

## LoM: Customer Modeling Sheet and ToDo

### General + Principles

**Quantity over details:** the main point of the outfit is to communicate the gameplay, NOT detailed aesthetics.

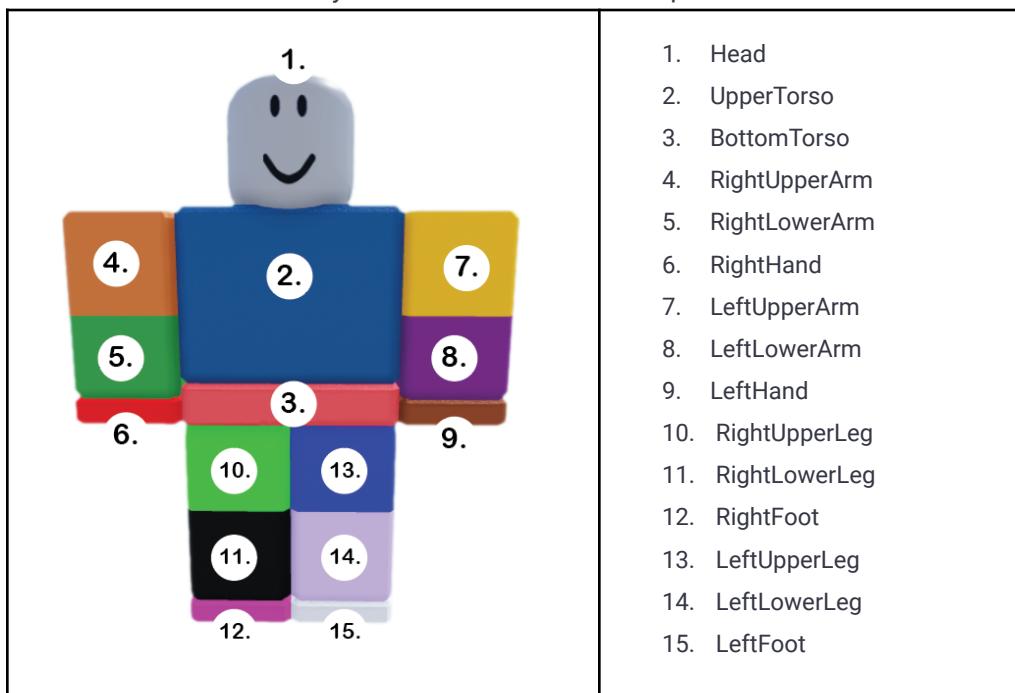
### 3D Outfits for 15 Part (R15) Roblox Avatars

Traditionally on Roblox, the most common and practical / simple way of creating 3D outfits for R15 characters is by exporting the outfit mesh into Roblox studio as separated meshes for each of the R15 character's limb parts.

#### R15 Character

Unlike traditional game rigs, Roblox's traditional blocky Roblox rig is separated into individual pieces (15 parts) in the engine, and can't be skinned by traditional means. Instead, breaking down the finished outfit mesh into separate MeshParts and attaching them to the main body is the most reliable way to go.

The R15 character is fundamentally broken down into these 15 part:



From these parts, LoM outfits are made from the following process:

1. Get base character model (an R15 avatar)
2. Choose base colors for the character
3. Choose colors for the outfit

4. Choose all meshes for the outfit
5. Apply all outfit meshes to the character, and apply colors along the way
6. Add any additional decorative elements (faces, particles, etc.)

### ***Technical Breakdown***

For the sake of example, here is the breakdown of concept-to-meshes for vector art from Bee:



Based off the customer's preferences, the following colors are generated:

Color 1	Light Gray
Color 2	Dark Red
Color 3	Orange
Color 4	Brown

With the colors generated, the customer gets all the meshes it needs. Here's what those individual meshes would be if it were this proposed concept, and how the colors would apply to each mesh:



Total unique meshes: 19 - 29

1. **Head**
  - a. Mesh for metal (color 1)
  - b. Mesh for top (color 2)
2. **UpperTorso**
  - a. Mesh for metal (color 1)
  - b. Mesh for cape front (color 2)
  - c. Mesh for cape front outline (color 3)
3. **BottomTorso**
  - a. Mesh for belt (always black)
  - b. Mesh for belt buckle (color 3)
4. **RightUpperArm**
  - a. Mesh for metal (color 1)
  - b. Mesh for metal outline (color 3)
5. **RightLowerArm**
  - a. Mesh for metal (color 1)
  - b. Mesh for metal outline (color 3)
6. **RightHand:** Left blank (see 16)
7. **LeftUpperArm:**
  - a. If symmetrical, reuse meshes from RightUpperArm
  - b. If not symmetrical, make mirror meshes and color same
8. **LeftLowerArm:**
  - a. If symmetrical, reuse meshes from RightLowerArm
  - b. If not symmetrical, make mirror meshes and color same
9. **LeftHand:** Left blank (see 16)
10. **RightUpperLeg**
  - a. Mesh for metal (color 1)
  - b. Mesh for metal outline (color 3)
11. **RightLowerLeg**
  - a. Mesh for metal (color 1)
  - b. Mesh for metal outline (color 3)
12. **RightFoot**
  - a. Mesh for metal (color 1)
  - b. Mesh for metal outline (color 3)
13. **LeftUpperLeg**
  - a. If symmetrical, reuse meshes from RightUpperLeg
  - b. If not symmetrical, make mirror meshes and color same
14. **LeftLowerLeg:**
  - a. If symmetrical, reuse meshes from RightUpperLeg
  - b. If not symmetrical, make mirror meshes and color same
15. **LeftFoot:**
  - a. If symmetrical, reuse meshes from RightFoot
  - b. If not symmetrical, make mirror meshes and color same
16. For color 4 (the clothing underneath), set the base color of all the limb parts to color 4.
17. Decorative mesh added to belt: hangs below the belt.
18. Cape mesh behind character (color 2)

For a better understanding of how MeshParts can be applied to a character and affected by coloring, [Gif examples of applying separate meshes to an R15 character can be found in this folder.](#)

## Outfits Aesthetic

### *Gameplay Significance in Aesthetic*

When a customer is generated, their avatar follows the following rules:

- Race = N/A (doesn't affect outfit)
- Classes = customer outfit
- Wealth = outfit variance type
- Morality = customer colors
- Civility = customer accessories

## Pointers

- For modeling R15 characters, it's best to have the Roblox R15 avatar as a reference. That model is [here as a .obj](#)
- **For performance sake, most MeshParts should by default be set to the SmoothPlastic material in Roblox.**
- **More can be done than just the above.** The avatar creation process is programmed to be very additive, and offers a lot of versatility in what can be done with avatar models. If you have an out-of-the-box idea then it's very possible it can be done!
- **Clipping limb meshes is OK!** It is very common for R15 armor models to clip in general due to the strange R15 shape and proportions, and is expected from the style.

