

Creating a Circle in Adobe Illustrator

Physical Science and Technology

Follow these steps to make a perfect circle in Adobe Illustrator that you can then use to create a file that will direct the laser engraver to make a circle of the same size. If you get stuck, ask for help and be specific about which step you need help with!

1. Open Adobe Illustrator
2. From the File Menu, choose "New"
3. Set the width and height to 30 and change the units to centimeters, then select "OK".
4. Click the small triangle on the shape tool (it will start as a rectangle) and change the shape to an ellipse (○).
5. Use the mouse to draw a circle. Hold down the shift key to make a perfect circle rather than an oval.
6. Select the black arrow tool (the "Selection Tool"). Once it is selected, double-click your circle to change the size. (It doesn't matter how big you draw your circle to begin with; this step determines how large the circle will be when the laser engraver cuts it.) Change its size by changing the number in the "W:" box on the top tool bar. Enter the diameter you want into this box.
7. If you need to delete or move your circle, click on the black arrow first.
8. Use the black arrow tool to select your circle. With it selected, go to the "Stroke:" box on the upper toolbar and change the thickness of the outline of your circle to .001 inches. (The stroke of an object in Illustrator is the outline. The laser engraver interprets any stroke under .004 inches in thickness to be something that gets cut by the laser instead of just engraved. To be safe, we always set the stroke to .001 inches to insure that it cuts. Include the word "inches" to insure that the thickness is correct.)
9. Click the "Text Tool" and click outside the circle. Type your name and your partner's name in the text box that appears.
10. Use the selection tool to move the text into your circle.
11. Save your file to the desktop of your computer. The file name should be your first and last names, all one word (for example: "danbregar.ai" – just pick one partner for the file name).
12. Transfer your file to your Google Drive (make a PST folder within your Google Drive so you can stay organized).
13. Copy your file to a USB thumb drive for use with the laser engraver. You can share the thumb drive with other students since all your files should be clearly named and the resulting circles will have your names on them.