Getting Started with Adobe Photoshop
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Welcome to the wonderful world of Photoshop. This tutorial covers the basics of how to use Photoshop to work with your digital images. The intent of this tutorial is to introduces you to the concepts at work in Photoshop, the best way to develop your skills is to experiment with the programs. This first page will point out some of the features of the Photoshop interface and define a few terms I'll use throughout the tutorial.

Familiarizing yourself with the Photoshop Interface

Open application

The first step, of course, is to open the application. In the IT lab, you can find Photoshop in the folder marked Adobe in the programs menu (from the start menu). It may also be located in a start menu folder called Graphics.

Once you have opened the application (after a few moments of loading time), the Photoshop interface will appear. There are many complex elements of the interface, and for reasons of both saving space in this tutorial and keeping things basic, I'll only show you the toolbars and options panes you need to perform the most basic tasks in Photoshop. If you ever notice that some of these elements are missing, simply go to the window menu and select them.
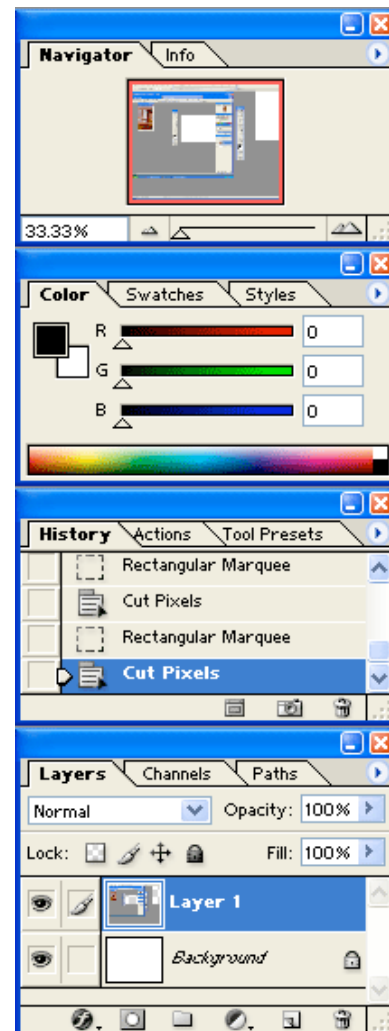
Elements of the Interface
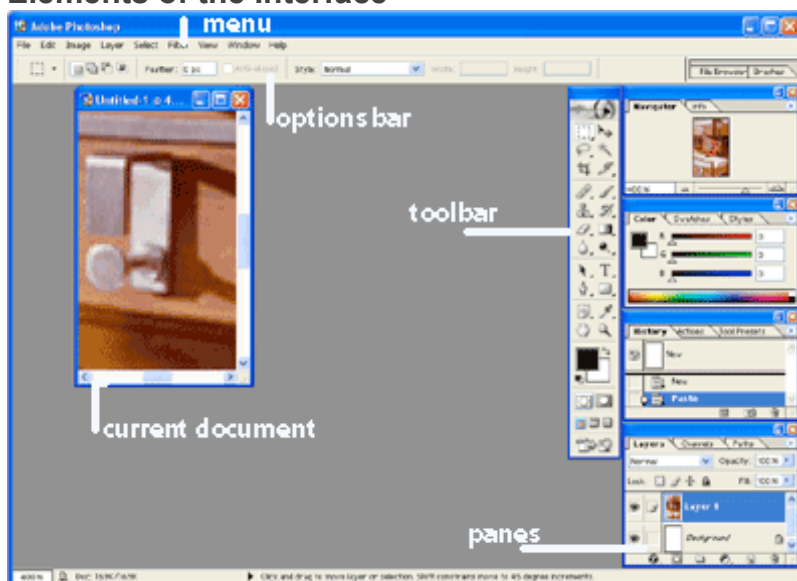
The Workspace

Perhaps the most important element of the Photoshop interface is the **toolbar**. It contains a bunch of icons that represent the different tools Photoshop offers to alter and create images. These include tools for selecting specific areas of images, changing the colors of the image, stretching, transforming, and erasing parts of an image, and many more. To get an idea of what some of these tools can do, mouse over the icons and you'll get an explanatory tool tip. I'll explain some specific tools in the following sections of this tutorial
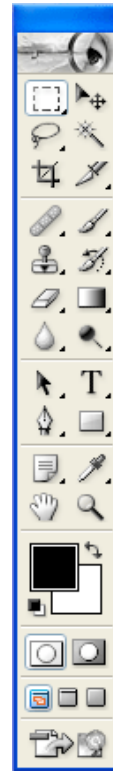
The Photoshop Toolbar

Panes are also important features of the Photoshop interface. All sorts of information is displayed in these panes, and therefore they can get a little confusing. They display location information, tool options, and history among other things. If you ever lose track of a specific pane (they tend to stack up), go to the windows menu and select that pane to view it. I'll talk more about the specific panes later on in the tutorial.

Various Photoshop Panes

Menus are probably the most familiar interface elements to a new Photoshop user. They contain all sorts of options, but since there are not as visible as panes or the toolbar, they are often only partially explored. I'll take time right now to go over the menus and give a brief description to orient you to each.

> **File** contains all of the stuff you'd expect it to, with a few extras including Import, which deals with scanning, and Save for Web, which allows you to export a web-ready image from your Photoshop file.
> **Edit** is another familiar menu. In Photoshop edit houses all of the expected options as well as Fill & Stroke, and other image-altering functions.
> Items on the **Image menu** affect a whole image, for the most part. Here you'll find color adjustments, size adjustments, and any other changes you need to make globally when working with a Photoshop file.
> The **layer menu** is similar to the image menu, but it contains options that effect only current or selected layers. I'll explain layers a little later, but for now, just understand that an image in Photoshop consists of stacked transparent layers; options in the Layer menu affect these pieces of the image rather than the complete image.
> The **select menu** deals with selections you make. Selecting the specific parts of an image you'd like to alter is a difficult part of working in Photoshop. This menu gives you some options regarding selections, including the ability to save selections, reverse them, or add to them. Learning the options on the selection menu can really save you some time.
> The **filter menu** is probably what most people think about when they think about Photoshop. The filter menu allows you to apply filters to any part of your image. These filters include ways to change the texture of the image, with some potentially radical results.
> The **view menu** is where you change the view settings. You can use this to show and display guidelines on the image, and to zoom in and out, among other things.
> The **window menu** allows you to toggle back and forth between hide and show for each interface element. This is the first place you should go if you lose track of a particular window while you're working.
> Last and least, of course, it the **help menu**. The help documentation isn't so helpful, but for some reason, this menu contains two nice features: resize image, and export transparent image, which I'll get to later.

The **options bar**, which is located directly underneath the menus, is a useful tool when working with the different Photoshop tools. As you can see right now, when the selection tool is in use, the options bar reflects the changes that can be made to how that specific tool operates. Here, you have selection options, and style options, which includes the ability to make the selection tool a specific size in pixels. When you switch tools, to the paintbrush tool for instance, these options change. When a tool in Photoshop isn't behaving like you'd like it to, the options bar should be the first place you look to fix it.
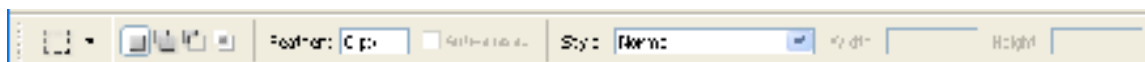
The options bar

Some definitions to get you started:

.psd: A **.psd** file is the file format in which Photoshop saves documents by default. It is a multi-layer document that retains its full editing options when saved. In many cases you will export web graphics from a .psd document.

layers: Photoshop documents are composed of **layers**, which can basically described as single transparent sheets which hold particular pieces of an image. These layers can contain images, text, and vector graphics, and can be rearranged and grouped according to user needs. Layers are controlled with the use of the Layers pane. Often times, when you find yourself frustrated with Photoshop it is because you are trying to perform operations on a layer that is not currently selected. Simply click on the name of a layer in order to designate it as the current layer. Whenever you add text to an image in Photoshop, the text appears on a new layer. You can "merge down" layers to consolidate them, and "flatten image" to force the entire contents of the image onto one layer.