## ToDo Notes

One Outfit Variant means:

- Required Models:
  - Torso
  - Sleeves
  - Legging
- Optional Models:
  - Head clothing / shirt extension (Helmets, Hoods)

## References

### *Roblox References*



Taken from [Roblox game Vesteria](#)

I really like these from Vesteria. My main reason for including them is that, overall, the mesh's level-of-detail is exactly what I've had in mind for low-to-mid wealth LoM customers. If it were framed in LoM context, I imagine the **left** would be a **lawful-good mid-wealth archer**, and the **right** would be a **neutral low-wealth warrior**. I'd say the left one is lawful because of their guard-like helmet, and the right one is neutral because that helmet is very versatile.



Taken from [This portfolio \(with other good armor examples\)](#)

Looking above, to me this is absolutely a **lawful-evil high-wealth sorcerer**. The evil is pretty obvious, but for me the lawfulness comes from that helmet giving off a complete totalitarian king vibe.

I love that even with a low-poly style, the gold outline feels like it has a stroke to its shape in a lot of places. I imagine in the context of the customer system, the colors would probably be this:

Color 1	
Color 2	
Color 3	
Color 4	

For LoM's starting outfit list, the effort in this one is definitely a bit too much, especially with the texturing and overall detail.



Taken from [This twitter post](#)



Taken from [This twitter post](#)



Taken from [This twitter post](#)

The one above has way too much detail, but I love that the feel of it is absolutely **wealthy lawful-good**. I think it's also a great example of a Roblox avatar that, even without having the technical capabilities for skinned meshes, still looks really fantastic and movable.



Taken from [This twitter post](#)

## Harbor Town: Blockout to Finish

### Harbor Town

#### *Brief*



The Harbor Town is the introduction for players into the world of Land of Merchants. When players first join the game, they spend around 30-40 minutes in this town, learning the basic mechanics of the game such as:

- Recourse gathering
- Crafting and selling items
- Selling items to customers
- Learning customer preferences

After all of these game mechanics are adequately introduced, the player then upgrades their shop to be movable around the world, where they leave the town and venture off into the rest of the world.

#### *One Place*

In Land of Merchants, sections of the maps are separated using the Roblox place system, with the map split apart with loading screens transporting players from one place to another. In the case of Harbor Town, the town is entirely its own place.

#### *Hollow*

All of the buildings can be completely solid / have no interior.

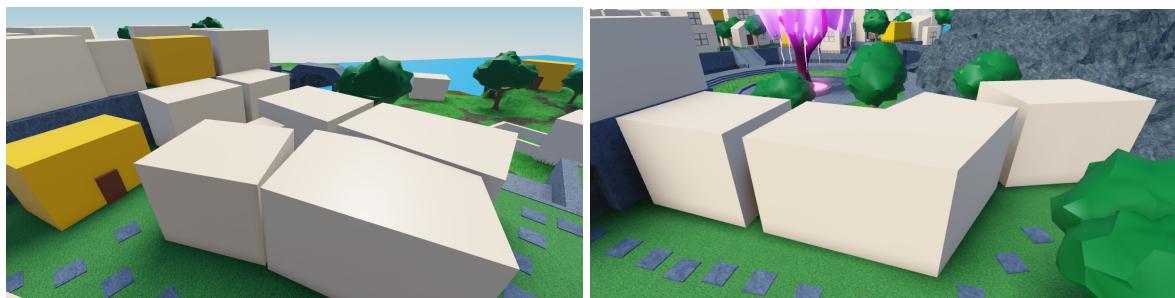
### What to do for...

#### *Solved Buildings*



Buildings that are “Solved” are already decorated with things such as roofs, window placements, doors, etc. These are buildings that have been solidified into the world, and they aren’t expected to be adjusted. It’s clear how these buildings should be decorated.

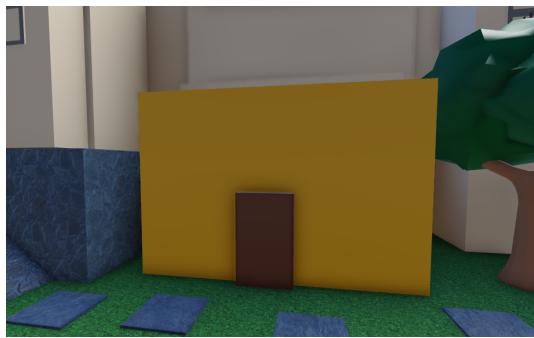
### ***Blocked Buildings***



Buildings that are “Blocked” are absent of all the features that a solved building has - they briefly give an idea as to what building shapes could fit in the area, but have little to no indication of what they should look like when decorated.

For these buildings, imagination / creativity is encouraged! Do whatever you think would feel right.

### ***Yellow Buildings (Player Shop Locations)***



During their session in this phase of the game, players have a beginner shop that they can spawn around the map at designated player shop locations. These player shop locations are indicated by the completely solid yellow buildings.

The most important aspect of these buildings is the sizing - unlike the solved and blocked buildings that can be adjusted here and there, yellow buildings must stay the given size. With that in mind, it's also important that they have enough space around them to where they won't get cluttered.

Yellow buildings are NOT to be decorated - for now, you can ignore them.

### **"Pads"**



The stone plates on the ground are "Pads." The only purpose of these pads is for communicating where / how the player is expected to traverse the stress of Harbor Town.

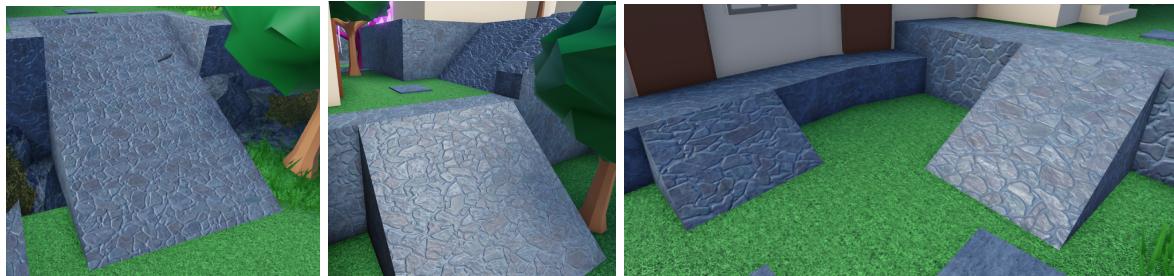
For the final product of the map, all pads are expected to be removed. In their place, a decorated path should be modeled into the map. These decorated paths could include bricks, stone meshes, dirt, etc.

