

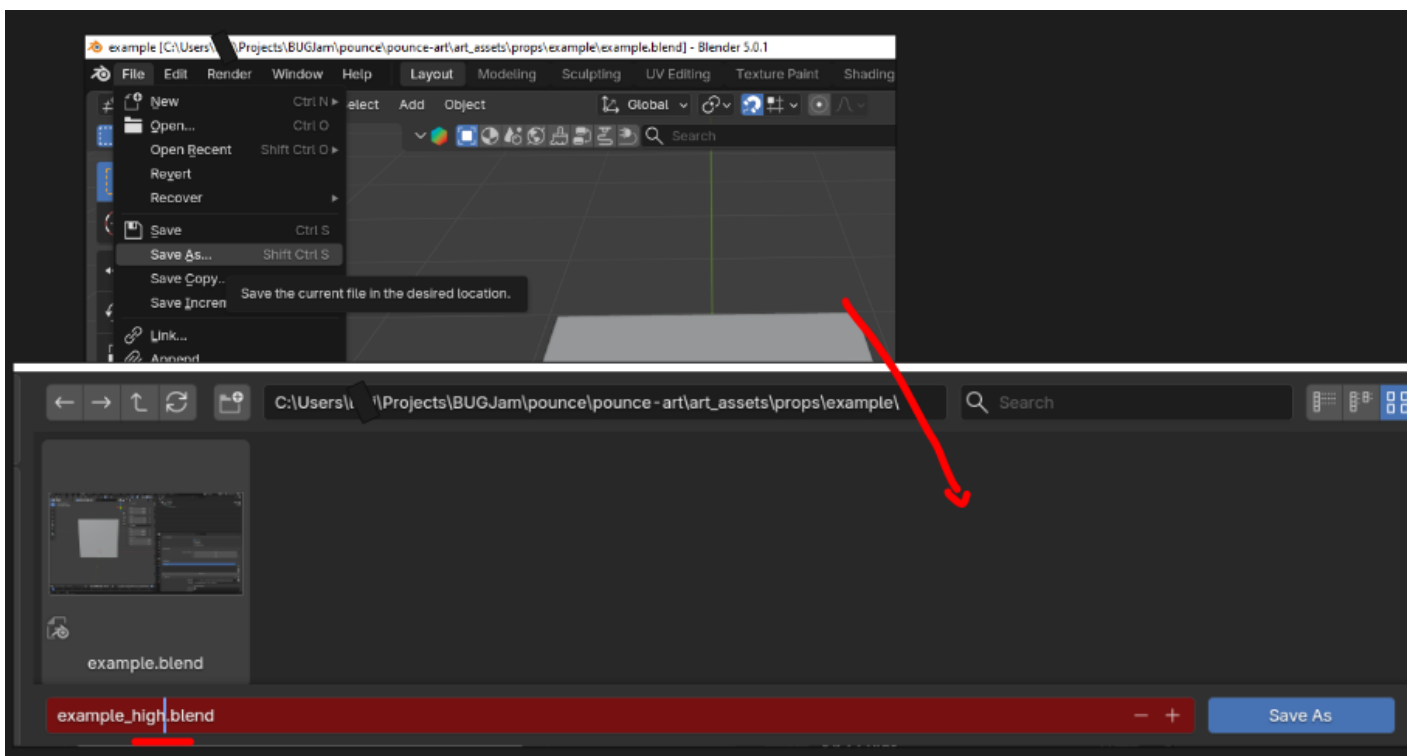
Asset Creation - Part 3: High Resolution Mesh

Once the block mesh plus has been approved, it's time to refine it into a high quality high resolution mesh. There are multiple ways to do this depending on the asset you're trying to make: hard surface models tend to rely on subdivision surface workflows and geometry nodes, while organic forms tend to rely on sculpting. We should use whatever combination of techniques are appropriate.

