# Project 1 student guides

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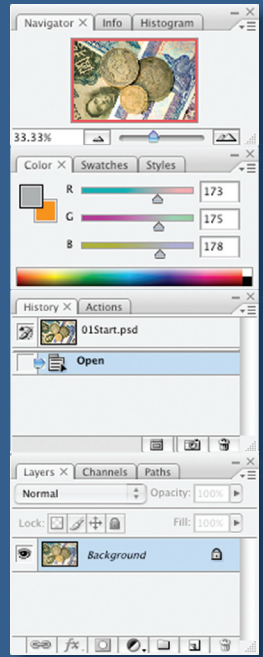
As you work with Adobe Photoshop, you'll discover that you can often accomplish the same task several ways. To make the best use of the extensive editing capabilities in Photoshop, you must first learn to navigate the work area.

1 Getting to Know the Work Area

Lesson overview

In this lesson, you'll learn how to do the following:

- Open Adobe Photoshop files.

- Select and use some of the tools in the toolbox.

- Set options for a selected tool using the tool options bar.

- Use various methods of zooming in and out on an image.

- Select, rearrange, and use palettes.

- Choose commands in palette and context menus.

- Open and use a palette docked in the palette well.

- Undo actions to correct mistakes or to make different choices.

- Customize the workspace.

- Find topics in Photoshop Help.

This lesson will take about 90 minutes to complete. Before starting Adobe Photoshop, locate the Lesson01 folder on the *Adobe Photoshop CS3 Classroom in a Book* CD, and copy the folder into the Lessons folder that you created on your hard disk for these projects (or create it now). As you work on this lesson, you'll preserve the start files. If you need to restore the start files, copy them again from the *Adobe Photoshop CS3 Classroom in a Book* CD.

Starting to work in Adobe Photoshop

The Adobe Photoshop work area includes the command menus at the top of your screen and a variety of tools and palettes for editing and adding elements to your image. You can also add commands and filters to the menus by installing third-party software known as *plug-in modules*.

Photoshop works with bitmapped, digitized images (that is, continuous-tone images that have been converted into a series of small squares, or picture elements, called *pixels*). You can also work with vector graphics, which are drawings made of smooth lines that retain their crispness when scaled. You can create original artwork in Photoshop, or you can import images into the program from many sources, such as:

* Photographs from a digital camera.

* Commercial CDs of digital images.

* Scans of photographs, transparencies, negatives, graphics, or other documents.

* Captured video images.

* Artwork created in drawing programs.

 For information on the kinds of files you can use with Adobe Photoshop CS3, see "About file formats" in Photoshop Help.

Starting Photoshop and opening a file

To begin, you'll start Adobe Photoshop and reset the default preferences.

Note: Usually, you won't reset the defaults when you're on your own. However, while you're working in this book, you'll reset them each time so that what you see on-screen matches the descriptions in the lessons. See "Restoring default preferences" on page 6.

1 On the desktop, double-click the Adobe Photoshop icon to start Adobe Photoshop and then immediately hold down Ctrl+Alt+Shift (Windows) or Command+Option+Shift (Mac OS) to reset the default settings.

If you don't see the Photoshop icon on your desktop, choose Start > All Programs > Adobe Photoshop CS3 (Windows) or look in either the Applications folder or the Dock (Mac OS).

2 When prompted, click Yes to confirm that you want to delete the Adobe Photoshop Settings File, and then click Close to close the Welcome Screen.

The Photoshop work area appears as shown in the following illustration.

Note: The following illustration shows the Windows version of Photoshop. On Mac OS, the arrangement is the same, but operating system styles may vary.
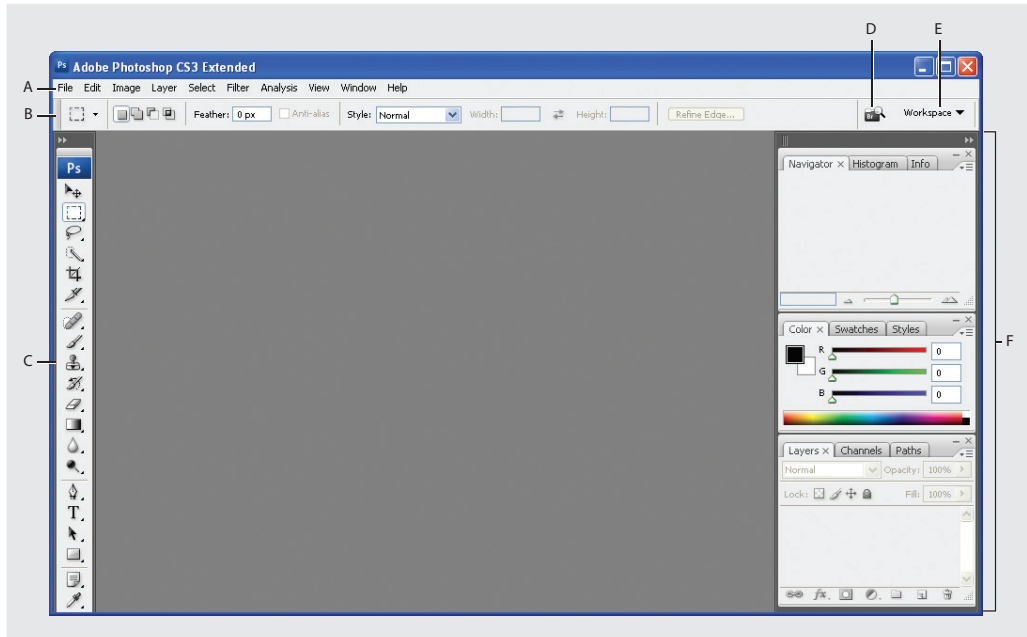

A. Menu bar B. Tool options bar C. Toolbox D. Adobe Bridge button E. Palette well F. Floating palettes

The default work area in Photoshop consists of a menu bar at the top of the screen, a tool options bar below the menu bar, a floating toolbox on the left, floating palettes (also called panels), and one or more image windows, which are opened separately. This interface is the same one you'll see in Adobe Illustrator®, Adobe InDesign®, and Flash®— so learning how to use the tools and palettes in one application means that you'll know how to use them in the others.

Watch the New UI QuickTime movie to get a quick overview of the new CS3 interface. The movie is located on the Adobe Photoshop CS3 Classroom in a Book *CD in Movies/New UI.mov. Double-click the movie file to open it; then click the Play button.*

3 Choose File > Open, and navigate to the Lessons/Lesson01 folder that you copied to your hard drive from the *Adobe Photoshop CS3 Classroom in a Book* CD.

4 Select the 01A_End.psd file and click Open.
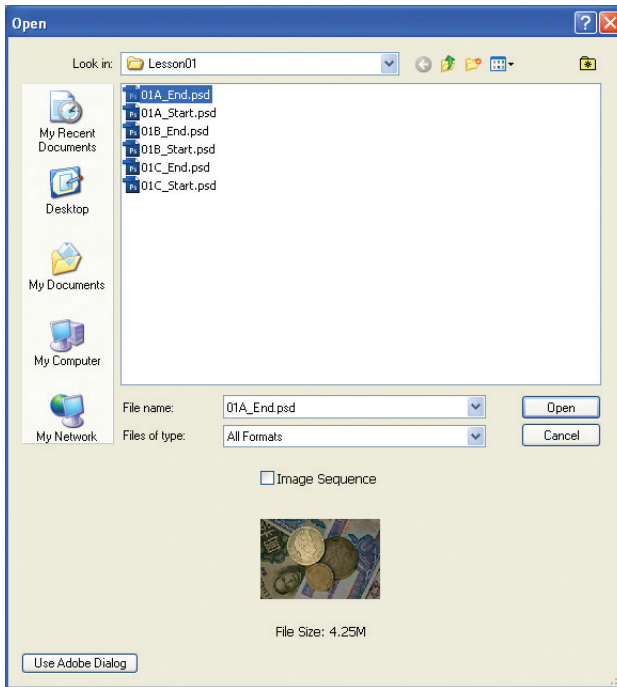
The 01A_End.psd file opens in its own window, called the *image window*. The end files in this book show you what you are creating in the different projects. In this end file, a collage of old currency and coins has been enhanced so that one coin appears spotlighted while the rest of the picture appears to be in shadow.

5 Choose File > Close, or click the close button on the title bar of the window in which the photograph appears. (Do not close Photoshop.)

Opening a file with Adobe Bridge

In this book, you'll work with different start files in each lesson. You may make copies of these files and save them under different names or locations, or you may work from the original start files and then copy them from the CD again if you want a fresh start. This lesson has three start files.

In the previous exercise, you used the classic method of opening a file. Now you'll open another file using the Adobe Bridge visual file browser, which helps take the guesswork out of finding the image file that you need.

1 Click the Go To Bridge button (⬛) in the tool options bar.
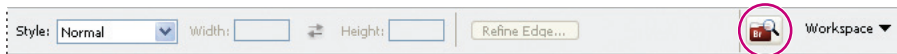

Watch the Bridge Intro QuickTime movie to get a quick overview of Adobe Bridge. The movie is located on the Adobe Photoshop CS3 Classroom in a Book *CD in Movies/ Bridge Intro.mov. Double-click the movie file to open it; then click the Play button.*

Adobe Bridge opens, displaying a collection of panels, menus, buttons, and panes.

Note: You can also open Adobe Bridge by choosing File > Browse.

2 From the Favorites panel in the upper left of Bridge, browse to the Lessons folder you copied from the CD onto your hard disk. The Lessons folder appears in the Content panel.

3 Drag the Lessons folder to the Favorite panel in the upper left corner of Bridge to add the folder to the list of favorites. (You can also select the folder and then choose File > Add To Favorites.) Adding files, folders, application icons, and other assets that you use often to the Favorites panel lets you quickly access the items.

4 In the Favorites panel, double-click the Lessons folder to open it; then double-click the Lesson01 folder.

Thumbnail previews of the folder contents appear in the center pane of Bridge.
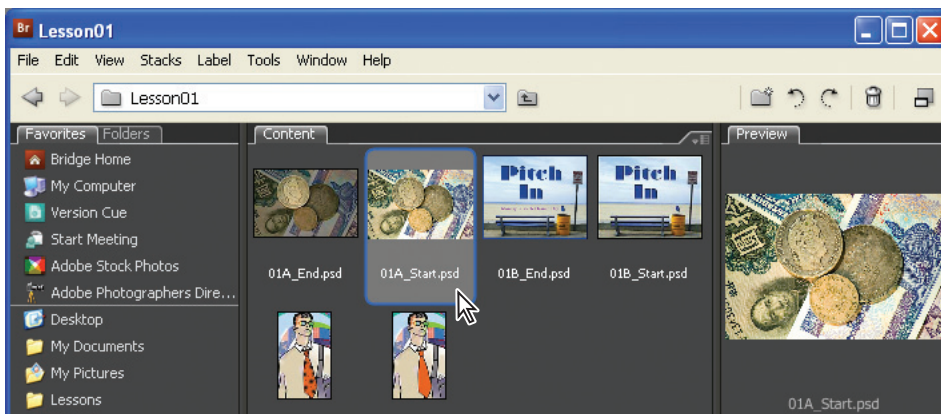
5 Select the 01A_Start.psd file in the Contents pane and open the file by double-clicking its thumbnail, or use the Bridge menu bar and choose File > Open.

The 01A_Start.psd image opens in Photoshop.

Adobe Bridge is much more than a convenient visual interface for opening files. You'll have the chance to learn more about the many features and functions of Adobe Bridge in Lesson 13, "Working with Scientific Images."

Note: Leave Bridge open for the moment; you may use it to locate and open files later in this lesson.

Using the tools

Photoshop provides an integrated set of tools for producing sophisticated graphics for print, Web, and mobile viewing. We could easily fill an entire book with details on the wealth of Photoshop tools and tool configurations. While that would certainly be a useful reference, it's not the goal of this book. Instead, you'll start gaining experience by configuring and using a few tools on a sample project. Every lesson will introduce you to more tools and ways to use them. By the time you finish all the lessons in this book, you'll have a solid foundation for further explorations of the Photoshop tool set.

Selecting and using a tool from the toolbox

The toolbox—the long, narrow palette on the far left side of the work area—contains selection tools, painting and editing tools, foreground- and background-color selection boxes, and viewing tools.

Let's start by using the Zoom tool, which appears in many other Adobe applications, including Illustrator, InDesign, and Acrobat.

Note: For a complete list of the tools in the toolbox, see the toolbox overview on page 50.

1 Notice the toolbar that appears to the left of the image window as a single column. Click the double-arrow button just above the toolbox to toggle to a double-column view. Click the arrow again to return to a single-column toolbox and use your screen space more efficiently.


2 Examine the status bar at the bottom of the image window and notice the percentage listed on the far left end. This represents the current enlargement view of the image, or zoom level.
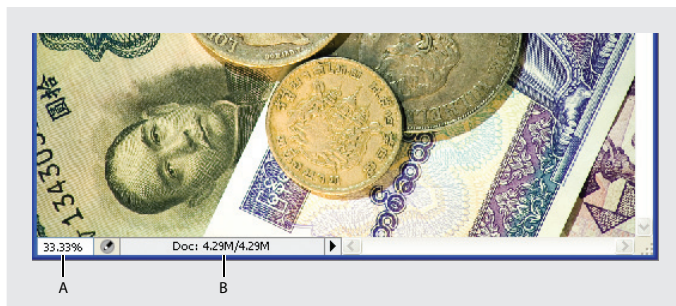
A. Zoom level B. Status bar

Note: In Windows, the status bar may appear across the bottom of the work area.