### **Trees / Nature**



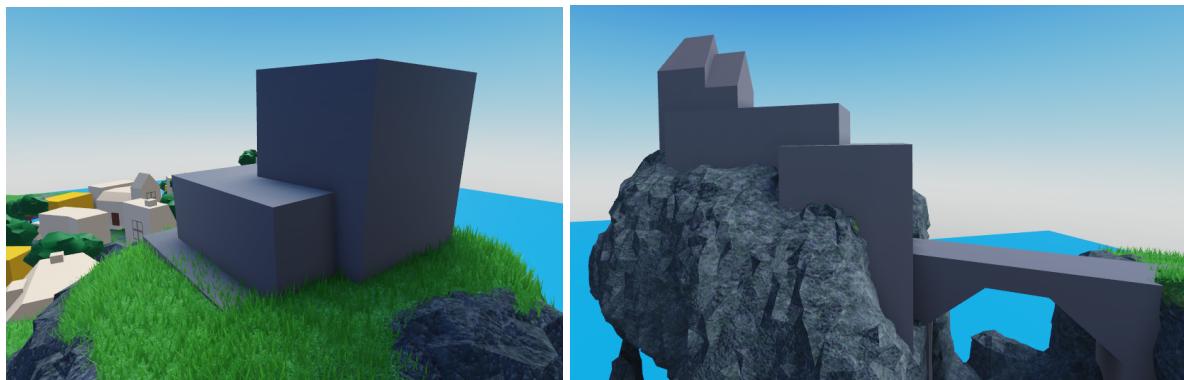
Tree meshes indicate that flora should be placed at that location. As a placeholder, bulky trees have been placed to convey the nature-y feel of Harbor Town. For the final product of the map, these trees should be replaced with more creative nature elements - while in some areas a simple tree mesh would suffice, in others they could be filled with things such as flowers around the tree, bushes, etc.

### **Stone Wedges**



Stone wedges indicate where stairs should be modeled in the town.

### *Ruins*



For now, Ruins can be ignored completely.

### *Landmarks*

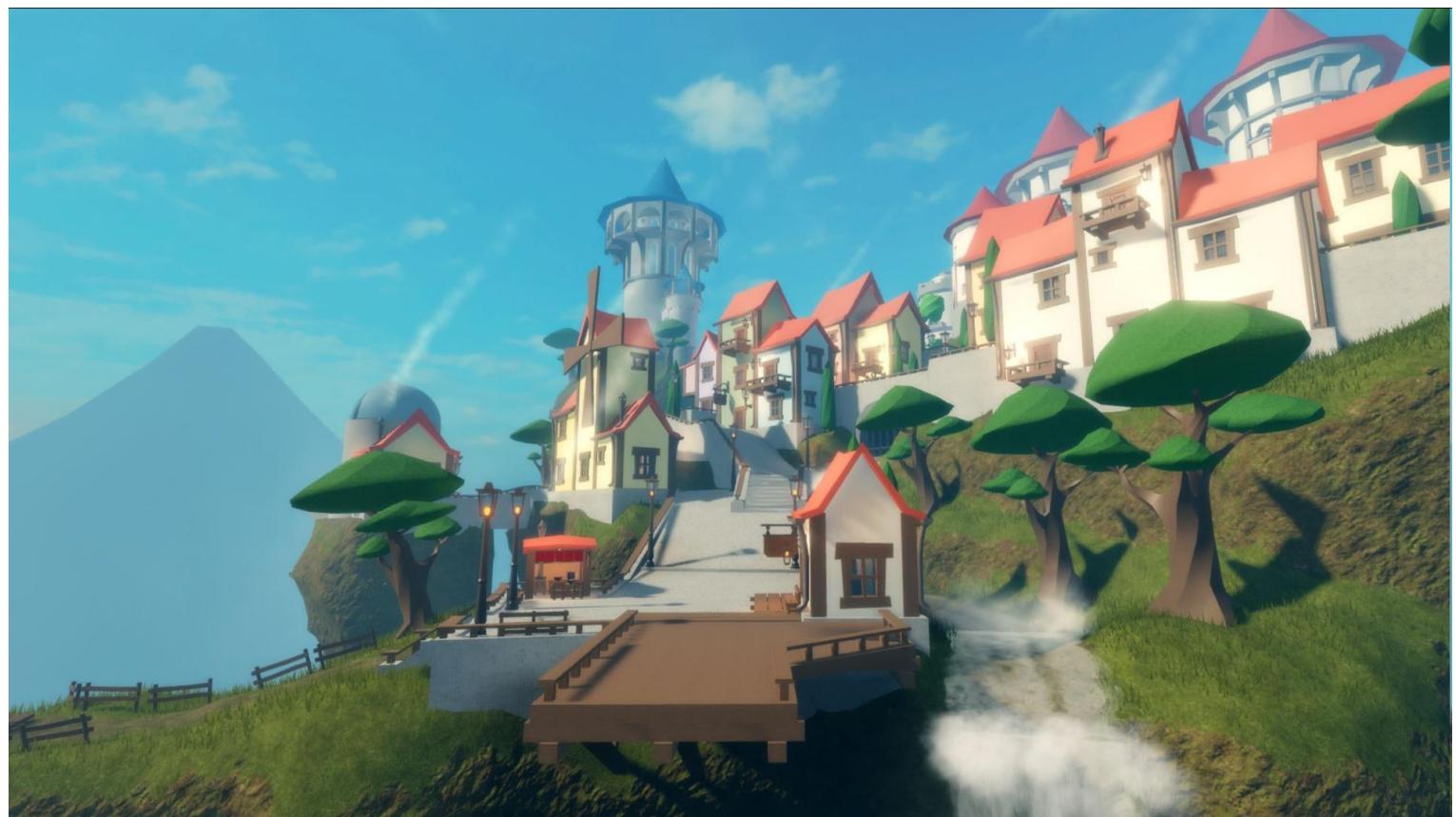


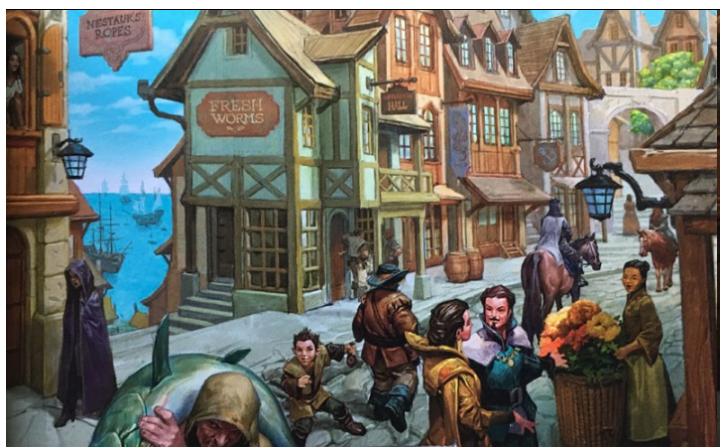
For now, Landmarks can be ignored completely. The only landmark atm is the large pink tree.