Goals

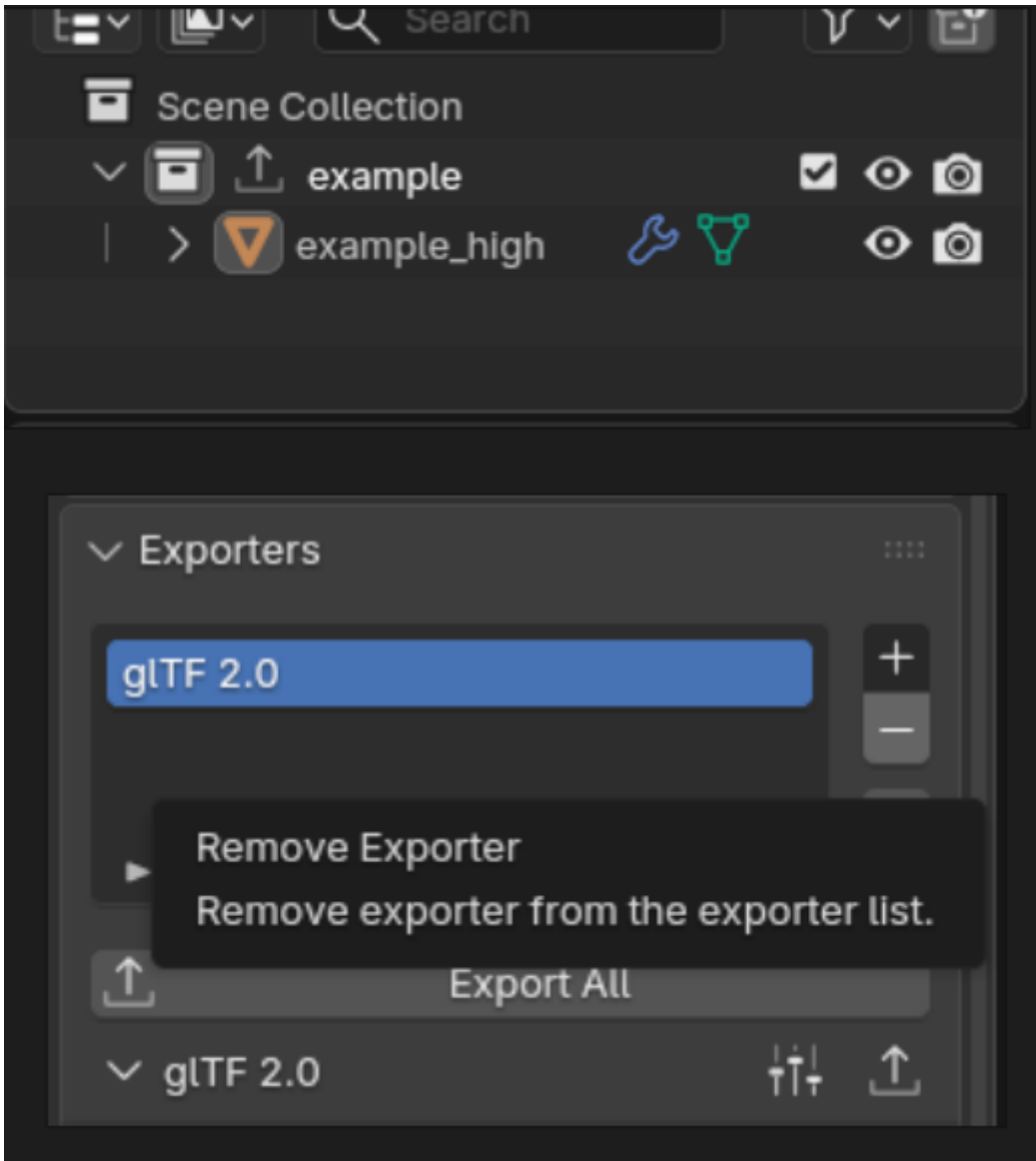
1. Create a high resolution mesh that will eventually be used to bake normals and other mesh maps.
2. Save the file as a new file with the "_high" suffix: asset_high.blend