3 Move the pointer over the toolbox and hover it over the magnifying-glass icon until a tooltip appears, identifying the tool by name and providing its keyboard shortcut.
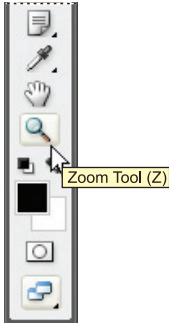
4 Select the Zoom tool by either clicking the Zoom tool button (🔍) in the toolbox or by pressing Z, the keyboard shortcut for the Zoom tool.

5 Move the pointer over the image window. Notice that it now looks like a tiny magnifying glass with a plus sign (+) in the center of the glass.

6 Click anywhere in the image window.

The image enlarges to a preset percentage level, which replaces the previous value in the status bar. The location you clicked when you used the Zoom tool becomes the center of the enlarged view. If you click again, the zoom advances to the next preset level, up to a maximum of 3200% on Windows and 1600% on the Macintosh.

7 Hold down the Alt key (Windows) or Option key (Mac OS) so that the Zoom tool pointer appears with a minus sign (–) in the center of the magnifying glass, and then click anywhere in the image. Then release the Alt or Option key.

Now the view zooms out to a lower preset magnification. Examine the photograph and the coins in the center.

Note: You can zoom out other ways. For example, you can select the Zoom In (🔍) or Zoom Out (🔍) mode on the Zoom tool options bar. You can choose View > Zoom In or View > Zoom Out. Or, you can type a lower percentage in the status bar and press Enter or Return.

8 Using the Zoom tool, drag a rectangle to enclose the area of the image that includes the French coin that you will spotlight.

The image enlarges so that the area you enclosed in your rectangle now fills the entire image window.
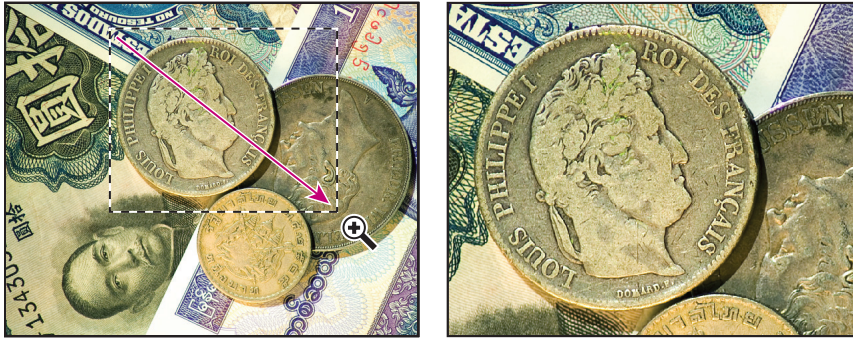
You have now tried three ways of using the Zoom tool to change the magnification in the image window: clicking, holding down a keyboard modifier while clicking, and dragging to define a magnification area. Many of the other tools in the toolbox can be used with keyboard combinations. You'll have opportunities to use these techniques in various lessons in this book.

Selecting and using a hidden tool

Photoshop has many tools you can use to edit image files, but you will probably work with only a few of them at a time. The toolbox arranges some of the tools in groups, with only one tool shown for each group. The other tools in the group are hidden behind that tool.

A small triangle in the lower right corner of a button is your clue that other tools are available but hidden under that tool.

1 Position the pointer over second tool from the top in the toolbox column until the tooltip appears, identifying it as the Rectangular Marquee tool (▢) with the keyboard shortcut M. Then select that tool.

2 Select the Elliptical Marquee tool (◯), which is hidden behind the Rectangular Marquee tool, using one of the following methods:

• Press and hold the mouse button over the Rectangular Marquee tool to open the pop-up list of hidden tools, and select the Elliptical Marquee tool.
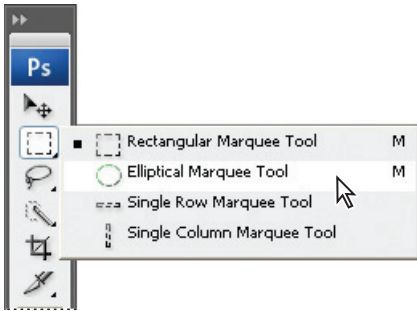
• Alt-click (Windows) or Option-click (Mac OS) the tool button in the toolbox to cycle through the hidden marquee tools until the Elliptical Marquee tool is selected.

• Press Shift+M, which switches between the Rectangular and Elliptical Marquee tools.

3 Move the pointer over the image window so that it appears as cross hairs (-¦-) and move it to the upper left side of the French coin.

4 Drag the pointer down and to the right to draw an ellipse around the coin and then release the mouse button.

An animated dashed line indicates that the area inside it is *selected*. When you select an area, it becomes the only editable area of the image. The area outside the selection is protected.

5 Move the pointer inside your elliptical selection so that the pointer appears as an arrow with a small rectangle (▶▫).

6 Drag the selection so that it is accurately centered over the French coin.

When you drag the selection, only the selection border moves, not pixels in the image. When you want to move the pixels in the image, you'll need to use a different technique, which you'll learn a little later. There's more about making different kinds of selections and moving the selection contents in Lesson 4, "Working with Selections."

Using keyboard combinations with tool actions

Many tools can operate under certain constraints. You usually activate these modes by holding down specific keyboard keys as you move the tool with the mouse. Some tools have modes that you choose in the tool options bar.

The next task is to make a fresh start at selecting the French coin. This time, you'll use a keyboard combination that constrains the elliptical selection to a circle that you'll draw from the center outward instead of from the outside inward.

1 Make sure that the Elliptical Marquee tool (⬭) is still selected in the toolbox, and deactivate the current selection by doing one of the following:

- In the image window, click anywhere outside the selected area.
- Choose Select > Deselect.
- Use the keyboard shortcut Ctrl+D (Windows) or Command+D (Mac OS).

2 Position the pointer in the center of the French coin.

3 Press Alt+Shift (Windows) or Option+Shift (Mac OS) and drag outward from the center of the coin until the circle completely encloses the coin.

4 Carefully release first the mouse button and then the keyboard keys.

If you are not satisfied with the selection circle, you can move it: Place the pointer inside the circle and drag, or click outside the selection circle to deselect it and then try again.

Note: If you accidentally release one or both of the keys prematurely, the tool reverts to its normal behavior (unconstrained and drawing from the edge). If, however, you haven't yet released the mouse button, you can just press the keys down again, and the selection changes back. If you have released the mouse button, simply start again at Step 1.

5 In the toolbox, double-click the Zoom tool (🔍) to return to 100% view. If the entire image doesn't fit in the image window, then click the Fit Screen button in the tool options bar.

Notice that the selection remains active, even after you use the Zoom tool.

Applying a change to a selected area

In order to spotlight the selected coin, you'll want to darken the rest of the image, not the area inside the current selection. Normally, you change the area within the selection. To protect that area, you'll invert the selection, making the rest of the image active and preventing the change from affecting the one center coin.

1 Choose Select > Inverse.

Although the animated selection border around the French coin looks the same, notice that a similar border appears all around the edges of the image. Now the rest of the image is selected and can be edited, while the area within the circle is not selected and cannot be changed while the selection is active.

*A. Selected (editable) area **B.** Unselected (protected) area*

2 Choose Image > Adjustments > Curves.

The keyboard shortcut for this command, Ctrl+M (Windows) or Command+M (Mac OS) appears by the command name in the Adjustments submenu. In the future, you can just press that keyboard combination to open the Curves dialog box.

3 In the Curves dialog box, make sure that the Preview option is selected. If necessary, drag the dialog box to one side so that you can see most of the image window.

The Preview option shows the effect of your selections in the image window, so the picture changes as you adjust settings. This saves you from having to repeatedly open and close dialog boxes as you experiment with different options.

4 Drag the control point in the upper right corner of the graph straight down until the value shown in the Output option is approximately 150. (The Input value should remain unchanged.)

As you drag, the highlights are reduced in the selected area of the image.
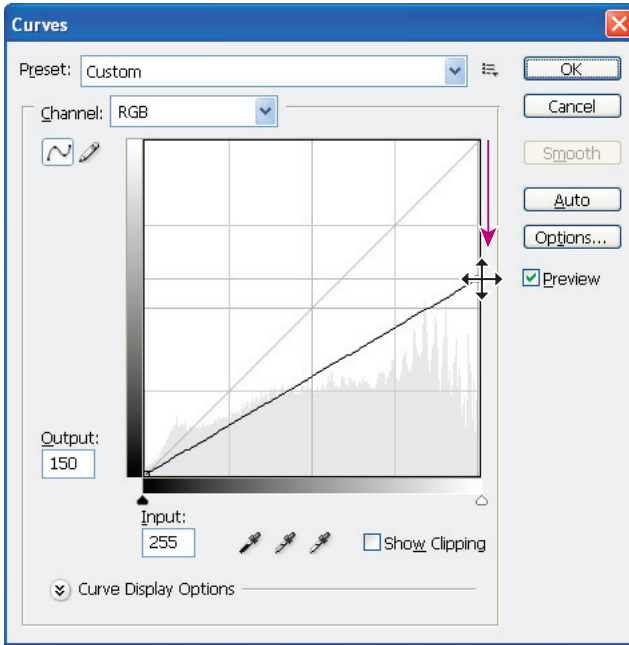
5 Examine the results in the image window and then adjust the Output value up or down until you are satisfied with the results.

6 Click OK to close the Curves dialog box.

7 Choose Select > Deselect to deselect your selection. The marquee disappears.

8 Do one of the following:

• If you want to save your changes, choose File > Save and then choose File > Close.

• If you want to revert to the unaltered version of the file, choose File > Close and click No when you are asked if you want to save your changes.

• If you want to do both of the above, choose File > Save As, and then either rename the file or save it to a different folder on your computer, and click OK. Then choose File > Close.

You don't have to deselect, because closing the file cancels the selection.

Congratulations! You've just finished your first Photoshop project. Although the Curves dialog box is actually one of the more sophisticated methods of altering an image, it isn't difficult to use, as you have seen. You will learn more about making adjustments to images in many other lessons in this book. Lessons 2, 3, and 7, in particular, address techniques like those used in classic darkroom work, such as adjusting for exposure, retouching, and correcting colors.

Zooming and scrolling with the Navigator palette

The Navigator palette is another speedy way to make large changes in the zoom level, especially when the exact percentage of magnification is unimportant. It's also a great way to scroll around in an image, because the thumbnail shows you exactly what part of the image appears in the image window.

The slider under the image thumbnail in the Navigator palette enlarges the image when you drag it to the right (toward the large mountain icon) and reduces it when you drag to the left.
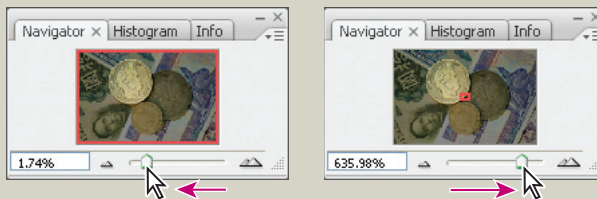
The red rectangular outline represents the area of the image that appears in the image window. When you zoom in far enough that the image window shows only part of the image, you can drag the red outline around the thumbnail area to see other areas of the image. This also is an excellent way to verify which part of an image you're working on when you work at very high zoom levels.
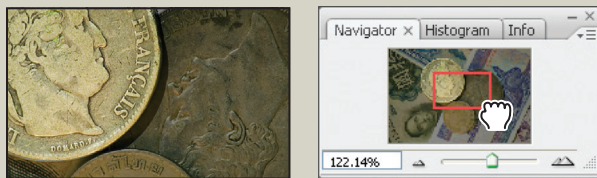
Using the tool options bar and other palettes

You've already had some experience with the tool options bar. In the previous project, you saw that there are options in the tool options bar for the Zoom tool that change the view of the current image window. Now you will learn more about setting tool properties in the tool options bar, as well as using palettes and palette menus.

Previewing and opening another file

The next project involves a promotional postcard for a community project. First, let's preview the end file to see what we're aiming to do.

1 Click the Go To Bridge button (🖼) in the tool options bar.

2 In the Bridge Favorites pane, open the Lessons/Lesson1 folder.

3 Select the 01B_End.psd file in the thumbnail preview area so that it appears in the Content panel.

4 Examine the image and notice the text that is set against the sandy area across the lower part of the image.

Beach photo: Amana Stock Photography

5 Select the thumbnail for the 01B_Start.psd file and double-click to open it in Photoshop.

Setting tool properties in the tool options bar

With the 01B_Start.psd file open in Photoshop, you're ready to select the characteristics for the text and then to type your message.

1 In the toolbox, select the Horizontal Type tool (T).

The buttons and menu in the tool options bar now relate to the Type tool.

2 In the tool options bar, select a font you like from the first pop-up menu. (We used Adobe Garamond, but you can use another font if you prefer.)

3 Specify 38 pt as the font size.

You can specify 38 points by typing directly in the font-size text box and pressing Enter or Return, or by scrubbing the font-size menu label. You can also choose a standard font size from the font-size pop-up menu.

> *You can place the pointer over the labels of most numeric settings in the tool options bar, in palettes, and in dialog boxes in Photoshop, to display a "scrubby slider." Dragging the pointing-finger slider to the right increases the value; dragging to the left decreases the value. Alt-dragging (Windows) or Option-dragging (Mac OS) changes the values in smaller increments; Shift-dragging changes them in larger increments.*
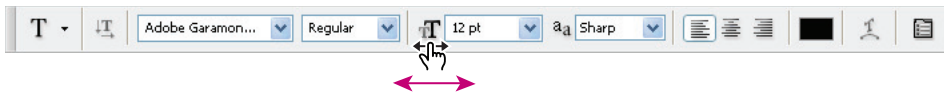
4 Click once anywhere on the left side of the image and type **Monday is Beach Cleanup Day.**

The text appears with the font and font-size formatting that you selected.