## Misc.

### *Building References*

Below are pictures that really well show the feel of what the town should be like.







## LoM: Assets for Map + Misc

### **Todo List**

For Tuesday (01/11):

- Bulky Curved Rock Cliff Variant 1
- Bulky Curved Rock Cliff Variant 2
- Bulky Curved Rock Cliff Variant 3
- Bulky Curved Rock Cliff Variant 4
- Bulky Curved Rock Cliff Variant 5
- Root Piece Variant 1
- Root Piece Variant 2
- Root Piece Variant 3

For Thursday (01/13):

- Full Root Variant 1
- Full Root Variant 2
- Basic Loot Chest

### **Assets for Map**

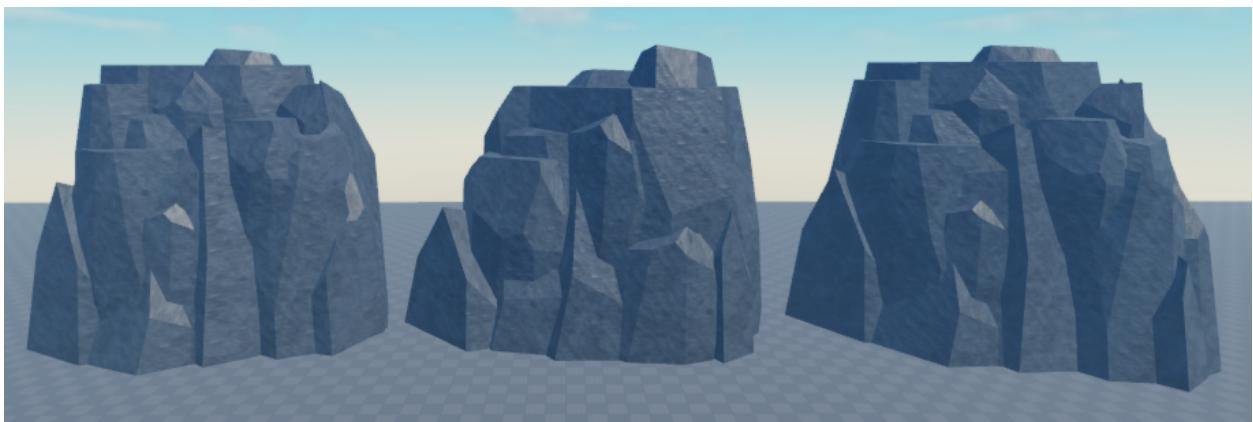
For these assets, all of the ideas have been gotten from the map as it's been developed (place link [here](#), you should have studio access to check it out). So far, it's looking really desirable, and the assets are working really well with the vision in mind for its aesthetic and gameplay functionality.



With that, the assets needed are to further enhance the map based on these learnings.

### **Rounded Rock Walls**

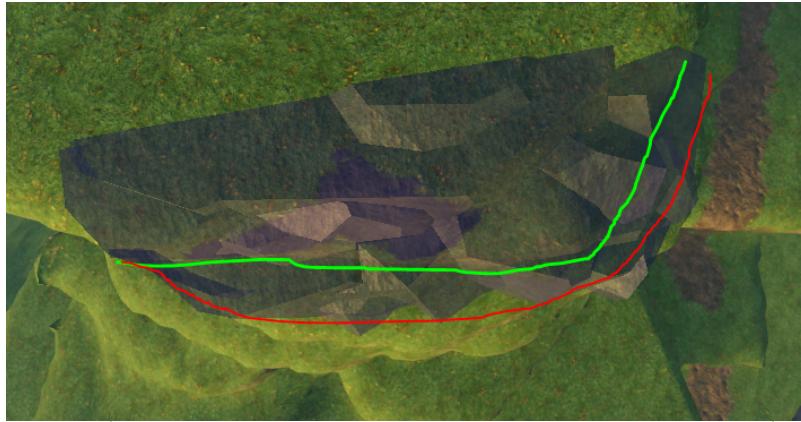
In creating the rock terrain, the asset that's been found to be the most preferable for larger rock walls (for things like mountains) are these three:



Because we like them so much, we want more variations of them to not only keep the mountain designs consistent, but also prevent them from being repetitive.

In the case “make more of these” is a bit unclear, here’s specifically the 4 reasons we like them the most:

### 1) Their curved shape makes them conform to terrain really effortlessly

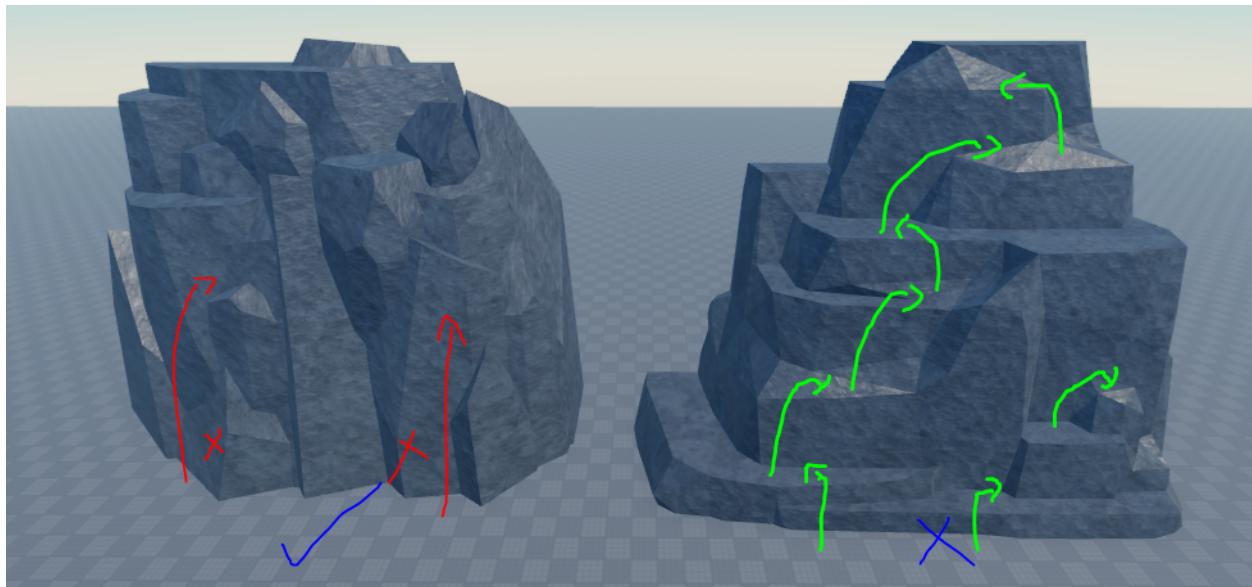


Pictured: how their curvature is useful

Unlike some of the other mountain cliff sides that have a more square-ish look, these rock cliffs really easily conform to rounder shapes, which make them helpful for things like mountains that inherently have a more roundish look.

