple shape.
There are multiple ways to do thie. One way is using edit mode to push the vertices around using proportional editing.
The other way is to “sculpt” the vertices using sculpting mode.
For this exercise, we will sculpt it using edit mode
With the sphere selected TAB into edit mode.
Ensure that the following settings are enabled: Edge-Select mode and Proportional Editing


Select the top vertex and drag it downwards. While dragging, scroll the mouse wheel to change the area of effect for the proportional editing tool.

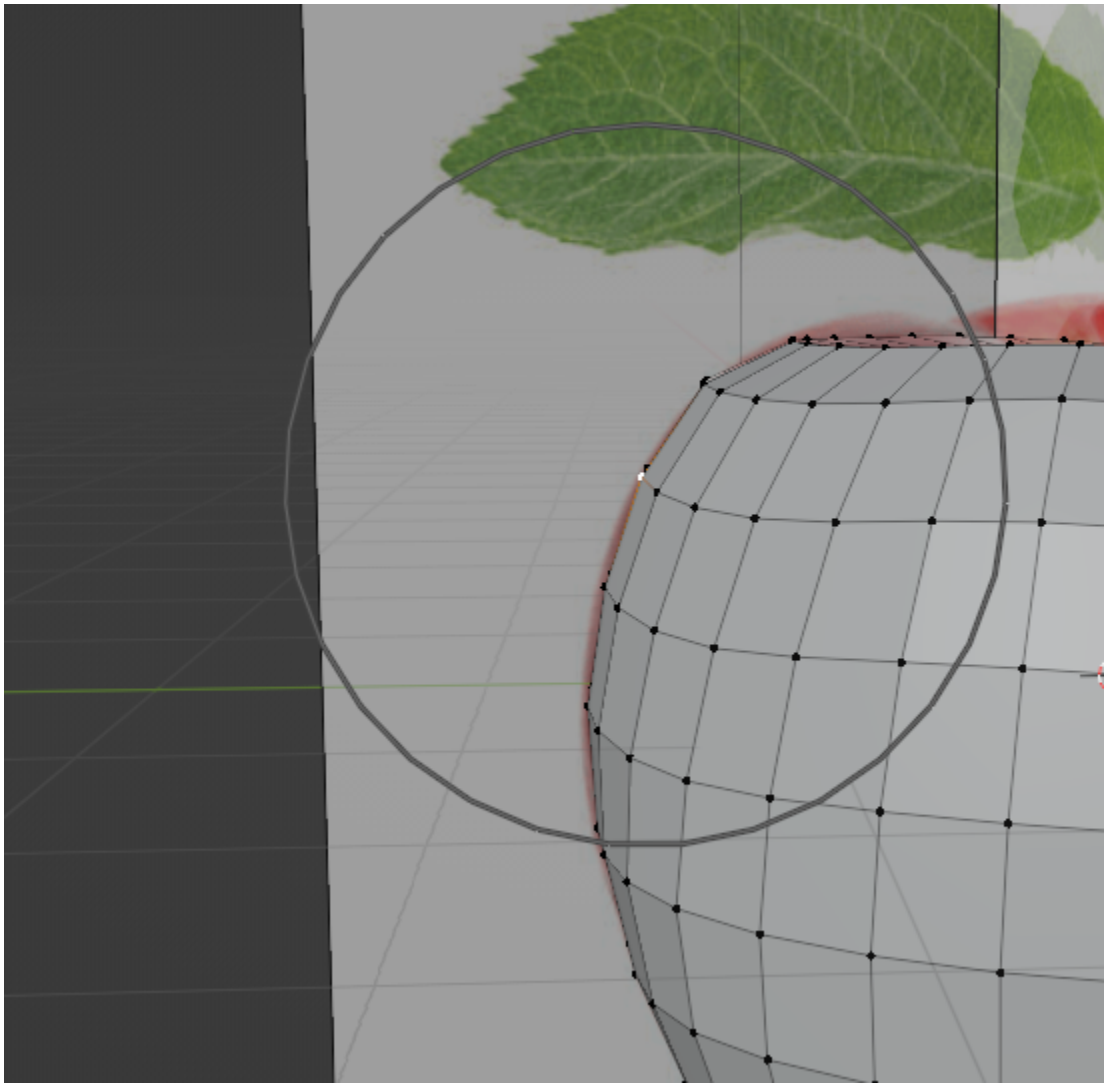




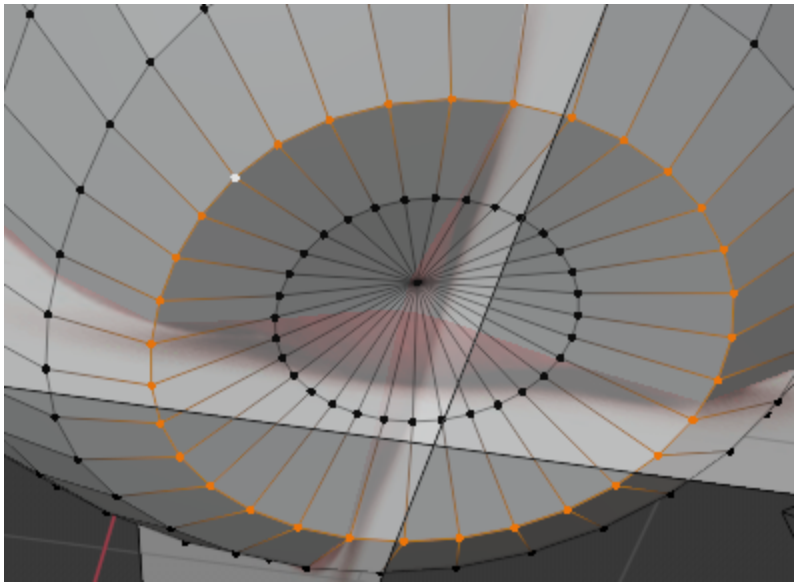
Repeat the same process on the bottom of the sphere to create the bottom of the apple



Grab verts on the edge and align (grab using the **g** key) the edges of the sphere to the apple reference image.The idea is to closely match the shape of your sphere to the shape of your apple from all four angles.
Repeat this on all 4 sides.

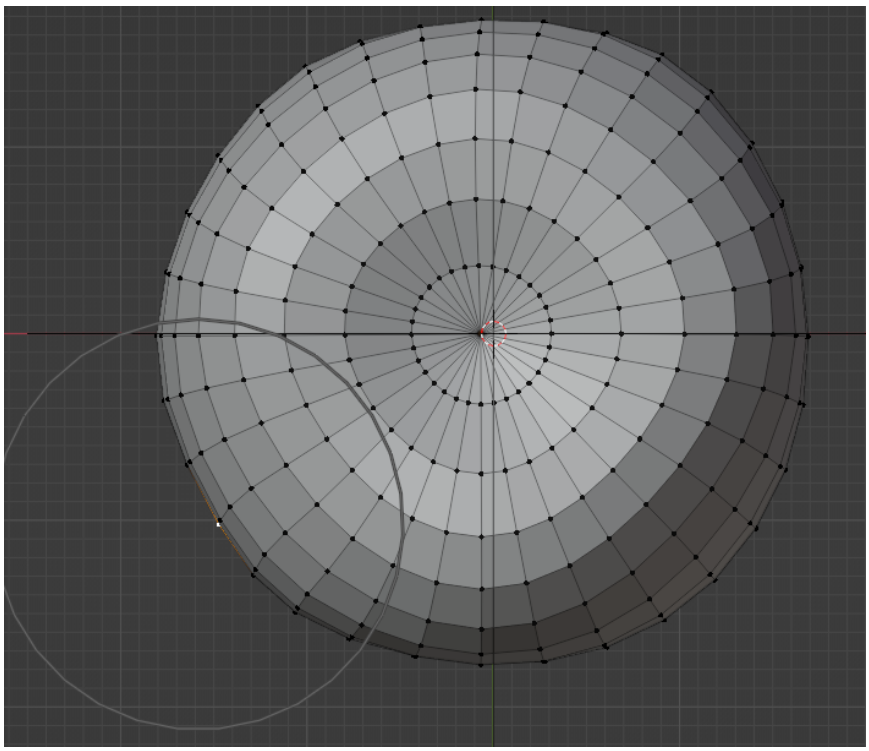


Hold **ALT+ click** and select edges or vertices to Loop Select. This makes it easier to alter a larger region.

