

Do You Have the Time... to be a Hero?



Project Overview:

Using the original artwork Super Hero logos that you created in pairs or team, we will design a working clock. This clock will have artwork incorporated into the face which will be laser cut, laser etched, or raster engraved. We will combine computer design and pencil and pen drawing to create this project. The final product will be given to the organization that your group worked with.

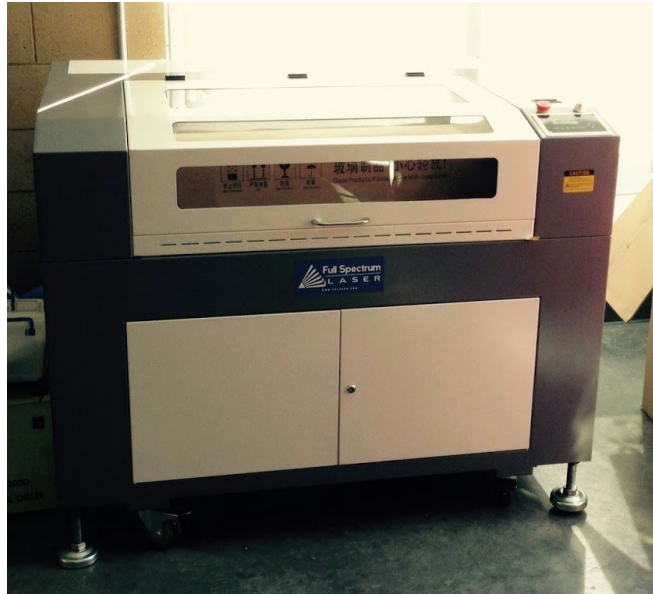
Essential Question:

How can the use of technology enhance your artistic vision?

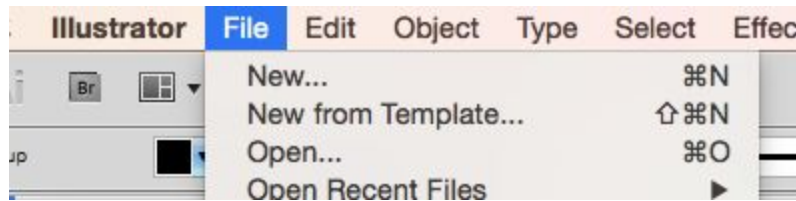
Timeline:

November 9 Drawings Due	November 10 Safari Park	November 11 No school	November 12 Project Launch	November 13 Illustrator Refresh
November 16 Draw Plans	November 17 Design Time	November 18 Laser Cutter Visit- 16th Street	November 19 Design Time	November 20 Design Time
Thanksgiving Break				
November 30 Design Time	December 1 Design Critique	December 2 Revisions	December 3 Plans Submitted	December 4 Cutting
December 7 Cutting	December 8 Cutting	December 9 Cutting	December 10 Cutting	December 11 Cutting
December 14	December 15	December 16	December 17 School Exhibition 5:00-7:00	December 18

Basic Adobe Illustrator Settings/Design for the Laser Cutter



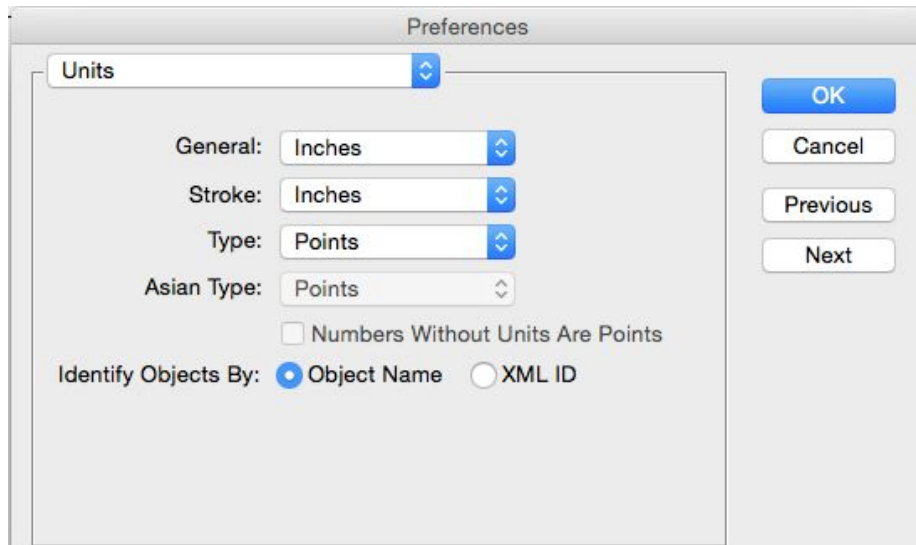
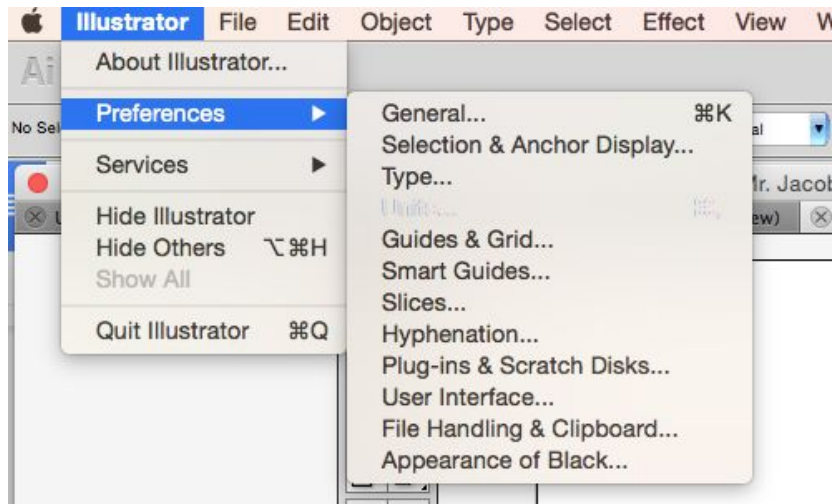
Setting up your Artboard