Selections: Selections refer to regions in an image that will be affected by the various tools. A selection in Photoshop is similar to a selection that you highlight in a word-processing application. Once you have selected an area, you can apply a tool to it, such as paintbrush, or perform an operation such as copy or crop. Selections can be any shape and size, the shape depends on which selection tool you are working with.

Your selection will apply only to the current layer. If that layer is empty in the region selected you will get an error message. When this happens, go to the layers pane and select the correct layer.

Resolution: Resolution refers to the number of pixels in a full size image. An image with hi resolution contains more information than an image with lo resolution, and therefore, one can always convert a hi-res image to a lo-res image. However, because information is lost in the conversion, the reverse is not true. If you were to increase the resolution of a lo-res image, the result would be fuzzy.

Screen resolution is close to 72 pixels per inch, so if you are working with graphics to be viewed only on screen, 72 should be fine. Depending on the printer you are using, you would want to increase this above 72 for graphics that will be printed. 300 is usually an acceptable resolution for images to be printed, 150 would be the lowest acceptable resolution for printing.

Image Size: Resolution should not be confused with image size, which is also expressed in pixels. Image size deals with the actual number of pixels tall and wide an image is. For an idea of how the two differ, go Image Size in the Image menu, and plug in different numbers for image size and resolution.

Color mode: Color mode refers to the types of colors you will be using in your image. CYMK and RGB are the most important of these modes to be familiar with.

CMYK is the setting for images that will be printed to paper. The letters refer to the 4 channels of color used to create every color available. Cyan, Magenta, Yellow and blacK.

RGB refers to the three channel color mode suitable for images to be viewed on the web. Red Green Blue.

Opening an file/Creating a new file

It is most likely that first time users of Photoshop will be starting with an image, say a photo that they need to alter or edit. In this case, you have two options:

First, you can open the image from the Photoshop file menu. It will be opened in the format it was saved in, so in order to work with it in Photoshop (beyond just resizing or cropping), You'll need to save it as a .psd file (this will also ensure that you do not ruin your original image should you need to revert to it). In essence it will become a .psd file as soon as you add an additional layer, and will save as such when you save it.

Another method for getting an image into Photoshop is to copy and paste it into a new file in the application. This is especially useful for saving and altering web graphics or screenshots.
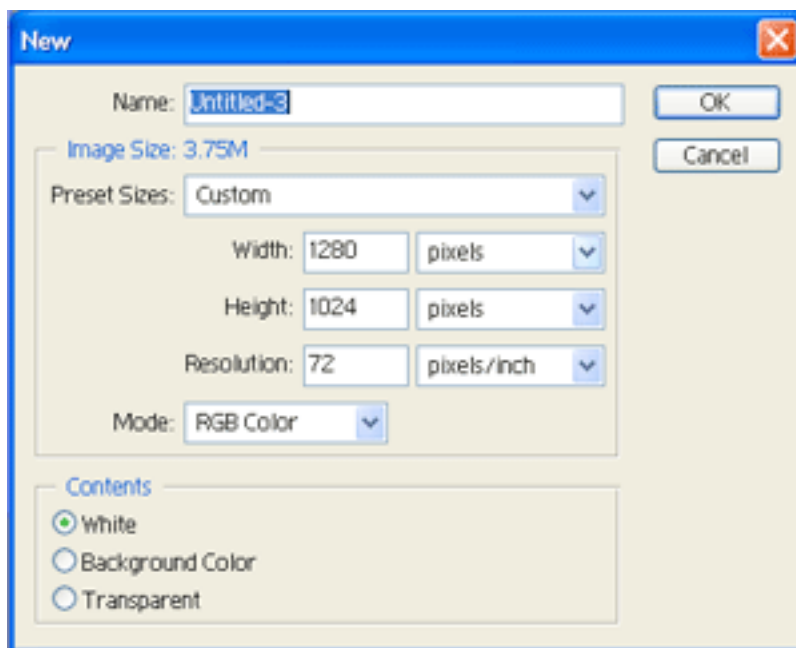
The "New File" dialog

Once the image is copied to the clipboard, go to Photoshop and select new from the file menu. A new file dialog will appear asking you to name the file, choose the size, resolution, color mode, and background. The image size (in pixels) will automatically reflect the size of the image copied to the clipboard. Choose CMYK if this graphic is to be used in print, or RGB for the web. For background, choose transparent (this can always be changed later).

Now that we have an open Photoshop document, we can begin to use some of the basic Photoshop tools. The next chapter of this tutorial will outline these various tools.

Using Tools from Photoshop's Toolbar

Now it's time to learn how to use some of the tools in the Photoshop toolbar.

Marquee Selection tools: The following tools allow you to select regions in your image to alter, copy, move, and apply filters.

Rectangular marquee tool: This is the default selection setting, you can make a selection of any rectangular size and shape.

Elliptical marquee tool: This tool, available when you click and hold down on the selection tool region of the tool bar, selects elliptical spaces. To select a round area, hold the shift key while clicking and dragging.

Single row: The tool will select a 1pixel region that is as wide as your image. Very useful for trimming edges and making straight lines.

Single column: The tool will select a 1pixel region that is as tall as your image. Also very useful for trimming edges and making straight line

A Note on Selection Modes (in the options bar):
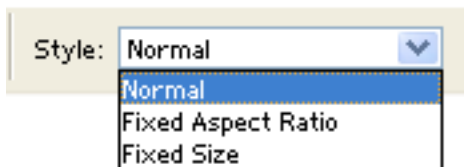
> **Normal mode** allows you to drag the cursor to create the selection size you want.
> **Constrained aspect ratio** allows you to choose a scalable rectangle, say with a width to height ratio of 1 to 2. The selection will grow when you drag, but will remain the same shape.
> **Fixed size/Fixed Aspect Ratio** allows you to predetermine the size, in pixels or a ratio, of the selection you will make. When you click with fixed size selected, a selection box of the exact size you specified will automatically appear. With fixed aspect ratio, you can make different-sized selections of the same shape. This is a particularly helpful tool when cropping images to a certain size or drawing identical boxes.

Move Tool
the move tool moves an entire layer at a time. When you have selected this tool, click on a layer in the layer pane, and then click and drag on the image. The current layer will move all at once. You can even move it outside of the current image size. Don't worry,

though, parts of an image that move outside the borders still exist, they are just hidden. They will only be cropped out if you flatten the image.

Lasso tools

The lasso selection tools are similar to the marquee tools, except that the lasso tools give you ultimate freedom in terms of the shape of your selection. There are three different lasso tools:

Lasso tool, which allows you to draw a selection by dragging the cursor freehand. The selection will close itself.

Polygon Lasso tool, which creates a selection composed of straight lines that can be as short as one pixel. The selection grows with each additional click. This tool is especially useful for cutting out objects in an image to place on new backgrounds.

Magnetic Polygon Lasso tool works a little like a combination of the other two lasso tool, as you drag, the selection maps to natural borders in the image. This is a useful tool when dealing with well-defined and high-contrast image.

A note about lasso tool options: When extracting part of an image from its background, the result will be choppy and rough around the edges unless you adjust the feather value in the options bar. This fades the edges you create and can smooth the region into its new background.

Magic Wand Tool The magic wand tool is similar to the magnetic polygon lasso tool except that rather than dragging to make a selection, you click in a region and a selection appears around similar colored pixels. You can control how similar pixels must be to be included in the selection by altering the tolerance value.
This tool is useful for selecting monochromatic regions or pieces of high-contrast images.

Using the Image Menu

Most basic Photoshop tasks involve the Images menu, which I showed you earlier. In this chapter of the tutorial, I'll go a little deeper into what you can do with the image menu. I'm skipping around a little here; this represents the most commonly used items on the Images menu.