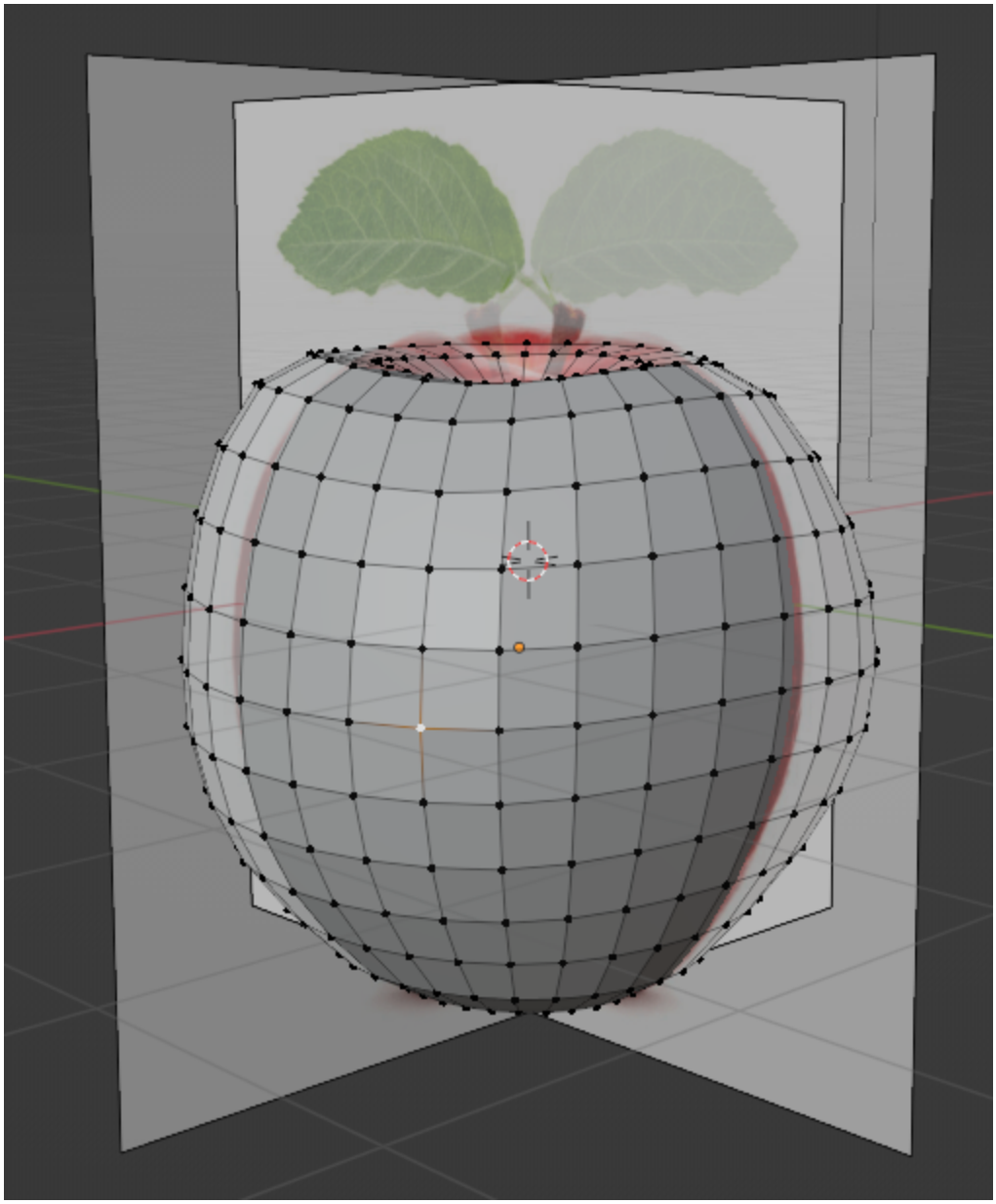


Click the navigation widgetl in the corner to view thapple from different angles

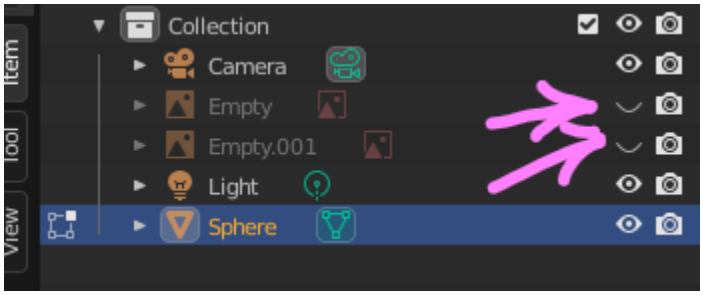

View your apple from above and adjust the edges of the shape accordingly



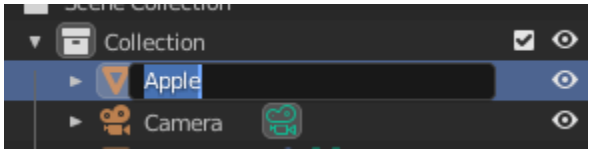
When you are done, you will now have an apple shape