5 In the toolbox, select the Move tool (⤧) at the top of the column on the right.

Note: Don't select the Move tool using the V keyboard shortcut, because you're in text-entry mode. Typing V will add the letter to your text in the image window.

6 Position the Move tool pointer over the text you typed and drag the text into the misty white rectangle near the bottom of the image, centering the text inside it.


Using palettes and palette menus

The text color in your image is the same as the Foreground Color swatch in the toolbox, which is black by default. The text in the end-file example was a dark blue that coordinates nicely with the rest of the image. You'll color the text by selecting it and then choosing another color.

1 In the toolbox, select the Horizontal Type tool (T).

2 Drag the Horizontal Type tool across the text to select all the words.

3 In the Color palette group, click the Swatches tab to bring that palette forward.
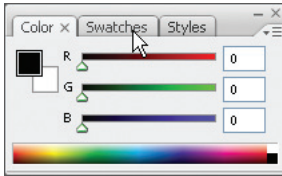
4 Select any swatch. The color you select appears in three places: as the Foreground Color in the toolbox, in the text color swatch in the tool options bar, and in the text you typed in the image window. (Select any other tool in the toolbox to deselect the text so that you can see the color applied to it.)

Note: When you move the pointer over the swatches, it temporarily changes into an eyedropper. Set the tip of the eyedropper on the swatch you want, and click to select it.
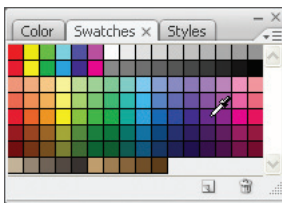
That's how easy it is to select a color, although there are other methods in Photoshop. However, you'll use a specific color for this project, and it's easier to find it if you change the Swatches palette display.

5 Select another tool in the toolbox, such as the Move tool (⯈⊕) to deselect the Horizontal Type tool. Then, click the arrow (⊙) on the Swatches palette to open the palette menu, and choose the Small List command.
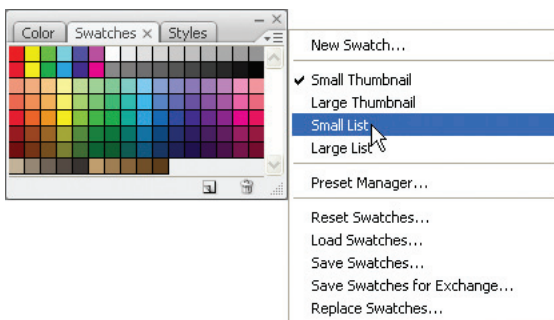
6 Select the Type tool and reselect the text, as you did in Steps 1 and 2.

7 In the Swatches palette, scroll down to near the bottom of the list to find the Light Violet Magenta swatch, and then select it.
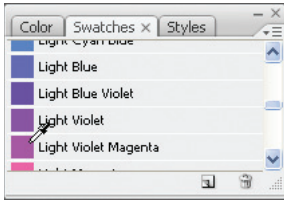
Now the text appears in the lighter violet color.

8 Select the Hand tool ( ) to deselect the text. Then click the Default Foreground And Background Colors button ( ) in the toolbox to make Black the foreground color.

Resetting the default colors does not change the color of the text, because the text is no longer selected.

9 You've finished the task, so close the file. You can either save it, close it without saving, or save it under a different name or location.

It's as simple as that—you've completed another project. Nice job!

Undoing actions in Photoshop

In a perfect world, you'd never make a mistake. You'd never click the wrong item. You'd always perfectly anticipate how specific actions would bring your design ideas to life exactly as you imagined them. In a perfect world, you'd never have to backtrack.

For the real world, Photoshop gives you the power to step back and undo actions so that you can try other options. Our next project provides you with an opportunity to experiment freely, knowing that you can reverse the process.

This project also introduces you to layering, which is one of the fundamental and most powerful features in Photoshop. Photoshop features many kinds of layers, some of which contain images, text, or solid colors, and others that simply interact with layers below them. The file for this next project has both kinds of layers. You don't have to understand layers to complete this project successfully, so don't worry about that right now. You'll learn more about layers in Lesson 5, "Layer Basics," and Lesson 10, "Advanced Layering."

Undoing a single action

Even beginning computer users quickly learn to use and appreciate the familiar Undo command. As we will do each time we start a new project, we'll begin by looking at the final result.

1 Click the Go To Bridge button (🖼️) and navigate to the Lessons/Lesson01 folder.

2 Select the 01C_End.psd file so that you can see the results you'll achieve in this exercise. After you've studied it in the Preview panel, double-click the 01C_Start.psd file thumbnail to open it in Photoshop.

3 In the Layers palette select the Tie Designs layer.
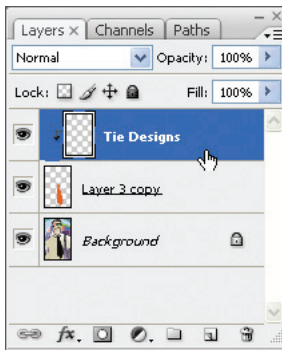
Notice the listings in the Layers palette. The Tie Designs layer is a clipping mask. A clipping mask works somewhat like a selection in that it restricts the area of the image that can be altered. With the clipping mask in place, you can paint a design over the man's tie without worrying about any stray brush strokes disturbing the rest of the image. The Tie Designs layer is selected, because it's the layer you'll be editing now.

4 In the toolbox, select the Brush tool (✐), or press B to select it by its keyboard shortcut.

5 In the Brush tool options bar click the brush size to reveal the Brushes palette. Scroll down the list of brushes and select the Soft Round 65-pixel brush. (The name will appear as a tooltip if you hover the pointer over a brush.)
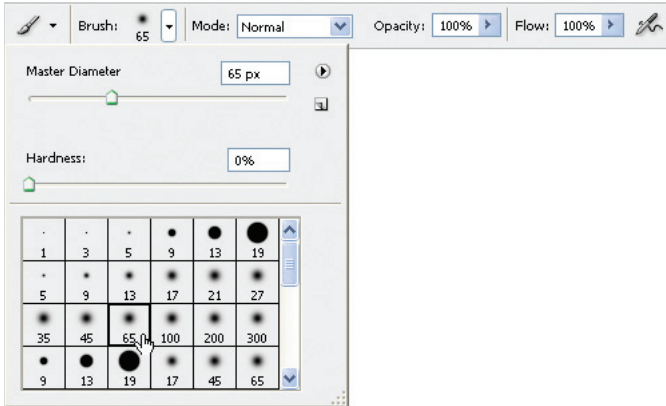
If you want to try a different brush, that's OK, but select a brush that's reasonably close to 65 pixels—preferably between 45 and 75 pixels.

6 Move the pointer over the image so that it appears as a circle with the diameter you selected in Step 5. Then draw a stripe anywhere in the orange tie. You don't have to worry about staying within the lines, because the brush won't paint anything outside the tie clipping mask.

Illustration: Pamela Hobbs

Oops! Your stripe may be very nice, but the design calls for dots, so you'll need to remove the painted stripe.

7 Choose Edit > Undo Brush Tool, or press Ctrl+Z (Windows) or Command+Z (Mac OS) to undo the Brush tool action.

The tie is again a solid orange color, with no stripe.

Note: You'll get more experience with clipping masks in Lesson 6, "Masks and Channels," Lesson 8, "Typographic Design," and in Lesson 10, "Advanced Layer Techniques."

Undoing multiple actions

The Undo command reverses only one step. This is a practicality because Photoshop files can be very large, and maintaining multiple Undo steps can tie up a lot of memory, which tends to degrade performance. However, you can still step back through multiple actions using the History palette.

1 Using the same Brush tool settings, click once over the (unstriped) orange tie to create a soft dot.

**2** Click several more times in different areas on the tie to create a pattern of dots.

3 Click the History palette icon (🔖) alongside the palette dock on the right side of the window. This expands the palette so that you can see its contents. Then drag a corner of the History palette to resize it so that you can see more steps.
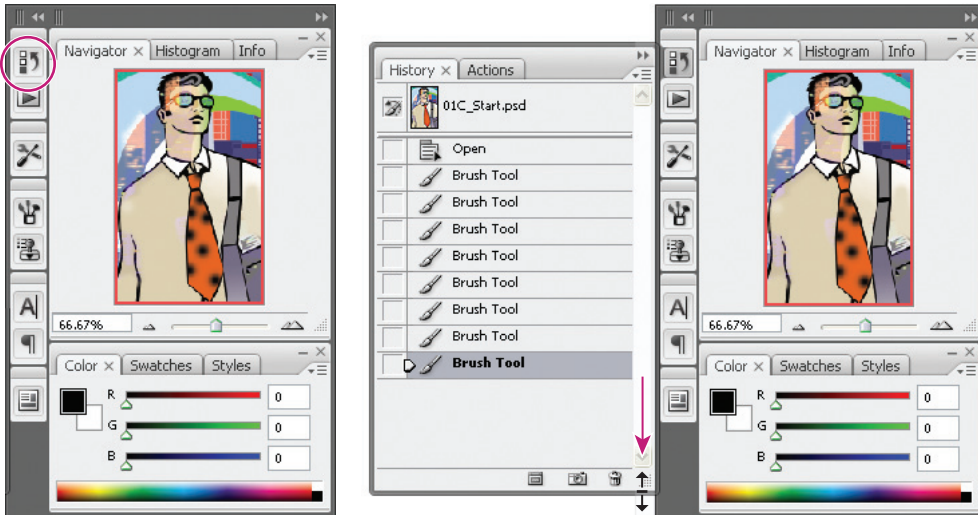
💡 *You can also expand the History palette by clicking the minimize/maximize button on the palette title bar. This resizes the palette so that all the current history states are in view.*

The History palette records the recent actions you've performed in the image. The current state is selected, at the bottom of the list.

4 Click one of the earlier actions in the History palette, and examine the changes this causes in the image window: Several previous actions are undone.
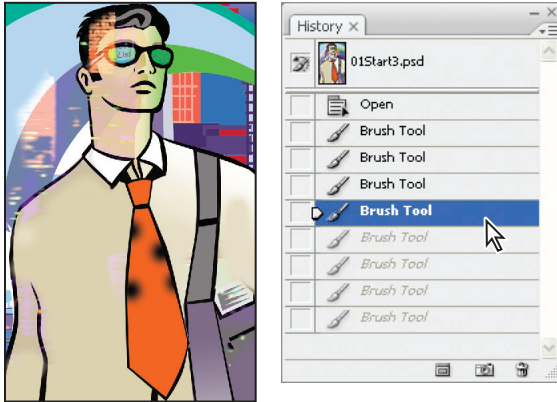
5 In the image window, create a new dot on the tie with the Brush tool.

Notice that the History palette has removed the dimmed actions that had been listed after the selected history state and has added a new one.

6 Choose Edit > Undo Brush Tool or press Ctrl+Z (Windows) or Command+Z (Mac OS) to undo the dot you created in Step 5.

Now the History palette restores the earlier listing of dimmed actions.

7 Select the state at the bottom of the History palette list.

The image is restored to the condition it was in when you finished Step 2 of this exercise.

By default, the Photoshop History palette retains only the last 20 actions. This is also a compromise, striking a balance between flexibility and performance. You can change the number of levels in the History palette by choosing Edit > Preferences > Performance (Windows) or Photoshop > Preferences > Performance (Mac OS) and typing a different number in the History States option.

You'll explore the History palette more in Lesson 3, "Retouching and Repairing."

Using a context menu

Context menus are short menus that are appropriate to specific elements in the work area. They are sometimes referred to as "right-click" or "shortcut" menus. Usually, the commands on a context menu are also available in some other area of the user interface, but using the context menu can save time.

1 If the Brush tool (✎) is not still selected in the toolbox, select it now.

2 In the image window, right-click (Windows) or Control-click (Mac OS) anywhere in the image to open the Brush tool context menu.
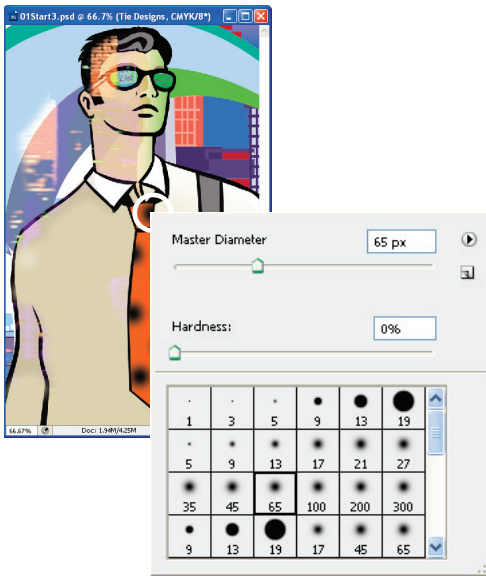
Context menus vary with their context, of course, so what appears can be a menu of commands or a palette-like set of options, which is what happens in this case.

3 Select a finer brush, such as the Hard Round 9-pixel brush. You may need to scroll up or down the list in the context menu to find the right brush.

4 In the image window, use the selected brush to create smaller dots on the tie.

Note: Clicking anywhere in the work area closes the context menu. If the tie area is hidden behind the Brush tool context menu, click another area or double-click your selection in the context menu to close it.