Mode

The first item on the image menu is Mode. This is what you use to change the color mode and appearance on the entire image. I discussed RGB, the web mode, and CMYK, the print mode earlier. You have some other choices here, including grayscale and duotone. Some modes' availability depends on the pre-existing color mode.
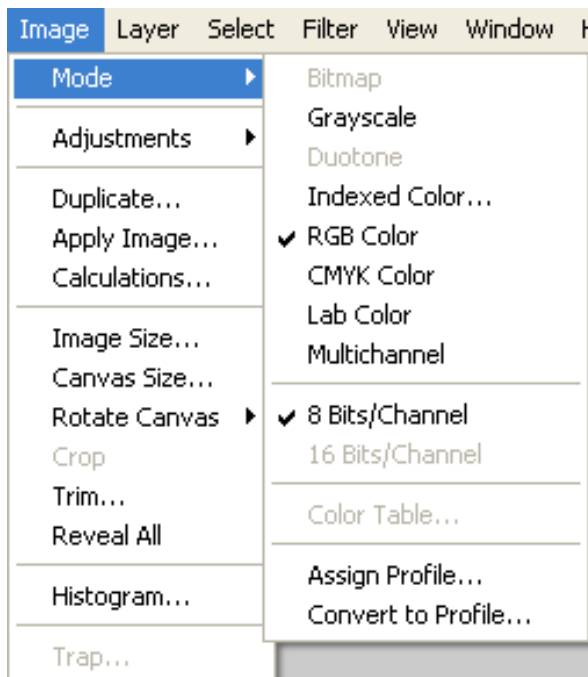
The Image and Mode menus

Adjust
You can see that the adjust option on the images menu give you a lot of different tools for adjusting your image. The most basic types of adjustments you can make with Photoshop involve colors and brightness.

The most simple is the contrast/brightness adjustment. When you select contrast/brightness, you are confronted with a dialog box with a slider for both brightness and contrast. Moving the sliders to the left makes the picture more murky or darker, and moving the sliders to the right brightens and increases the contrast between the dark and light colors in the image. You can play around with both sliders until you get a suitable mix, the change is previewed in the image. This tool is helpful for brightening pictures that were taken in low light.

The other adjustments you can make with the options on the adjustments menu are a little more complex, and the best way to learn about them is just to experiment. Because Photoshop allows you to preview your adjustments, you can get a good feel for the adjustments without hurting your image.
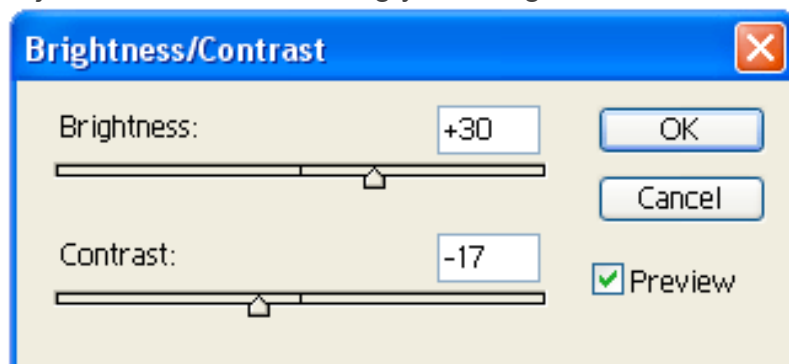
The Brightness/Contrast dialog

Image size
Another common basic feature of Photoshop that lives on the image menu is image size. You use this function to resize an image, and it's pretty straight forward. When you select image size from the image menu a dialog box appears with some numbers corresponding to the current size.

You'll notice that there are two sets of sizes, Pixel Dimensions and Document Size. Pixels Dimensions refers to the image's size on screen, and Document size refers to the size at which the document will print. You'll notice that all the numbers change when you change one of them. This default setting preserves the original h/w ratio of your image when you make changes to it size. If you want to change only one dimension of the image, uncheck the "constrain proportions" checkbox at the bottom of the dialog.

Notice that in the Documenst size settings, you have the option to change the resolution (remember, things images will always be approximately 72 pixels/inch on screen). You can use this to change the resolution of your image, but remember, if you don't want the quality to decrease, you should only for from hi-res to low-res.
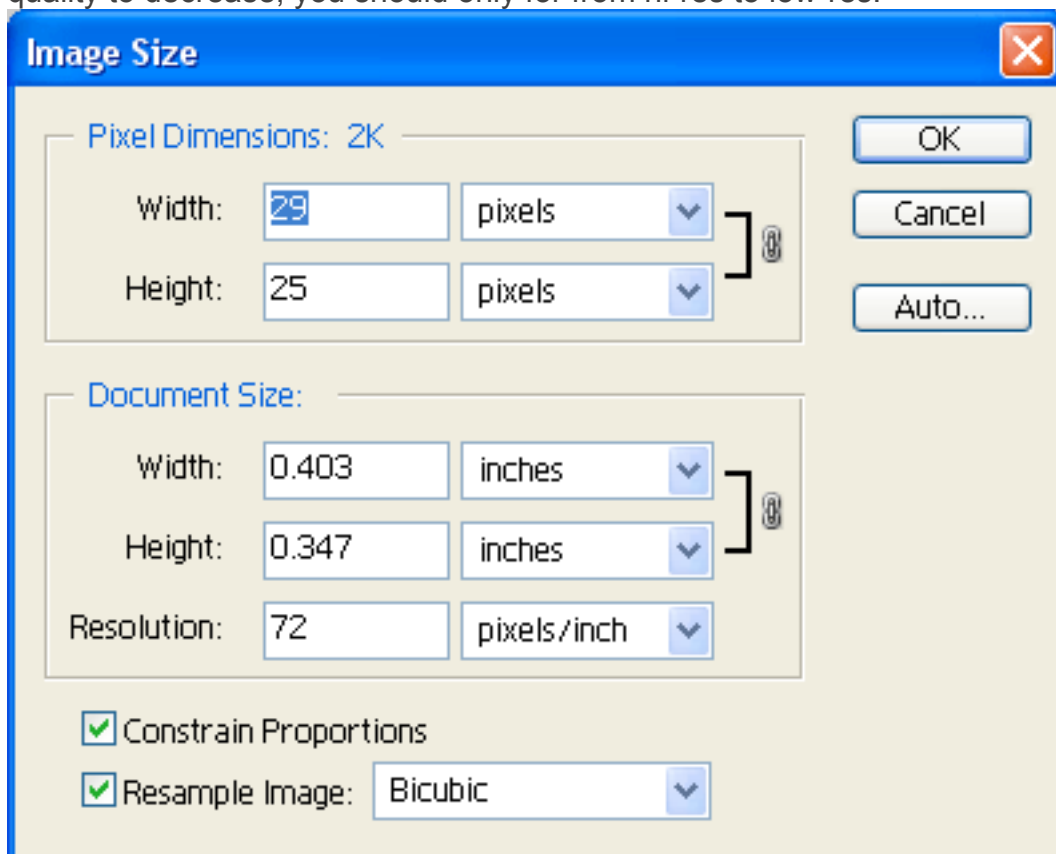
The Image Size dialog

Canvas Size
Canvas Size is similar to Image size, but changes to an image's canvas size can provide you with more working area for your image, incase you want to annotate it, copy more images into it, or perform. any number of other graphic variations.
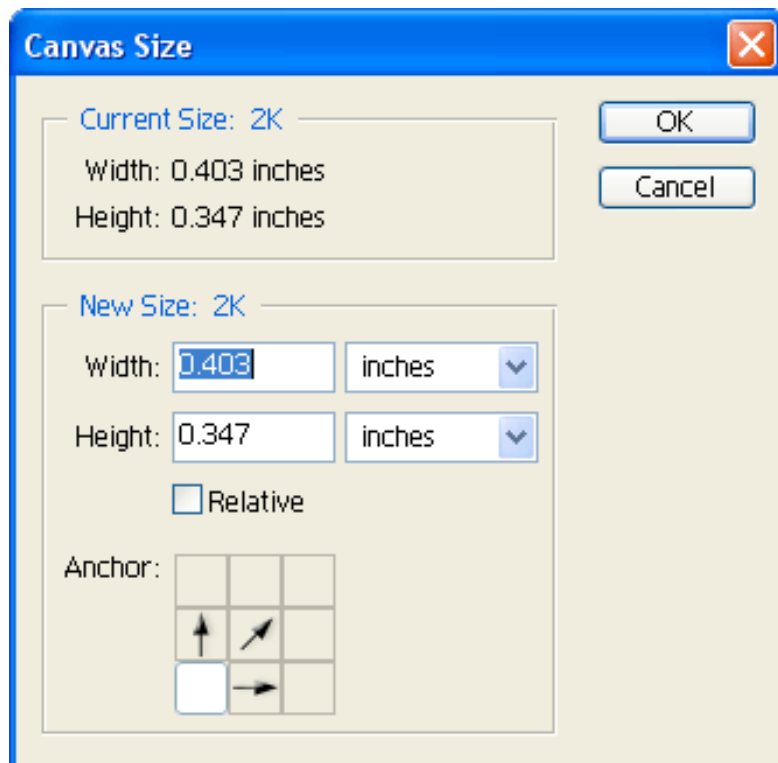
The Canvas Size dialog

Crop
The Crop function in the image menu is pretty straight forward. Make a selection, got to Image and select crop, and then everything outside you selection disappears. The image size reflects the change.