Open a new document in Adobe Illustrator. It is the Ai Icon

Name your document and change the units to "Inches." A 8.5 in x 11 in will work for most of your pieces.

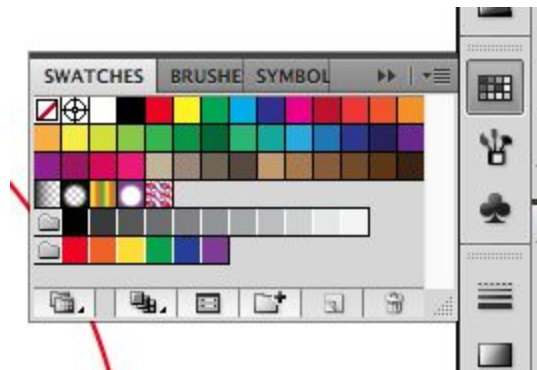
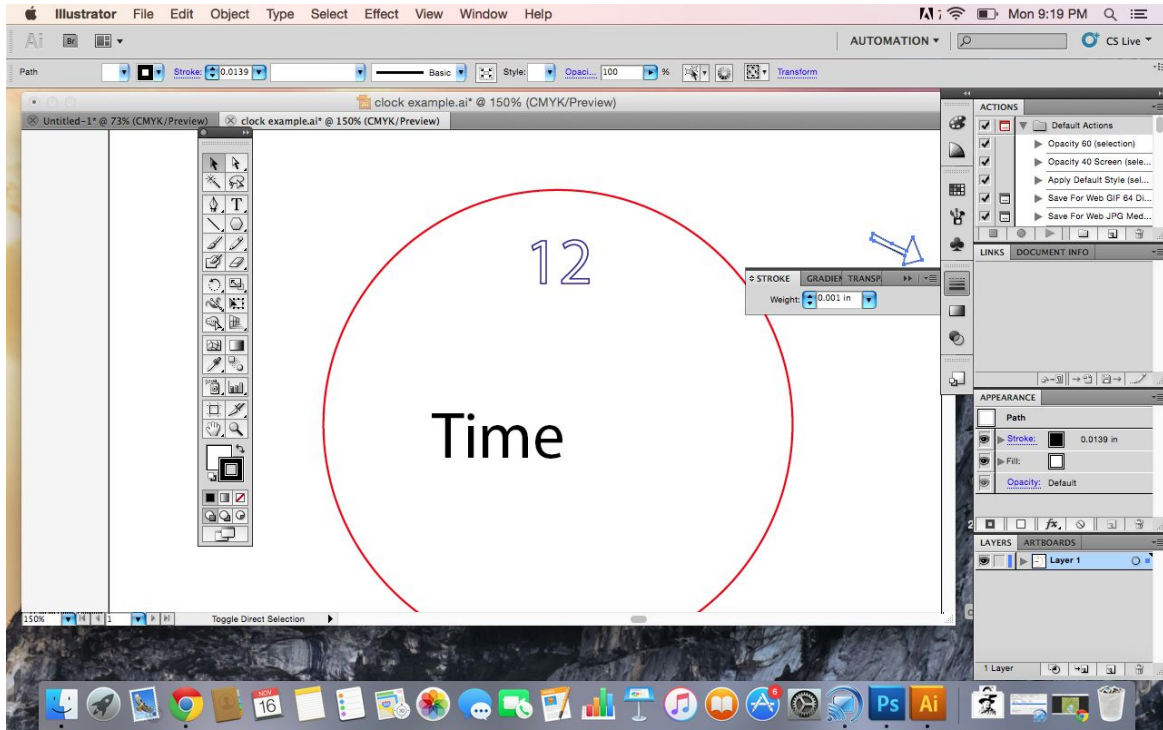
Next, check that the **Preferences** are also in **Units of Inches**.



