

lab::working with pixels

1. Copy the `Lab_Resources` folder from the `GD_121C` folder located on the Data Drive to the `Student Work` folder on your computer. Rename the folder on your computer as follows: `firstname_lastname`.
2. Open each of the Photoshop documents, perform the change listed below to the appropriate file, and save the changes and close the document.
 - Climber_01 Reduce the printing size and the pixel count by 50%.
 - Climber_02 Enlarge the printing size (but not the pixel count) to 6 inches wide by 9 inches tall.
 - Climber_03 Change the resolution to 20 dpi without resampling the image.
 - Climber_04 Reduce only the width (not the height) of the image to 30% of its current size (hint: turn off constrain proportions).
 - Climber_05 Add one inch to each side of the canvas (top, bottom, left, right).
 - Climber_06 Subtract one inch from only the top of the canvas.
 - Climber_07 Convert to Indexed Color mode. Use the Local (Adaptive) palette, 32 colors and Dither set to None.
 - Climber_08 Convert to Grayscale mode, then to Bitmap mode using the Diffusion Dither method.
 - Climber_09 Leave open for the next step...
3. `Climber_9` should now be the only document open in Photoshop. In this document, look at the Channels individually (`Window > Channels`) and note their look and composition. Use the shortcut command keys (`Command-~`, `Command-1`, `Command-2` and `Command-3`) or the Channels Palette (`Window > Channels`) to navigate through the Channels.
4. Convert `Climber_9` to CMYK using `Image > Mode > CMYK Color`. Again, look through the Channels and notice any differences between the RGB and CMYK Modes. Also look for any differences in color between the two (`Command-4` will show the Black channel; `Command-Z` will toggle between Undo and Redo).
5. Save `Climber_9` and close the image.

6. Create a new document in Photoshop with the following specs:

Name: *firstname_lastname.psd*
Width: 1000 pixels
Height: 400 pixels
Resolution: 100 pixels per inch
Color Mode: RGB
Canvas: Transparent

Note that the following steps result in a somewhat arbitrary-looking image. Don't worry too much if your work doesn't look like much—it shouldn't.

7. From the Swatch palette (Window > Swatches), select any color, then select Render > Clouds from the Filter menu.
8. Alter the image size so that the width and height are both 4 inches. The image should appear "squished" (Resample Image will need to be checked, and Constrain Proportions unchecked).
9. Select Image > Rotate Canvas > Arbitrary and rotate the canvas 25° counter-clockwise.
10. Change the Canvas Size to remove 100 pixels from both the width and the height of the image.
11. Change the Image Size so that the width is exactly 2 inches wide. (Resample Image will need to be checked, and Constrain Proportions unchecked).
12. Once again, select Image > Rotate Canvas > Arbitrary and rotate the canvas 25° counter-clockwise.
13. Flip the image horizontally using the Image > Rotate Canvas > Flip Canvas Horizontal.
14. Save your completed file in the folder you created in the first step of this Lab (the one located in the Student Work folder on the Desktop).
15. Copy the folder containing your work for this lab into the GD_121C folder on the Data Drive.