Layer Management

The most difficult aspect of working in Photoshop for me to master when I first used it was how to work in a document on multiple layers. Though you can perform an uncanny number of operations using the layers pane and menus, I'll only go over the basics to reduces beginner's confusion.

Layers pane
The layers pane is one of the panes that it's best keep visible at all times. If you don't see it when you open Photoshop, go to window> show layers and it will be restored.
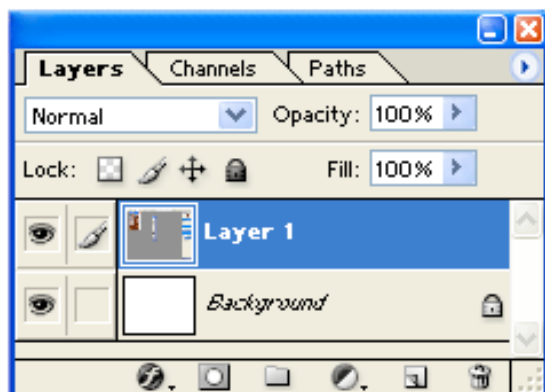
The Layers Pane

A note on working with jpeg file copied from other applications: If you've pasted in a jpg image. You'll notice that there is only one layer. If you open a jpeg image, this layer will be called "background" and will have a lock icon demonstrating that it is locked. In order to unlock it, double click on the layer name in the payer pane and change the name. The layer is now unlocked. Depending on how you plan to alter this image, it may be a good idea to leave this layer alone, and do your work on other layers.

Adding New Layers

Ok, as I said earlier, you can think of the layers as clear pages overlaying each other. The layers pane provides a good visualization of this concept because the layers appear in the layers pane as they are organized in the document. To demonstrate this, we'll add a new layer and type a little on it.

Go to Layer> and select new layer. Type a name for the layer in the dialog box that appears and hit enter. It should now appear in the layers pane (but since it is currently empty, there will be no sign of it in the image. Select the text tool from the tool bar and click & drag somewhere on the image (making sure the new layer is still highlighted in blue).

Selecting Layers
Select the Type tool (which I'll detail shortly) and type a little. You can see that the type appears on top of the image (i'll explain more about type a little later) . Now, we'll use these two layers to learn how to use the layers pane.

For starters, on the top text layer, click the eye icon. You'll see that it toggles the layer between show and hide. When you click on the paintbrush next to it, which represents that this is the layer you're currently working on, nothing happens. Now click on the name of the layer below. You see that the paintbrush now shows on the new active layer.

You can click on the empty paintbrush box to lock and unlock layers to avoid unwanted changes. The squiggle means it's locked.

Arranging Layers
Also, you can manually arrange the layers. Click and drag your text layer underneath the original image layer. You'll see that the text no longer appears. That is because it is now located behind the opaque image layer.

I already showed you one way to add a layer, but there's a quicker and easier way. Just click on the dog-eared page icon at the bottom of the layers pane. You can double click on this layer's name to change it. If you want to delete a layer, you can either drag it to the trash icon at the bottom of the layers pane or select the layer and click the trash icon.

Combining ("Merging") layers: Sometimes you'll want to combine the contents of two layers onto one layer. Select the layer you want to be on top of the new merged layer, make sure the other layer you'd like to merger is directly beneath it, and select Merge Down from the Layer menu. The two layers are now one. If you want to merge down an

entire file of layers, select "Flatten image" from the layers menu, then all layers will be squashed into one.

When you merge or flatten layers that contain text layers, you will be asked whether you'd like to rasterize that text (that is, convert it to an image and lose the ability to edit it). I find it's a good idea to copy any layers and hide them before you rasterize and merge. It saves you the work of completely recreating layers if you decide to change text.

Working With Text in Photoshop

The tools Photoshop provides for manipulating text are probably its most straightforward features.

You just select the **text tool**, click, and drag, and you are ready to type.

Use the options bar to change the style of highlighted text.
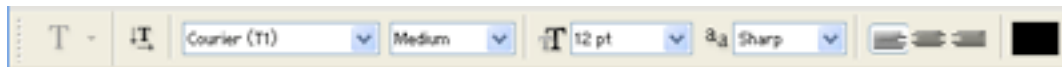
Text styles in the options bar

When you engage the type tool, what you type automatically **becomes its own layer** and is given what is typed as a layer name. This is a very helpful feature when dealing with multiple text layers. Double click the T to easily edit the text.

If you want to merge a text layer with an image layer, the text layer must be rasterized, or converted to an image first. Once this is done, you can no longer edit the text. Unless you are using text in an illustration or altering letters, this may not even be necessary.

Creating Graphics in Photoshop

An advantage of Photoshop over basic photo editing software is the capabilities it gives you to create your own graphics. There's an exhaustive number of tools and Photoshop (and resources about them), so I'll just cover the basics.

Most of the functions these tools perform are based on your selection in an image. The effect or tool only operates within a selection.

Make a small selection and select the paintbrush tool. Move the mouse over your selection holding down the mouse button. You'll see that the image is only altered within the selection.

Colors and Graphics

Before I get to some of the main tools, I'll tell you a little about colors. The foreground color, which will be applied by tools like the paintbrush, is represented by the top square at in the middle of the toolbar.

Foreground/Background colors

To change this color, double click the square. This reveals the color picker, where you can pick a color with several different methods including RGB values, hexadecimal codes, and by simply selection. If you are making an image for the web, it is best to check the "only web colors" box to ensure that no dithering (reductions in color quality) will take place.
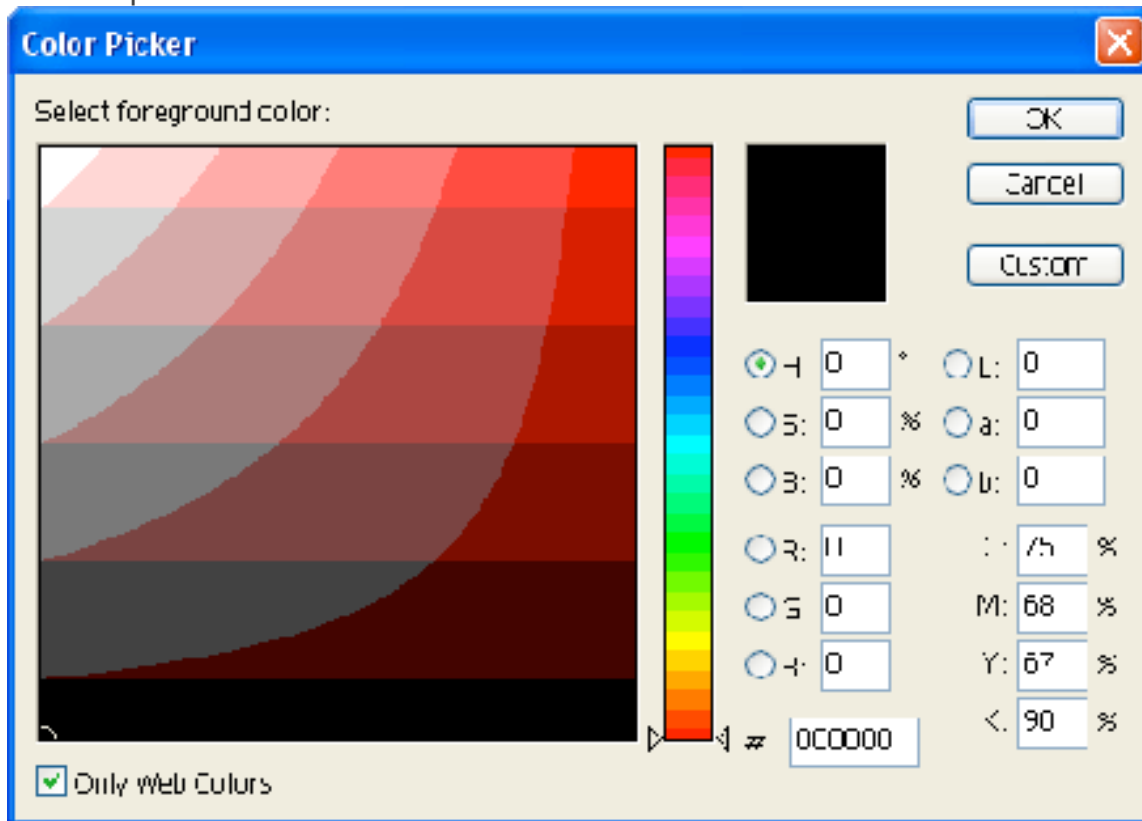
The Color Picker

Once you have picked your color, click ok, and you are ready to go.

