

Illustrator for Makerspace

Artboard

- Show the Ruler, change to inches
- Make 2 Artboards
- Size one at 2 x 2 inches and the other at 8 x 10 inches
- Name the smaller one “Sticker” and the larger one “Signage”
- Place them side by side
- Save your file in a folder, name them meaningfully

Shapes & Layers

- Draw a rectangle in the sticker artboard
- Give the rectangle a color fill but no stroke
- Name the layer “sticker”
 - Notice how to rename and move layers, lock and hide them
- Using shapes and the pathfinder tool make a heart or other combined shape.
 - Try to use 3 of the pathfinder tools
- Create a new layer, name it “signage”
- Create a background shape for your sign in the 8x10 artboard
- Give the shape a 1 point/pixel stroke in pure red

Text

- In your signage layer and artboard start a text box
- Type some text
- Try changing the font, size, color, spacing
- Notice that you can click and type a line or click and drag a sized box.
- You can also fill a shape with text or type on a path
- Once you have some text, copy the layer> lock and hide that new copy> go back to the original and go to type>**create outlines**
- This will divorce your type from the font.
- Add text to your sticker if you want

Colors

- On the laser: RED means cut, BLUE means line, BLACK means engrave
 - Red is RGB (255, 0, 0), HEX #ff0000
 - Blue is RGB 0, 0, 255, Hex #0000ff
 - Black is RGB 0, 0, 0, Hex #000000
- The Roland and Mimaki read CMYK color (not RGB)
- [Grab a color palette](#) from an image, save a color palette for later, load a color palette
 - You will need to load the Roland Versaworks magenta for your sticker cut-line
- Set your preferred colors on your sticker and signage (though if you laser cut the sign there is no color)

Images

- You can grab free vectors from [vecteezy.com](https://www.vecteezy.com) or other sites
 - For the laser set the color according to how you want the laser to process them
- If you add a photo or graphic Illustrator will link to that graphic
 - Be sure you save your file in a folder to keep your AI file and assets grouped
- To use just part of an image, use a clipping mask
 - Draw a shape over the part you want to keep> select both the shape and the image> right click> make clipping mask. Notice how it behaves in the layers.
- Trace Outlines> Expand, creates a vector version of your photo but it can be very mess/cumbersome, use a few shapes and colors as you can.

Pen Tool

- The pen tool makes points, connected with math to the next point
- [Bezier curves](#) change the shape in a unique way
- Try making a wave, an hourglass, [see keyboard shortcuts](#)
- The white arrow (A) will let you modify your points and curves
- Pen tool + and - let you add or remove points.
- The metal/fiber laser likes simple shapes with few points/nodes

Cut Lines & Bleed

- In your sticker create a cut line by drawing a shape with the pen tool or shapes tool around your image. Give the new shape no fill and a stroke of 1px- you will need to set this line to the Roland Magenta for a cut line and save as a PDF
- Bleed: This is the extension of the color beyond the cut line. Its needed in case the printer shifts a bit and doesn't cut perfectly you want the background color to go all the way to the edge.

Offset Path

- This [creates a cut line](#) around a complex shape
- First you need a line around the outside of your shape, if the shape is a vector just make a copy (in the layers panel > 3dots > duplicate layer)
- If the sticker is a graphic you can manually trace it with a pen tool or make a copy of the main image > trace outlines > fill and combine the shape > create a stroke then
- OBJECT > Path > Offset Path