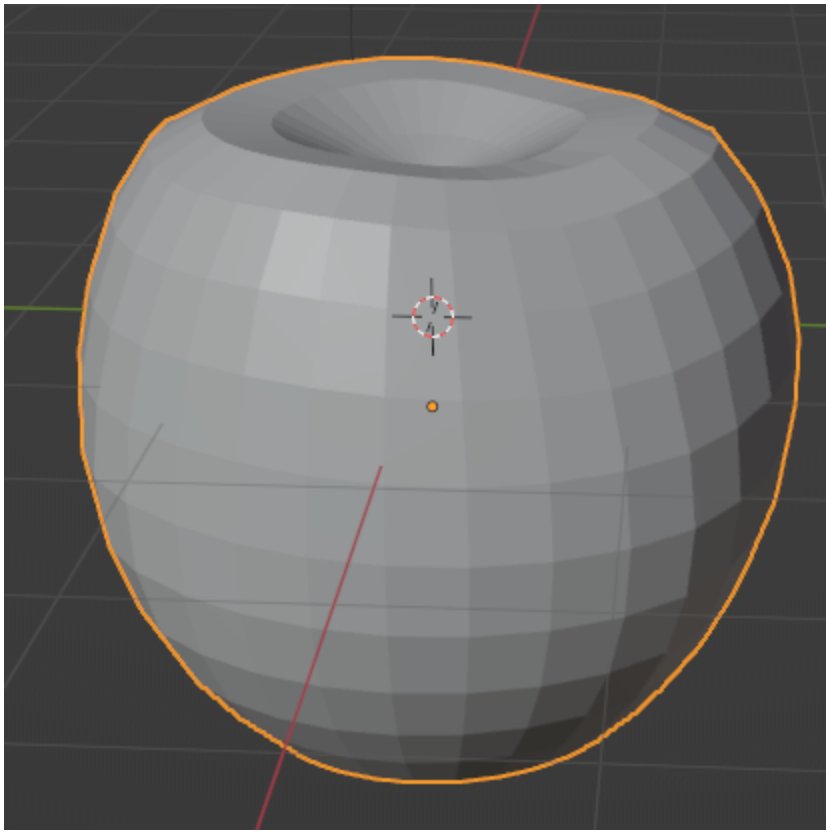
Hide the image layers in the hierarchy by clicking their eye icons



