

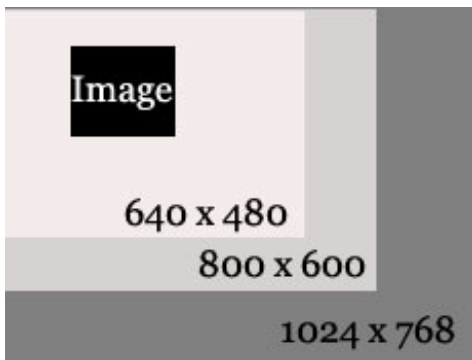
Photoshop Basics & Scanning

Objective

Scan an image and learn the basics of Photoshop 7.0 including layers, cropping, color definition and adding text.

1. Resolution

A. Image Pixels and Monitor Resolution



- i. Any image on a computer screen is composed of **pixels**.
- ii. Pixels are squares of light that are fixed in size and do not overlap.
- iii. PPI indicates the number of Pixels Per Inch that compose an image on screen.
- iv. Monitor Resolution defines the number of pixels available to display images on a computer screen in width and height.
- v. When Monitor Resolution changes, an image *appears* to shrink in relationship to the viewable area.

B. DPI and Print Resolution


- i. Printed images are composed of dots.
- ii. Dots are circles of ink on paper that may or may not be consistent in size and often overlap each other.
- iii. DPI indicates the number of Dots Per Inch that compose an image on a physical surface (paper).
- iv. PPI and DPI are often misunderstood as being interchangeable. They are related but represent different visual effects. PPI determines an image's relative size on screen, while DPI determines image *quality* on the printed page. On screen, an image can be 72 PPI and still look good. Printed, an image requires more information.

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2. Getting Started

- A. Quit all open applications.
- B. Select **Adobe Photoshop 7.0** from the **Dock** to start Photoshop.

3. Scanning from the Macintosh using VueScan

- A. Place the object to be scanned face down in the scanner.
- B. Click on the Applications icon  on the **Dock** and select **VueScan**.
- C. Click on **Preview** and drag the dotted lines around the selection area you want to scan.
- D. Before you scan the final version, we recommend you set the resolution. Under the **Input tab** on the left side of the screen, select your choice resolution from the **Scan Resolution** drop-down menu.

General guidelines: Use 150 dpi for images for the web and 600 dpi for images for print.

- E. Click the **Scan** button. Once the picture has been scanned, Adobe Photoshop will automatically launch and open your scanned image.

Troubleshooting Tips

- If you have problems with the quality of your scan make sure have set the appropriate resolution.
- You can also load the default settings in the event someone before you has tweaked them. From the top menu choose
File > Default options

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Moving Files around on a Macintosh

4. Saving a Photoshop Document onto Scratch

- A. Often times you may need to move from computer to computer and take your files with you. You can use a network share called Scratch as a temporary holding place for your files while you change computers.
- B. Connect to **Scratch** on Calawah by clicking on the network share icon on the **Dock**.
- C. From within Photoshop Select **File > Save As...** to save your file.
 - i. Expand the **Where** option by clicking on the triangle.
 - ii. Select **Scratch** from the far left menu and locate your preferred folder on Scratch or create one for yourself with the **New Folder** button.
 - iii. From the **Format:** pulldown menu Select **Photoshop**.
 - iv. Type a name for your file in the **Name:** box and be sure to name it with a **.psd** extension and hit **Save**
 - v. Until you are done modifying the image, you should continue to save it as a Photoshop Document.

5. Opening an Image from Scratch

- A. Select **File > Open** to open the file you saved onto Scratch
 - i. repeats steps C1 and C2 above to locate your file.
 - ii. Select your file and click **Open**.

6. Saving into the Local Documents Folder

- A. Select **File > Save As...**
- B. Locate the Documents folder
- C. Click on the **New Folder** icon and name the folder with your name.