### 2) They easily allow for designing areas where players specifically can't go up

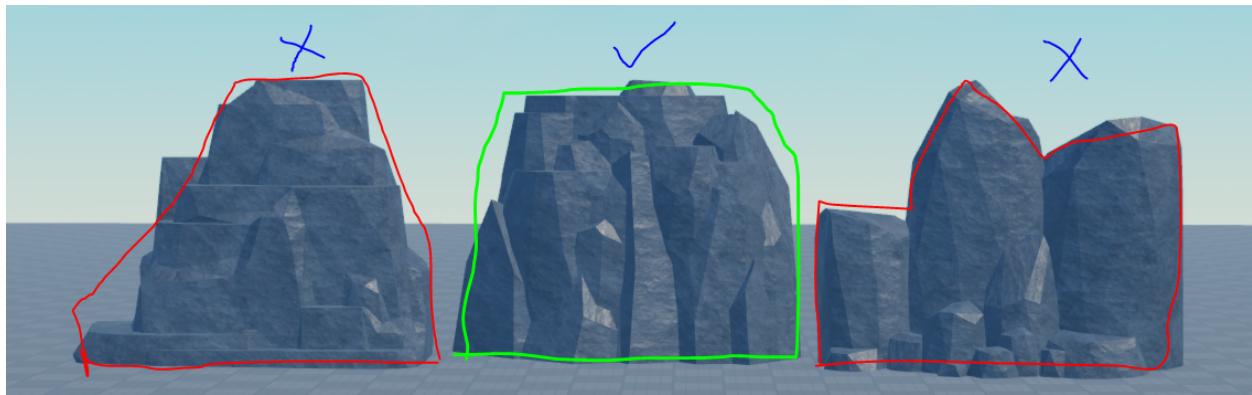
Since we have plenty of rock faces that allow for designing steps players **can** navigate up, we want more variations that allow for designing rock walls players **cannot** navigate up, especially for these meshes that are supposed to be used at a larger-scale with the purpose of making sure players can’t navigate up them.



Pictured: we want more of the left, and less of the right.

### 3) They are bulky

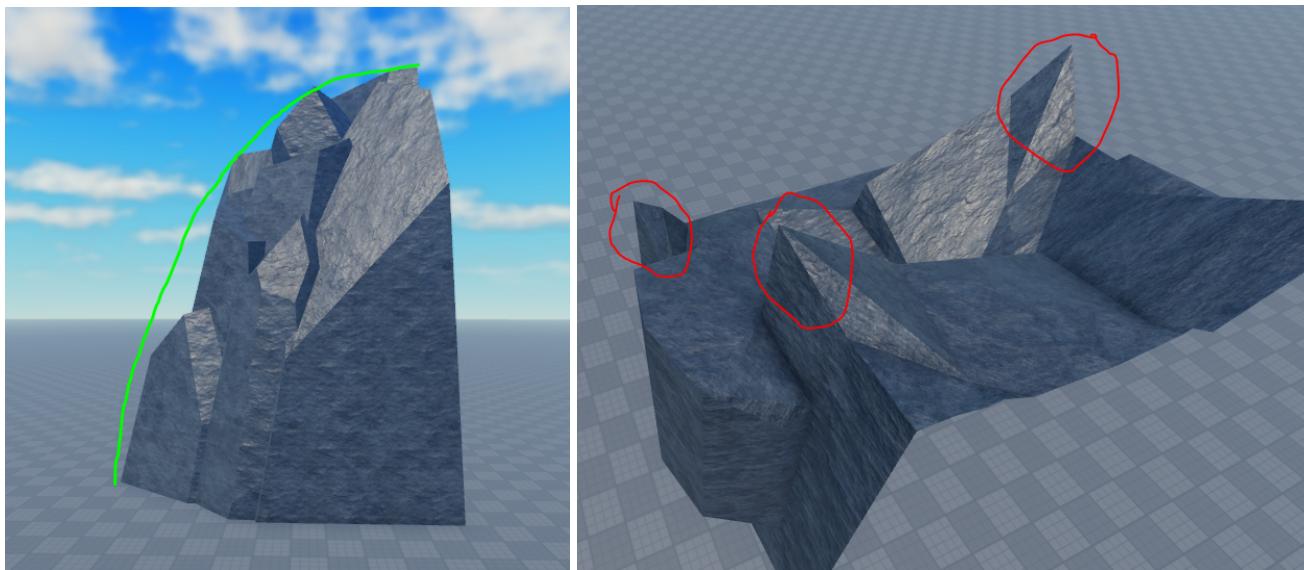
With their more squarish shape, these rock assets more easily allow us to cover an entire region of a mountain with rock shape, whereas the other rock assets look awkward if used for the same purpose due to their more triangle / sharp shape.



Center is good, where its more square shape means it would more fully cover terrain.

### 4) They cave inward

Lastly (and very simply) the way the overall geometry caves inward helps a lot with conforming them to terrain. It also makes sure that when they are stretched out, they don't create too many "pointy bits" facing upwards that can cause issues with players colliding onto them.