5 Place additional dots on the tie.

6 As it suits you, use the Undo command and the History palette to backtrack through your painting actions to correct mistakes or make different choices.

When you finish making changes to your tie design, give yourself a pat on the back because you've finished another project. You can choose File > Save if you want to save your results, or File > Save As if you want to save it in another location or with a different name, or you can close the file without saving.

More about palettes and palette locations

Photoshop palettes are powerful and varied. You rarely would have a project in which you needed to see all palettes simultaneously. That's why they're in palette groups and why the default configurations leave some palettes unopened.

The complete list of palettes appears in the Window menu, with check marks by the names of the palettes that are open at the front of their palette groups. You can open a closed palette or close an open one by selecting the palette name in the Window menu.

You can hide all palettes at once—including the tool options bar and toolbox—by pressing the Tab key. To reopen them, press Tab again.

Note: When palettes are hidden, a thin, semitransparent strip is visible at the edge of the document. Hovering the mouse pointer over the strip displays its contents.

You already used the palette well when you opened the Brushes palette for 01C_Start.psd. You can drag palettes to or from the palette well. This is convenient for bulky palettes or ones that you use only occasionally but want to keep handy.

Other actions that you can use to arrange palettes include the following:

• To move an entire palette group, drag the title bar to another location in the work area.

• To move a palette to another group, drag the palette tab into that palette group so that a black highlight appears inside the group, and then release the mouse button.
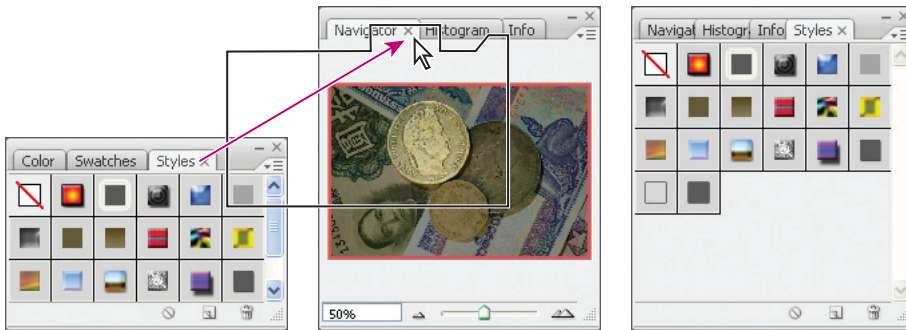
• To stack a palette in the palette well in the tool options bar, drag the palette tab into the palette well so that the palette well is highlighted.
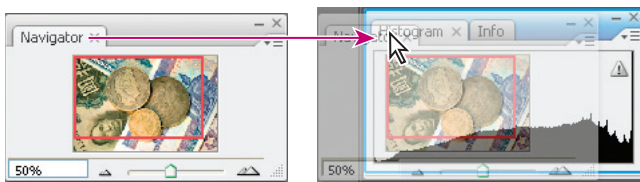
Expanding and collapsing palettes

You can also resize palettes to use screen space more efficiently and to see fewer or more palette options, either by dragging or clicking to toggle between preset sizes:

• To collapse open palettes to icons, click the right double-headed arrows in the gray dock above the palette group. To expand the palette, click the icon or the double-headed arrow.
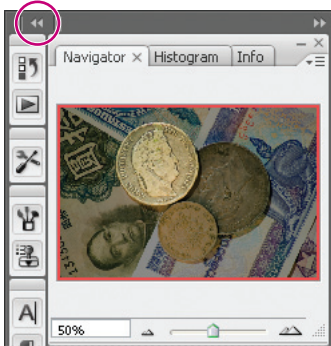
• To change the height of a palette, drag its lower right corner.

• To change the width of a palette or palette group, position the pointer in the left corner above the palette or palette group; when a double-headed arrow appears, drag either left or right to widen or narrow the palette, respectively.

• To expand a palette to show as much as possible of its contents, click the minimize/ maximize button. Click a second time to collapse the palette group.

• To collapse a palette group so that only the dock header bar and tabs are visible, double-click a palette tab or palette title bar. Double-click again to restore it to the expanded view. You can open the palette menu even when the palette is collapsed.

Notice that the tabs for the various palettes in the palette group and the button for the palette menu remain visible after you collapse a palette.

Note: You can collapse, but not resize, the Color, Character, and Paragraph palettes.

Special notes about the toolbox and tool options bar

The toolbox and the tool options bar share some characteristics with the other palettes:

• You can drag the toolbox by its title bar to a different location in the work area. You can move the tool options bar to another location by dragging the grab bar at the far left end of the palette.

• You can hide the toolbox and tool options bar.

However, some palette features are not available or do not apply to the toolbox or tool options bar:

• You cannot group the toolbox or tool options bar with other palettes.

• You cannot resize the toolbox or tool options bar.

• You cannot stack the toolbox in the palette well. (The same is true for the tool options bar, because the palette well appears in the tool options bar.)

• The toolbox and tool options bar do not have palette menus.

Customizing the workspace

It's great that Photoshop offers so many ways to control the display and location of the tool options bar and its many palettes, but it can be time-consuming to drag palettes around the screen so that you can see some palettes for certain projects and other palettes for other projects. Luckily, Photoshop lets you customize your workspace, controlling what palettes, tools, and menus are available at any time. In fact, it comes with a few preset workspaces suitable for different types of workflows—tone and color correction, painting and retouching, and so on. Let's experiment with them.

Note: If you closed 01C_Start.psd at the end of the previous exercise, open it—or open any other image file—to complete the following exercise.

1 Choose Window > Workspace > Color And Tonal Correction. If prompted, click Yes to apply the workspace.

If you've been experimenting with opening, closing, and moving palettes, you'll notice that Photoshop stacks the floating palettes along the right edge of the workspace. Otherwise, it may appear that nothing changes in the workspace. As you're about to see, however, Photoshop has colored many of the menu commands that are commonly used for color and tonal corrections.

2 Click the Window menu, and drag over the other menus to see that color and tonal-correction commands now appear orange.

3 Choose Window > Workspace > Web Design. If prompted, click Yes to apply the workspace.

4 Click the Window menu, and drag over the other menus to see that Web design–related commands now appear purple.

For times when presets don't suit your purposes, you can customize the workspace to your specific needs. Say, for example, that you do lots of web design, but no digital video work.

5 Click the Image menu and drag down to see the Pixel Aspect Ratio subcommands.
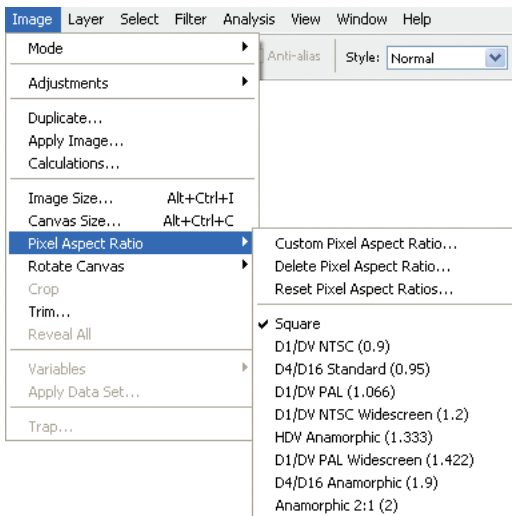
These subcommands include several DV formats that many print and web designers don't need to use.

6 Choose Window > Workspace > Keyboard Shortcuts And Menus.

The Keyboard Shortcuts And Menus dialog box lets you control availability of the application and palette menu commands, as well as create custom keyboard shortcuts for menus, palettes, and tools. For instance, you can hide commands that you use infrequently, or highlight commonly used commands to make them easier to see.

7 In the Menus tab of the Keyboard Shortcuts And Menus dialog box, choose Menu For: > Application Menus.

8 Toggle open the Image menu command by clicking its right-pointing triangle.

When it's open you will see the Image menu commands and subcommands, including Mode, Adjustments, and Duplicate.

9 Scroll down to Pixel Aspect Ratio and click the eye icon to turn off visibility for all of the DV and video formats—there are eight of them, beginning with D1/DV NTSC (0.9) through Anamorphic 2:1 (2).
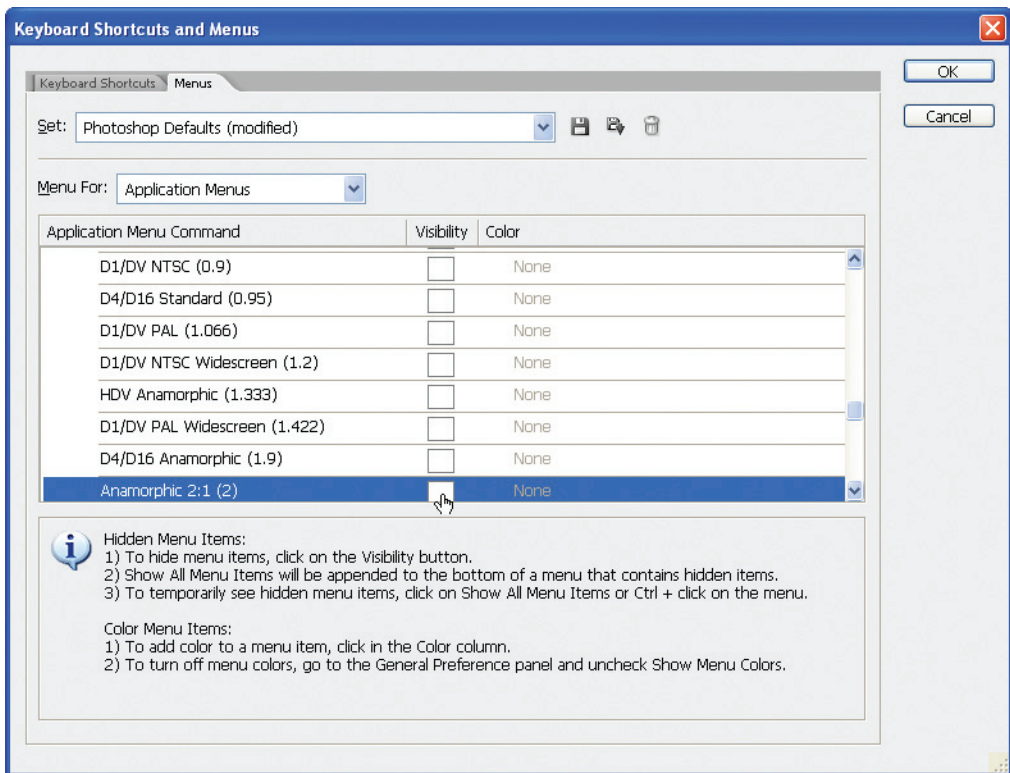
10 Now scroll up to the Image > Mode > RGB Color command, and click None in the Color column. Choose Red from the pop-up menu.
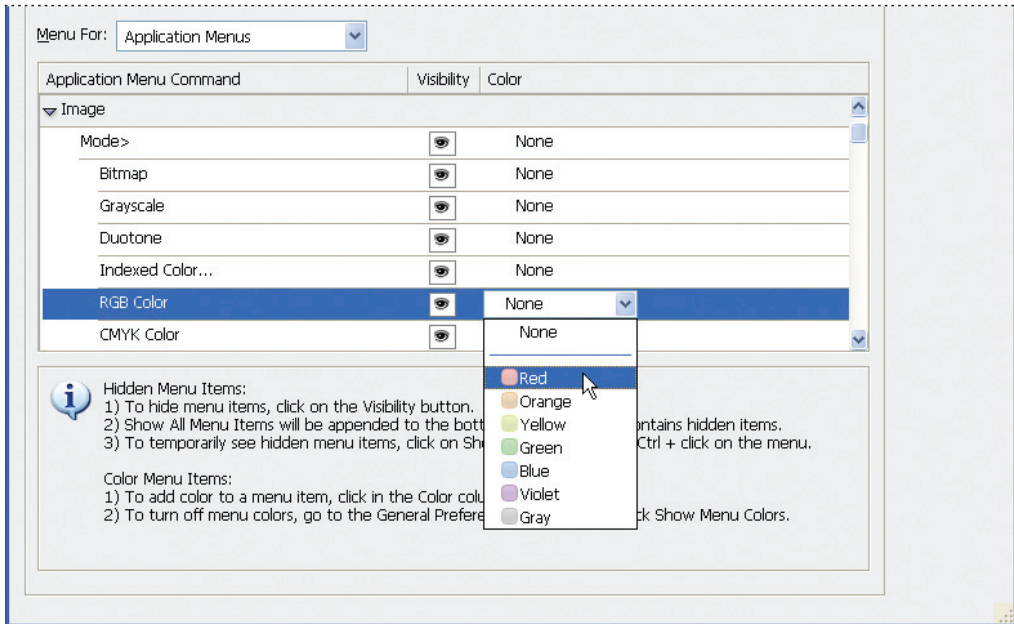
11 Click OK to close the Keyboard Shortcuts and Menus dialog box.

