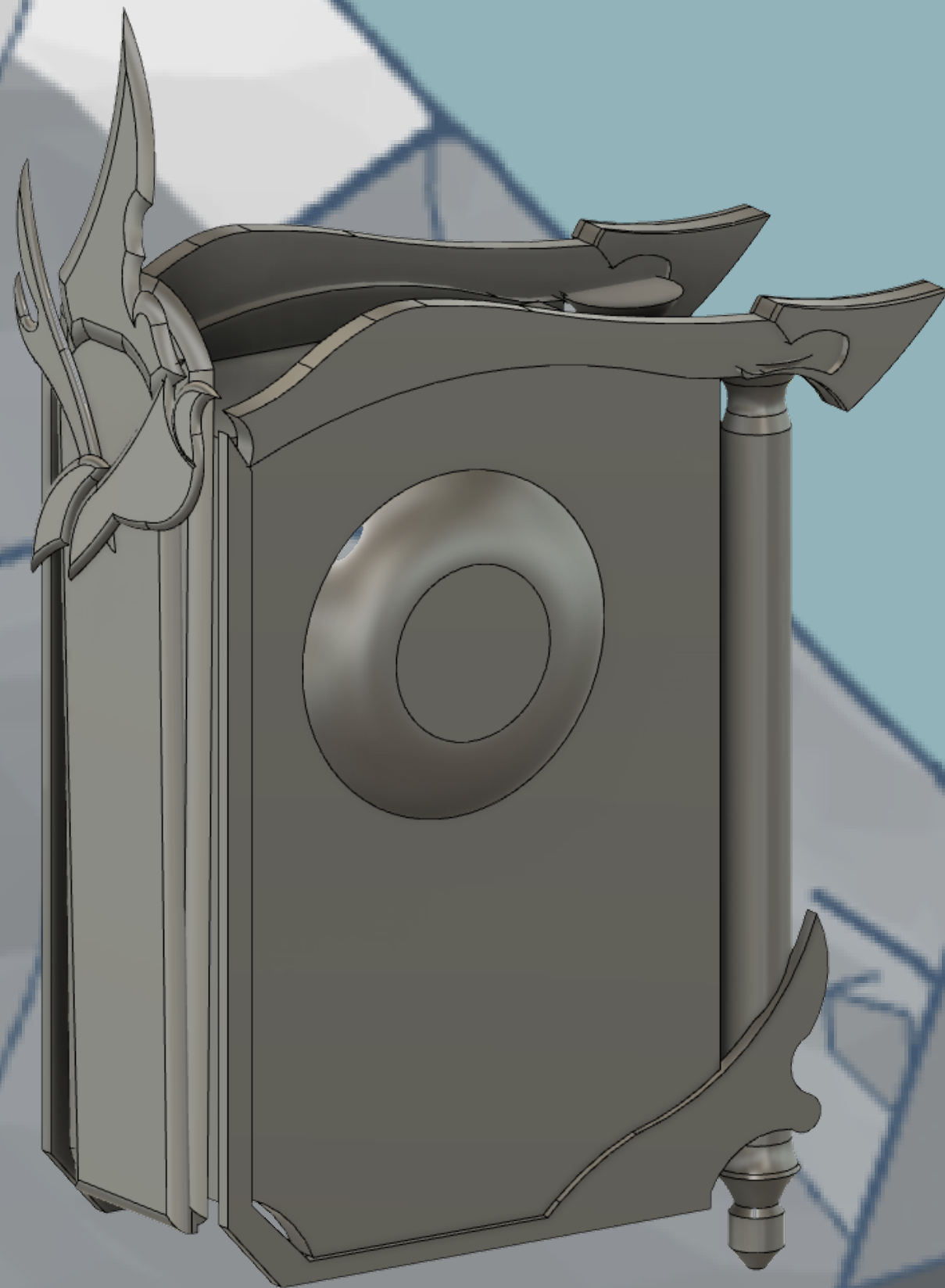


Forge of Legends:

