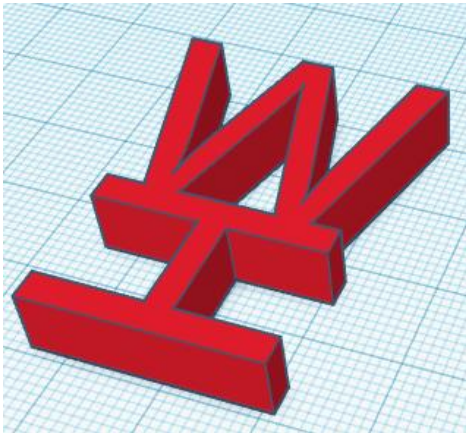


3D & Wood Creation – Make 1

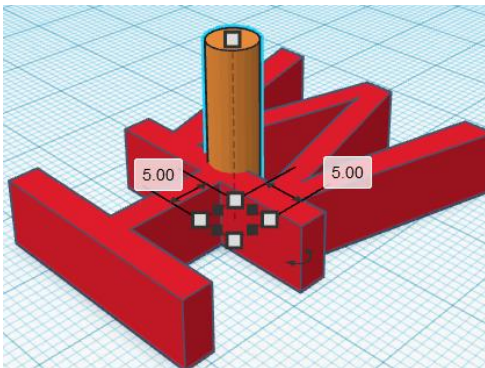
Your task is to 3D print a little stand that features your initials and which holds a small laser cut piece of wood.

Part 1: make and print the 3D part

Start by making your first and last name initials in Tinkercad. Overlap them slightly, and arrange them so that they fit within a 30 by 40 mm area. Group them together. Make the whole thing have a height of 7 mm. For example, my initials are W and H, so here is what I did:

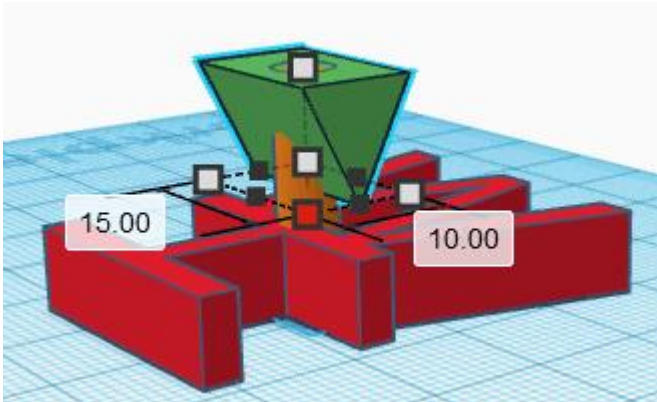


Next create a cylinder that is 5 by 5 by 20 and place it in the center of your letters (it has to be overlapping with part of a letter, it can't be in a hole spot, you may need to add other connectors or move it from the center to make this work.) Here is what I did:



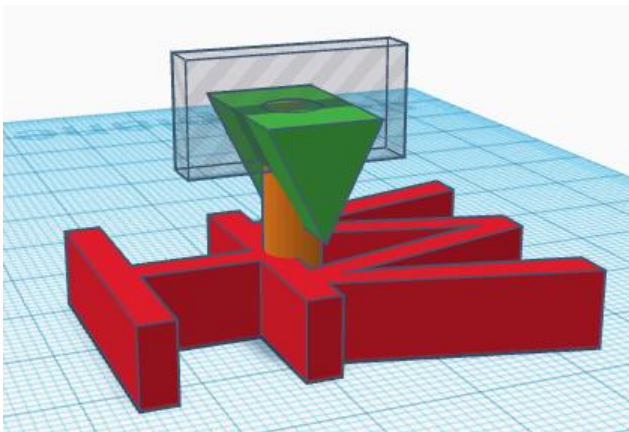
Continued on next page.

Next, add a cross piece like this:

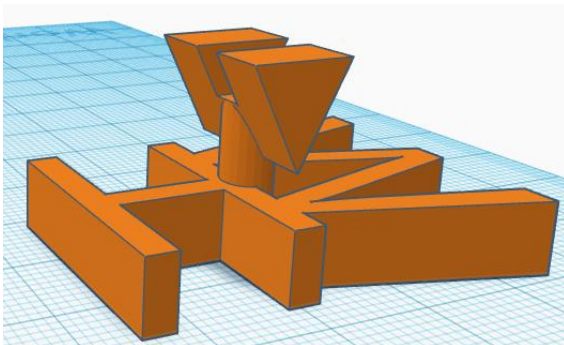


That is a triangle piece, flipped over, that is 15 by 10 and 10 mm tall. Line it up so that the big flat part is even with the cylinder (see how you can see the circle on the top of mine above?)

Add a hole piece across the top that is 3.5 by 20 by 10 and place it in the center of your cylinder/triangle part like this:



Select all parts and group your project. You should end up with something like this:



Export as an STL file, turn that file in on the Google Classroom, and email it to 3d.makerlab@wscuhsd.org. Then move on the laser part of the project (next page).

In Inkscape design a small wood piece (under 60 mm square) that we cut out and which you place into the slot on your 3D piece.

I made the following:



Make all lines .1mm stroke and red. You may use rastering if you want. Email your file to the laser when you are ready to cut it out.

Assemble the two pieces and come show me to get checked off.