

# 24-Days of Low Poly Characters



**Eric Lybbert**

[www.linkedin.com/in/ericlybbert](http://www.linkedin.com/in/ericlybbert)  
[lybberte@byui.edu](mailto:lybberte@byui.edu)

# 24-Days of Low Poly Characters



## The Overview

To push myself to create, learn, and refine I decided to do a 24-day project. Here I created a new visual asset each day, and posted it via social media to keep myself accountable. I planned up to 4 days that I could miss to leave room for emergencies and oversights. The final time-frame ended up being 24 days in a 28-day window.

## The Catalyst

As of late, I have been captivated by the Oculus Rift and VR in general. I wanted some excuse to dive into this world and see what was possible. Games were fun, Immersive stories were jaw-dropping, but when I stumbled across Google Blocks my mind started racing. I could create 3D objects while working in a virtual world. It was amazing and empowering. I have worked with 3D modeling programs in the past, but there were too many barriers to entry in creating 3D objects in a 2D environment. Working in Google Blocks on the Oculus Rift was intuitive, fast, and had a natural workflow.

### Oculus Rift

A virtual reality headset that completely immerses you inside a virtual world.

## The Project

I have always been interested in scriptural characters, and finding ways to make them come to life. With this in mind, I decided to make low poly scriptural characters using the Oculus Rift and Google Blocks. I picked 24 characters from a variety of stories, and started molding them into 3D objects.

Each finished low poly character can be seen in Appendix A.





# 24-Days of Low Poly Characters



Blocks

## The Groundwork

Before I started this project I sketched and created 2D vectors of my characters. This enabled me to focus on bringing the characters to life in a 3D environment instead of trying to figure out what each character should look like. Having this blueprint or vision of each character made the 3D creation process progress smoothly.

## The Workflow

Each day I strapped on the virtual reality headset, took hold of the hand controllers, and launched the Google Blocks application. At this point I was fully immersed in the virtual world. From here I imported a 2D reference photo to use as a template for my 3D character and started crafting.

Google Blocks limited me to a handful of tools to work with, but with these restraints there were still endless possibilities. The first couple characters were made completely from scratch, but as I finished more of them I was able to borrow existing elements to make my workflow faster. Below you can see an abridged step-by-step process of how each character was created in Google Blocks.

### Google Blocks

An application that allows you to create 3D models in an intuitive VR environment.



**Step 1**

Choose one of 5 shapes to start working with. Each shape can later be manipulated, but starting with a good shape can save a lot of time.



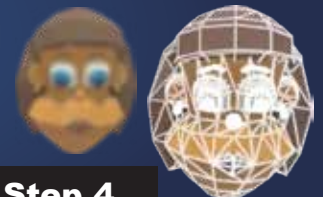
**Step 2**

Morph the original shapes by manipulating individual or groups of vertices.



**Step 3**

Build shape upon shape to get the desired overall form. Each shape can also be colored with a limited color pallet.



**Step 4**

Fine tune shape placement, vertices, and colors.

# 24-Days of Low Poly Characters



## The Lessons

### Single Document

After my first or second character I started creating all my characters in the same document. It was nice to see all the characters together at once, but what I neglected to understand is that this was grouping all these characters into one large object file. This became problematic when I went to use each character individually in a different program. This was not an insurmountable obstacle, but it did require me to open the large object file and separate each character out into a single file using the 3D program Blender. A little more research at the beginning of the project would have saved me this extra step.

### Documentation

I set out to do 24 characters, one each day within a 28-day window. I was doing great with this until somewhere in the middle of the project the days started blurring together. I did complete a new character each day, but I neglected to post a couple of them on the days I completed them. This extended my 28-day window to 30 days. My next attempt at a 24-Days of Something will have more structure, documentation, and reminders built in.

You can see my exact timeline in Appendix B. The days missed are clearly marked with a frowny face icon.