12 Click the Image menu command and scroll down: The Image > Mode > RGB Color command is now highlighted in red, and the DV and video formats are unavailable from the Pixel Aspect Ratio subcommand.
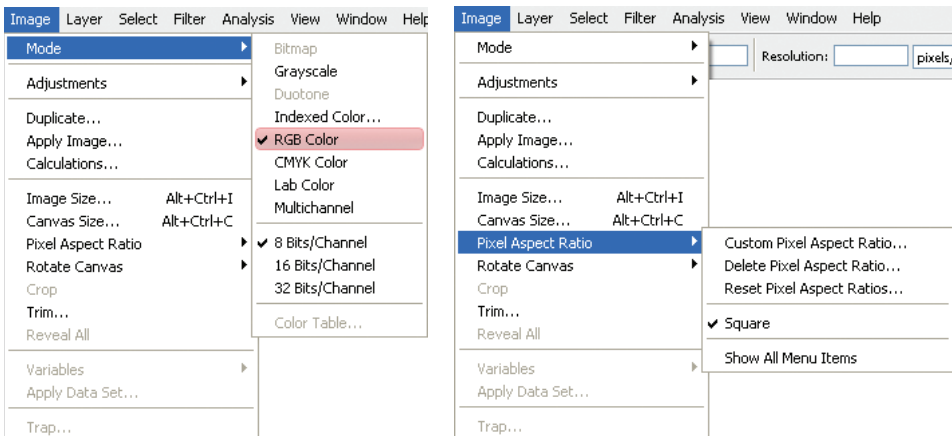
You can save this workspace by choosing Window > Workspace > Save Workspace. In the Save Workspace dialog box, give your workspace a name; make sure the Menus, Palette Locations, and Keyboard Shortcuts boxes are checked; and then click Save. Then, your custom workspace will be listed in the Window > Workspace submenu.
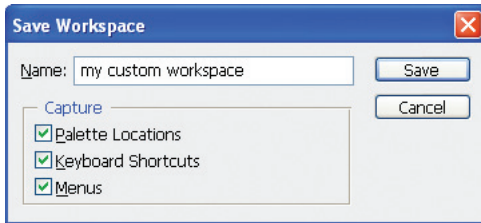
For now, however, return to the default workspace configuration.

13 Choose Window > Workspace > Default Workspace. When prompted, click Don't Save to not save changes to the menu file.

Using Photoshop Help

For complete information about using palettes, tools, and other application features, refer to Photoshop Help. Photoshop Help includes all the topics in the printed *Adobe Photoshop CS3 User Guide,* and more. It includes the complete list of keyboard shortcuts, how-to tips, tutorials, and explanations of Photoshop and Adobe Bridge concepts and feature descriptions.

Photoshop Help is easy to use, because you can look for topics in several ways:

• Scanning the table of contents.

• Searching for keywords.

• Using the index.

• Jumping to related topics using text links.

First, you'll try looking for a topic using the Contents palette.

1 Choose Help > Photoshop Help.

Note: You can also open Photoshop Help by pressing F1 (Windows) or Command+/ (Mac OS).

The Adobe Help Viewer opens. The topics for the Help content appear in the left pane of the floating window.
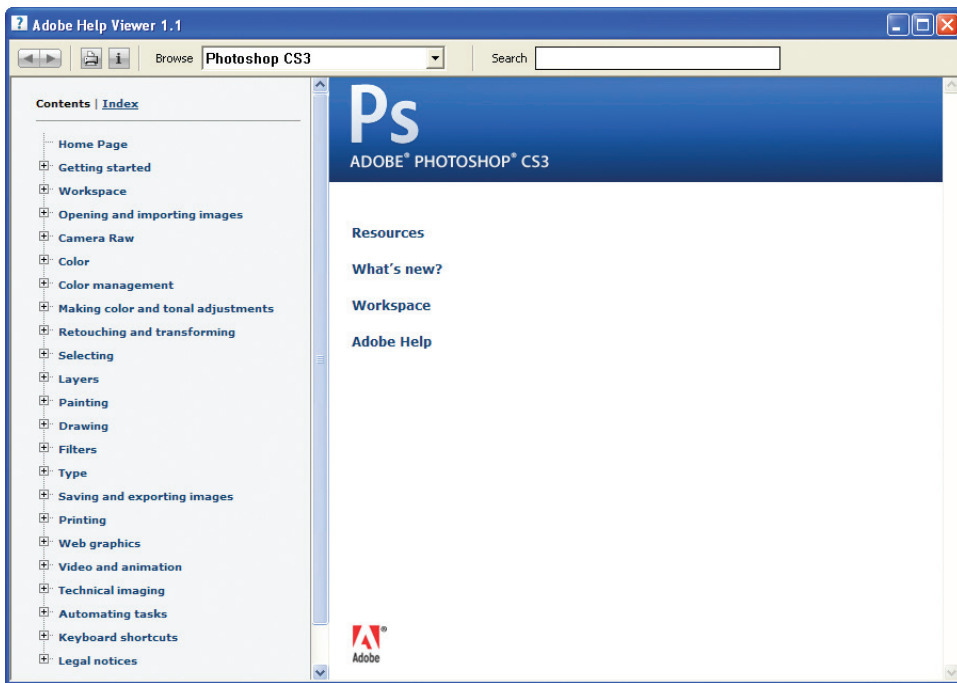
2 In the Contents section of the left pane of the Help window, scroll down to skim through the Help contents. They are organized in topics, like the chapters of a book.

3 Near the top of the list of topics, click the plus sign (+) to toggle open the topic Workspace, and then toggle open the Tools topic.

4 Click the entry "About Tools" to select and view that topic. Click the "View full size graphic" to display an illustration, with each tool called out by name.

Some Help Center entries include links to related topics. Links appear as blue, underlined text. When you position the mouse pointer over a link, the pointer changes to a pointing-finger icon (🖑) and the text turns red. You can click any text link to jump to that related topic.

5 Scroll down (if necessary) to Related Information and click the Selection tools gallery text link.
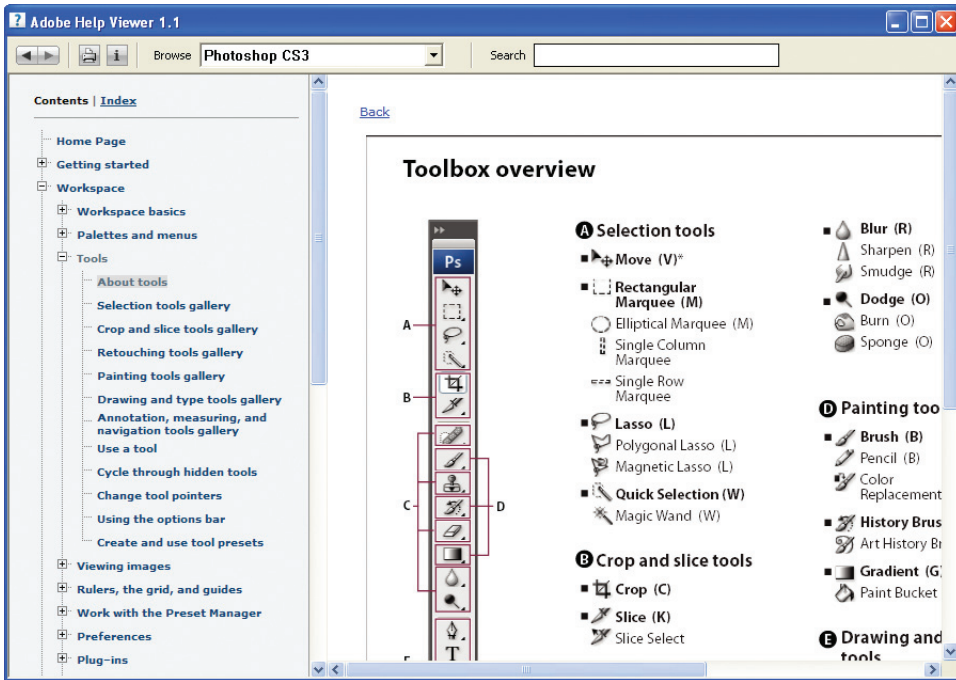

6 Click Next one or two more times to see information the rest of the tools.

Using Help Viewer keywords, links, and index

If you can't find the topic you're interested in by skimming the Contents page, you can try searching on a keyword.

1 At the top of the window, click Search.

2 Type a keyword in the search text box, such as **lasso**, and press Enter or Return. A list of topics appears. To view any of these topics, click the topic name.
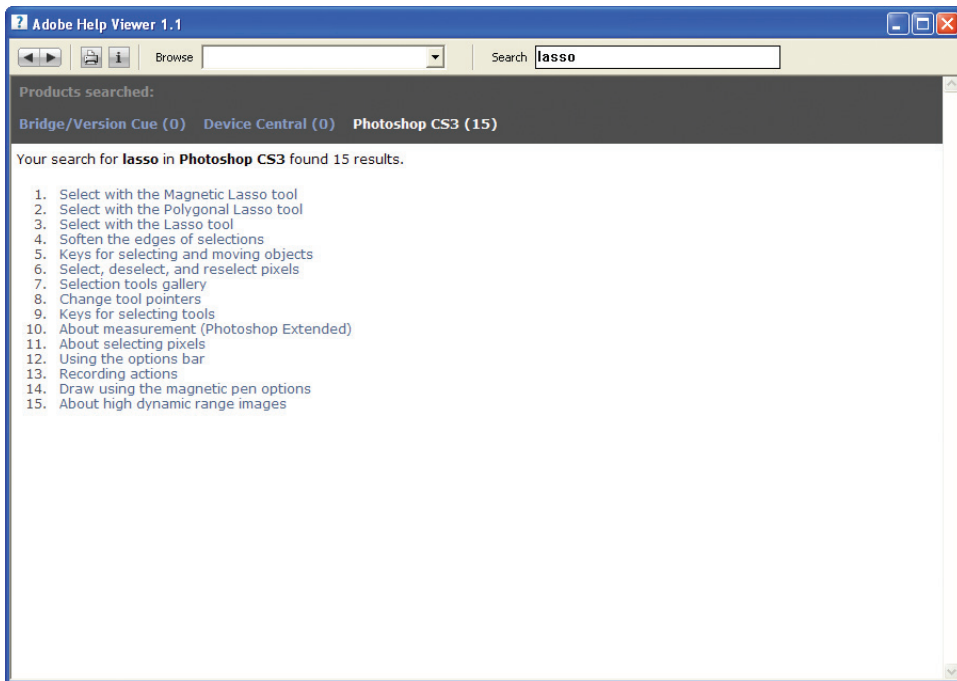
You can also search for a topic using the index.

3 In the left pane, click the Index ("i") button to display the Index contents. An alphabetical list of letters appears in the left pane.

4 Click a letter, such as "T," to display index entries for that letter.

Index entries appear alphabetically by topic and subtopic, like the index of a book. You can scroll down the list to see all the entries that begin with the letter "T."

5 Click an entry to open the topic about that entry. If a topic has more than one entry, click the plus sign (⊞) to toggle open visibility for all of the entries, and then click the entry that you want to read.
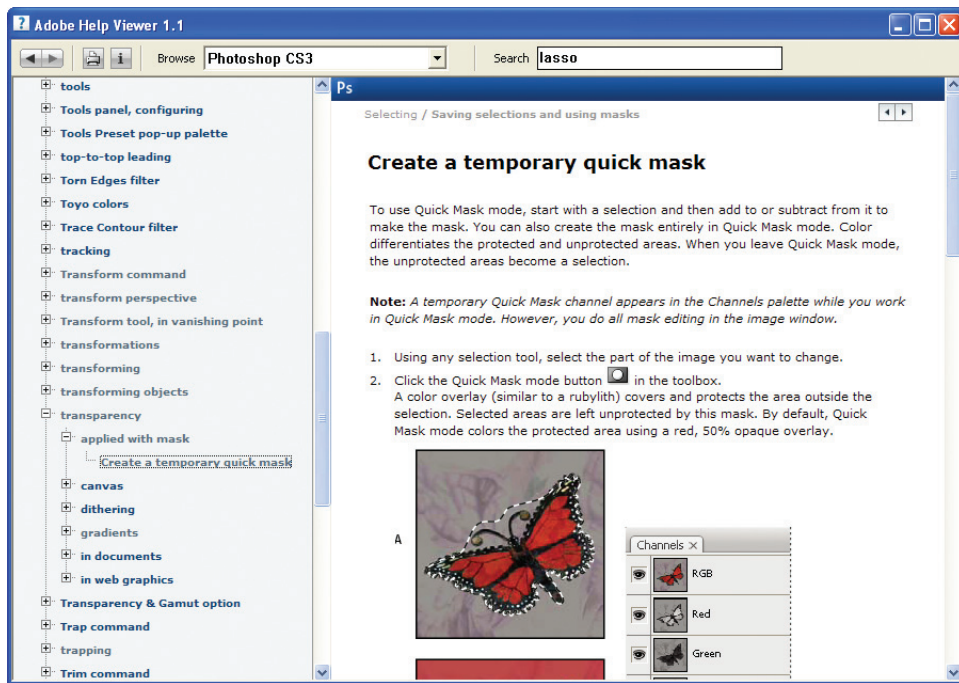
6 When you have finished browsing, click the close button at the top of the Adobe Help Viewer, or choose Adobe Help Viewer > Quit Adobe Help Center (Mac OS) to close Photoshop Help.

Using Adobe online services

Another way to get information about Adobe Photoshop and to stay abreast of updates is to use Adobe online services. If you have an Internet connection and a web browser installed on your system, you can access the Adobe Systems website (www.adobe.com) for information on Photoshop and other Adobe products. You can also be notified automatically when updates are available.

1 In Photoshop, choose Help > Photoshop Online.

Your default web browser launches and displays the Photoshop product page on the U.S. Adobe Systems website. You can explore the site and find such information as tips and techniques, galleries of artwork by Adobe designers and artists around the world, the latest product information, and troubleshooting and technical information. Or, you can learn about other Adobe products and news.

Now, you'll return to Photoshop and set it up so that you can automatically receive software updates.

2 Close your browser.

3 Return to Photoshop, and choose Help > Updates. In the Adobe Updater dialog box that appears, click the Preferences button.