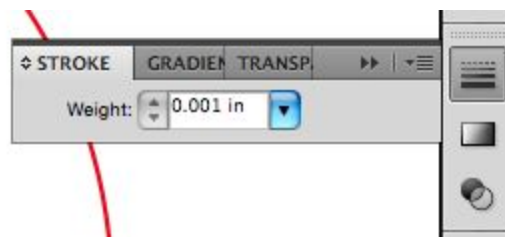
Change both the General and Stroke settings to Inches.

Creating Designs

The laser cutter understands color and stroke weight as different functions. In CMYK colors, **red** and **yellow** are for cutting while **blue** is for etching. **Black** is the default color and is used for raster engraving.



CMYK Colors in the Swatch tool bar.

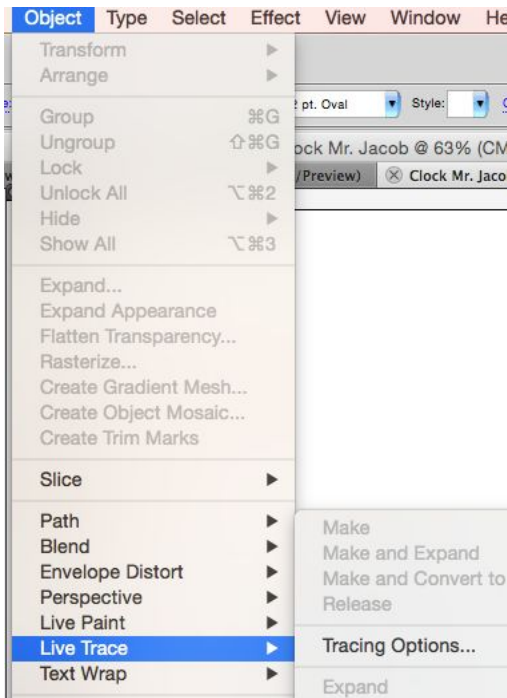


Stroke Weight is found under the Club symbol.

Stroke weight should be set to a hairline of **0.001 inches** in order to be cut/etch.

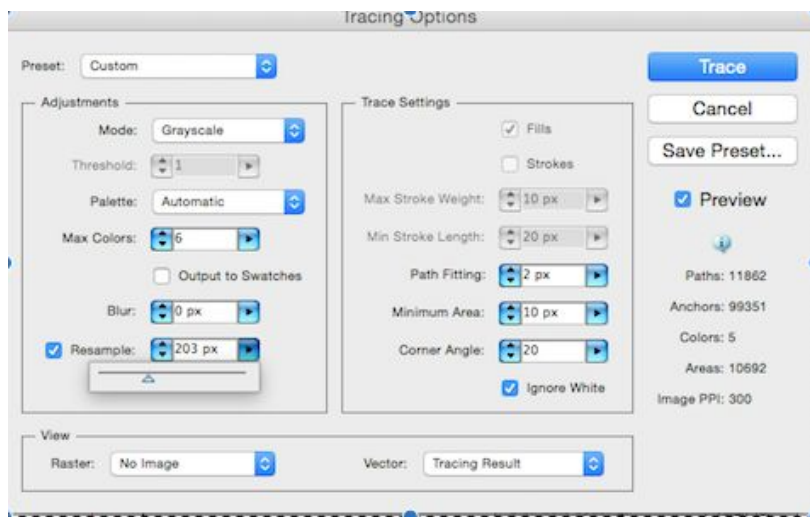
Tracing Artwork

The **Live Tracing** Feature allows you to create outlines of scanned artwork, TIFF, JPEG, and



