Sword Parts

- Blade
- Guard
- Handle/Grip
- Pommel
The Blade

- Use the **Box** tool to form the blade shape.

The box tool is located under the **Create Tab** or you can use the shortcut which is $X$.

Make sure you keep everything along the origin to keep your sword symmetrical.
The Blade: Tip

- First **Subdivide** your blade twice.

**Subdivide** is located under the multiply tab or it’s shortcut which is \(D\).
The Blade: Tip

- Next use the **Knife Tool** to plot the points that will be the shape of your blade tip. The Knife Tool is under the **Multiply** Tab and the short cut is **K**.

**Hint:** To keep everything symmetrical, it helps to draw a straight line across the blades and then bring your diagonal lines down to the second points that were created from Subdividing.
Once the you have your desired shape, delete the unwanted polygons.
The Sword: Tip

- Once you delete the polygons you are done with the blade and should have something like this.
The Guard

- First start off with another rectangle. You may want to make it a little bigger than desired, depending on the type of guard you want.
The Guard

• For the Guard there are several tools you can use, depending on the shape.

• To plot the points you need to shape the guard use the **Knife** tool.

• Once you have your points then use the **Drag Tool** to move those points around to shape your guard. The **Drag Tool** is located under the **Modify Tab** and you can use its short cut which is **^T**

• You can also use the **Magnet Tool** to have your guard slightly pulled out to give it some depth. The **Magnet Tool** is located under the **Modify Tab** and it’s short cut is :

*Note: Only shape one side of the guard*
The Guard

Once you have one of the guards shaped to your liking then you are ready to use the **Mirror Tool**. The Mirror Tool is located under the **Multiply Tab** or you can use its short cut which is **V**

Take the Mirror tool and mirror your guard. Move it around until it lines up with your first. Now you have a finished guard!
The Grip

- To make a grip, use the Disc Tool under the Create Tab.
The Pommel

• To create the pommel neck, you need to make another small disc.
• To make the curves on the side, either use the same method to make the Guard or you can use **Boolean Subtract** tool. Be warned though that Boolean Subtract can result in missing polygons at times.

Boolean Tool is located under the Construct Tab.
The Pommel: Top

- To create the top you only need to create disc again. Make sure the outer disc slightly overlaps your Pommel Neck.

- Use Boolean Subtract to cut a hole through the disc.
The Pommel

- Place another disc down to act as your middle point.
- Once you have your middle point down then you can create the smaller discs that run through the middle point to the other side. You can either create each little peg one at a time or have two long pegs that run straight through the middle.
Surface Properties

- **Blade Surface Properties:**
  - Color: 199 232 239
  - Luminosity: 11.5%
  - Diffuse: 100%
  - Secularity: 45.5%
  - Glossiness: 4%
  - Reflection: 80%
  - Transparency: 0
  - Refraction Index: 1
  - Translucency: 0%
  - Smooth Threshold: 89.53
Surface Properties

- **Guard/Pommel**
- Color: 176 117 050
- Luminosity: 0
- Diffuse: 100
- Secularity: 84
- Glossiness: 4
- Reflection: 81
- Transparency: 0
- Refraction Index: 1
- Translucency: 0
- Smooth Threshold: 89.5
Questions?