Crafting **Weapons**, **Shields**, and **Armor** in TinkerCAD

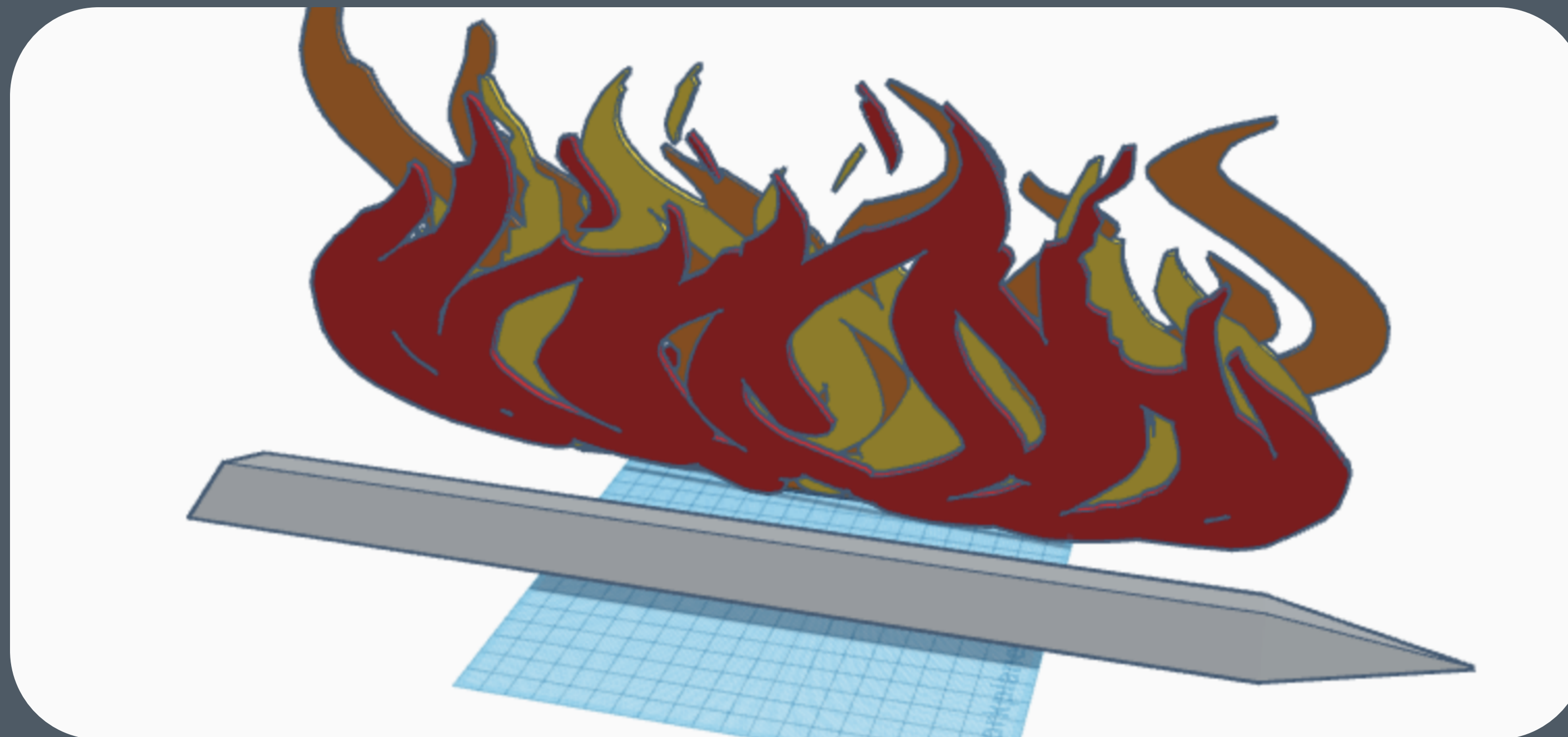
PART 2



Last time on Forge of Legends...

Last time, we used TinkerCAD to begin creating a 3D model of a sword.

We learned the basic tools of TinkerCAD, and how to think like a CAD Designer (breaking down shapes into its most basic parts).



Intro

Today, we'll be designing the **hilt** of our sword using **TinkerCAD!**

This phase of the tutorial is going to be a bit less instruction and a bit more experimentation for you. **Remember: you are encouraged to customize your sword and make whatever changes you would like to!**

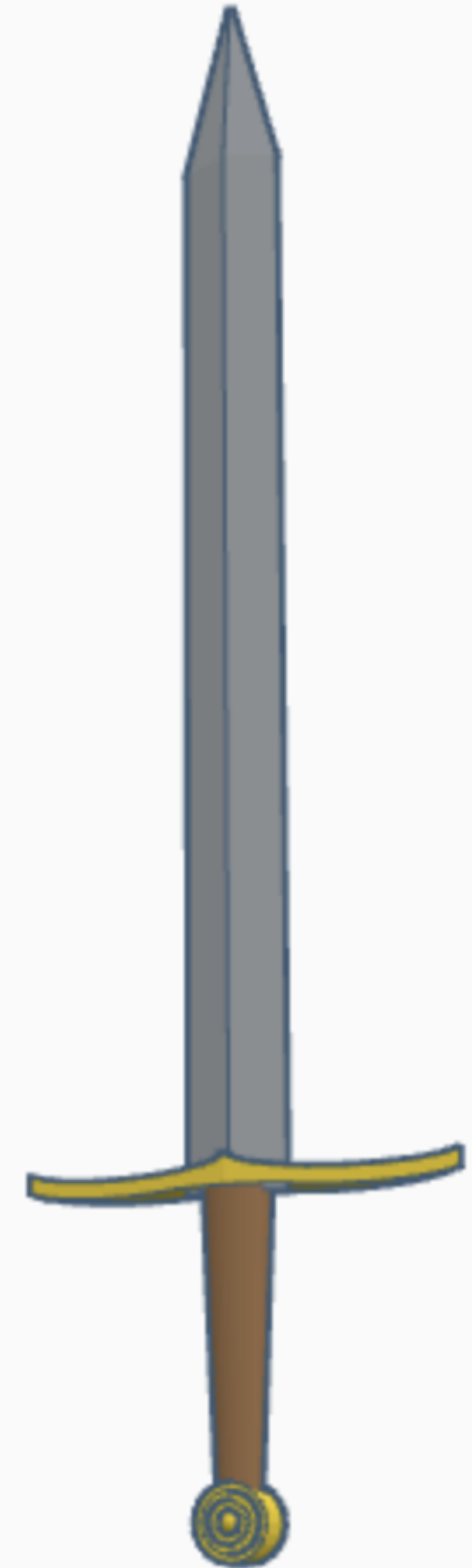
After today, you will end up with:

1. The completed model of the sword!
2. More refining for your 3D modeling skills!

Outline

It's gonna be a lot shorter than last time, now that you don't need to learn as many new TinkerCAD functions.