4 In the Adobe Updater Preferences dialog box, select the option, "Automatically Check For Updates Every Month." Then, decide whether you want updates to be downloaded automatically, or whether you want to be alerted before updates are downloaded.

If you choose to not automatically check for updates every month, you can still manually go to the Adobe website (as in Step 1) and check for Photoshop updates.

5 Click OK to save your changes.

Congratulations again; you've finished Lesson 1.

Now that you're acquainted with the basics of the Photoshop work area, you can explore more about the Adobe Bridge visual file browser, or jump ahead and begin learning how to create and edit images. Once you know the basics, you can complete the *Adobe Photoshop CS3 Classroom in a Book* lessons either in sequential order, or according to the subject that most interests you.

Toolbox overview

The marquee tools *make rectangular, elliptical, single row, and single column selections.*

The Move tool *moves selections, layers, and guides.*

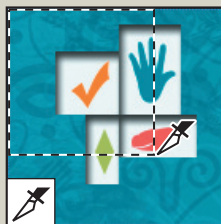**The lasso tools** *make free-hand, polygonal (straight-edged), and magnetic (snap-to) selections.*

The Quick Selection tool *lets you quickly "paint" a selection using an adjustable round brush tip.*

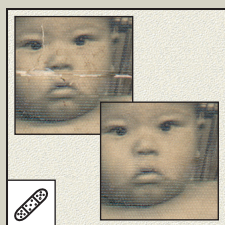**The Magic Wand tool** *selects similarly colored areas*
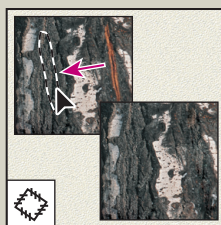
The Crop tool *trims images.*

The Slice tool *creates slices.*

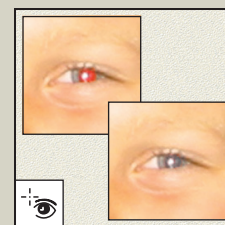**The Slice Select tool** *selects slices.*

The Spot Healing Brush tool *quickly removes blemishes and imperfections from photographs with a uniform background.*
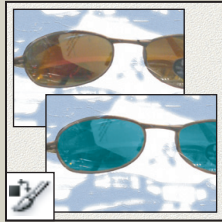
The Healing Brush tool *paints with a sample or pattern to repair imperfections in an image.*
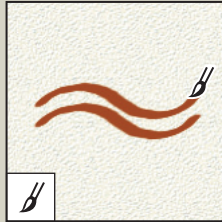
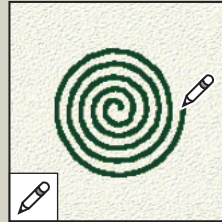**The Patch tool** *repairs imperfections in a selected area of an image using a sample or pattern.*

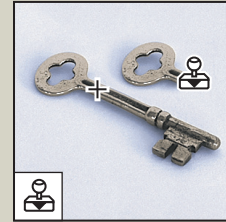**The Red Eye tool** *removes red-eye in flash photos with one click.*

The Color Replacement tool *substitutes one color for another.*
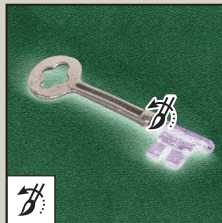

The Brush tool *paints brush strokes.*

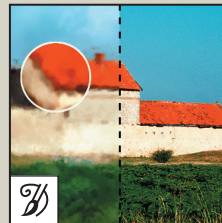**The Pencil tool** *paints hard-edged strokes.*

The Clone Stamp tool *paints with a sample of an image.*
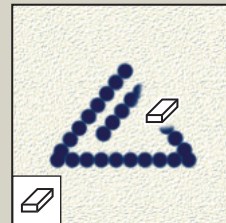

**The Pattern Stamp tool** *paints with a part of an image as a pattern.*

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

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

The Eraser tool *erases pixels and restores parts of an image to a previously saved state.*
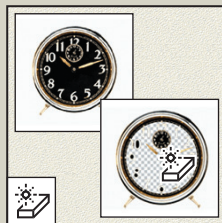
The Magic Eraser tool *erases solid-colored areas to transparency with a single click.*
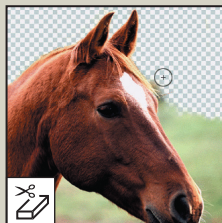
The Background Eraser tool *erases areas to transparency by dragging.*
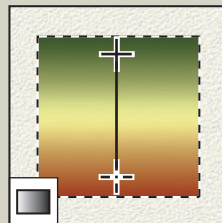
The Gradient tool *creates straight-line, radial, angle, reflected, and diamond blends between colors.*

The Paint Bucket tool *fills similarly colored areas with the foreground color.*

Toolbox overview (continued)

The Blur tool *blurs hard edges in an image.*

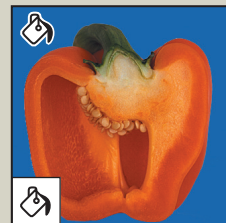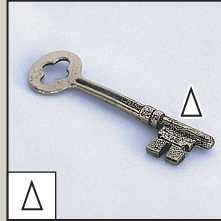**The Sharpen tool** *sharpens soft edges in an image.*
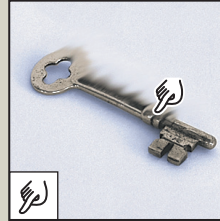
The Smudge tool *smudges data in an image.*
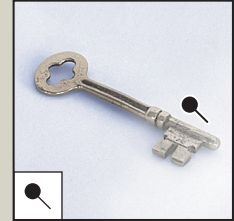
The Dodge tool *lightens areas in an image.*
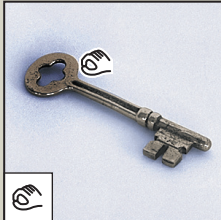
The Burn tool *darkens areas in an image.*
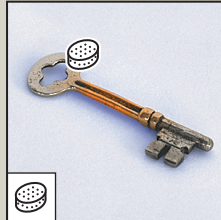
The Sponge tool *changes the color saturation of an area.*
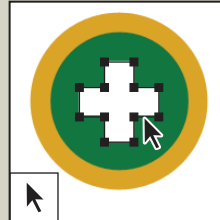
The path selection tools *make shape or segment selections showing anchor points, direction lines, and direction points.*
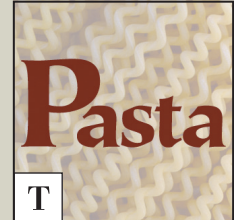
The type tools *create type on an image.*
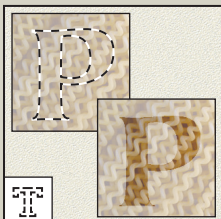
The type mask tools *create a selection in the shape of type.*

The pen tools *draw smooth-edged paths.*

The shape tools and Line tool *draw shapes and lines in a normal layer or shape layer.*
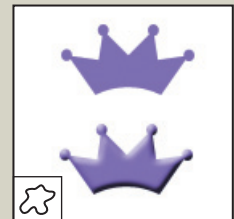
The Custom Shape tool *makes customized shapes selected from a custom shape list.*
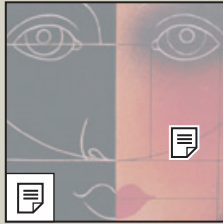
The annotations tools *make notes and audio annotations that can be attached to an image.*
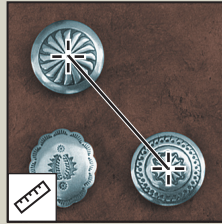
The Ruler tool *measures distances, locations, and angles.*
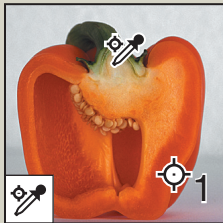
The Color Sampler tool *samples up to four areas of the image.*
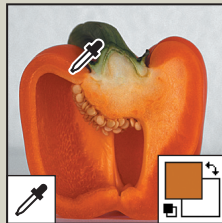
The Eyedropper tool *samples colors in an image.*
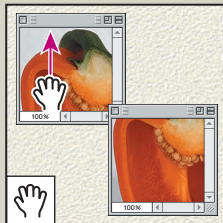
The Hand tool *moves an image within its window.*
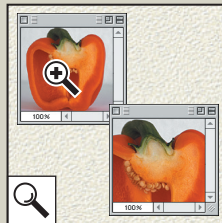
The Zoom tool *magnifies and reduces the view of an image.*

Photoshop CS3 Toolbar

— **Move (V)**

— **Rectangular Marquee (M)**

— **Lasso (L)**

— **Magic Wand (W)**

—**Crop (C)**

—**Slice (K)**

—**Spot Healing Brush (J)**

—**Brush (B)**

—**Clone Stamp (S)**

—**History Brush (Y)**

—**Eraser (E)**

—**Gradient (G)**

—**Blur (R)**

—**Dodge (O)**

—**Pen (P)**

—**Horizontal Type (T)**

—**Path Selection (A)**

—**Rectangle (U)**

—**Notes (N)**

—**Ruler (I)**

—**Hand (H)**

—**Zoom (Z)**

Review

▶ **Review questions**

1 Describe two types of images you can open in Photoshop.

2 How do you open image files using Adobe Bridge?

3 How do you select tools in Photoshop?

4 Describe two ways to change your view of an image.

5 What are two ways to get more information about Photoshop?

▶ **Review answers**

1 You can scan a photograph, transparency, negative, or graphic into the program; capture a digital video image; or import artwork created in a drawing program. You can also import digital photos.

2 Click the Go To Bridge button in the Photoshop tool options bar to jump to Bridge; locate the image file you want to open, and double-click its thumbnail to open it in Photoshop.

3 Click a tool in the toolbox, or press the tool's keyboard shortcut. A selected tool remains active until you select a different tool. To select a hidden tool, use either a keyboard shortcut to toggle through the tools, or hold down the mouse button on the tool in the toolbox to open a pop-up menu of the hidden tools.

4 Choose commands from the View menu to zoom in or out of an image, or to fit it on-screen; or use the zoom tools and click or drag over an image to enlarge or reduce the view. You can also use keyboard shortcuts or the Navigator palette to control the display of an image.

5 The Photoshop Help system includes all the information in the *Adobe Photoshop CS3 User Guide* plus keyboard shortcuts, task-based topics, and illustrations. Photoshop also includes a link to the Adobe Systems Photoshop web page for additional information on services, products, and tips pertaining to Photoshop.

How to scan images

Gather images from magazines, newspapers, books, created artwork, or found objects (leaves, flowers, and so on) to practice scanning and to create graphical content to include in future projects. You will scan the images and objects and produce an individual body of work (electronic files and folders with original materials).

| Plan | → | Capture (Scan) | → | Edit | → | Save |
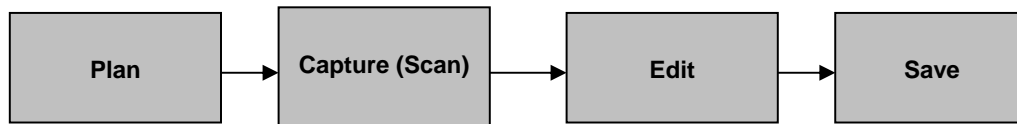
Plan

Ask yourself:

- What message do I want to get across?

- What image or object do I want to use?

- Does this image tell the story? Focus on the message.

- Does it tell the same story as another image?

- How am I going to use this image? Displayed on a monitor? Printed?

- Will I need to modify this image again for another purpose?

- Does the image include any extraneous information?

- Does it have any distracting details?

Capture

Preview scan:

- Turn on the scanner.

- Position the image or object on the surface.

- Start Adobe Photoshop (if it did not start when you turned on the scanner).

- Scan using one of the scanning methods described at the end of this guide.

- Do a preview scan to determine the area you want to capture.

- Set the final size.

- Set the resolution. If you will use the imager in a print layout, you should set resolution to at least 300 ppi.

- Scan again to acquire the image you will actually use.

Edit

Edit image:

• Start Adobe Photoshop.

• You may notice that the image lacks contrast. Apply automatic color correction, such as Autocolor, to correct this problem.

• Add special effects.

• Resize according to your needs. If you will use the image in a print layout, you should keep it at as high a resolution as possible..

Save

Save files:

• Save as a file I can make changes to in the future.

• Save as a web-ready file.

• Save as a print-ready file.

Scanning into Adobe Photoshop CS3

You can scan images into Photoshop by using either of two methods:

• Import with your scanner's TWAIN interface.

• Import with a Photoshop plug-in called WIA.

With either method, you can open and edit the images immediately in Photoshop. Scanned images will especially benefit from the retouching techniques described elsewhere in these guides.

Importing with TWAIN

TWAIN is an interface for acquiring images captured by most scanners. With the TWAIN option, you essentially open the scanner's software from within Photoshop. The TWAIN option lets you specify a wide range of settings, depending on the options provided by your scanner.

You must install the TWAIN device and its software and then restart your computer before you can import images into Photoshop through TWAIN. See your scanner's documentation for more information.

To import with TWAIN, choose File > Import and select your scanner. Your scanner's TWAIN software will open.

Importing with WIA

The WIA plug-in lets you specify where images are stored when you scan them. It's useful when you're scanning a large number of images and do not need to tweak scanning options too precisely.

1. Start Photoshop.

2. Choose File > Import > WIA Support.

   The WIA Support Wizard appears (**Figure 1**).

3. Click Browse to designate a place on your computer to store your scanned images.

4. To make sure the image opens in Photoshop, select the Open Acquired Image(s) In Photoshop option.

   The Create Unique Subfolder option lets you save scanned images directly into a folder whose name is the current date.