Stroke & Fill

The most basic ways to apply colors to an image are to use Fill and Stroke, both available on the edit menu. Make a selection, and choose fill from the edit menu. A dialog will appear asking you to make some decisions about colors and transparency. Make your selections, and press ok to fill the selection with the chosen color. Stroke operates in much the same manner, though you are given the chance to determine the weight of the lines you create.

Paintbrush tool

I had you use the paintbrush tool a little bit to demonstrate how selections work; now I'm going to tell you how to use it. Make a selection and choose the tool from the toolbar.

You can change the size of the brush in the options bar, as well as the behaviors of the paint. The best way to learn what these options do (and some of it is pretty surprising) is to experiment. Remember, you have multiple undos and multiple layers, so don't worry about ruining your image!

Pencil Tool

The Pencil tool works much like the Paintbrush, but draws a distinct line rather than a feathery painted one. Click and hold the paintbrush icon to reveal the pencil.

Eraser Tool

The eraser tool works much like the Paintbrush and Pencil, but rather than fill the selected region with a color, it actually removes whatever is in the selection and reveals the background. This is a very useful tool for cleaning up images with rough edges.

Tips & Fun Stuff

Before I set you loose to create great graphics on your own, there are a few things I'd like to point out. Some of them are helpful lessons many must learn the hard way, and some are just fun features you can use to radically change your images. Keep experimenting!

Save for Web
When you're working on a .psd, you're likely going to want to eventually to have your file saved as a gif or jpg. In the file menu, you can select "Save for Web," located under save, to do so. When you select it, a new window will open allowing you to make choices about how you want to save and optimize your image. You can select transparency options, matte colors, and file types to apply. This way, you don't need to flatten your .psd just to get a jpg or gif image.
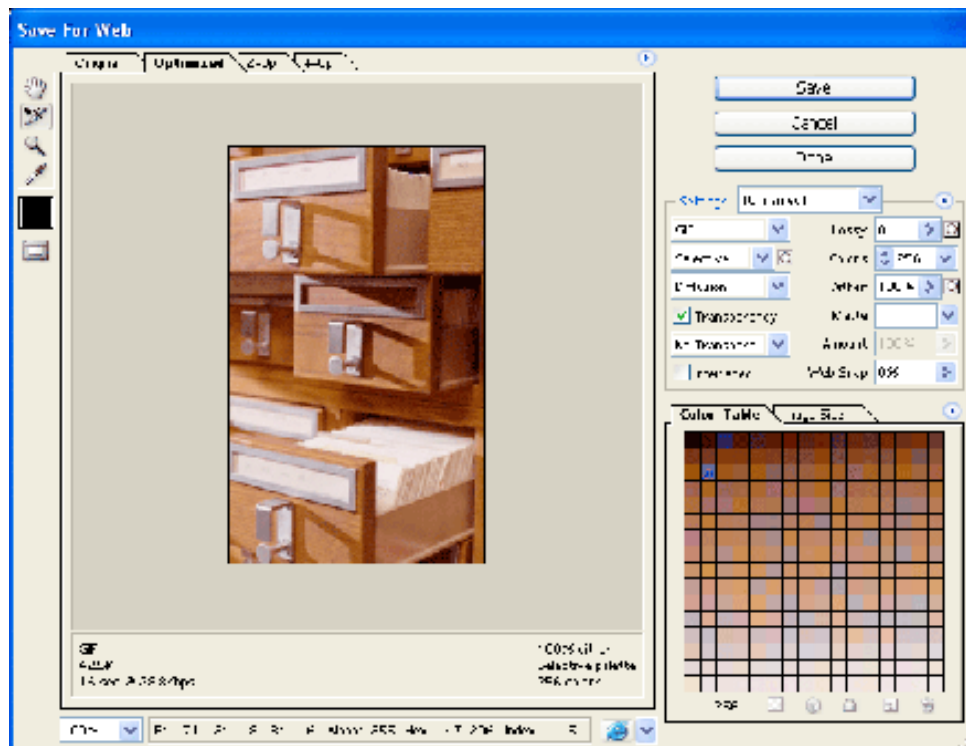
Save for Web dialog

Ctrl-click for selecting a layer
To easily select the entire contents of a layer, press ctrl and click on the preview box for that layer in the layers pane.

Playing with filters
To really get a feel for what Photoshop can do, PLAY WITH FILTERS! Just make a selection and try something from the filters menu. Because you have multiple levels of undo and step backward, you can try some really elaborate combinations of effects without worrying that you'll ruin your file.
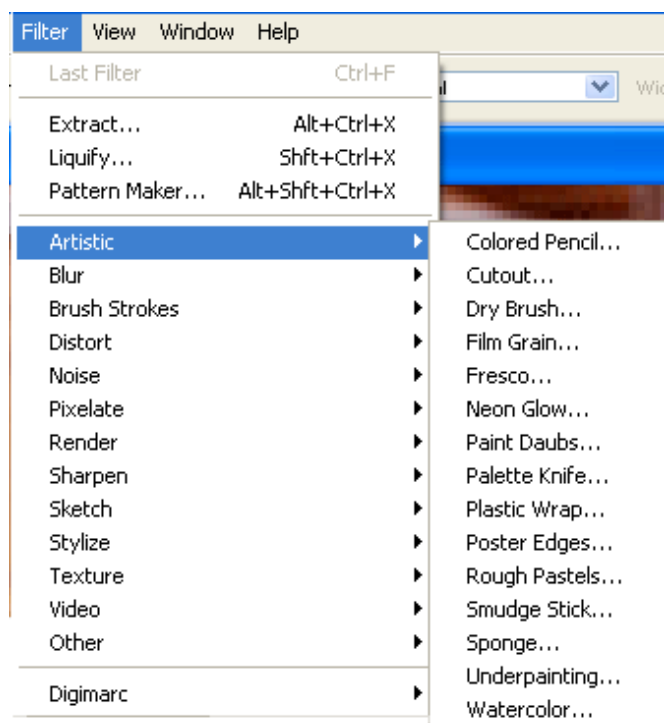
INTRODUCTION TO PHOTOSHOP TOOLS

The toolbox basics

Marquee Tools*

Move Tool*

Lasso Tools*

Magic Wand Tool*

Crop Tool*

Slice Tools

Healing Tools*

Drawing Tools*

Stamp Tools

History Brush Tools

Eraser Tools*

Fill Tools*

Advanced Drawing Tools

Advanced Selection Tools

Text Tools*

Pen Tools

Shape Tools*

Color Picking and Measuring Tools*

Hand Tool*

Zoom Tool*

Foreground Color

Background Color

Screen Layout and Transport to Image Ready Tools

Tools with little black arrows in their bottom right corner ⌐ indicate a tool group. Alternate tools can be selected by clicking and holding down the "top tool."
Items with * next to their name will be detailed in depth in the following pages.

Photoshop Tools
Photoshop CS6

Tools Panel Introduction

When you start Photoshop, the Tools panel appears at the left of the screen. Some tools in the Tools panel have options that appear in the context-sensitive options bar. You can expand some tools to show hidden tools beneath them. A small triangle at the lower right of the tool icon signals the presence of hidden tools.