## The Conclusion

This was a successful experience in creating 3D characters in a virtual environment. This taught me many nuances to my workflow that will streamline my future work. It was very satisfying seeing my 2D vectors evolve into refined, well as refined as low poly objects can be, 3D objects.

### Blender

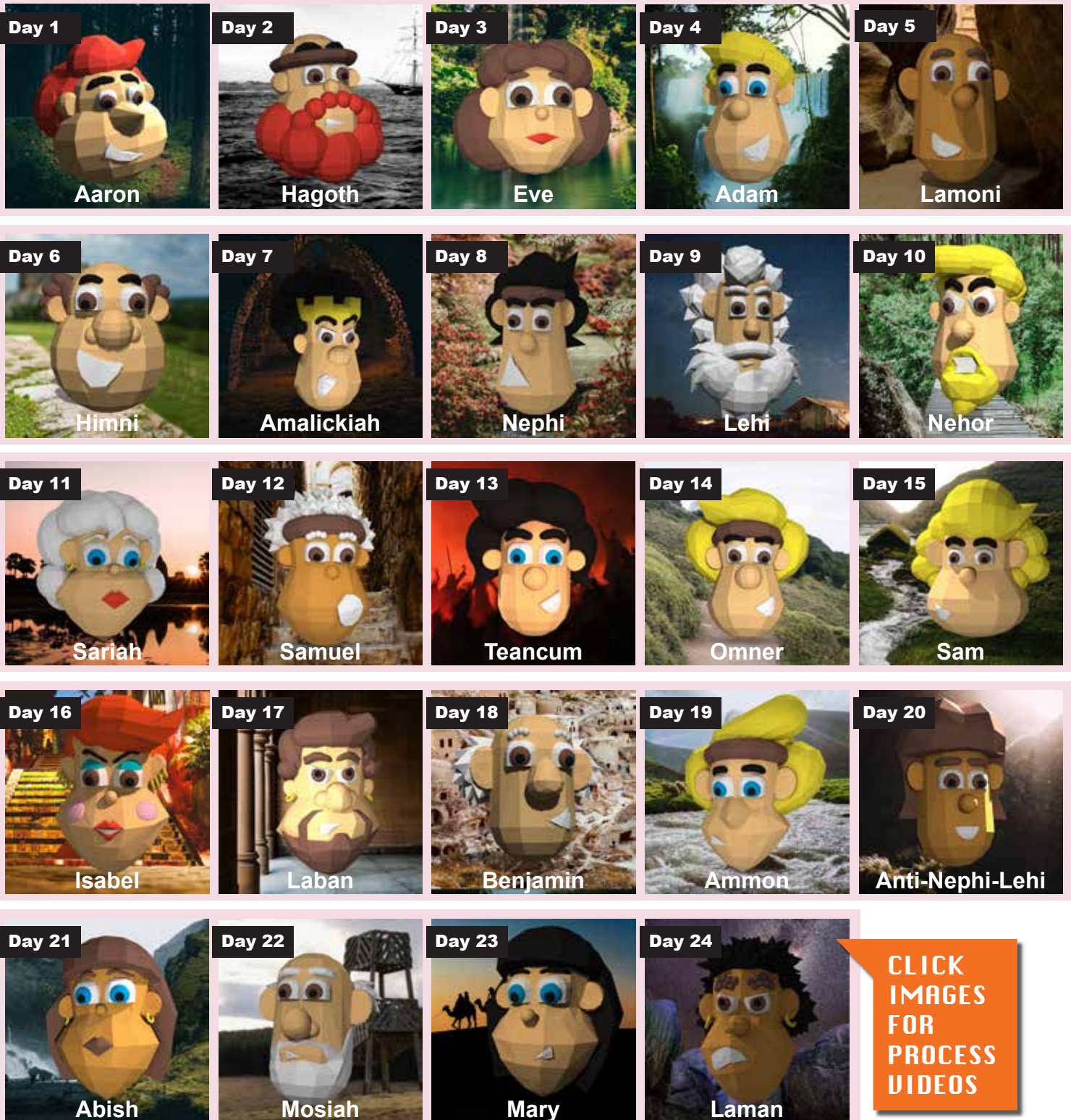
A free open-source 3D application that supports modeling, rigging, animation, rendering, etc.