1. Deconstructing the Hilt (planning how to model the hilt)
 - a. Cross Guard
 - b. Grip
 - c. Pommel
2. Fusing the Pieces (finally putting everything together)
3. Armory of Legends (sharing your sword!)



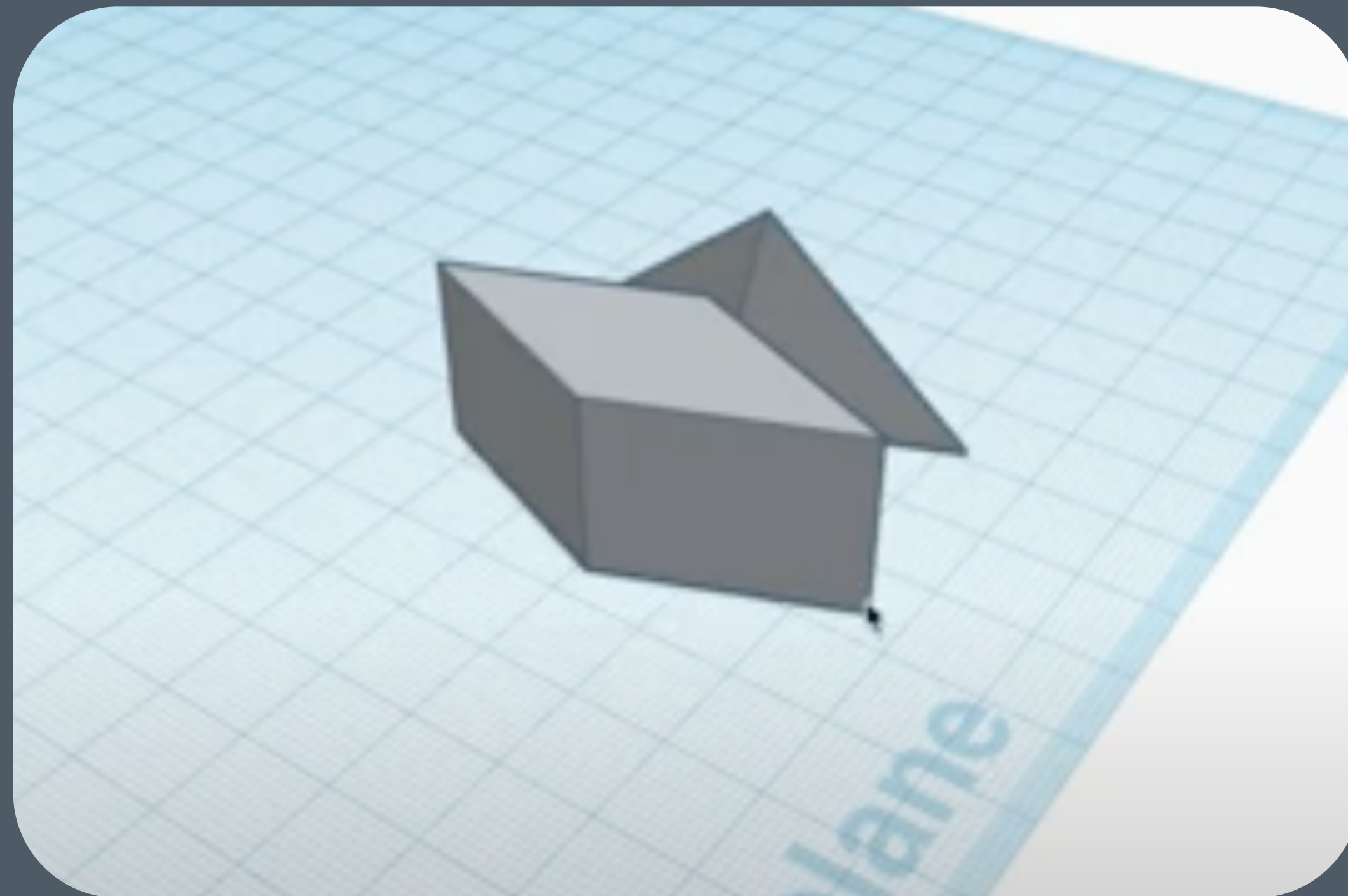
Part 1: Deconstructing the Hilt

Deciding What Pieces to Model at Each Point

A Quick Review...

Remember what we did for the blade?