Tools Panel Overview

Tools panel overview

A Selection tools
- ■ ⊹ Move (V)*
- ■ [ ] Rectangular Marquee (M)
  - ○ Elliptical Marquee (M)
  - ⫾ Single Column Marquee
  - ⋯ Single Row Marquee
- ■ ◯ Lasso (L)
  - Polygonal Lasso (L)
  - Magnetic Lasso (L)
- ■ Quick Selection (W)
  - Magic Wand (W)

B Crop and slice tools
- ■ 🔲 Crop (C)
  - Slice (C)
  - Slice Select (C)

C Measuring tools
- ■ Eyedropper (I)
  - Color Sampler (I)
  - Ruler (I)
  - Note (I)
  - 1₂3 Count (I)†

D Retouching tools
- ■ Spot Healing Brush (J)
  - Healing Brush (J)
  - Patch (J)
  - Red Eye (J)
- ■ Clone Stamp (S)
  - Pattern Stamp (S)

- ■ Eraser (E)
  - Background Eraser (E)
  - Magic Eraser (E)
- ■ Blur
  - Sharpen
  - Smudge
- ■ Dodge (O)
  - Burn (O)
  - Sponge (O)

E Painting tools
- ■ Brush (B)
  - Pencil (B)
  - Color Replacement (B)
  - Mixer Brush (B)
- ■ History Brush (Y)
  - Art History Brush (Y)
- ■ Gradient (G)
  - Paint Bucket (G)

F Drawing and type tools
- ■ Pen (P)
  - Freeform Pen (P)
  - Add Anchor Point
  - Delete Anchor Point
  - Convert Point
- ■ T Horizontal Type (T)
  - Vertical Type (T)
  - Horizontal Type Mask (T)
  - Vertical Type Mask (T)

- ■ Path Selection (A)
  - Direct Selection (A)
- ■ Rectangle (U)
  - Rounded Rectangle (U)
  - Ellipse (U)
  - Polygon (U)
  - Line (U)
  - Custom Shape (U)

G Navigation & 3D tools
- ■ 3D Object Rotate (K)†
  - 3D Object Roll (K)†
  - 3D Object Pan (K)†
  - 3D Object Slide (K)†
  - 3D Object Scale (K)†
- ■ 3D Rotate Camera (N)†
  - 3D Roll Camera (N)†
  - 3D Pan Camera (N)†
  - 3D Walk Camera (N)†
  - 3D Zoom Camera (N)†
- ■ Hand (H)
  - Rotate View (R)
- ■ Zoom (Z)

■ Indicates default tool   * Keyboard shortcuts appear in parenthesis   † Extended only

Selection Tools Gallery
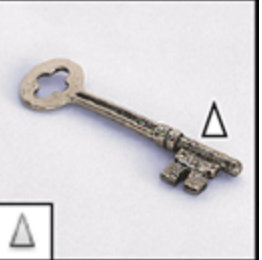
The marquee tools *make rectangular, elliptical, single row, and single column selections.*	**The Move tool** *moves selections, layers, and guides.*	**The lasso tools** *make freehand, polygonal (straight-edged), and magnetic (snap-to) selections.*	**The Quick Selection tool** *lets you quickly "paint" a selection using an adjustable round brush tip*
The Magic Wand tool *selects similarly colored areas.*			

Crop and slice tools gallery
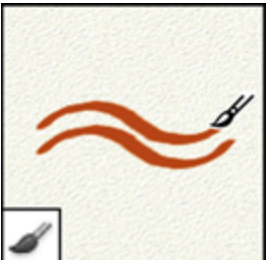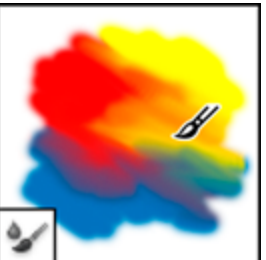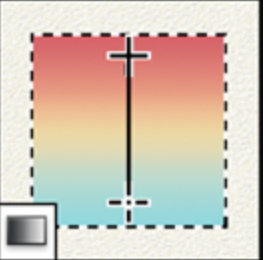
The Crop tool *trims images.*	**The Slice tool** *creates slices.*	**The Slice Select tool** *selects slices.*

Retouching tools gallery
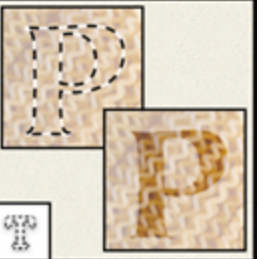
The Spot Healing Brush tool *removes blemishes and objects*	**The Healing Brush tool** *paints with a sample or pattern to repair imperfections in a image.*	**The Patch tool** *repairs imperfections in a selected area of an image using a sample or pattern.*	**The Red Eye tool** *removes the red reflection caused by a flash.*
The Clone Stamp tool *paints with a sample of an image.*	**The Pattern Stamp tool** *paints with part of an image as a pattern.*	**The Eraser tool** *erases pixels and restores parts of an image to a previously saved state.*	**The Background Eraser tool** *erases areas to transparency by dragging.*

The Magic Eraser tool erases solid-colored areas to transparency with a single click.

The Blur tool blurs hard edges in an image.

The Sharpen tool sharpens soft edges in an image.

The Smudge tool smudges data in an image.

The Dodge tool lightens areas in an image.

The Burn tool darkens areas in an image.

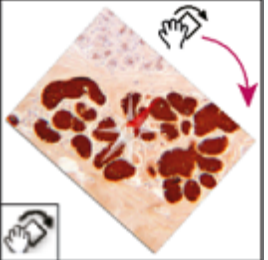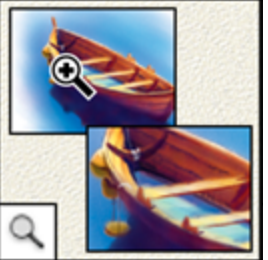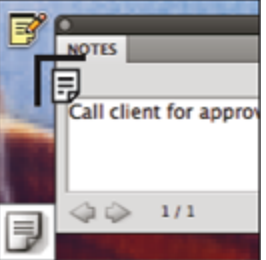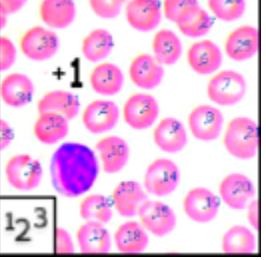**The Sponge tool** changes the color saturation of an area.

Painting tools gallery

The Brush tool paints brush strokes.

The Pencil tool paints hard-edged strokes.

The Color Replacement tool replaces a selected color with a new color.

The Mixer Brush tool Simulates realistic painting techniques such as blending canvas colors and varying paint wetness.

The History Brush tool paints a copy of the selected state or snapshot into the current image window.

The Art History brush tool paints with stylized strokes that simulate the look of different paint styles, using a selected state or snapshot.

The gradient tools create straight-line, radial, angle, reflected, and diamond blends between colors.