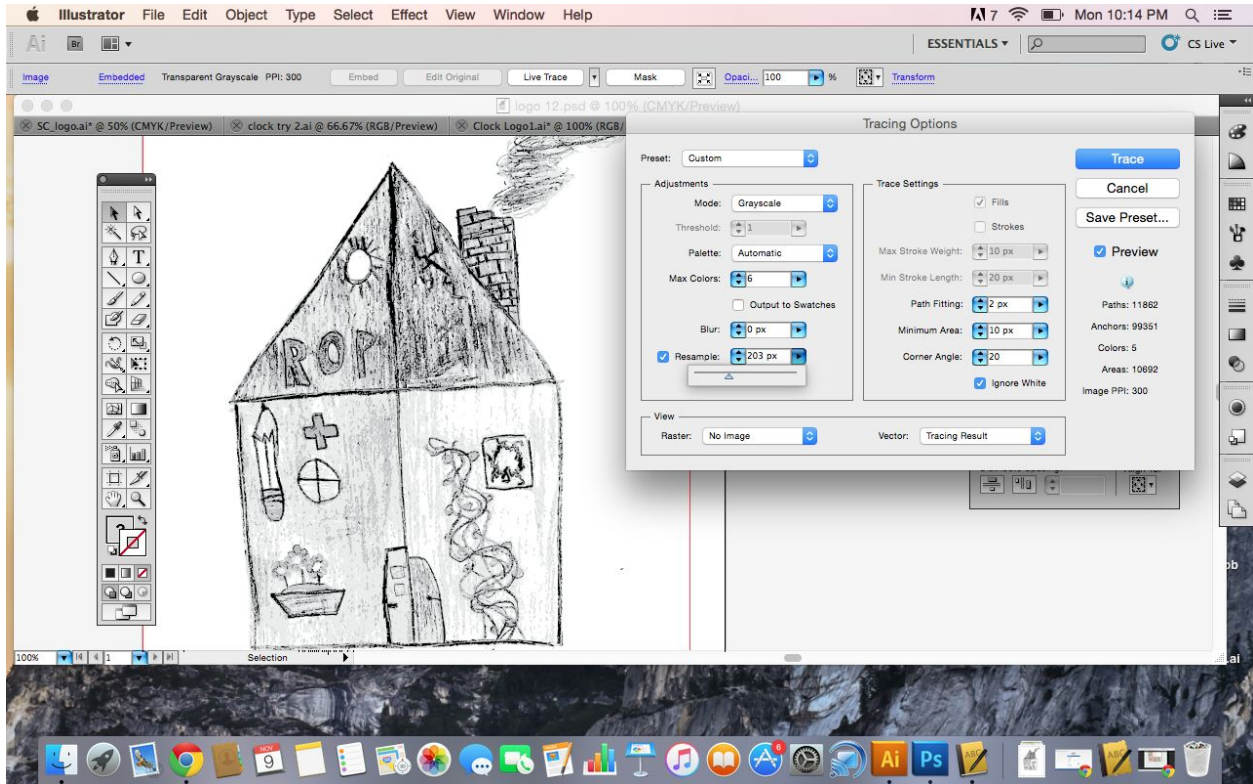
PNG files.

Object > Live Trace > Tracing Options



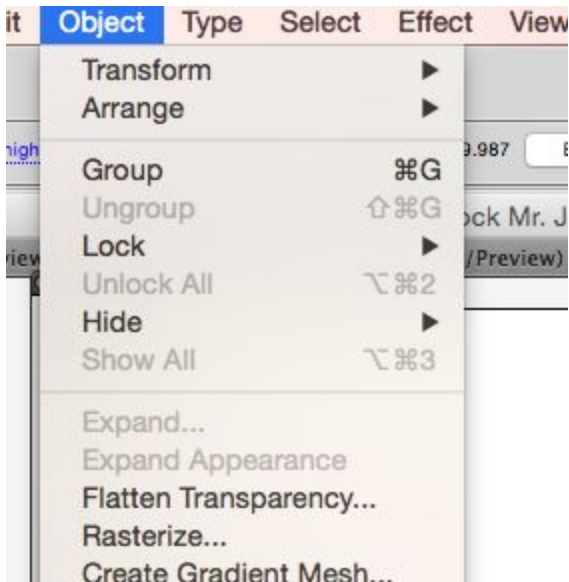
Check the Ignore white and Preview boxes.

You can change the mode to Black and White or Grayscale depending on what you want to accomplish.

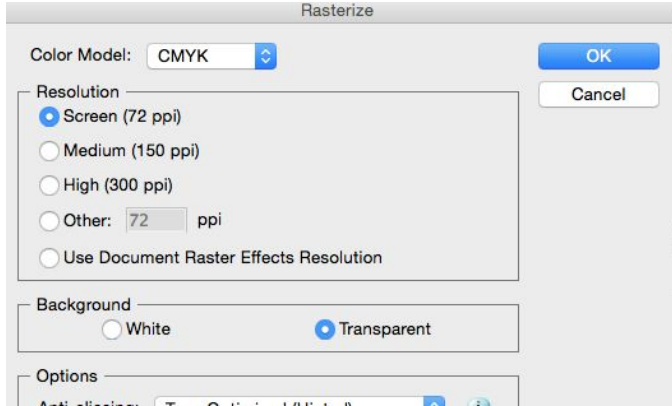


This is preparing a vectorized image of an original drawing.

Preparing a Raster Image



A raster image is like lots of tiny dots being burned into the wood.



The clock on the **Left** is a laser etch design. It is only the outlines of the artwork and the letters.



The clock on the **right** is a raster image. Tiny dots are burned into the wood to create the image of the house.

When a raster image is exported to the Laser Cutter PC, it will look like this. The red area indicates the progress on the job.

