## Structure: Cutting

Before we can begin building the structure of the GuitarBot we first need to cut all the pieces we need for the frame. In this section we will measure and cut the t-slotted aluminum bars that will later form the frame of the GuitarBot.

## Bill of Materials:

Name	Number
80/20® Bars (48" long, 1" wide)	6

Tools
Hacksaw
Vice Grips
Tape Measure
Maker

## Step 1:



## Need:

- 6 80/20® Bars (48" long, 1" wide)
- Hacksaw
- 4 vice grips
- 1. Measure, mark, and cut one bar in half to create two 24" inch pieces these will serve as the *feet* of the GuitarBot.
- 2. Measure, mark, and cut at the 40" mark to create two pieces of 40 inches that will be *leg beams* and two pieces of 8 inches that will be guitar prongs that will later hold the guitar in place.
- 3. Measure, mark, and cut bars at the 36" mark to create two pieces of 36 inches that will go along the back of the guitar.
- 4. Measure, mark, and cut one bar at the 17" mark to create the piece that will attach to the brains.