We broke it down into the Blade Shaft and the Blade Tip, using regular shapes to easily model both parts, then combining them into a whole.



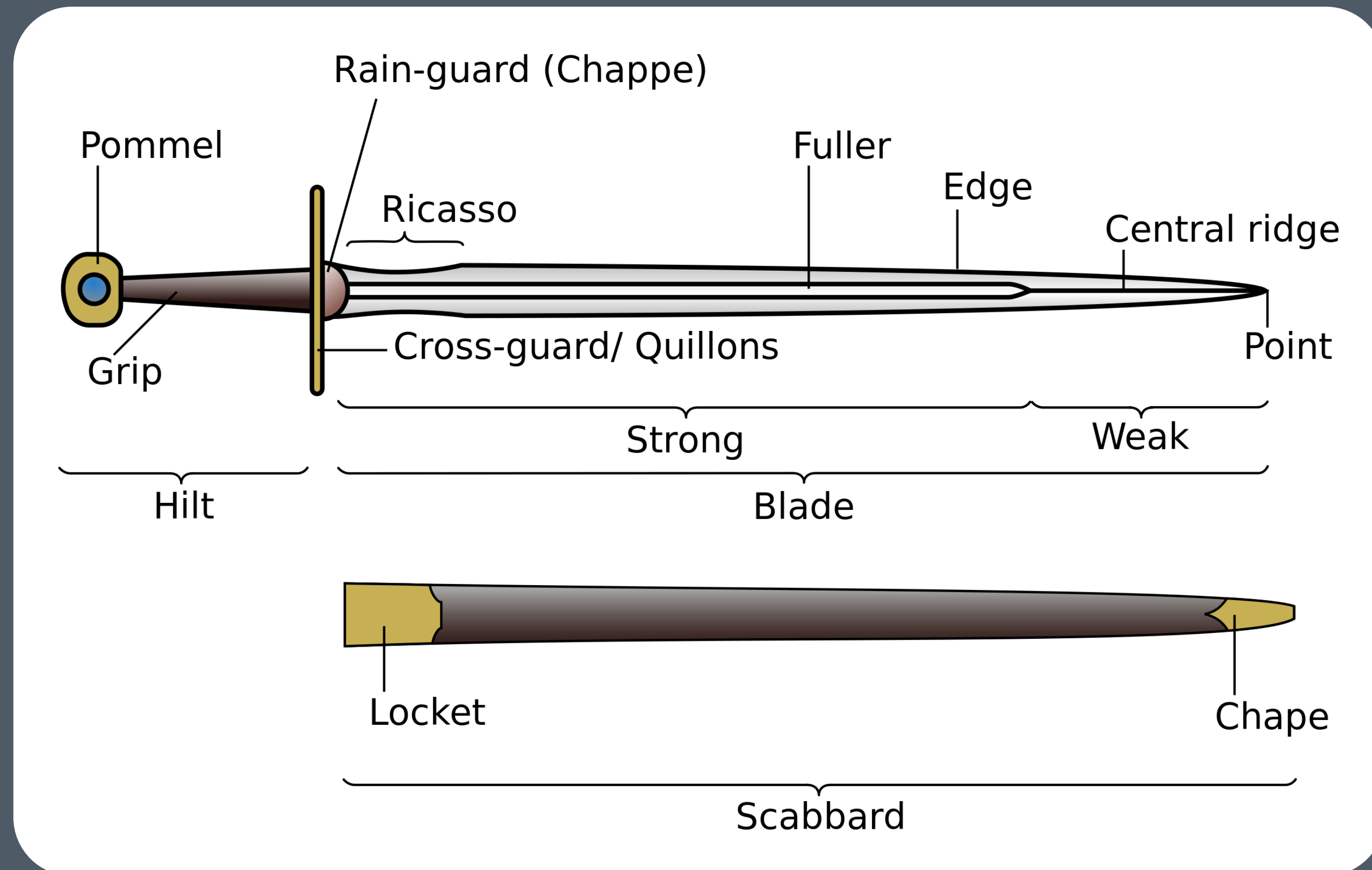
Quiz time!

How can we most efficiently break down the hilt into manageable pieces?

next slide for hint

Hint...

