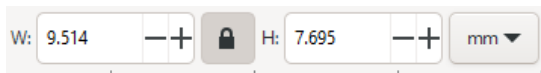


Final exam block, hanging letter group activity
Fall 2023

We are going to each make a letter from our name with little hooks on it, laser cut it out, and then hang them all on the light string above the classroom.



Open Inkscape. Type the first letter of your first name. Use the sans-serif font. With the letter selected, click the lock icon near the sizes:

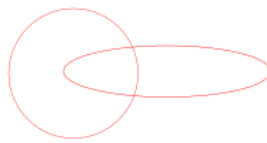


Notice which dimension of your letter is longer, the height or width. Set that one to 100 mm.

Make a circle that is 25 mm across (that is the diameter, not the radius).

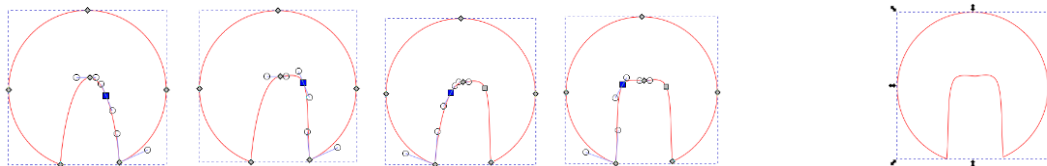
Make an oval that is 40 by 10.

Lay them across each other like this:



Do a Path>Difference with them both selected. You should have this figure.

Turn this object 90 degrees to the right. Double click to add a node on each side of the arc, and move the new nodes so that your shape looks like the image on the right.



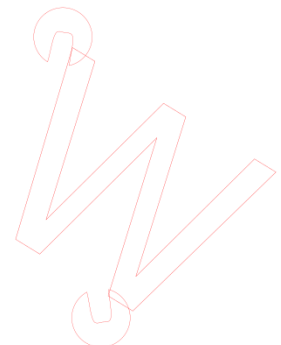
Make a copy of this shape. Move one copy to the top left of your letter and the other to the bottom right. Flip the bottom right one upside down. Everything should look like this (except with your letter, not mine):



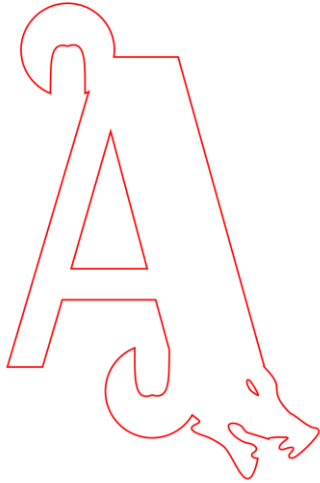
The idea is that the top left object will be a hook to hang on someone else's letter above yours in a chain, and the bottom right one will be a hook for someone else's letter to hang on yours. (Sort of like a barrel of monkeys if you ever played with those when you were little.) You will need to do a Path>Union, but before you do, consider how someone else's letter might end up hanging on your letter and how your letter might hang from another letter. Consider rotating everything so that it will work better. What I did with the W is shown here to the right.

After you get the parts lined up right, do a Path>Union.

But wait, there is one more part! (See next page).



After you get your letter all set and Path>Unioned you will add an animal face to your letter. You will need to find an image, do a Trace>Bitmap, and then do a union to get the animal face onto your letter. Here is an example:



When done, set all fill to off and all stroke to red and .1 mm. Email the file to the laser, then come over and I'll cut it out and hand it to you. Then we hang them all.