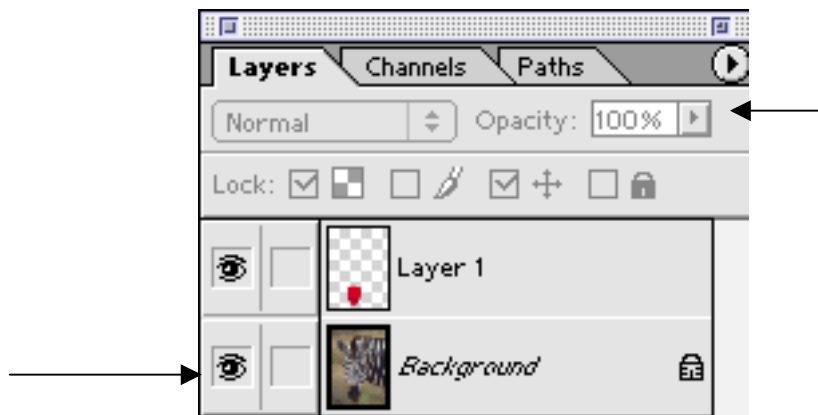
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- D. Click **Create**.
- E. Click **Save** to save the file into your folder in the Documents
- F. Save both files into your folder in the Documents folder.

Working with images in Photoshop

7. Layers

- A. Layers in Photoshop are like Acetate sheets. Depending on the Layer stacking order layers on top will show above those beneath.
- B. By default the Background Layer is Locked. To begin modifying an image you must either
 - i. unlock it by double clicking on the layer and renaming it
OR
 - ii. Duplicate the background layer and work on the copy.
- C. **Select a Layer** in the Layers Palette by clicking on the layer's name. All work you do will only apply to the layer you have selected.



- D. Click on the **eyeball** next to the layer name to 'hide' the layer.
- E. Click in the same area again to turn the **eyeball** back on and show the layer contents.
- F. Modify layer opacity using the slider in the Layers Palette.
- G. Duplicate Layer 1 by selecting **Layer > Duplicate Layer** with the layer to duplicate selected. Give the duplicate layer a new name.

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- H. Move layers by selecting and dragging them in the Layers Palette.
- I. Delete layers using the trash can in the Layers Palette.

8. Adjusting an Image

- A. Select **Image > Image Size** to check the size of the file in pixels. Be sure units is set to pixels and remember images should be smaller than 640 x 480 pixels for the Web.

Note: The width value will change automatically to keep the image in proper proportion. You may uncheck the **Constrain Proportions** option to resize an image in one dimension only.

- B. Select **Image > Adjust > Auto Levels** and/or **Image > Adjust > Auto Contrast** to fix color and contrast.


9. Sharpening the Image with a Filter

- A. Select **Filter > Sharpen > Unsharp Mask...** to compensate for loss in detail from scanning.
- B. Many other filters are available for almost endless effects possibilities.

10. Transforming an Image: Rotate, Scale, Skew, Flip...

- A. Select **Edit > Transform** to reveal the transform tools.
- B. **CMD-T** is a quick way to access the **Free Transform** tool.

11. Cropping

- A. Use the crop tool to define the area to crop. 
- B. Set the crop size using the options toolbar by defining **Width:** and **Height:** in pixels.



- C. Move the 'handles' to modify the crop area.
- D. **Double-click** inside the area to be cropped (not the absolute middle) to complete cropping. (Press Escape if you decide not to)


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crop.) Alternatively, hit **Return** or click on the crop tool and click **Crop**.



12. History

- A. Everything is recorded in the History Palette.
- B. The number of steps you can undo depends on the history states setting. (In the Macintosh Classroom, the number of history states is set to 20.)

13. Defining Colors

- A. Choosing colors using the Foreground and Background Color Picker on the Toolbar. 
- B. Define absolute black and absolute white with the lower-left icon in the Foreground and Background Color Picker.
- C. Swap the Foreground and Background colors with the double-sided arrows in the Foreground and Background Color picker.
- D. Use the Eyedropper tool to sample a color from the image.

14. Adding Text

- A. Click on the Type tool .
- B. Click in your image and type text.
- C. Highlight the text and modify color, size and font options in the Options toolbar under the menu bar.
- D. Use the **check box** in the Options toolbar to confirm.
- E. Using the text tool creates a separate layer.
- F. Use the move tool , with the text layer selected, to move the text.

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15. Saving

- A. Save your image by selecting **File > Save**.
- B. To save into an image format readable by other applications choose from the Format: dropdown.
 - i. TIFF is an uncompressed file format typically used for print or high quality screen displays.
 - ii. JPEG is a lossy compressed file format commonly used on websites. Note: It's best to use **File> Save for Web** if your going to be making JPEGs.

16. Quitting

- A. Quit Photoshop by selecting **File > Quit** (or command+Q).

17. Photoshop Help and References

- A. Photoshop's Help Menu
- B. Adobe Photoshop Classroom in a Book (available for checkout at the Computer Center Consultant's Desk and the Multimedia Lab).