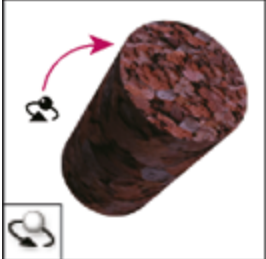**The Paint Bucket tool** fills similarly colored areas with the foreground color.
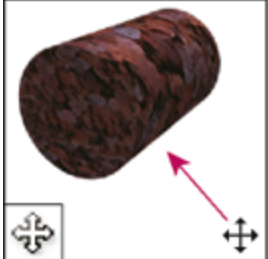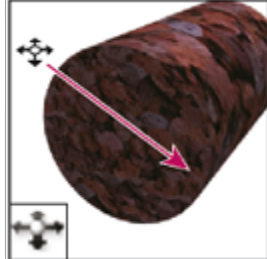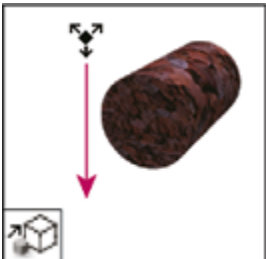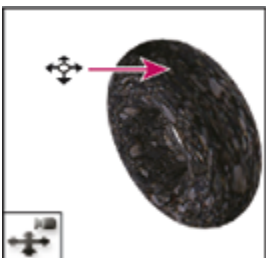
Drawing and type tools gallery

The path selection tools *make shape or segment selections showing anchor points, direction lines, and direction points.*	**The type tools** *create type on an image.*	**The type mask tools** *create a selection in the shape of type.*	**The pen tools** *let you draw smooth-edged paths.*
The shape tools and Line tool *draw shapes and lines in a normal layer or a shape layer.*	**The Custom Shape tool** *makes customized shapes selected from a custom shape list.*		

Navigation, notes, and measuring tools gallery

The Hand tool *moves an image within its window.*	**The Rotate View tool** *non-destructively rotates the canvas.*	**The Zoom tool** *magnifies and reduces the view of an image.*	**The Note tool** *makes notes that can be attached to an image.*
The Eyedropper tool *samples colors in an image.*	**The Color Sampler tool** *displays color values for up to four areas.*	**The Ruler tool** *measures distances, locations, and angles.*	**The Count tool** *counts objects in an image. (Photoshop Extended only)*

3D tools gallery (Photoshop Extended)

The 3D Object Rotate tool *rotates the object around its x-axis.*	**The 3D Object Roll tool** *rotates the object around its z-axis.*	**The 3D Object Pan tool** *pans the object in the x or y direction.*	**The 3D Object Slide tool** *moves the object laterally when you drag horizontally, or forward and back when you drag vertically.*
The 3D Object Scale tool *scales the object larger or smaller.*	**The 3D Rotate Camera tool** *orbits the camera in the x or y direction.*	**The 3D Roll Camera tool** *rotates the camera around the z-axis.*	**The 3D Pan Camera tool** *pans the camera in the x or y direction.*
The 3D Walk Camera tool *moves laterally when you drag horizontally, or forward and back*	**The 3D Zoom Camera tool** *changes the field of view closer or farther away.*		

when you drag vertically.			

Other Resources:
- **http://tinyurl.com/photoshop-cs6-tools**

Sources:
Adobe Help

Interactive Media Center
http://library.albany.edu/imc/
518 442-3608

UNIVERSITY LIBRARIES
UNIVERSITY AT ALBANY
State University of New York

Photoshop Tips
The Photoshop Tool Bar

The Photoshop Tool Bar is the heart of the Photoshop image-editing program. Learning what the tools are and what they can do is one of the very first things that a new Photoshop user should do. This Tech Tip is discusses the Tool Bar in Photoshop. However, it is applicable to the Tool Bars in earlier versions of the program. While more recent versions of the program have newer tools, many tools remain the same and the functions of others are similar.

The Photoshop Tool Bar

If the Tool Bar is not visible, **click** Window on the Menu bar at the top of the screen. A drop down menu will appear. Then **click** Tools and the Tool Bar will be displayed.

The Tool Bar is illustrated below. Note that the actual tools displayed will depend on the settings left by the last user. In most instances, clicking and holding on one of the buttons can access several tools. This illustration shows many of the typical tools.
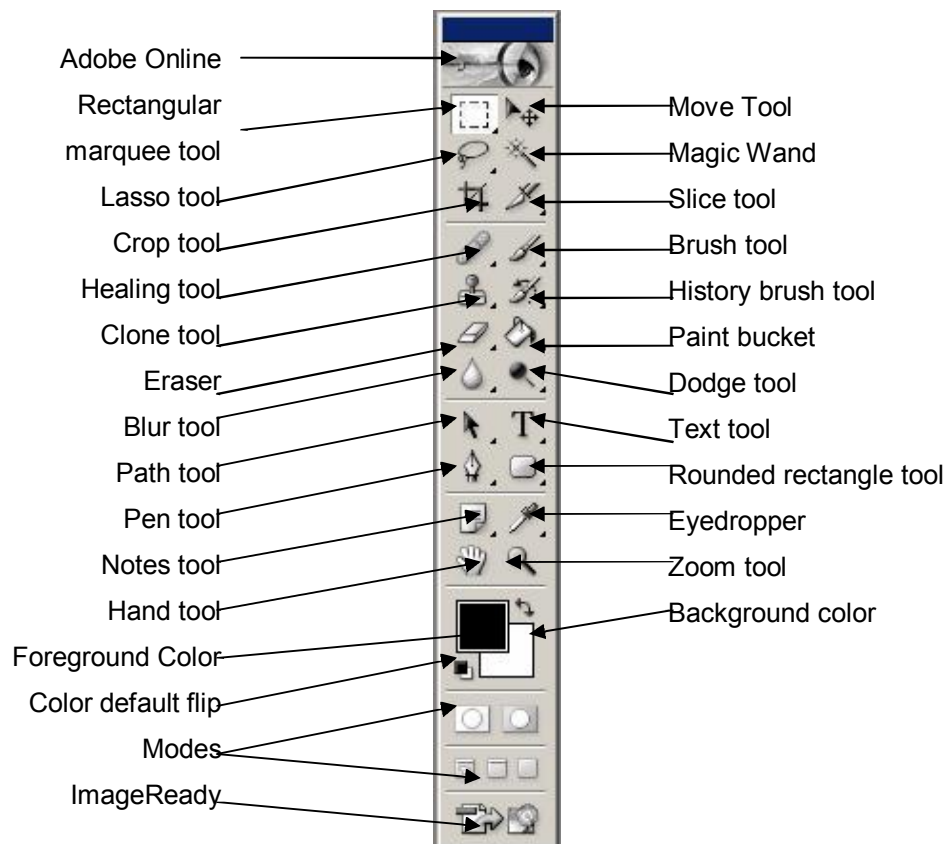
Many of the buttons on the tool bar control more than one tool or different modes for the same tool. As an example, the Paint Bucket tool button hides the button for the Gradient tool .

Click either the Paint Bucket button or the Gradient tool button, whichever is displayed. A pop out menu will appear. That menu is illustrated on the right.

Select either of the buttons. That button will now become active on the Tool Bar and you can now work with that tool.

Experiment with the other tool buttons and see what tools and modes are available.

Special Buttons

The Photoshop Tool Bar has two special buttons that do not directly access tools. The first button is the Adobe Online button . If you click this button you will be connected to Adobe.com, assuming you have Internet access available.

The ImageReady button starts the ImageReady program. ImageReady is a supplementary program that comes with later versions of Photoshop. It allows users to optimize images for Web use, create animated GIFs, and perform other specialized operations. When the ImageReady button in clicked, the currently active image in Photoshop will be appear in the ImageReady workspace.

Using Tools

To use any tool, simply click once on the appropriate button to select it. The tool will then become active and can be used in the Photoshop workspace. Many tools can be modified or adjusted depending on the task. The Photoshop Help or reference books will assist in perfecting good tool techniques and methods.

Functions of Popular Tools

Because Photoshop has so many features, and because it can be highly complex, it is not possible to discuss every tool and option available in this document. However, descriptions of several of the most popular tools follow.

Rectangular Marquee - This tool allows the user to select rectangular shaped areas within an image. The areas can then be copied or cut and then pasted into new layers. The tool also can become a bounding border for "pouring" color with the Paint Bucket or Gradient tools. Other marquee tools are available by clicking and holding the button.

Move tool - The Move tool is used to move selected layers around. Clicking and holding the mouse button can adjust the positions of layer elements. This tool is also used to set and move Guide Lines.

Lasso Tool - This tool is used to select parts of a layer for editing. There are other types of lassos available, including a Magnetic Lasso and Polygonal Lasso.

Magic Wand - The Magic Wand is used to select portions of an image based on color. Sections of the same color are selected when the wand it touched on the desired color and the mouse if left clicked.

Crop Tool - The Crop tool is an important tool for making adjustments to the overall size of an image. Using the Crop tool affects the size of the whole image, not just a single layer. This is a powerful tool and must be used carefully.

Healing Tool - This is an especially helpful tool that is new starting in Photoshop. It is used to remove dust marks and scratches from photographs. The Patch tool is found at the same position on the Tool Bar, but is used to repair areas of a photograph that are larger than the typical scratch.

Clone Tool - The Clone tool is used to copy portions of a layer from one area to another. It is similar to the Rubber Stamp tool found in earlier versions of Photoshop.