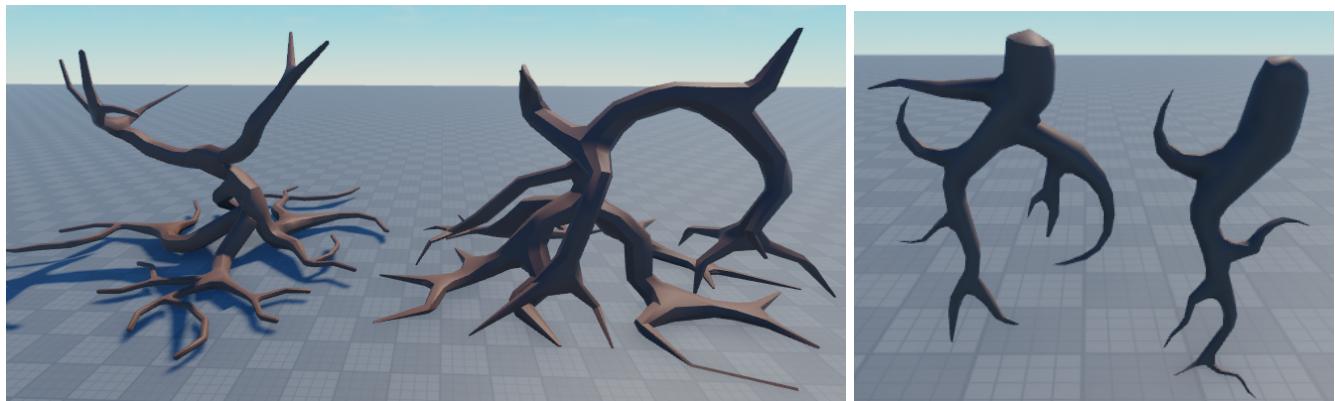
Left: good slope shape, great for intended usage. Right: example of "pointy bits" when stretching out ledge piece

### More Tree Roots

An asset type I didn't expect to get as much use as it has gotten are the tree roots. By pushing them into terrain and rotating their branches to hit the ground in cool ways, some really cool over-growth results have been produced.



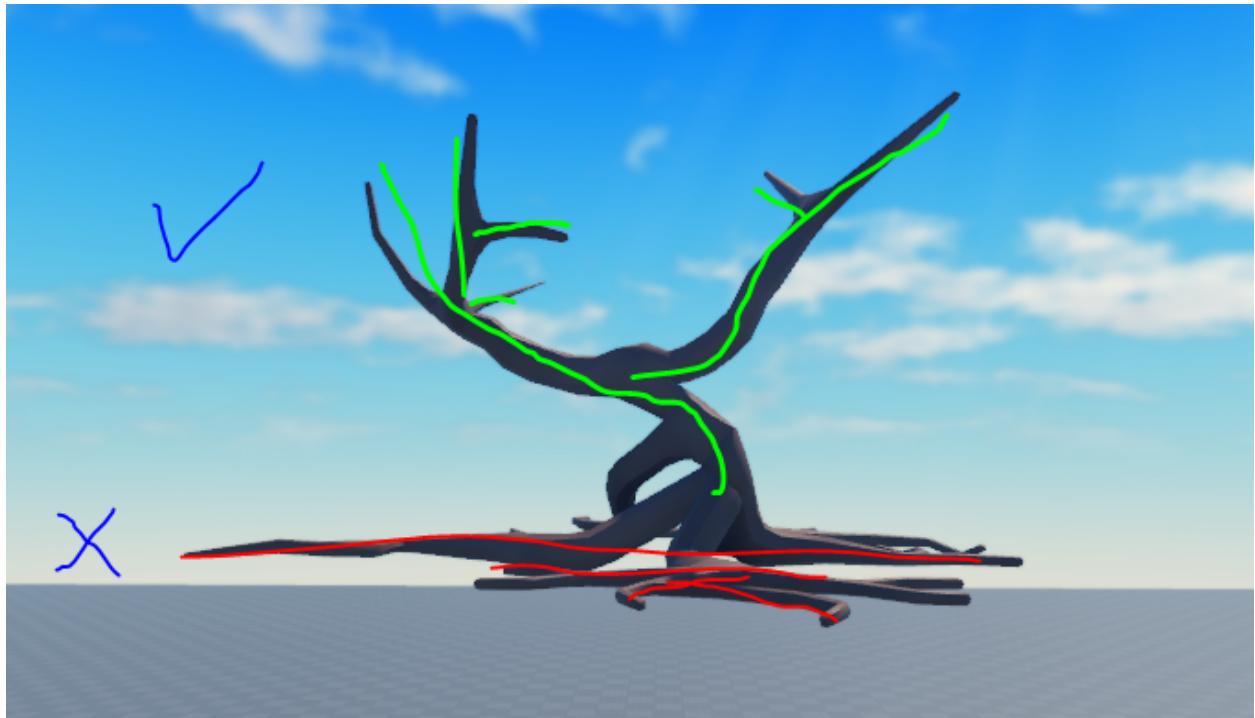
With these roots, I've split them up into two different types: the “**full roots**” and the “**root pieces**.” The root pieces are used mainly at a larger scale for tangled-up overgrowth creeping out of small crevices, while the root pieces are used for smaller details.



*Left: “full roots”. Right: “root pieces”.*

With the full roots, the only change we want with them is to not have a “bottom root base” like the one on the left very clearly does. Since these root meshes have mostly been used for sticking out of things and

creating detail that way, we'd rather have more attention to the roots that stick out instead of going flat at the bottom.



Pictured: the way they sprawl out with the top is good, and the way they go flat at the bottom isn't what we want for these variations.

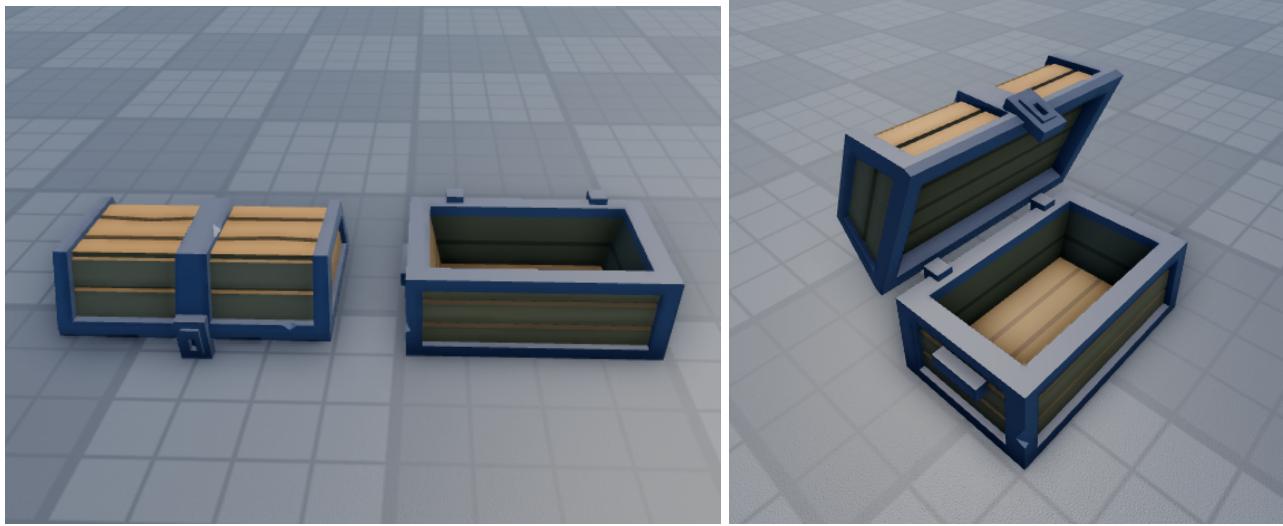
## Misc

### *Loot Chest*

Lastly, a very simple model for a chest that can open and close would be helpful. Ideally, it can just look like a stereotypical fantasy chest, and the only 3 requirements are that:

1. It should have a top and bottom so it can be open and closed in studio
2. The top and bottom should each be 2 separate meshes for 2 different colors
3. The interior should be empty

Basically, it just needs to be like this unity asset that is currently being used as a placeholder. This asset can also be found in the Game Assets place if you'd like to examine it yourself.



*Pictured: the Unity asset I'm talking about.*

## New Pine Trees

For the large cliff areas in the Land of Merchants map, we're looking for pine trees that have a very distinct and natural feel to them, straying a bit further away from the current cartoony style and more into the believable realm with distinct changes to the trees.

### ***Checklist***

February 1st (Tuesday)

- New Pine Tree Variant 1
- New Pine Tree Variant 2
- New Pine Tree Variant 3

February 2nd (Wednesday)

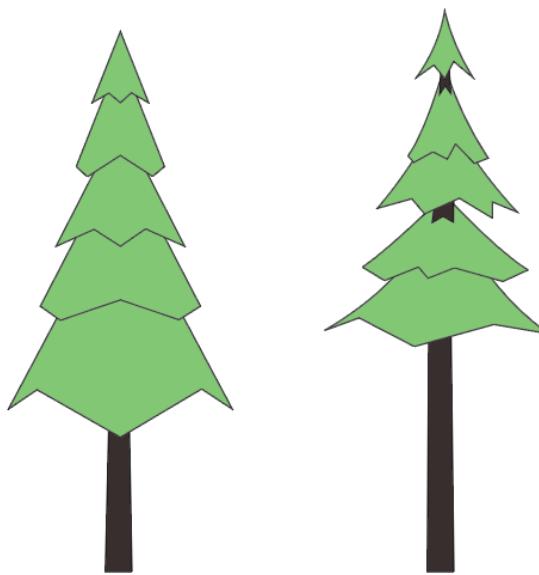
- New Pine Tree Variant 4
- New Pine Tree Variant 5
- New Pine Tree Variant 6

## Differences from current pine trees

### ***General Shape Change***

The new pine trees have a generally different shape than the old one. The most notable changes are:

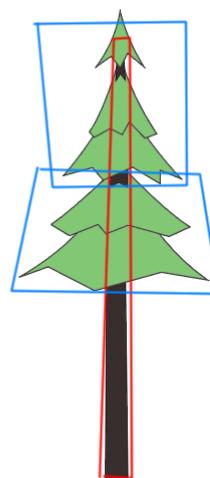
- More uneven leave triangle edges
- More uneven distribution of leaves vertically along trunk
- More “bendiness” to the tree cone shapes (around 2-3 edge loops or 4 if needed)\*\*\*
- Trunks have a longer base, and the leaves start appearing much further off the ground



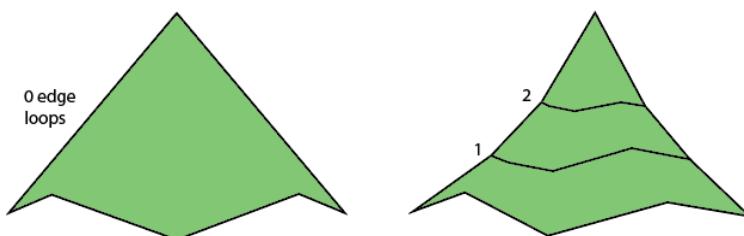
*Left: Current standard pin tree.*

*Right: Desired new pine tree.*

In terms of splitting it into meshes, the trunk would always be just one mesh, while the leaves would be split into 2-3 meshes. It would be something like this:



\*\*\* on edge loops:

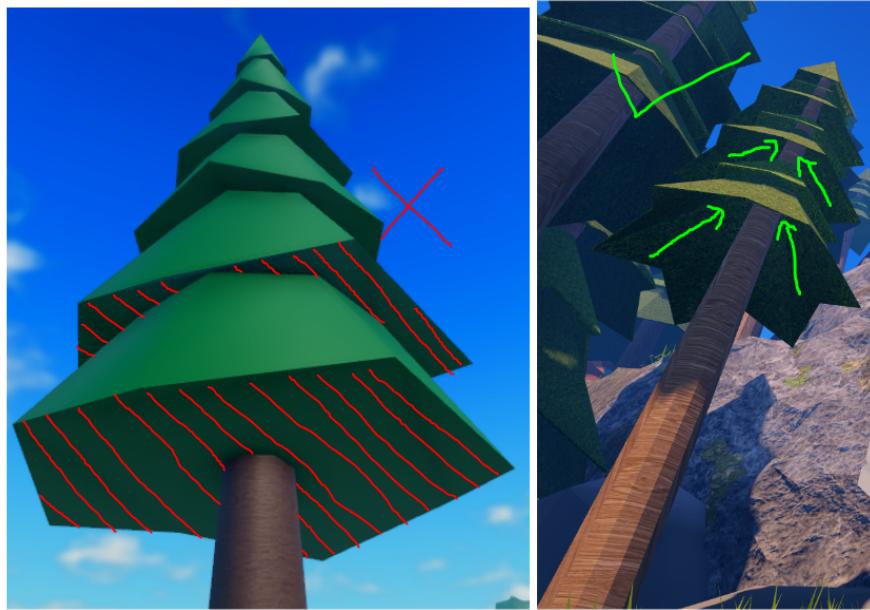


*Left: Current standard pin tree "straight".*

*Right: Desired new pine tree "bendiness".*

## ***Shell Leaves Mesh***

For the new tree designs, the leaves should be more of a shell instead of having a flat bottom, where if the player were to look up at them from on the ground, they would see the inside of the trunk.