# 24-Days of Low Poly Characters

## Appendix A: Finished Characters





## Appendix B: Daily Social Media Posts

**Eric Lybbert shared a link.**  
August 6

I am doing a 24-Days of Something project. I have chosen to make Low Poly 3D models of some scriptural characters I created about 10 years ago. I am using the Oculus Rift and Google Blocks. Here is Day 1 🙌

**Aaron Low Poly Speed Video**

23 Comments · Seen by 106

Like · Comment · Share

**Eric Lybbert** Here is day 2 of my 24-Days of Low Poly 3D Models. It is a blast working in VR!  
<https://youtu.be/hRZ8Feedjyc>

**Hagath Low Poly Speed**

Like · Reply · Remove Preview · 6w

**Eric Lybbert** Day 3 of my 24-Days of Low Poly 3D Models. I am getting faster 😊  
<https://youtu.be/DgG5O8chTt9Q>

**Eve Low Poly**

Like · Reply · Remove Preview · 6w

**Eric Lybbert** Day 4, my kids wanted me to make Adam to go with Eve 🙌  
<https://youtu.be/vuPzApQH3c>

**Adam Low Poly**

Like · Reply · Remove Preview · 5w

**Eric Lybbert** Day 5 🙌  
<https://youtu.be/LLTAJSRXKTU>

**Lamoni Low Poly**

Like · Reply · Remove Preview · 5w

**Eric Lybbert** Day 6: Oh Himel, you should really love Rogaine 😊  
<https://youtu.be/ZhQvhoQ2V40>

**Himni Low Poly**

Like · Reply · Remove Preview · 5w

**Eric Lybbert** Day 7. Decided to do a bad guy this time. This one is fun since I manipulated an existing character and evolved him into Amilickiah.  
<https://youtu.be/t1hemXig0xo>

**Amilickiah Low Poly**

Like · Reply · Remove Preview · 5w

**Eric Lybbert** Day 8. Here is my Nephi. Still having fun 😊  
<https://youtu.be/A98CojmSiSU>

**Nephi Low Poly**

Like · Reply · Remove Preview · 5w

**Eric Lybbert** Day 9. It was fun to do a father/son pair. Looking at Lehi now I think he needs to be a little tuffier in the face.  
<https://youtu.be/Hf0banQQkIs>

**Lehi Low Poly**

Like · Reply · Remove Preview · 4w · August 16

**Eric Lybbert** Day 10, Nehor. This one I am still not 100% sure of, I might revisit him after the 24 days are done. Music credit: Bensound.com  
<https://youtu.be/METDBwZIYT0>

**Nehor Low Poly**

Like · Reply · Remove Preview · 4w · August 19

**Eric Lybbert** Day 11, Sariah. I had a heart attack this morning because the video was freezing! Turns out it was just my computer and not the actual video. Music credit: Bensound.com  
<https://youtu.be/ho7EEYVvn3A>

**Sariah Low Poly**

Like · Reply · Remove Preview · 4w · August 20

**Eric Lybbert** Day 12, Samuel. I am having fun looking for free music to go with my videos. I probably have not been finding the best music to be paired with each character, but it has still been fun. I will try and give music credit even when it is not necessary for a reference to good sources. Music Credit: Night Owl by Broke For Free, licensed under a Creative Commons Attribution License.  
<http://youtu.be/vkzdriPSARA>