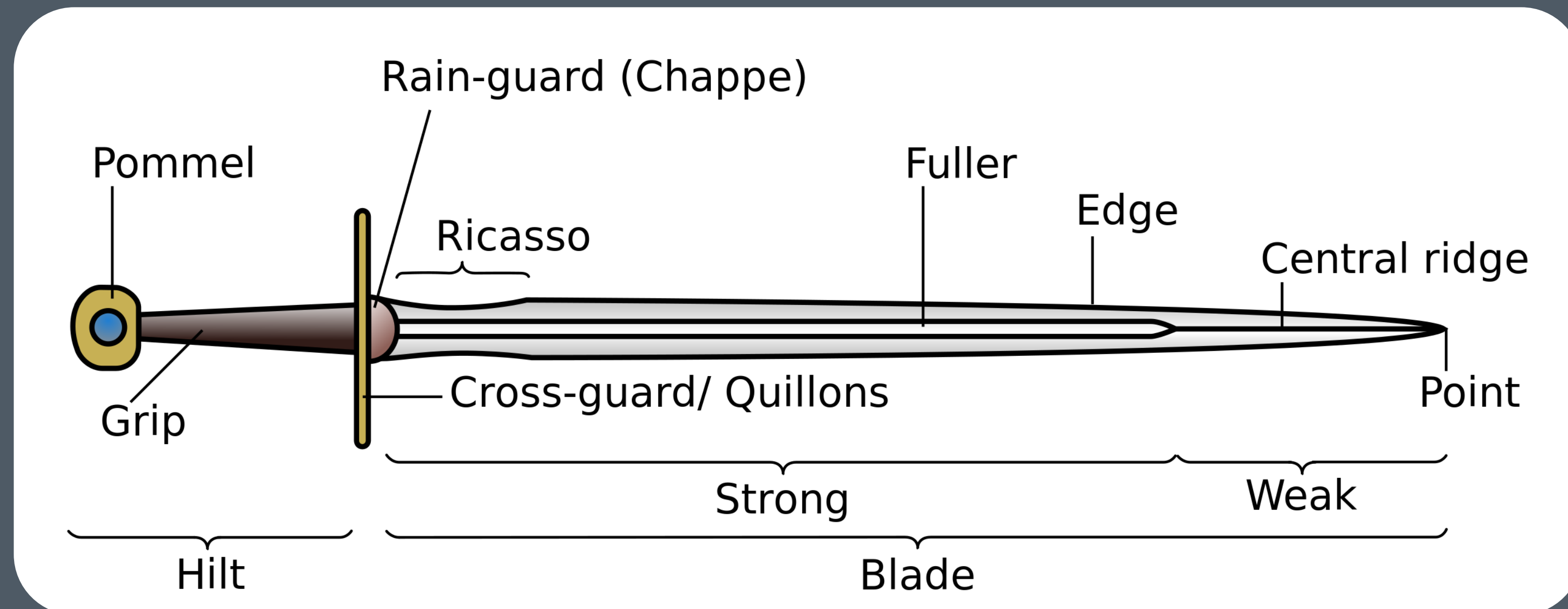
This is a breakdown of the sword. Can you tell me the names of the parts we will need?



Solution!

There's no right answer as long as you think you are good enough to model those parts!

A good example division (and what this guide uses), is Pommel, Grip, and Cross-guard.



Moving on from here:

In these sections, we are just going to model the different pieces.

A lot of the instructions are detailed in the Website page. There's also going to be videos on every other slide after this to guide you if you are lost at any point.

Here, we reiterate that creativity trumps following the procedure! If at any point you want to diverge from the Jam's instructions to make your sword unique, please go ahead!!!

Consult your handout if you need quick help!!!

Part 1–A: The Cross–Guard

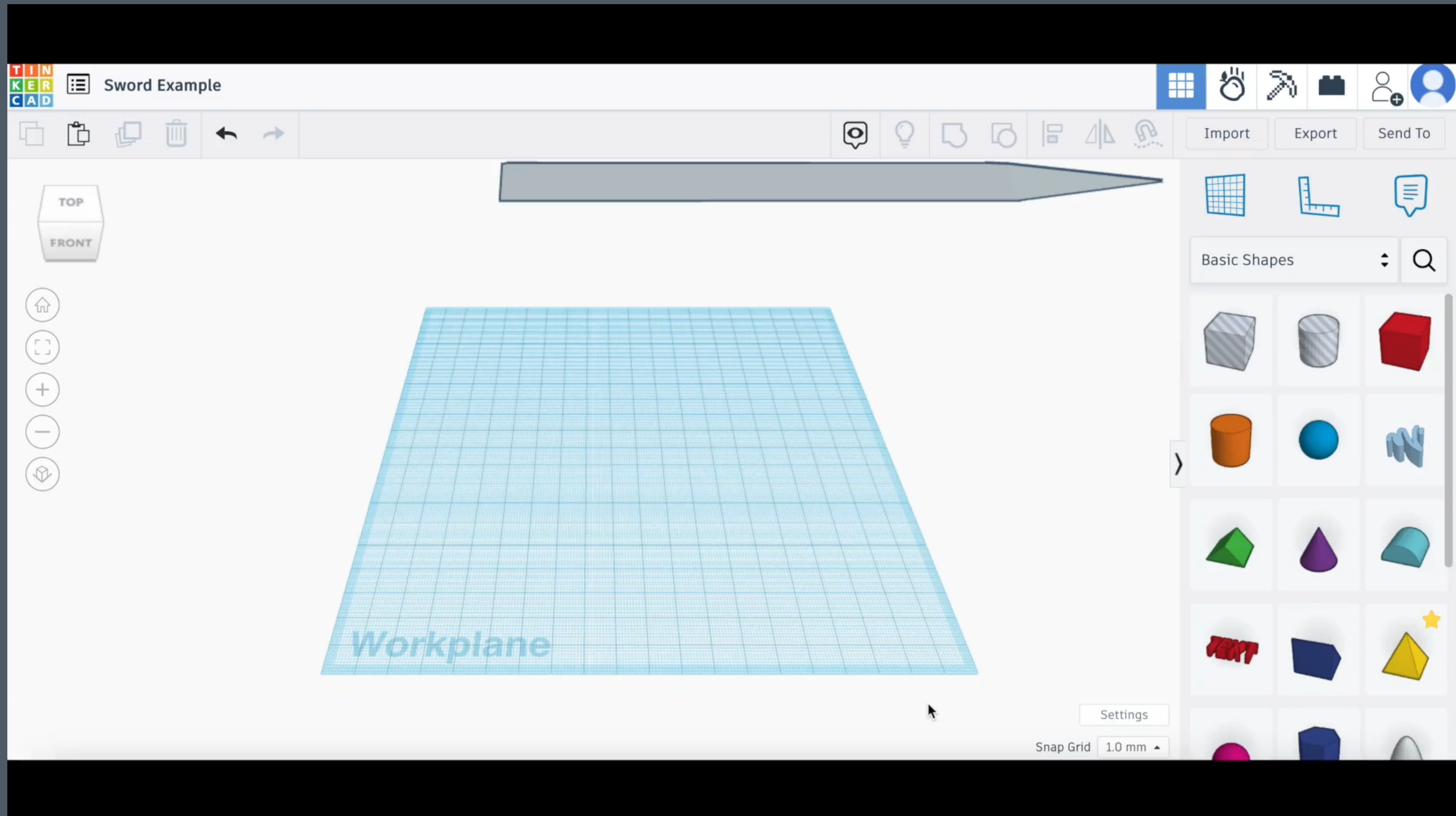
This piece is by far the most complicated of the three we divided the sword into.