5. Click Start.

6. Select the scanner you want to use (**Figure 2**).

   Note: If your scanner does not appear, ensure that the scanner's software and drivers are installed properly and that the scanner is connected.

7. Click OK.

8. On the next page (**Figure 3**), specify the type of image you are scanning:

   - Color pictures

   - Grayscale pictures

   - Black and white pictures or text

9. Select Adjust The Quality Of The Scanned Picture.

   If the scanned images are for print projects, make sure you select a resolution of 300 or greater.

10. Click OK.

11. Click Preview to view the scan in the preview window.

12. Click Scan to scan the image.

    The scanned image opens in Photoshop.

13. Choose File > Save to save the image.

    For maximum flexibility in working with the image later, choose PSD (Photoshop's native format) as a file format.
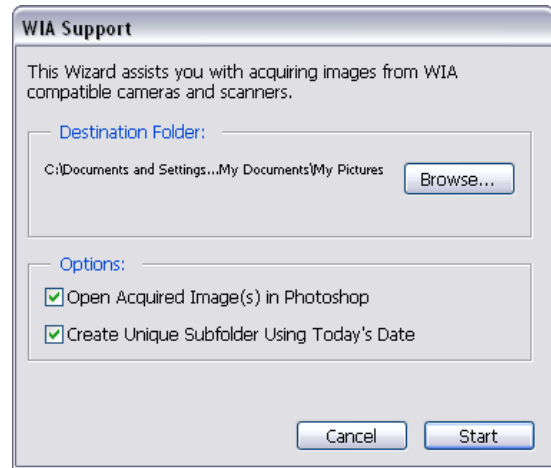
Figure 1 Initial page of WIA Support Wizard
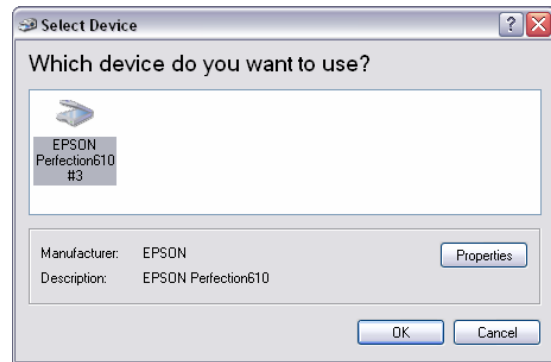
Figure 2 Selecting scanner
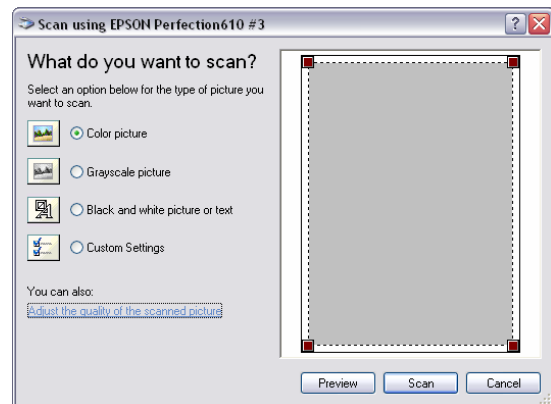
Figure 3 Setting scan options

How to correct color

Often, once you've opened an image in Photoshop, you may want to adjust color quality and light levels. These commands can improve an image's appearance and correct problems that arise during scanning or taking a photograph.

Note: Most of the tasks in this guide apply primarily to photographs.

Using automatic adjustments

Photoshop includes several commands to adjust image quality automatically. In many cases, these will be all you need. The latter part of this guide covers how to make such adjustments manually.

The Auto Color command adjusts the contrast and color of an image by searching the image to identify shadows, midtones, and highlights.

To use Auto Color:

1. Open the image you wish to correct.

2. Choose Image > Adjustments > Auto Color.

    Photoshop applies Auto Color to the image.

    Observe the changes in the photo. It should lighten in some areas and darken in others. Overall, the color's clarity (though not its sharpness) should improve.

3. Choose Image > Adjustments > Shadows/Highlights.

    The Shadow/Highlights dialog box appears (**Figure 1**).

4. Make sure the Preview option is selected.

    The Preview option lets you see changes in the image as you make them.

5. Drag the Shadows and Highlights sliders until you are satisfied with the image.

6. Click OK.
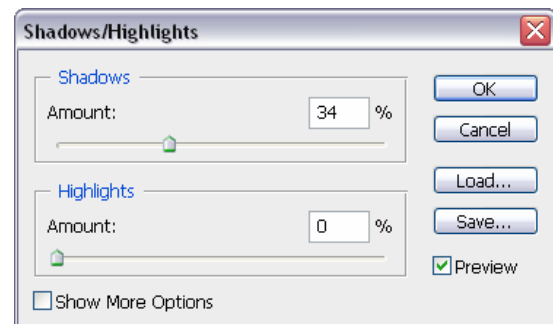
Figure 1 Shadow/Highlight dialog box

Adjusting levels

Every image has a range of tone, from the darkest pixels to the lightest pixels. Photographs tend to look better when their darkest pixels are close to black and their lightest pixels are close to white. This gives the photograph a wide *tonal range*. You can use the Levels command in Photoshop to adjust the darkest and lightest pixels in your picture. You can also adjust the midtones—the gray or gamma tones of your picture that are in the middle of the brightness range.

To use the Levels command:

1. Make sure nothing in the photo is selected. (You want to apply changes to the entire image.)

2. Choose Image > Adjustments > Levels.

    The Levels dialog box appears.

3. Make sure the Preview option is selected so you can see changes in the image as you make them.

4. Drag the left (black) triangle to the point where the darkest colors begin.

    Observe that the darker parts of the image become darker.

5. Drag the right (white) triangle to the point where the lightest colors begin.

    Observe that the lighter parts of the image become lighter.

6. Drag the middle (gray) triangle slightly to the left.

    Observe that the midtones lighten.

7. When the image looks right to you, click OK to apply changes and close the Levels dialog box.
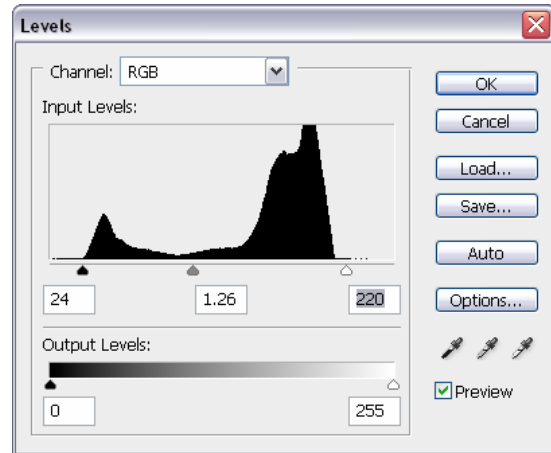
Figure 2: Levels dialog box

Adjusting lightness and darkness with the Dodge and Burn tools

The commands in the previous section change lightness and darkness in the image as a whole. Sometimes you may need to make particular areas of an image lighter or darker. For example, you might want to lighten the shadows on someone's face or brighten the colors in an area of the image without much light.

You can use the Dodge and Burn tools to change the lightness and darkness of particular areas of an image. Dodging and burning may seem like odd names, but like many other features in Photoshop, they are named after film-development processes. Dodging allows more light to show through the negative, making the area lighter, while *burning* allows less light to show, making the area darker.

Both tools are available in the toolbar above the Pen tool. The Dodge tool appears by default. To access the Burn tool, click the Dodge tool and hold down the mouse button (**Figure 3**).

To use the Dodge tool:

1. Click the Dodge tool in the toolbar (**Figure 3**).

   The cursor changes to a brush. Usually, the brush appears as a circle.

2. You can change the size or shape of the brush in the Options bar (**Figure 4**).

   Size the brush in proportion to the area you want to lighten.

3. Drag the brush across the photograph in the areas you want to lighten.

   Note: Dodging and burning require some practice. You may want to keep the History panel open so you can undo your actions.
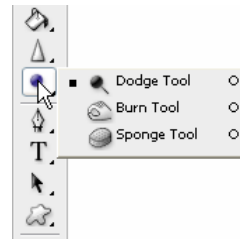
Figure 3 Dodge and Burn tools in the toolbar
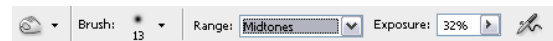
Figure 4 Brush options

To use the Burn tool:

1. Click the Dodge tool in the toolbar and hold down the mouse button to select the Burn tool (**Figure 3**).

   The cursor changes to a brush. Usually, the brush appears as a circle.

2. You can change the size or shape of the brush in the Options bar (**Figure 4**).

   Size the brush in proportion to the area you want to darken.

3. Drag the brush across the photograph in the areas you want to darken.

   Note: Dodging and burning require some practice. You may want to keep the History panel open so you can undo your actions.

Applying the Unsharp Mask filter

After retouching a photo, many Photoshop professionals apply a filter called the Unsharp Mask filter. When you apply color corrections, you can sometimes produce subtle blurriness in the image. The Unsharp Mask filter makes the image appear sharper by adjusting the contrast of edge detail.

Note: The Unsharp Mask filter is just one of Photoshop's many powerful filters. Many of these apply an artistic look to images. You can experiment with these by selecting different options in the Filter menu.

1.   Make sure nothing in the photo is selected. (You want to apply changes to the entire image.)

2.   Choose Filter > Sharpen > Unsharp Mask.

The Unsharp Mask dialog box appears (**Figure 5**).

3.   Make sure the Preview option is selected so you can see changes in the image as you make them.

4.   Drag the Amount slider until your image is as sharp as you want it.

5.   Drag the Radius slider to change its setting.

The Radius slider determines the number of pixels surrounding the *edge pixels* that affect sharpening. *Edge pixels* are pixels located where two different colors meet. The default setting is 1 pixel. Higher-resolution photos may benefit from a higher setting.

6.   Set the Threshold setting to 0 pixels.

Threshold determines how different pixels need to be before they are considered edge pixels. A setting of 0 sharpens all pixels in the image. Generally, you will want to keep Threshold set between 0 and 20 to avoid introducing unwanted "noise" into the image.

7.   When the image looks right to you, click OK to apply changes and close the Unsharp Mask dialog box.
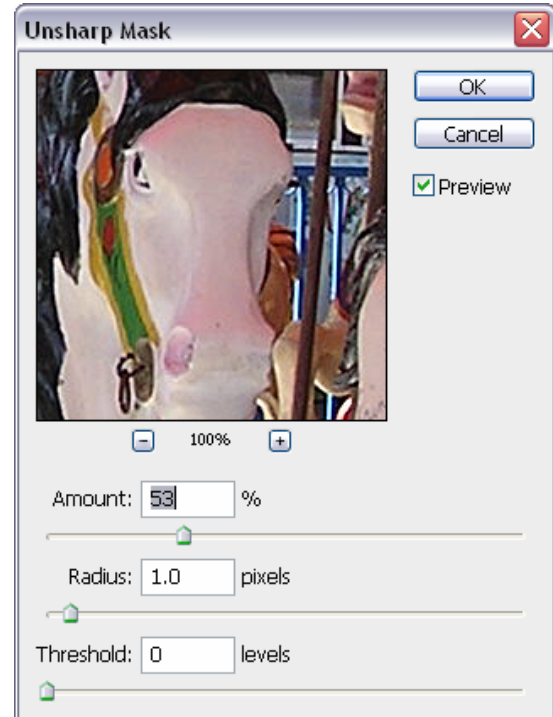
Figure 5 Unsharp Mask dialog box

How to retouch photos

Other than correcting color, one of the most common tasks you will perform in Adobe Photoshop is retouching photos to correct imperfections, edit out undesired parts of the photo, and correct problems that result from the photo-taking process. This guide covers several ways to retouch photos, including use of the Clone Stamp tool, the Spot Healing Brush tool, and the Red Eye tool.

Using the History palette

Because retouching can require trial and error, you should know how to use the History palette to undo steps.

Like most computer users, you're probably aware of the Undo command available in many applications. This command lets you undo the effects of whatever command you've just applied.

Photoshop takes the Undo command several steps further with the History palette. The History palette keeps track of the last 20 commands you've applied to an image, allowing you to revert to any one of these. When you execute a command, such as transforming an image or adding text, these are added to the History palette. The commands appear in the list in the order in which you performed them. Each command is listed with the name of the tool or command you used to change the image.

You can also take a "snapshot" of a particular set of commands, allowing you to revert to this snapshot later.

Note: Although the History palette is great, it does consume memory (RAM). Layers also consume memory, so if you're working with a complex, multilayered image, you may want to reduce the number of History commands saved. You can do so by choosing Edit > Preferences > Performance.

To use the History palette:

1. Open an image in Photoshop.

2. Execute several commands—such as selecting a part of the image, applying a filter, and adding a layer.

   The point is to add some commands to the History palette (**Figure 1**).

3. Click one of the earlier commands, such as Paste (**Figure 2**).

   Observe that the image reverts to its appearance at the time this command was executed. Any commands executed afterward are temporarily discarded and appear dimmed. In **Figure 2**, for example, the Liquify filter is dimmed and its effects no longer appear in the image.

   At this point, the Liquify command is still available in the palette (if you select it). However, if you execute another command, the Liquify command will be permanently discarded.

4. To delete a command, select it and then click the Delete icon (**Figure 1**).

   The image permanently reverts to the command prior to the deleted command.