**Samuel Low Poly**

Like · Reply · Remove Preview · 4w · August 21

**Eric Lybbert** Day 13, Teancum. I am not sure I like the back of this ones hair, but it is alright for now 🙌 Music Credit: Blind Love Dub by Jeris (c) copyright 2017 Licensed under a Creative Commons Attribution (3.0) license.  
<http://youtu.be/jb5mell7hd3U>

**Teancum Low Poly**

Like · Reply · Remove Preview · 4w · August 22

**Eric Lybbert** Day 14, Omner. I like how he turned out today. Music Credit: Artist: Rafael Knux, by Rafael Knux.  
<http://youtu.be/fLrHmbEHwrl>

**Omner Low Poly**

Like · Reply · Remove Preview · 4w · August 23

**Eric Lybbert** Day 15, Sam. I was excited to reuse Aaron's face, but that didn't work out. It didn't take me too long to start from scratch. Music credit: Get Up by Coyote Hearing from YouTube Audio Library.  
<http://youtu.be/Fa5ottF5SzGg>

**Sam Low Poly**

Like · Reply · Remove Preview · 3w · August 24

**Eric Lybbert** Day 16, Isabel. Well I am cutting this one close ... This was a fun one to do since there were many elements that were not duplicated from other characters. Music credit: Is This Love by Coyote Hearing from YouTube Audio Library.  
<https://www.youtube.com/watch?v=2nwk043fwA>

**Isabel Low Poly**

Like · Reply · 3w · August 25

**Eric Lybbert** Day 17, Laban. I like the music for this one, very eerie. I could see Laban being eerie. Music credit: Lafayette by Spezz Cardigan.  
[https://youtu.be/zZYqSGV\\_sw](https://youtu.be/zZYqSGV_sw)

**Laban Low Poly**

Like · Reply · Remove Preview · 3w · August 26

**Eric Lybbert** Day 18, Benjamin. I like his tufts of hair. I also thought this music was old-man-like. I was envisioning Mike Cannon the whole time 🙌 Music credit: Blurred and Abused by Quincas Moreira found on YouTube Audio Library.  
<http://youtu.be/kY5ozCh8Ds>

**Benjamin Low Poly**

Like · Reply · Remove Preview · 3w · August 27

**Eric Lybbert** Day 19, Ammon. It was really hard to visualize what this hair would look like in 3D ... not sure I quite got it. Music credit: YouTube audio library.  
<https://youtu.be/vK-3YndB3sk>

**Ammon Low Poly**

Like · Reply · Remove Preview · 3w · August 29

**Eric Lybbert** Day 20, Anti-Nephi-Lehi. Music credit: A to the O by Diamond Ortiz from YouTube Audio Library. Four more days after this!  
<http://youtu.be/Gq3R3BGlye>

**Anti-Nephi-Lehi Low Poly**

Like · Reply · Remove Preview · 2w · August 31

**Eric Lybbert** Day 21, Abish. So I had this one done the other day and never posted it 🙌  
<https://youtu.be/v8SFCLSoak>

**Abish Low Poly**

Like · Reply · Remove Preview · 2w · September 1

**Eric Lybbert** Day 22, Mosiah. Music credit: Diskofunkey by Francis Preve from YouTube Audio Library.  
<https://youtu.be/d9L3ZXo5A>

**Mosiah Low Poly**

Like · Reply · Remove Preview · 2w · September 2

**Eric Lybbert** Day 23, Mary. This one went fast since I was able to use a good base of Abish. Music credit: Mr. Tea by Rando Brothers from YouTube Audio Library.  
<https://youtu.be/gZkGR0baHA>

**Mary Low Poly**

Like · Reply · Remove Preview · 2w · September 3

**Eric Lybbert** Day 24, Laman. FINISHED! Wow, that was a long stretch. It was fun getting them all done 🙌 Music credit: Fire Breather by Silent Partner from YouTube Audio Library.  
<https://youtu.be/3KpZOMahyo>

**Laman Low Poly**

Like · Reply · Remove Preview · 2w · September 4