Paint Bucket - This tool is used to "pour" areas of color onto a layer. It is especially useful when used with a marquee. The Gradient tool is found in the same location.

Eraser - The Eraser is used to remove portions of a layer. Its size can be adjusted so that it can be used very delicately or quite grossly.

Blur Tool - The Blur tool is used to selectively blur areas of a layer. The amount of blur can be controlled. It is especially handy when blending colors or objects.

Text Tool T - This is the tool that is used to add to an image and to edit existing text. Size, color, and other attributes of the text can be specified and adjusted.

Eye Dropper - The Eye Dropper is used to select color. The color that is "picked up" by the Eye Dropper appears as the new foreground color.

Zoom Tool - This is a very handy tool used to quickly zoom in or out of an image.

The toolbox in detail

Marquee Tools

■	⬚ Rectangular Marquee Tool	M
	◯ Elliptical Marquee Tool	M
	⸳⸳⸳ Single Row Marquee Tool	
	⫶ Single Column Marquee Tool	

The Marquee tool selects a section of the document based on the shape of the chosen tool.
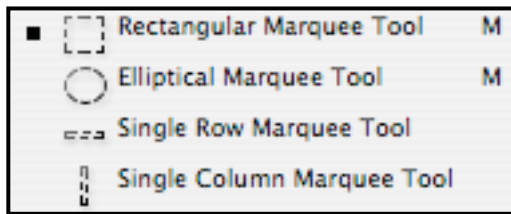
Tip: Holding down the shift key and making a new marquee will add to a current selection. Holding down option will take away. (There will be a little + or - by the tool that will let you know if you have one of these choices selected)

Move Tool

The Move tool moves items in the document, such as selections, layers, and guides.

Lasso Tools

■	◯ Lasso Tool	L
	⬠ Polygonal Lasso Tool	L
	⬠ Magnetic Lasso Tool	L

The Lasso tools allow you to select a section of the document either by freehand, polygonal, or magnetic selections.

- The Lasso tool will close the selection will close automatically when the mouse is unclicked.
- The Polygonal Lasso tool and Magnetic Lasso tool need the ends of the selection to be joined for the section to become selected.

Tip: The same adding and subtracting methods discussed with the marquee tool work with the lasso tool.

Magic Wand Tool

The Magic Wand tool selects areas of similar colors.

Tip: The default setting will only select the same colors that are touching each other (contiguous). However, this can be changed with the options bar.

Crop Tool

The Crop tool trims images.

Tip: When using Crop, the area that will be removed will be in shadow. The area can be expanded or contracted by clicking and dragging on one of the 9 points of the box. Once an image has been cropped, the only way to retrieve the parts that were removed is to undo the crop.

The toolbox in detail

Healing Tools

|	
■ 🖊 Spot Healing Brush Tool	J
🖊 Healing Brush Tool	J
🔾 Patch Tool	J
👁 Red Eye Tool	J
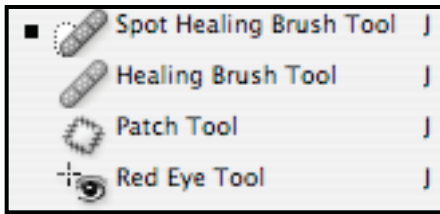
The Healing tools fix up issues in the document such as blemishes and red eye.

- The Spot Healing Brush removes blemishes and objects.
- The Red Eye tool removes the red reflection caused by a flash.

Note: The Healing Brush tool and The Patch tool are a little tricky to work with, so they won't be covered in this handout.

Drawing Tools

|	
🖌 Brush Tool	B
■ ✏ Pencil Tool	B
✒ Color Replacement Tool	B
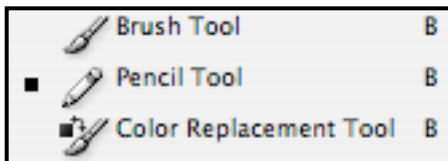
The Drawing tools let you draw in your document.

- The Brush tool paints brush strokes.
- The Pencil tool paints hard-edged strokes.
- The Color Replacement tool replaces a selected color with a new color.

Tip: If you want to draw in a very specifice place, with no spill-over, use the pencil instead of the brush.

Eraser Tools

|	
🖊 Eraser Tool	E
✒ Background Eraser Tool	E
■ ✒ Magic Eraser Tool	E
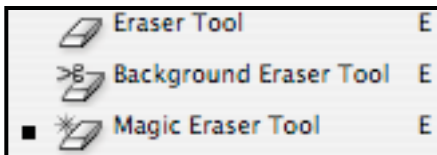
The Eraser tools erases pixels in the document.

- The Eraser tool will restore parts of an image to a
- previously saved state or will display the background color.
- The Background Eraser tool will turn the erased areas into a transparency.
- The Magic Eraser tool will erase everything of the same color into a transparency.

Tip: Color selection for the Magic Eraser tool works the same as the Magic Wand tool.

Fill Tools

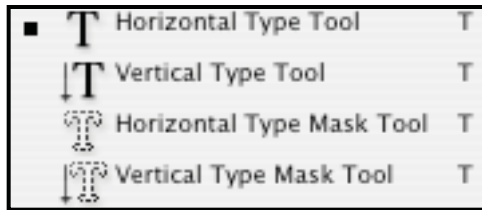|	
▢ Gradient Tool	G
■ 🖊 Paint Bucket Tool	G
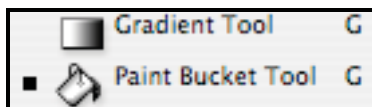
The Fill tools fill color into areas of the document.

- The Paint Bucket tool fills in areas of similar color with the foreground color.
- The Gradient Tool creates a smooth straight-line change from the foreground color to the background color.

Tip: Color selection for the Paint Bucket tool works the same as the Magic Wand tool.

The toolbox in detail

Text Tools

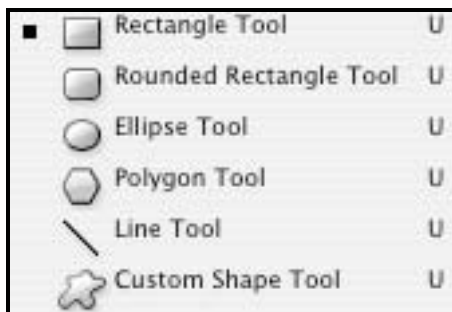|		
■ T	Horizontal Type Tool	T
↓T	Vertical Type Tool	T
T	Horizontal Type Mask Tool	T
T	Vertical Type Mask Tool	T

The Type tools add text to a document.

- The type tools create type on top of an image.
- The type mask tools make a selection of the document in the shape of type.

Tip: Both types can be used to create text either horiontally or vertically.

Shape Tools

|		
■ ▢	Rectangle Tool	U
▢	Rounded Rectangle Tool	U
◯	Ellipse Tool	U
⬡	Polygon Tool	U
╲	Line Tool	U
✿	Custom Shape Tool	U

The Shape tools draw shapes and lines in a normal layer or a shape layer.

- The Shape tools will create a solid color shape of their type.
- The Line tool will create a solid color line.
- The Custom Shape tool makes customized shapes selected from a custom shape list.

Tip: If you want to draw a rectangle or circle with a transparent center, it's easlier touse the Custom Shape tool.

Color Picking and Measuring Tools

■ ⚲	Eyedropper Tool	I
⚲	Color Sampler Tool	I
⟋	Measure Tool	I
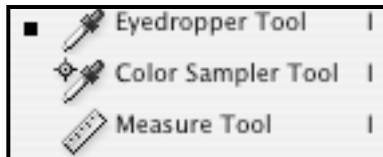
The Color Picking and Measuring tools do not actually change the document in any way.

- The Eyedropper tool changes the foreground color to the color that is clicked on.
- The Color Sampler tool is an advanced tool.
- The Measure tool measures the distance, location, and angle between to points in the document.

Hand Tool

The Hand tool moves an image within its window.

Tip: This is very useful when the image is naturally larger than the window or zoomed in.

Zoom Tool

The Zoom tool magnifies and reduces the view of an image.

Tip: To zoom out instead of in hold down the option key. When this is done, the + will turn into a -.