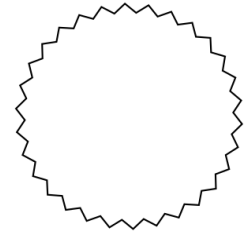


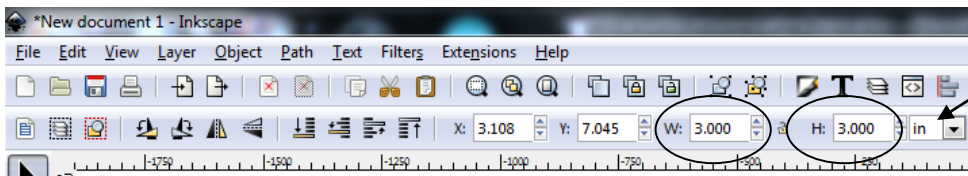
Make: First Laser Cutter Project

To get things going on the laser cutter we're going to do a quick and simple project: A round shape with your name on it with something cut out on the inside. It will use basic Inkscape skills that you have just learned. Create a new Inkscape document and save it to the Desktop of your computer with your name and "first laser" in the title.

Make a circle or other round shape using the circle tool or the star/polygon tool. If you use the circle tool, draw the circle while holding down the Control key so you get an actual circle. If you use the star tool, set it to have 20 or more corners and set the spoke ratio to something close to .900. You'll have something like the shape to the right (or a simple circle).



Set the size of your object to 3 by 3 inches. You do that by selecting the object, setting the units to inches in the toolbar, then entering 3 for the width and then the height as shown here:

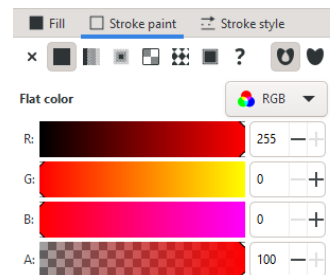
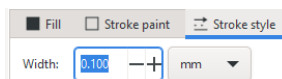


Add your name in an interesting font, make it fill the space from side to side. Hold down the Control key while you are scaling your name so that it doesn't get distorted.



Add one other fun thing (a spiral, other shape, etc.) above and/or below your name.

Select the outside round shape and open Fill and Stroke from the Object menu (Control-Shift-F). Set the Fill to "no paint" (the X) in the Fill tab. Under the Stroke paint tab, set the color to 255/0/0/100 (red) as shown to the right. Next, in the Stroke style tab, set the width to .1 mm like this:



You can type .1, it fills in the other zeros for you. "mm" stands for "millimeters".

Select your name and the other shape you added (in my example, the spiral). In Fill and Stroke set these to have no fill, then in the Stroke paint tab set the color to black (that's 0/0/0/100), then set the Stroke style to .1 mm like we did before. Finally, select all (Control-A), then open Align and Distribute under the Object menu (Control-Shift-A). Click the icon to the right to align everything by their centers.



Save the Inkscape file with your name and "first laser" in the title. Turn it in to the Google classroom for this assignment. Open your school Gmail, and email the file to the account laser.makerlab@wscuhd.org. I'll call you over when we're ready to cut yours out of cardboard.