The video outlines a very simple cross–guard, but it's actually the expressive part of the sword! Different cultures will have different types of cross guards, and so should you and your peers! **Please express your creativity!**

If you want inspiration, search up distinct cultural swords like:

- Asia/C.Asia: Chinese Jian, Japanese Katana, Persian Shamshir
- Europe: Roman Gladius, German Zweihander, Falchion
- Others: Rapier, Claymore, Scimitar
- [And click here for more!](#)

Part 1-A: The Cross-Guard -- Video



Part 1–B: The Grip

This part offers less creativity aspects, but still allows for it!

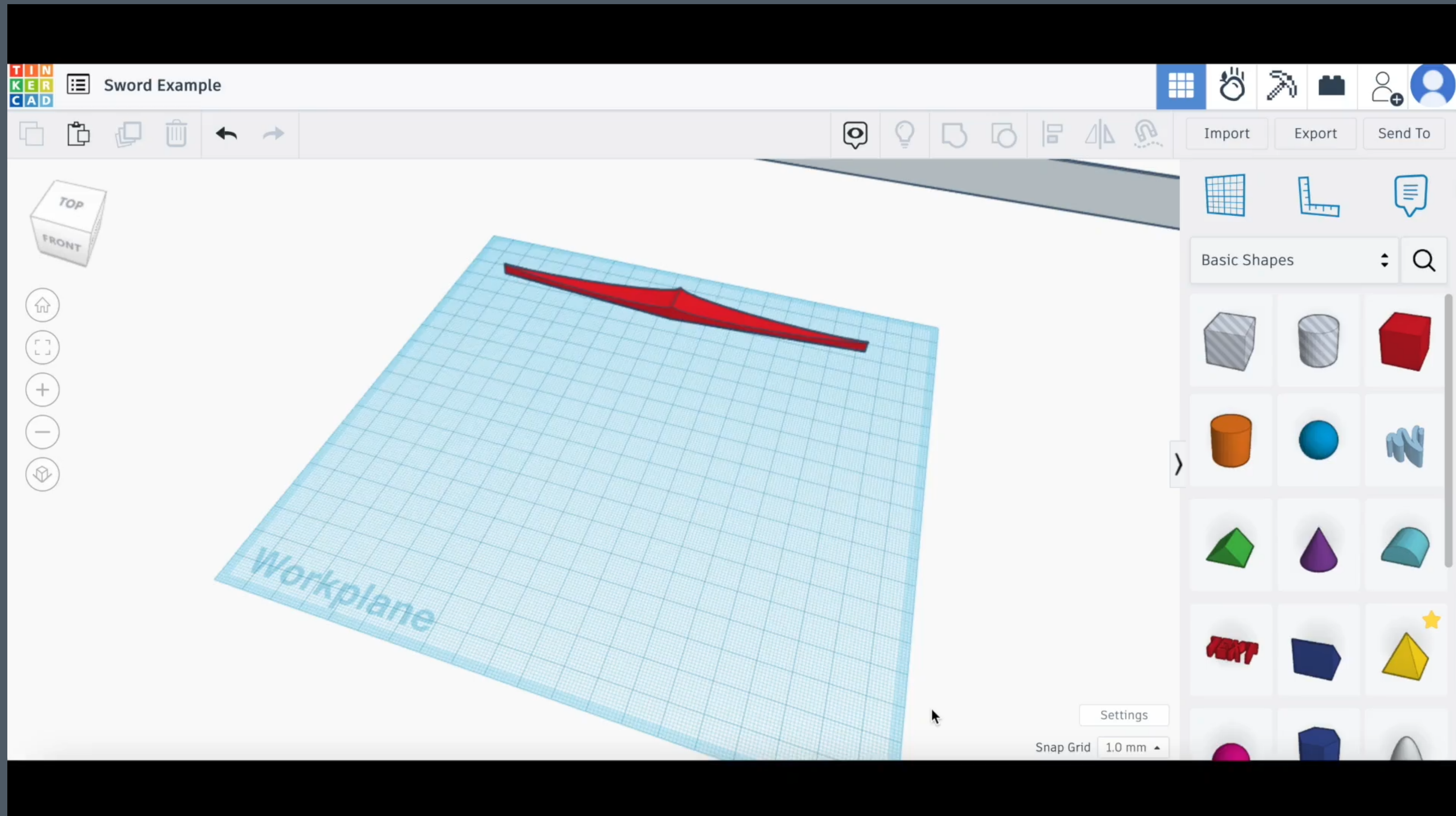
Remember, creativity is the ability to add new ideas and new changes to boring old things!