1: Create a new file for the high resolution mesh

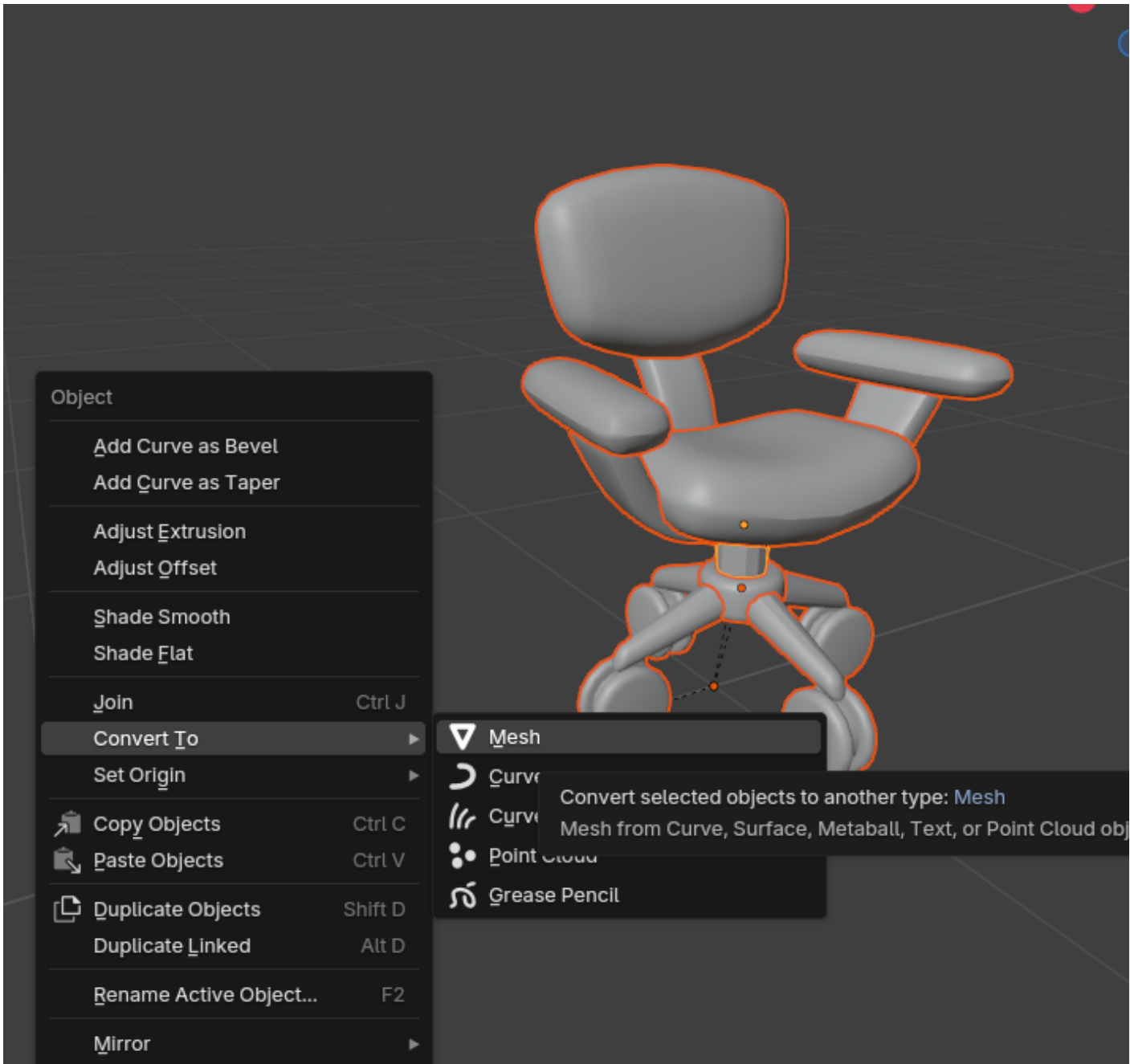


Starting from your blockout+ blend file - go to file > save as> and add '_high' to the file name, this creates a duplicate working file

This high poly mesh will NEVER be put into the game, so you can delete the collection exporter inside of this file, as well as updating the mesh data in your outliner with the suffix '_high'