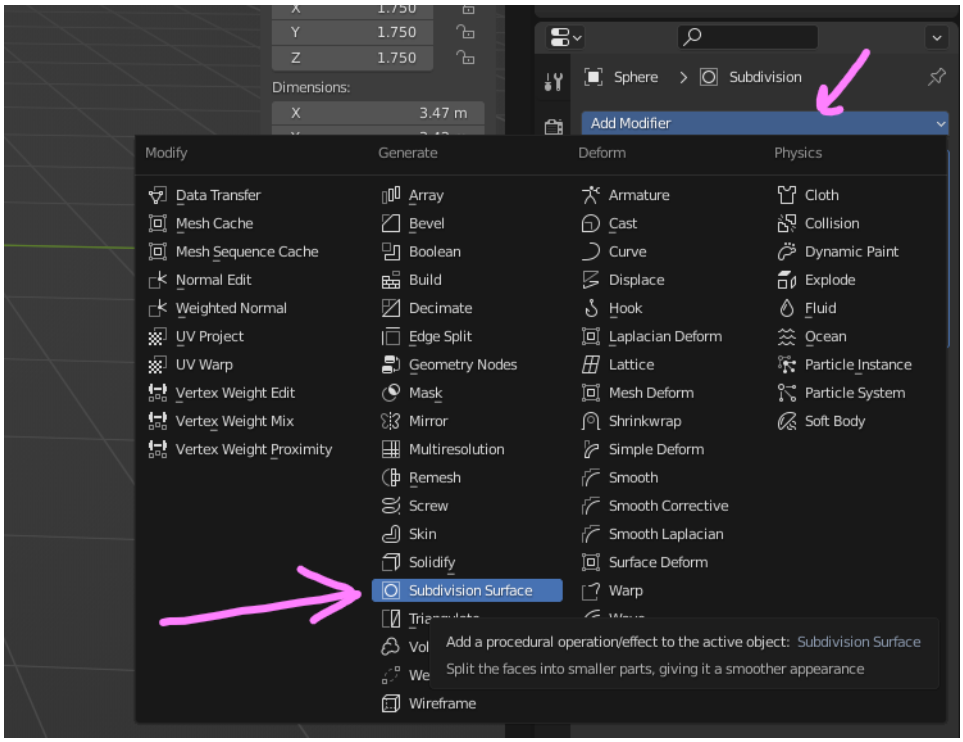

And rename the Sphere to Apple in the hierarchy

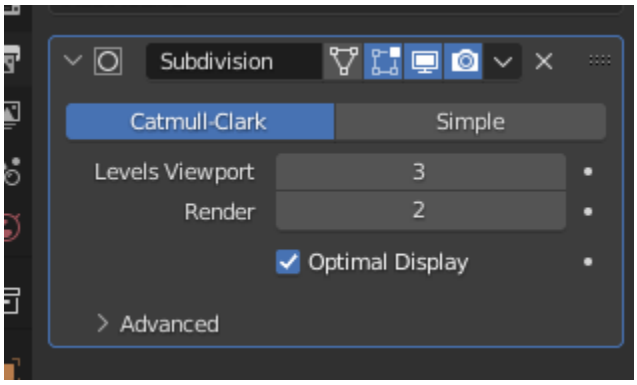



TAB back into object mode

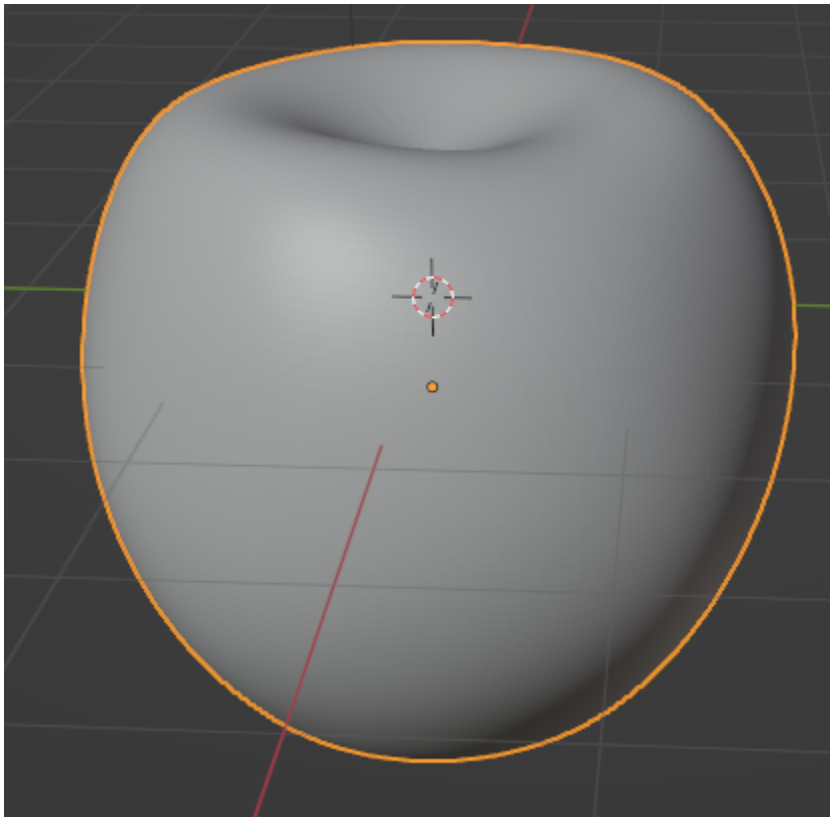


Add a subdivision surface modifier to the apple and set the setting to 3

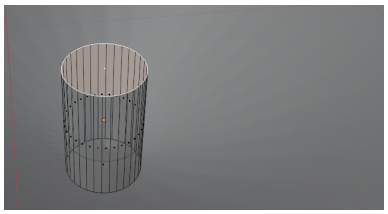


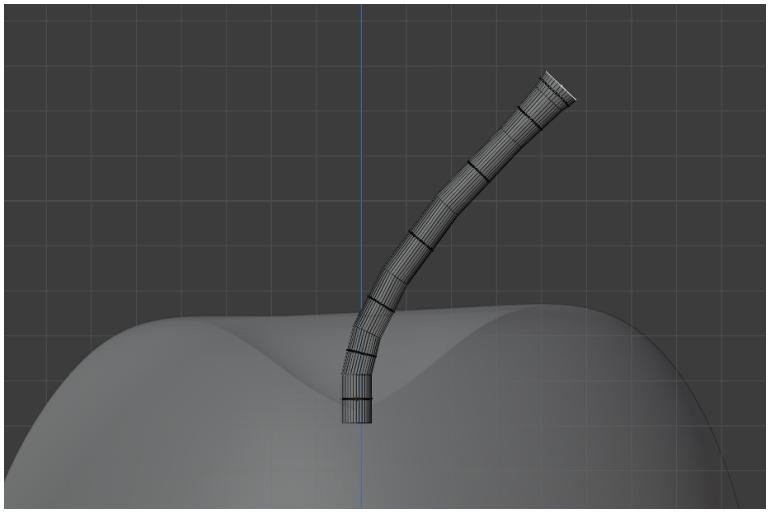



The apple will now be very smooth