The tutorial once again goes for the simplest option – just a flattened cone frustum, no extra decorations. However, you can still incorporate many interesting ideas!

You can incorporate curves in the shape, leather wraps, or even fashion it with gemstones or shapes like snakes.

The possibilities are endless if you put your mind to it!

Part 1-B: The Grip -- Video



Part 1-C: The Pommel

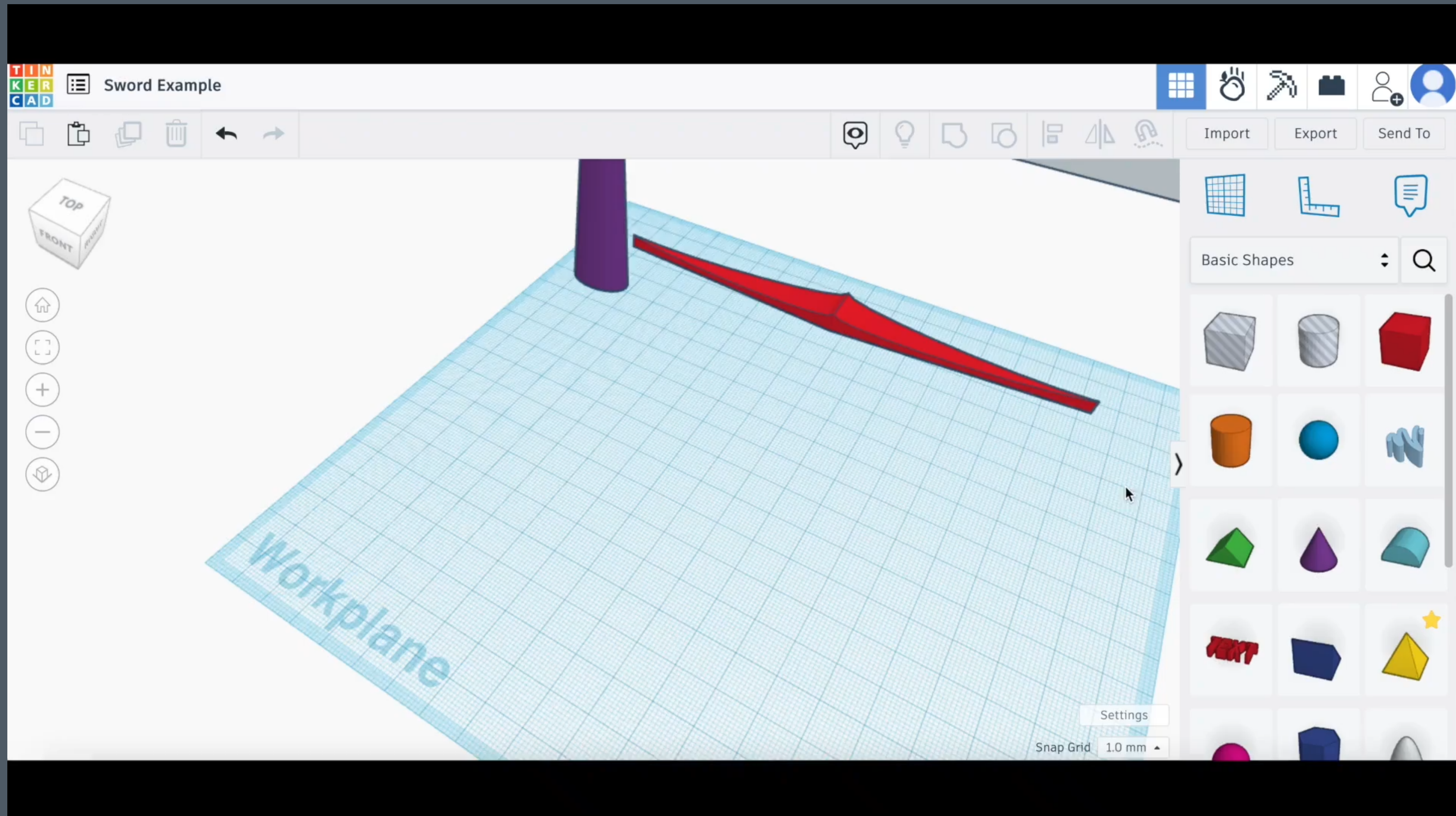
The pommel once again allows for endless creativity!