2: Create High Resolution Mesh



Object

Add Curve as Bevel

Add Curve as Taper

Adjust Extrusion

Adjust Offset


Shade Smooth


Shade Flat

Join Ctrl J

Convert To ▶

Set Origin ▶

 Copy Objects Ctrl C


 Paste Objects Ctrl V


 Duplicate Objects Shift D


Duplicate Linked Alt D


Rename Active Object... F2


Mirror ▶

 Mesh

 Curve

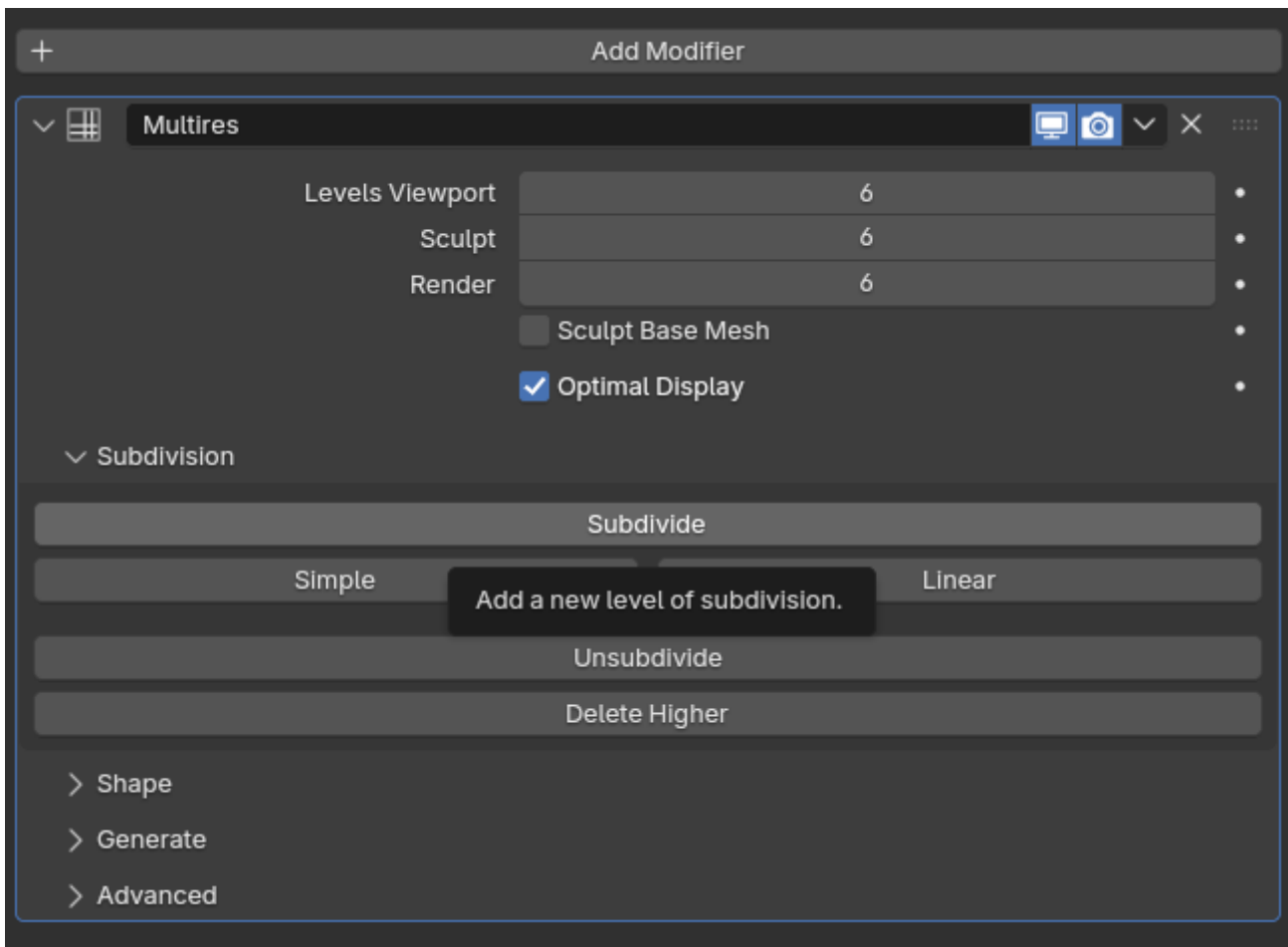
 Curve

 Point Cloud

 Grease Pencil

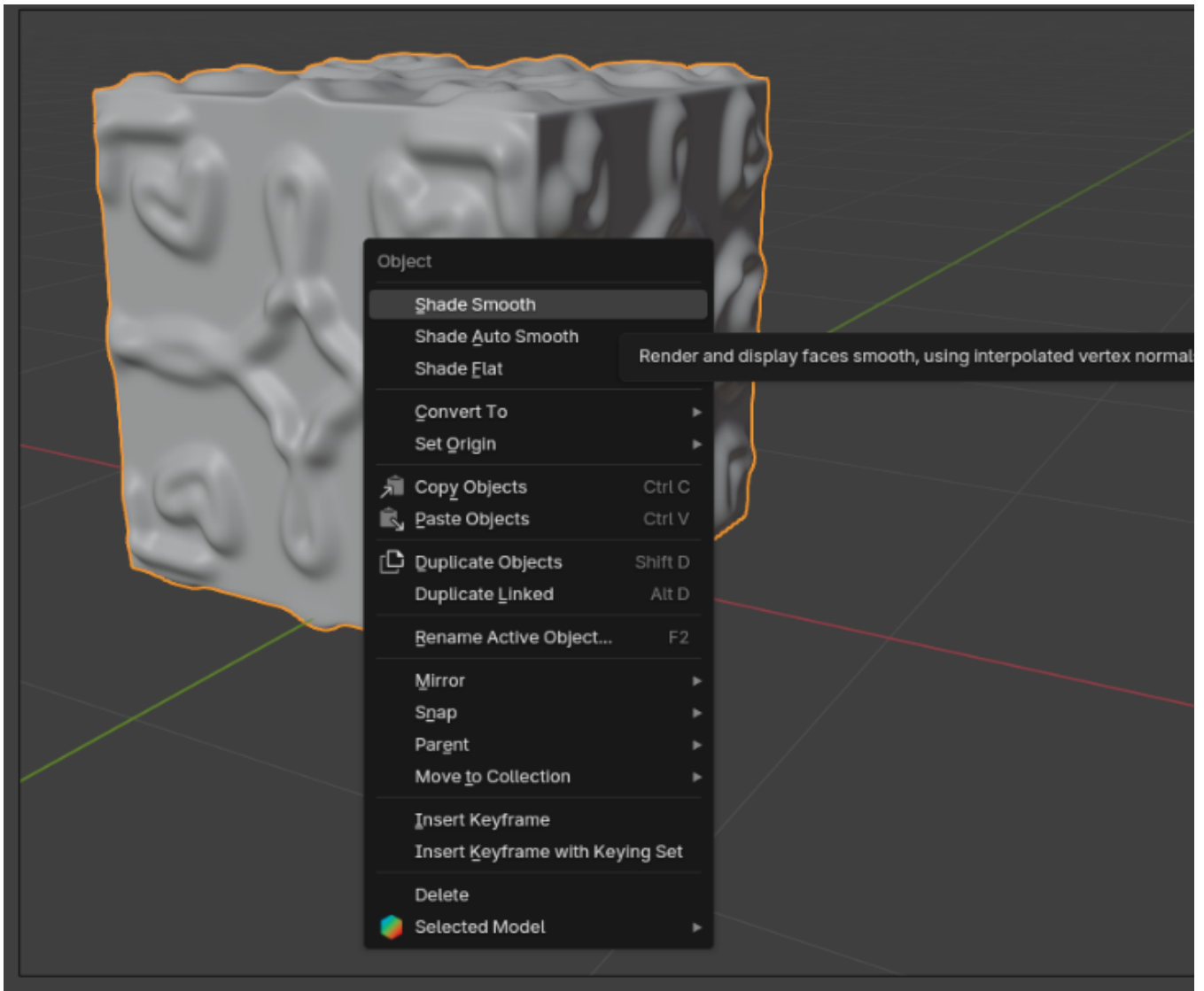
Convert selected objects to another type: Mesh

Mesh from Curve, Surface, Metaball, Text, or Point Cloud object



1. start by applying all current modifiers to your mesh (excluding instances) if you are working on a symmetrical mesh, use the mirroring effect in the sculpt workspace, and go ahead and apply any mirror modifiers
2. apply a multires modifier with 3-6 iterations, this increases the polygon count to a level that is appropriate for sculpting (if you find you need more when you are sculpting, just hit 'subdivide' again)
3. switch to the sculpting workspace
4. sculpt + detail your model adhering to the style guide + following notes
5. double check origin + reapply transforms
6. set object(s) to 'shade smooth'

7.