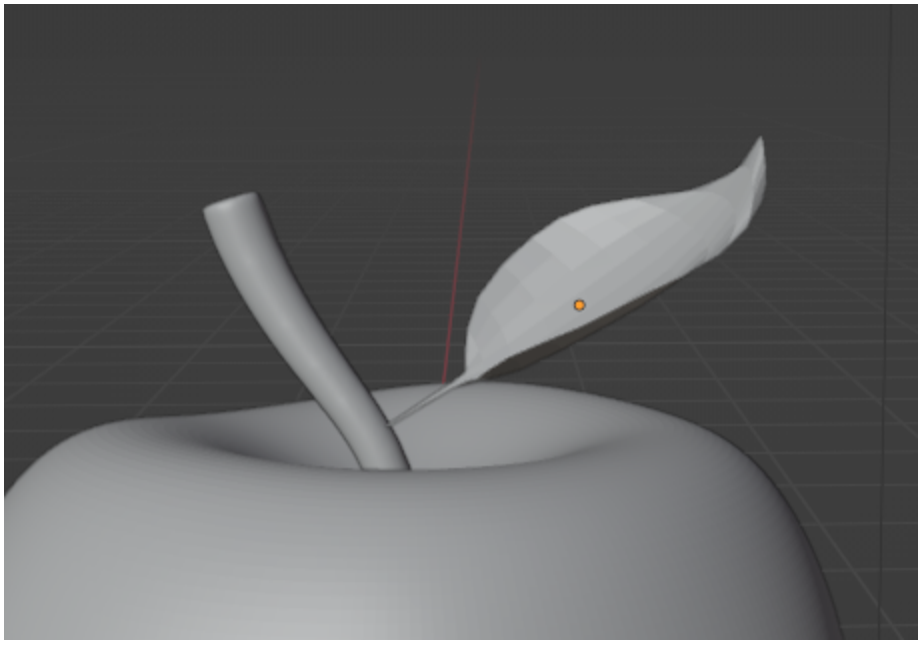


Try adding a cylinder to the scene and extruding the top of the cylinder into a stem within edit mode
Remember to rename the cylinder in the hierarchy to “stem” to stay organized





Can you add a leaf? Try starting the leaf by adding a plane in object mode and then subdividing the plane with loop cuts (**ctrl+r**) in edit mode to give it shape.