In fact, the pommel is probably the segment with **the most variety**. Even within the same culture, **pommels are very different** – and the same should be true for swords made by those in your club!

The tutorial makes a simple European-ish round pommel. However, even this simple pommel has multiple layers you can customize!

If you want a challenge, try making one that looks like an animal head!

Part 1-C: The Pommel -- Video

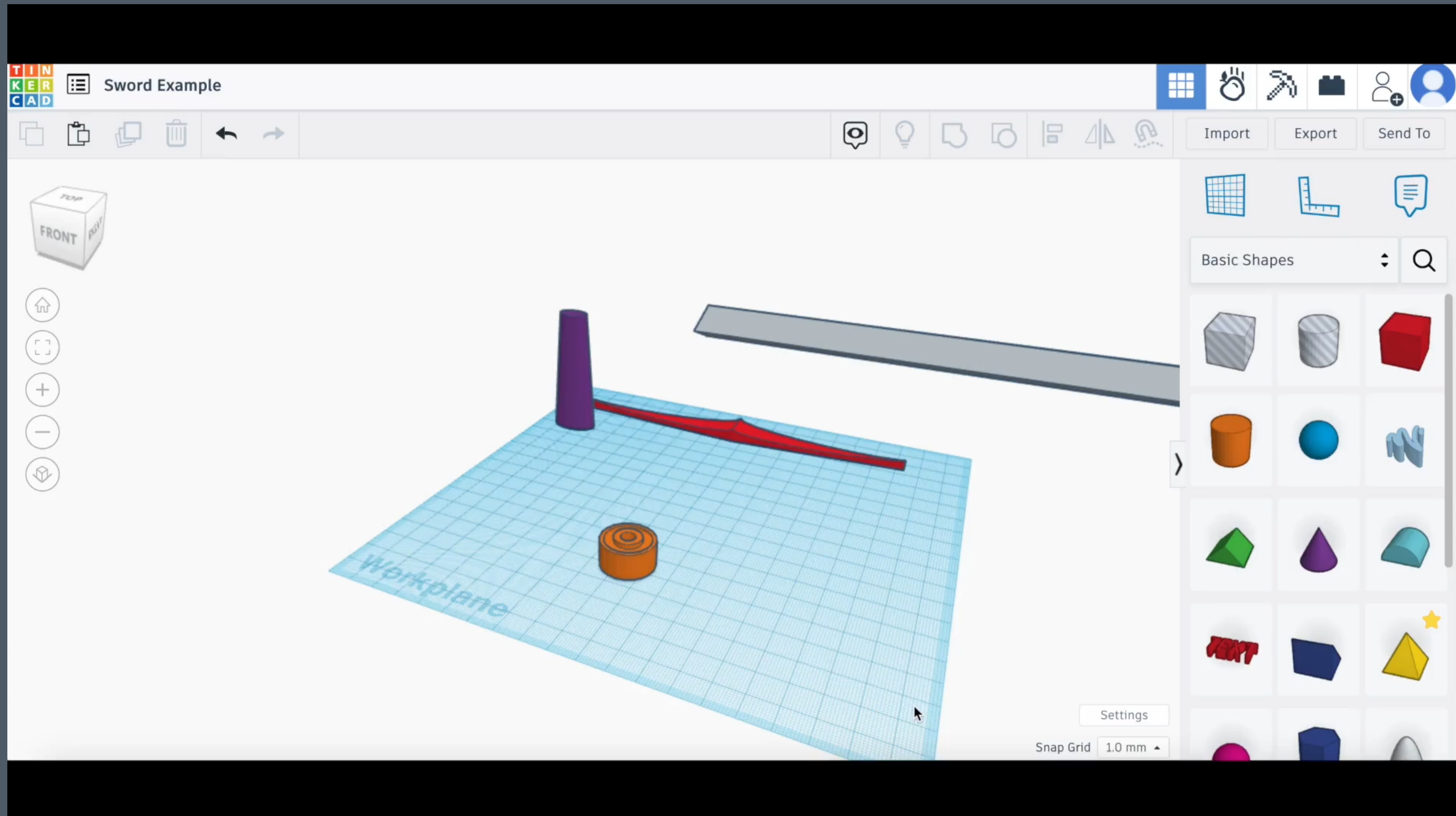




Part 2: Fusing the Pieces

Finally putting it all together!

Putting the Pieces Together





Gallery of Swords

Now, show your swords to others, and see how your peers created their unique legendary weapon!

Summary

Thanks again for choosing this Jam and for choosing the wonderful world of 3D modeling!

Today, you built on your past skills and learned how to create the rest of the sword!

Next, you can try more complicated software, like Blender or Fusion 360.

Now go and make your dreams come true!

Happy Crafting!!

