

BLENDER CUSTOM LIGHTSABER PROJECT

Up to this point, you have created specific objects that exist in the real world and have real reference material (such as photographs) that can be used to assist you in building the objects. Let's work now on creating objects that do not have a real-life counterpart and see if you can design custom objects using a set of design parameters. For this project, we are each going to create our own Star Wars™ inspired lightsaber.

You will work independently to create the 4 pieces that make up a general lightsaber to construct something truly unique. When complete, you will have the opportunity to print out your design on the 3D printer to have an amazing keepsake of your time in this course. I know...how much do you love this class?

Read the information about basic lightsabers below to get started.

PARTS OF A LIGHTSABER

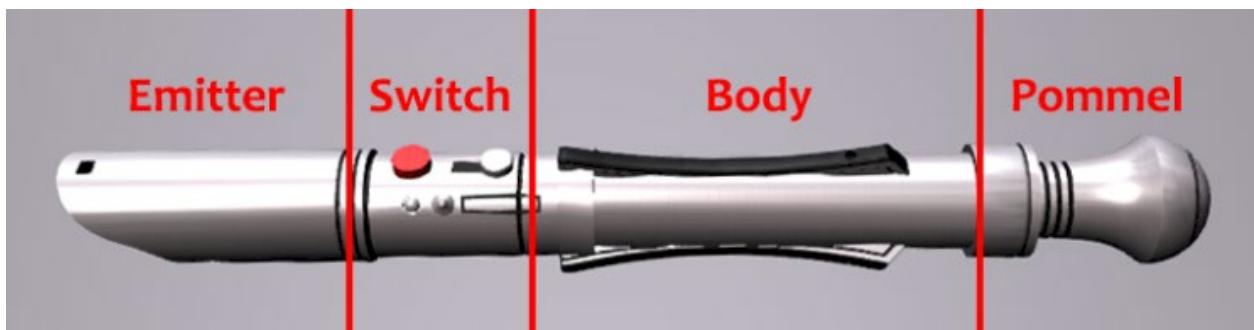
Before we begin, we need to understand the various parts of a Star Wars inspired lightsaber. Most lightsabers from the various incarnations (movies, tv shows, comics, graphic novels, etc.) of Star Wars consist of 4 basic parts:

1. Emitter
2. Switch
3. Body
4. Pommel

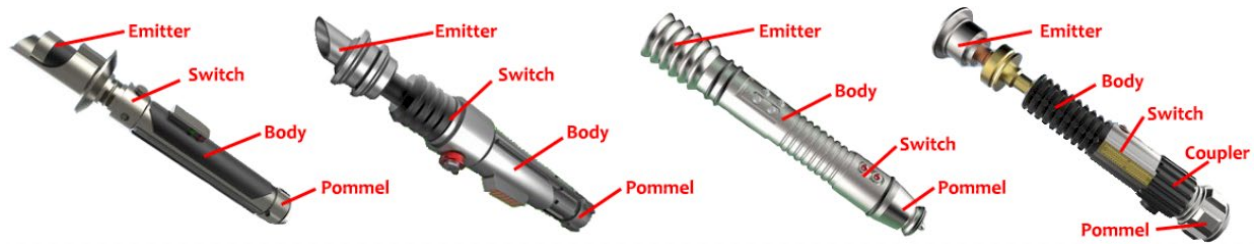
Take a look at the custom lightsaber shown below (custom meaning it is not from any Star Wars show, I designed it myself)...



Here are the 4 parts listed above:



In general, the 4 pieces are put together following the pattern above, but they do not have to be. Look at the following image:



Note that while the first two lightsabers (Kanan Jarrus and Ezra Bridger) follow the pattern, the next one (Kit Fisto) has the Body and Switch reversed, while the last one (Obi-Wan Kenobi) includes an additional piece – known as a Coupler – just above the Pommel. There are a WIDE variety of different styles and layout of lightsabers in the Star Wars universe including some that combine various pieces. For example, look at the lightsaber of Emperor Palpatine:



Note that the Emitter and Pommel are in place (since these are at each end of the lightsaber they kinda have to be in place), but the Switch is integrated into the Body and a Coupler is used to set off the Emitter.

Some of the Star Wars universe sabers get pretty odd...



This is Gungi's lightsaber and it is supposed to be made out of wood. But even with the weird design, you can still see the 4 basic parts.

I could go on and show tons more examples, but hopefully you get the idea.

Your task for this project will be to design a lightsaber if your own. Read the instructions below to understand the sequence you should follow to turn your design into a printable file.

Custom Lightsaber

Keep the following in mind as you complete your Composite Lightsaber:

- Begin by getting an idea for the overall design of your sabre

- You are free to look at lightsabers from the Star Wars universe for inspiration, but avoid trying to copy an existing sabre or use portions of other sabers to build your own
- Again, don't steal the design of an online lightsaber – this project is giving you the opportunity to design your own work, so take some pride in your work and do your own work
- The easiest way to start is by designing each of the 4 parts separately and then work to fit them together
- Your custom lightsaber must include the 4 parts discussed above, but what order you place the pieces in – and whether you include couplers – is entirely up to you
- You can create a double-bladed lightsaber if you wish, but just know right now that it will not be printed (too much filament)
- Model your lightsaber in Blender as one complete object to start with – save this model as you will submit it
- Identify what colors you want each of the individual pieces of your sabre to be (an easy way to do this if your sabre is not in separate pieces is to take a screenshot of your complete sabre in Blender and bring that image into Photoshop and simply color over the pieces until you get a color scheme you like)
- Once you have finalized your one piece lightsaber and have identified your colors, will need to break your sabre into individual pieces that can be printed in different filaments
- Rework your individual pieces so that your sabre can be constructed (glued together) and all of the pieces will line up
- Export each piece as an stl file – be sure your file names include what color the object should be printed in
- To submit your sabre to be printed, zip all of the individual stl files and submit that one zipped file (I will print the sabres for you)