Hit ctrl + S frequently while working on the high poly mesh + sculpting! it is a very likely time for blender to crash and you don't want to lose work! when you are done, only the most recent save will get pushed to the repo so dont worry!

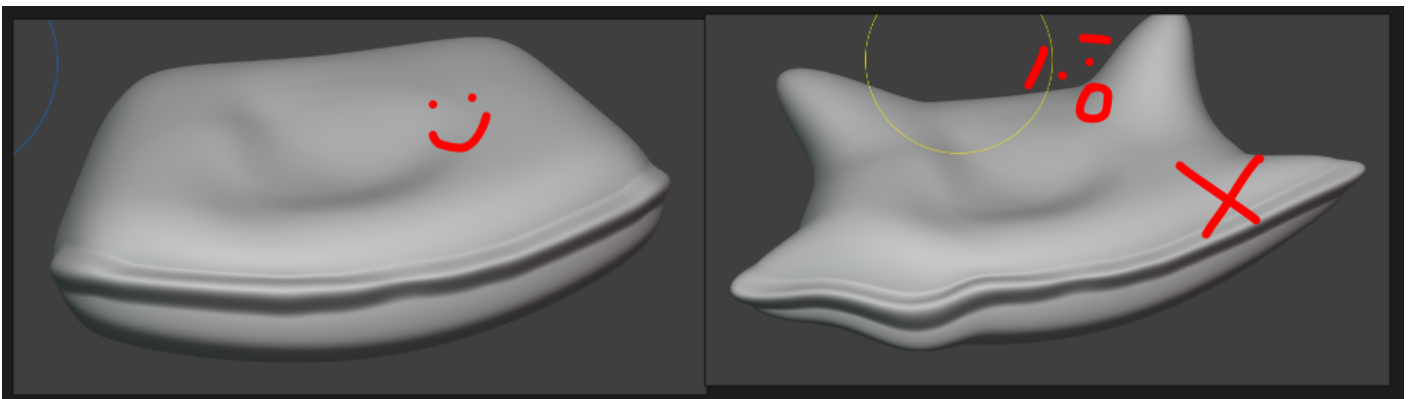
Polygon Notes:

We are going to be using a high - low polygon workflow, which means you can go pretty high when working on the details of your model! Poly counts + budgets arent a thing in this step, but please be considerate of the server's capacity and dont add 20 subdivs just because you can, add as many as you **need** to capture the details you want, but start low and go up instead of just throwing on 1 million faces

Just make sure there is enough to create a smooth surface- see below: when you see shading artifacts and little jagged edges, thats a sign to increase your subdivision level



A good high res sculpt adds detail (like dents, wrinkles, seams, fur, etc.) without making noticeable changes to the silhouette or size of the object



3.) Push to the repository

Commit changes / complete the task:

All changes to the .blend file need to be checked into the pounce-art repository. And the newly exported mesh / collision update need to be checked into the pounce-game repository.

Now that the asset has been pushed to the server, the art director will have access to it. Contact Lexi to let her know it's ready for review. If she has feedback for you, make the appropriate adjustments and repeat steps 1-5 as needed.

• Commit to the `pounce-art` repo:

- Make sure you're in the right branch: `dev`
- Stage only the .blend file for the newly created asset.
 - Make sure you haven't staged irrelevant files.
- Write a commit message:
 - Prefix the message with the name of the asset and a colon.

- e.g. "crate_wood: Create high res pass"
 - e.g. "crate_wood: Create high res pass"
 - Push the change to origin / DEV.
 - If it prompts you for credentials, enter your username and password for git.bugjam.dev
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Revision #5

Created 2026-02-14 21:58:54 PST by xury

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