Let's do a quick render for fun.
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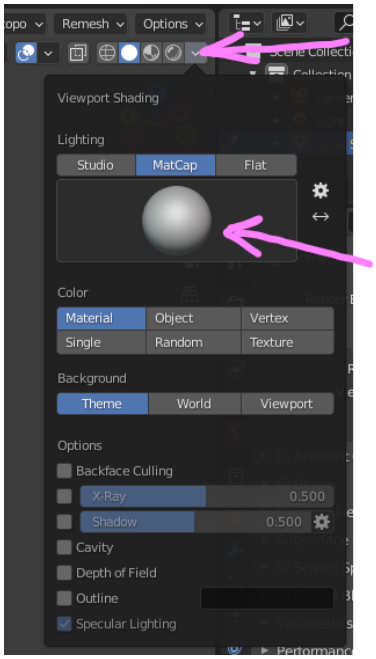
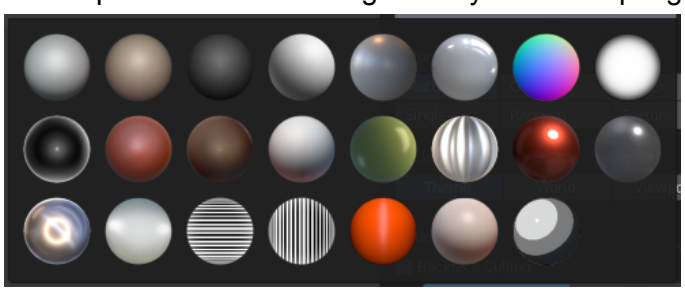
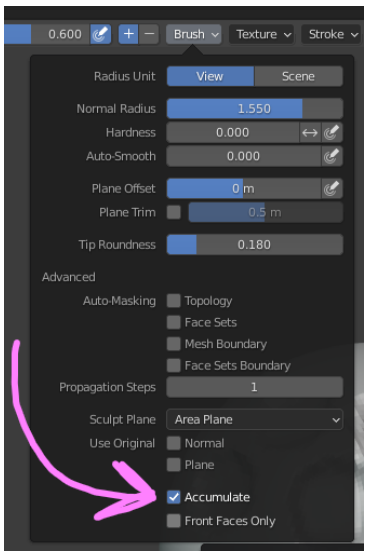
Dyntopo
File→ New → Sculpting
Let's look at Shading Modes that help with Sculpting
Click the dropdown menu on the shading modes




The different MatCap choices for shading do not affect the geometry or the rendered material, they are only overlays that help us to *visualize* the geometry while sculpting

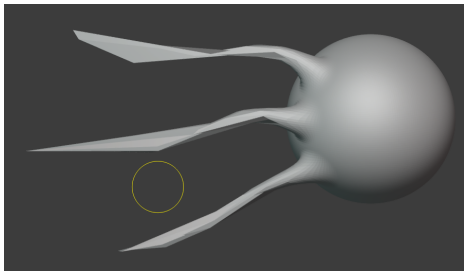


Click on the draw brush and draw a few strokes on the sphere with the default settings
Set the hardness to the highest settings in the Brush dropdown and try drawing with a hard edge
Return the hardness setting back to zero
Click the Clay tool and explore by drawing
Click the Clay Strips tool and explore by drawing
In the brushes menu click the checkbox for Accumulate - now the strokes pile onto one another
Keep the setting enabled

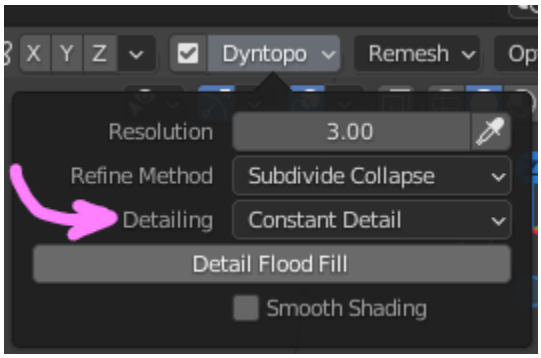



Keep going down the line of tools, exploring each one until you reach the snake hook tool

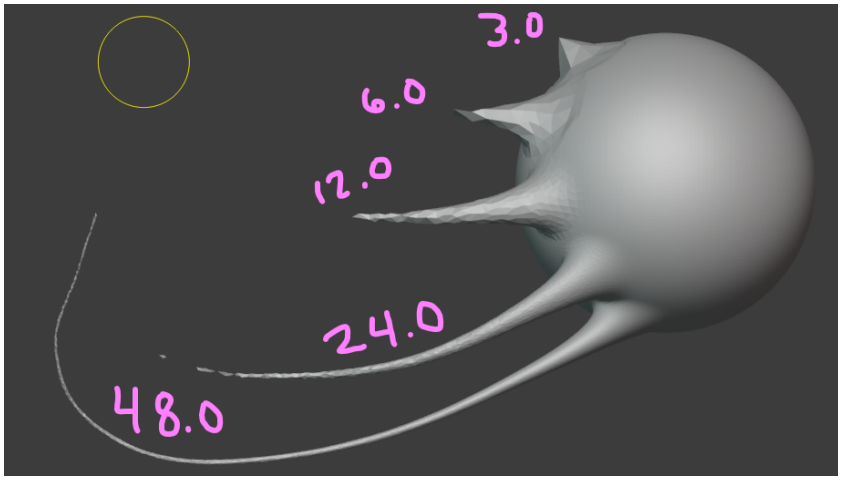
Snake hook tool - pull some snakes without dyntopo - polygons become stretched