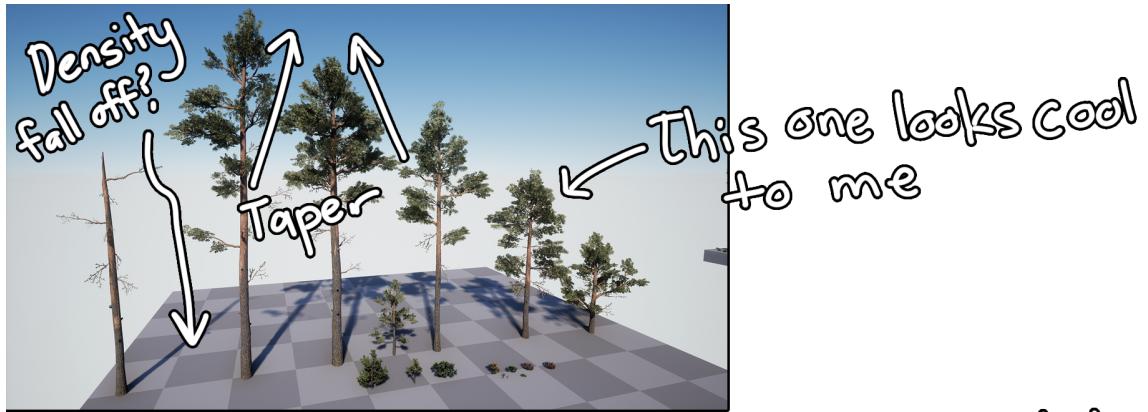


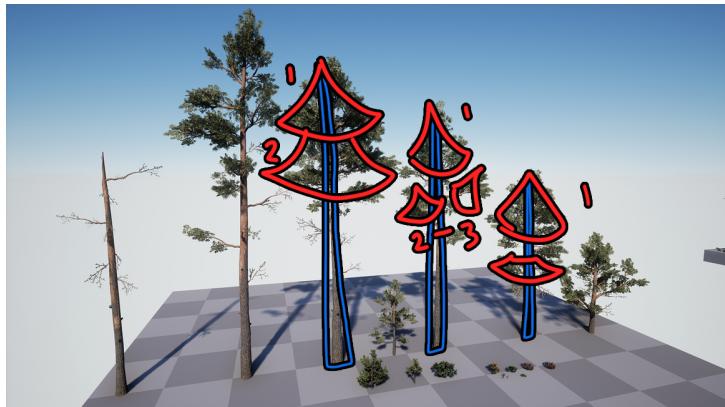
## ***Leaves Mesh Smoothness***

Use shade smoothing instead of shade flat for leaves.

## **Requests directly from Map Artist (Geoffry)**

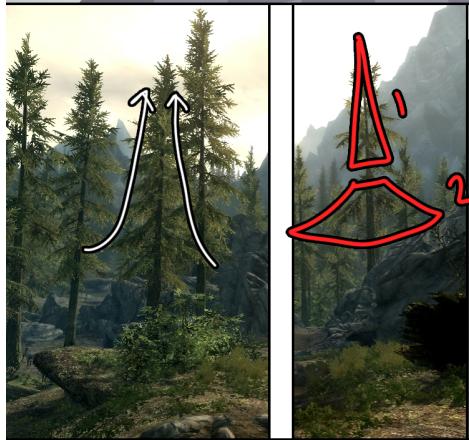
These are notes on directly the style Geoffry wants, specifically the shape.





Numbers  
Just differentiate

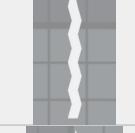
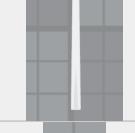
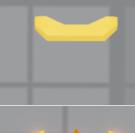
1 [triangle] 3 Meshes  
2 [triangle] 2 Meshes

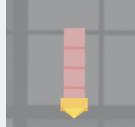
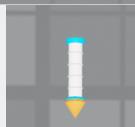


# LoM: Assets Progress Sheet

Item Name	Shapes Item is Made Of	Image
<b>Listed</b>		
Sword	Long Blade Blade Guard Blade Handle	
Knife	Short Blade Blade Guard Blade Handle	
Axes	Long Handle Topper Axe Blade Long Large Handle	
War Hammer	Long Handle Topper War Hammer Head Long Large Handle	
Spears	Short Blade Spear Guard Long Thin Handle	
<b>WIP / Subject to change</b>		
Trident	Trident Blade Spear Guard Long Thin Handle	
Staffs	Staff Magic Staff Head Long Thin Handle	
Mace	Long Handle Topper Mace Head Long Large Handle	
Scythe	Scythe Blade Head Guard Long Thin Handle	
Pickaxe	Pickaxe Blade Handle Guard Mid Handle	

Shape Name	Shape Type	Image	Info	Is model done?
<b>Todo</b>				
Axe Blade 5	Filler			
Axe Blade 6	Hero			
Axe Blade 7	Hero			
War Hammer Head 1	Filler			
War Hammer Head 2	Filler			
War Hammer Head 3	Filler			
War Hammer Head 4	Filler			
War Hammer Head 5	Hero			
War Hammer Head 6	Hero			
<b>Listed</b>				
Long Blade 1	Filler			

Long Blade 2	Filler					
Long Blade 3	Filler					
Long Blade 4	Filler					
Long Blade 5	Filler					
Long Blade 6	Filler					
Long Blade 7	Filler					
Long Blade 8	Filler					
Long Blade 9	Filler					
Blade Guard 2	Filler					
Blade Guard 3	Filler					
Blade Guard 4	Filler					
Blade Guard 1	Hero					

Blade Handle 1	Filler					
Blade Handle 2	Filler					
Blade Handle 3	Filler					
Blade Handle 4	Filler					
Blade Handle 5	Filler					
Blade Handle 6	Filler					
Blade Handle 7	Hero					
Short Blade 1	Filler					
Short Blade 2	Filler					
Short Blade 3	Filler					
Short Blade 4	Hero					
Long Handle Top 2	Filler					

Long Handle Top 3	Filler							
Long Handle Top 1	Hero							
Axe Blade 1	Filler							
Axe Blade 2	Filler							
Axe Blade 3	Filler							
Axe Blade 4	Filler							
Long Large Handle 1	Filler							
Long Large Handle 2	Filler							
Long Large Handle 3	Filler							
Long Large Handle 4	Filler							
Long Large Handle 5	Filler							
Long Large Handle 6	Hero							

Long Handle Guard 1	Filler					
Long Handle Guard 2	Filler					
Long Handle Guard 3	Filler					
Long Handle Guard 4	Filler					
Long Handle Guard 5	Filler					
Long Handle Guard 6	Filler					
Long Handle Guard 7	Hero					
Long Thin Handle 1	Filler					
Long Thin Handle 2	Filler					
Long Thin Handle 3	Filler					
Long Thin Handle 4	Filler					
Long Thin Handle 5	Hero					