

Inkscape 1  
Project Make  
Mr. Hays  
Analy High School

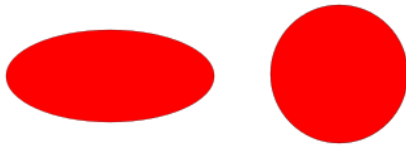
Open Inkscape. Create a new document.

Save it with the title "Inkscape 1 " followed by your name.

## 1. Creating objects

Choose the circle tool on the left.

Draw a circle in sort of an oval shape, then draw another circle while holding down the Control key. You should have something like this:




Draw a rectangle that is long and wide, then another rectangle while holding down the Control key. You should have something like this:



Holding down the Control key while creating an object in Inkscape makes the it symmetrical.

## 2. Resizing objects

Using the select tool (the  arrow at the top of the toolbar), select one of your objects. This gives you the resizing handles. Drag a corner, see how you can change the shape of an object. If you hold down the Control key while doing this, the object stays proportional to its original (that is, a square will still be a square, etc.)

With an object already selected, click on the object a second time. Now you have the rotation handles. You can rotate an object using these corner arrow handles. Don't double-click on an object to get these handles. You have to click, wait a second, then click a second time.

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### 3. Zooming

There are zoom tool icons in the toolbar, but I find the keyboard shortcuts to be easier to use.

- If you select an object and then type a 3, Inkscape zooms to fit that object into the window. Try this.
- If you type a 5, Inkscape zooms to fit the entire canvas in the window. Try this.
- If you hold down the Control key while moving the mouse wheel, Inkscape zooms in or out. Try this.

### 4. Undo

Delete one of your objects. Now type Control-Z. This undoes the last operation (in this case, it brings back the object you deleted).

You can also click the Undo button on the toolbar: 

### 5. Select All

Type Control-A, or choose "Select All" under the Edit menu. All four of your objects are selected. You can move them around now by clicking on one of them and moving everything. Try this.

You can also resize everything all at once by dragging on one of the resize handles while everything is selected. You can do this with or without the Control key. Try this. Undo if you want.

### 6. Copy, cut, paste, and duplicate

Click to the side where there is no object to unselect your objects. Now click on just one. Type Control-C. This copies it. Type Control-V, this pastes a copy. Move the copy so it's not directly on top of the original. You can also do Control-X to cut and remove an object (or cut and then paste elsewhere.)

Right click on one of your objects (that means click on it with the right mouse button). A menu appears. You can choose "Duplicate" in this menu to make a copy of the object. This is also under the Edit menu. Move the duplicate so it is not on top of the original. You can also type Control-D to duplicate an object. Try it.

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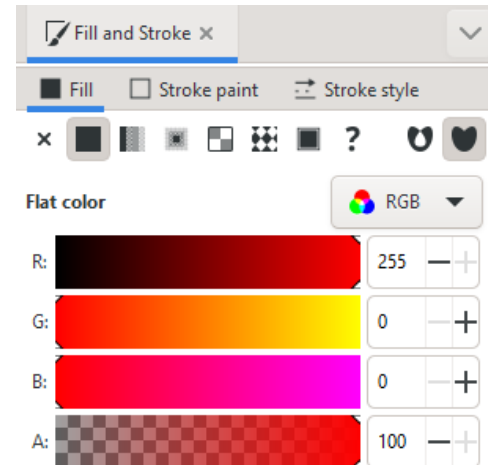
## 7. Setting colors

Select an object and open "Fill and Stroke", the second item down in the Object menu.

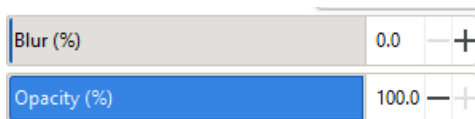
Turn on the Fill if it is not already on (on the Fill tab, click the first box next to the X).

Set the color scheme pop-up menu to RGB if it is not already on RGB.

Set the R line to 255, the G line to 0, the B line to 0 and the A: line to 100. Please do not ever change the A: line. It should always remain at 100.



Also, at the bottom of the Fill and Stroke control window are the settings for Blur and Opacity. Blur should always be at 0 and Opacity should always be at 100. Please never change these values.



If A: is not 100, please fix it. If Blur is not 0, please fix it. If Opacity is not 100, please fix it.

In this class we use red to tell the laser cutter we want to cut something on that line and black to tell the laser cutter that we want to simply engrave a line. Red is 255/0/0 and Black is 0/0/0.

## 8. Text

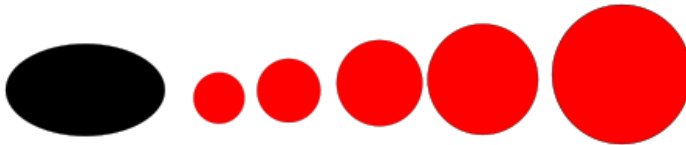
Choose the text tool to the left (the letter A). Click and drag to create a box, then type the month (August). Select all of the text, change the font to something non-default. It's a funky thing, but if you click on the font menu and then click off, then click on it again, the menu shows you all the fonts live in the menu, instead of just the names of the fonts.

Resize August while holding down the Control key to keep it proportional. Make it large enough so that it fills the page left to right.

Go to the next page for the part of today's assignment that you will turn in. Everything up to here was practice.

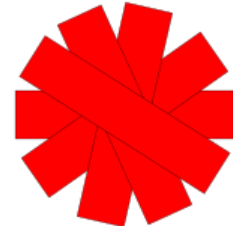
Start with an empty document. (Either select all and delete everything, or just close whatever document you were working in and create a new one.)

1. Create an oval shape with the circle tool.
2. Set the oval to be filled with black.
3. Create a perfect circle to the right of your oval. Set it to have red fill.
4. Duplicate the perfect circle four times. Line the circles up from left to right. Make each one slightly larger than the one to its left. In the end, I want one oval, then five perfect circles, each growing larger from left to right. Something like this:



If you run out of room, select all and then while holding the Control key down, resize everything so it fits better. All of your work needs to fit on the workspace or canvas. If you need to see if it's fitting, type a 5, and Inkscape zooms to show your canvas. Are all of your shapes on the "paper"?

5. Using the rectangle tool (the square shape two items below the select tool on the far left) draw a rectangle that is not a square. It should be red. If it is not, set its fill to red.
6. Duplicate the rectangle and rotate it. Do this so that you have five rectangles arranged like a flower as shown to the right.
7. Draw a perfect square using the rectangle (draw it while holding the Control key down). Set this one's fill to black.
8. Using the text tool, type your first and last names. Change the font to something non-default. Set the fill to red.



In the end you should have something like this to the left. Notice how everything fits on the canvas. If you have to move or resize things until you get it to fit.



Save and close your file. Save your file with your name in the title and "Inkscape 1". So instead of having a document called drawing.svg, you will have a document called "Mr. Hays Inkscape 1.svg" but with your name instead of mine. Save it to the Desktop.

After you turn this in, if you click on it in the Chrome browser, the font will appear messed up. That's not a problem. Inkscape will show me the correct font. Chrome isn't Inkscape, and it's just doing the best it can to show you what is in the file after you turn it in on the Google Classroom.