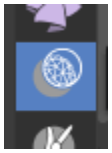
Now enable dyntopo and set to constant detail



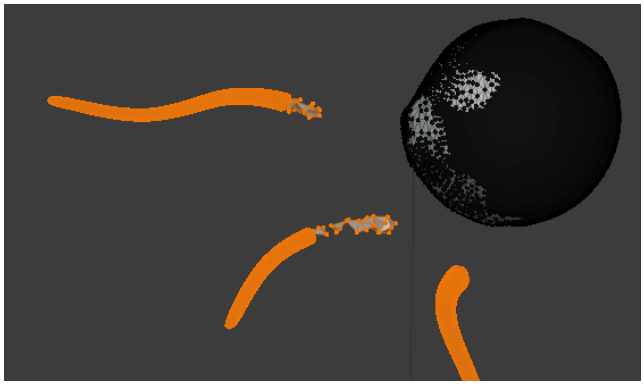

Try pulling a snake at resolution 3.00
Now increase the resolution by doubling to 6.00 and try pulling another snake
Now increase the resolution by doubling to 12.00 and try pulling another snake
Now increase the resolution by doubling to 24.00 and try pulling another snake
Finally increase the resolution by doubling to 48 and try pulling another snake




Pull a few more snakes at 48 resolution and switch over to the task of trying to erase the snakes from the form
Try using the smooth brush. It is challenging
Enable the mesh overlay to see the geometry while we work 
Switch to the Simplify brush (oly works with dyntopo enabled)

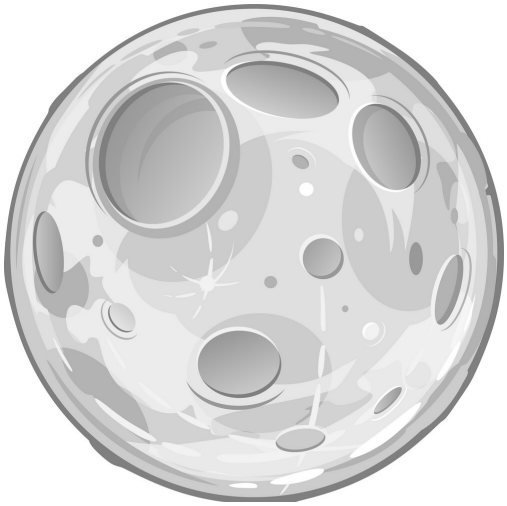


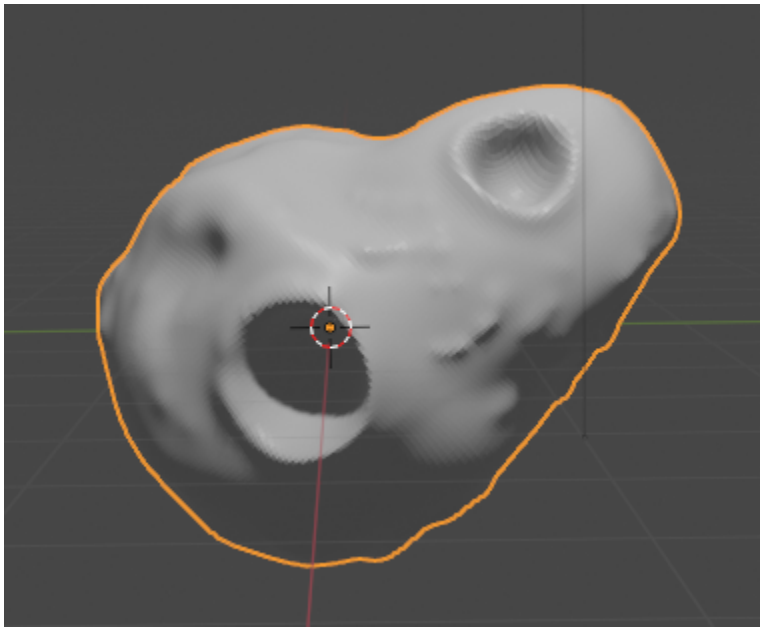
Try simplifying the geometry using this brush to erase the snake hooks. Will require tinkering with the resolution setting in the dyntopo menu.
**Tab** into edit mode
Select a vertex on your object
**ctrl+L** to select linked
Invert the selection



Press **X** or press **Delete** key to erase the vertices
Press tab to return to sculpt mode

—---
Lets try sculpting a few more things:
Lets sculpt a small moon or comet





Spend the rest of the time adding a face to your moon

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