Delete icon
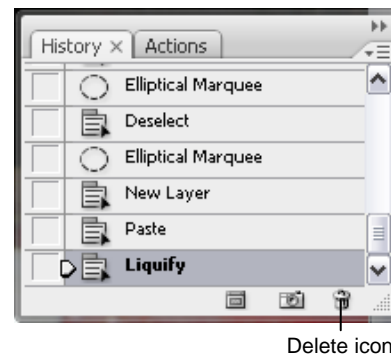
Figure 1 The History palette
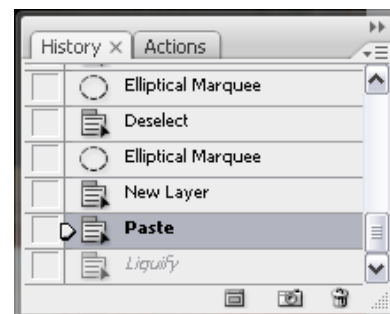
Figure 2 History palette with earlier command selected

Taking a snapshot

You can use the Snapshot feature to capture the image as it appears at any point in the list of History commands. Once you're satisfied with an image, it's a good idea to take a snapshot.

To take a snapshot:

1. Click the History command you want to capture.

2. Click the Snapshot icon.

3. Scroll to the top of the History palette to view the snapshot (**Figure 3**).

4. To revert to the snapshot, click it as you would any other History command. You can compare different snapshots by clicking on them.
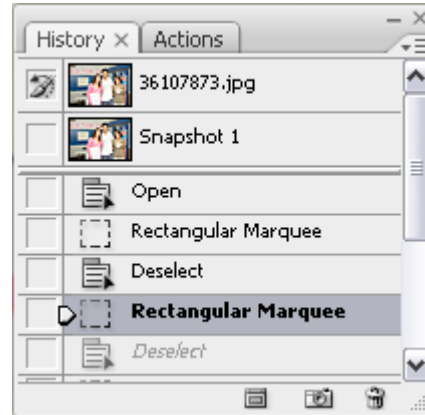
Figure 3 Snapshots in the History palette

Using the Clone Stamp tool

You can use the Clone Stamp tool to remove minor features from a photo. It is most effective with small, distinct features.

To use the Clone Stamp tool:

1. Identify the object you want to remove from an image.

  For example, you can remove the marks from the wall pictured in **Figure 4**.

Area to be retouched

Figure 4 Initial image to be retouched

2. Use the Zoom tool to magnify the object (**Figure 5**).

3. Identify an area of the background that will blend with the problem area. For example, in Figure 5, you can pick the buoy in the water. The area to be cloned should be consistent; the Clone Stamp tool works best with patterned or single-color areas.

4. Select the Clone Stamp tool in the toolbar.

5. Hold down the Alt key and click the area to be cloned (**Figure 6**).

6. Release the Alt key and move the Clone Stamp tool over the object you want to remove (**Figure 7**).
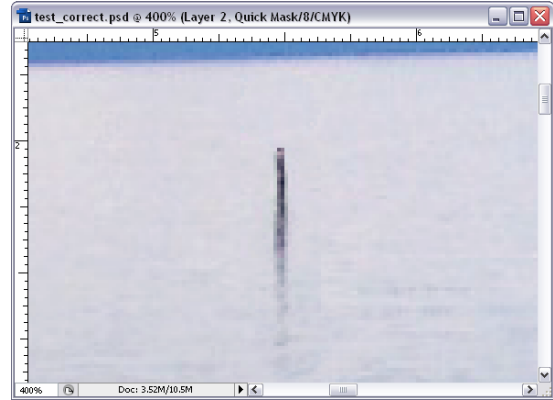
Figure 5 Object magnified
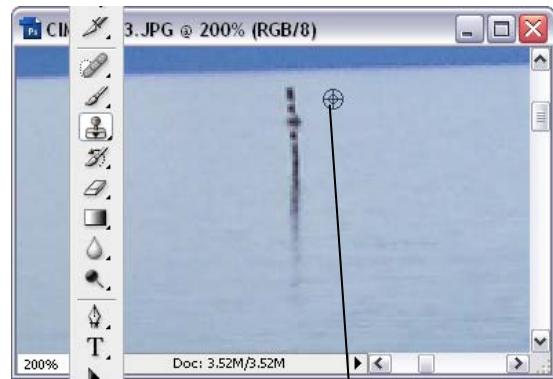
Area to be cloned

Figure 6 Clone area selected
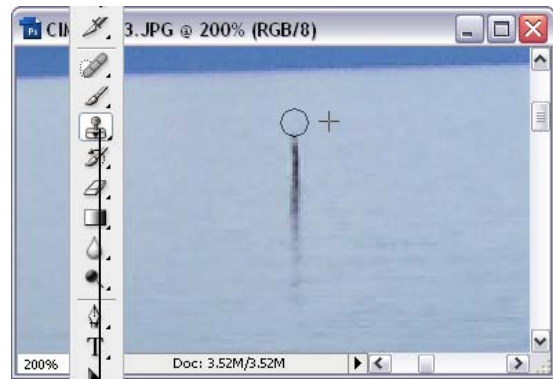
Clone Stamp tool

Figure 7 Cloning the area

7. Continue moving the Clone Stamp tool over the object until it disappears (**Figure 8**).

8. When you finish with the Clone Stamp tool, you can switch to another tool by clicking the new tool in the toolbar.
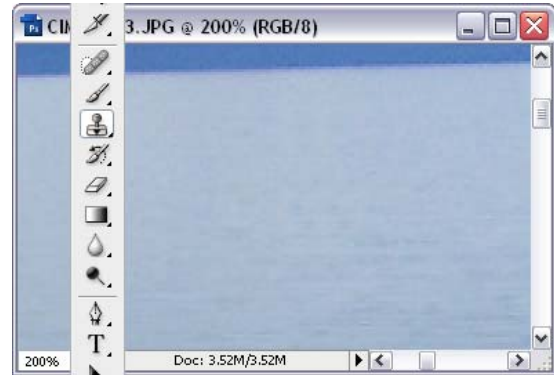
Figure 8 Cloning complete

Using the Spot Healing Brush tool

The Spot Healing Brush tool makes touchups even easier for small areas. The Spot Healing Brush tool automatically samples pixels from the surrounding area and applies these to the selected area. The Spot Healing Brush tool makes changes quickly to a small area. You do not need to select a sample area.

To use the Spot Healing Brush tool:

1. Click the Spot Healing Brush tool in the toolbar. The pointer changes to a brush. Usually the brush appears as a circle.

2. You can change the size or shape of the brush in the Options bar (**Figure 9**). The brush should be large enough to cover the entire spot, with some room around the edges.

3. Position the Spot Healing Brush tool over the area you want to correct (**Figure 10**.

4. Click to apply the correction (**Figure 11**).
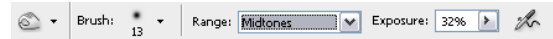
Figure 9 Brush options

Spot Healing Brush tool

Figure 10 Spot Healing brush positioned over a blemish

Figure 11 Spot Healing brush applied

Using the Red Eye tool

When you take photos with a flash, red eye can often result. You can quickly correct red eye with the Red Eye tool.

To use the Red Eye tool:

1. Click the Red Eye tool in the toolbar.

   The pointer changes to a cross.

2. Position the Red Eye tool over the pupil you want to correct (**Figure 12**).

3. Click to apply the correction (**Figure 13**).

Figure 12 Red Eye tool positioned over a pupil

Figure 13 Red Eye tool applied

How to generate different file formats

Different mediums—print and web—require different file formats. This guide describes how to generate appropriate file formats for both the web and print by using Adobe Photoshop CS3.

When generating any image in Photoshop, it's important to remember that when you save an image, Photoshop saves the image as it appears onscreen. That is, if you have hidden some layers, they will not appear in the saved image.

Saving files for the web

For web pages, you will generally want to save photos in JPEG format. JPEG is used more than any other format for photos on web pages. (Other web formats include GIF—usually used for images with limited colors—and PNG—a less often used, but flexible format.)

JPEG is popular because it *compresses* well—that is, you can make files smaller without sacrificing quality. However, if you compress too much, file quality will suffer; the trick is to find the right balance between image quality and compression.

Photoshop makes this process easier through a command called Save For Web & Devices. You can use Save For Web & Devices to preview JPEGs with different compression settings before you save them.

Note: When you save a file for the web, it appears at its full pixel size. The document size does not affect how the image appears in a browser. For example, an image whose pixel size is 640 x 480 displays at that size in a browser. The document size affects only how the image prints.

To save a file as a JPEG:

1. Start Photoshop and open an image.

2. Choose File > Save For Web & Devices.

   The Save For Web & Devices dialog box appears (**Figure 1**).

3. Click the 2-Up tab to display both the original and a preview of the file to be saved.
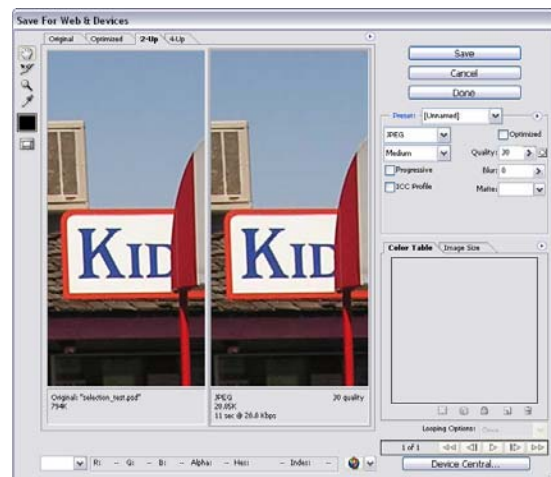
Figure 1 Save For Web & Devices dialog box

4. In the Optimized File Format pop-up menu, choose JPEG (**Figure 2**).

5. Adjust quality by using either the Compression Quality pop-up menu or the Quality slider (**Figure 2**).

    As you change settings, observe how the photo to the right appears.

6. When you are satisfied, click Save.

    Clicking Save automatically saves a copy of the image as a JPEG with the settings you indicated. The original image is left unchanged. For working purposes, you may want to incorporate some of the settings into the filename, such as "banner_high.jpg" for an image saved as a high-quality JPEG.

    After you save, the original file stays open in Photoshop.

Note: If the original image is also a JPEG (many digital cameras use JPEG as a format), you need to save the copy in a different location from the original (or give it a different name) to avoid confusion.

Optimized File pop-up menu   Compression Quality pop-up menu   Quality slider
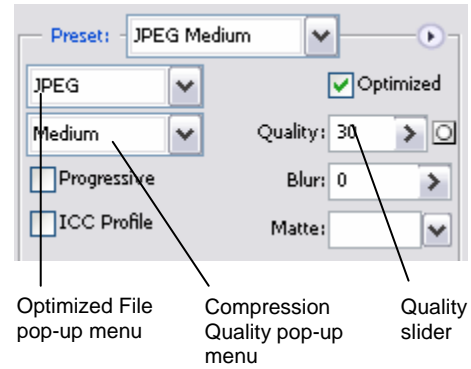
Figure 2 Save for web settings

Generating files for print

Generating files for print use is different from saving images for the web: you use an uncompressed file format and you must be sure the file is at a high enough resolution (preferably 300 ppi) before you save it. It is always good to import the image into Photoshop at the highest possible resolution to give more flexibility in the kinds of images you can generate.

Note: You can print to a printer directly from any computer running Photoshop. The options described here are for sending an image to a printer, to another computer to be printed, or to another application.

Generating files for print involves three steps:

1. Setting the image resolution to 300 ppi.

2. Converting the image to CMYK (if the image is going to an offset print vendor).

3. Generating a print-friendly (compression-free or lossless) format, such as TIFF.

Setting resolution to 300 ppi

1. Open an image in Photoshop.

2. Choose Image > Image Size.

   The Image Size dialog box appears (**Figure 3**).

3. Make sure the Resample Image option is *not* selected.

   When you leave this option unselected, you ensure that you're only changing the image's resolution, not removing or adding pixels.

4. Enter **300** in the Resolution text box.

   Make sure pixels/inch is selected as the units for Resolution.

5. Click OK.
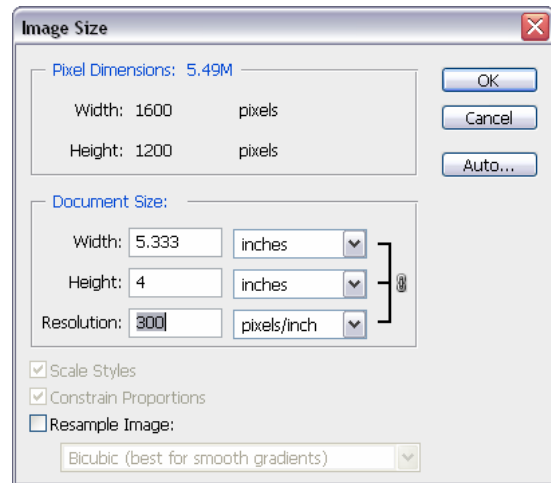
Figure 3 Image Size dialog box

To preview an image at the size it will appear when printed, choose View > Print Size (you may need to first select View > Show All Menu Items).

Converting images to CMYK

Computers use combinations of red, green, and blue (RGB) to display photos. Offset printing presses print full-color photos, using cyan (blue), magenta (red), yellow, and black. This is known as CMYK printing. If you are printing to an inkjet printer, you can leave the image in RGB mode, but if you are sending the image to an offset print vendor, you need to convert the image to CMYK.

To view how the image will appear in CMYK, choose View > Proof Setup > Working CMYK. (For some images, you may not observe any difference at all.) This preview is called a *soft proof*.

Note: Soft proofs are approximations. What you see onscreen depends on the quality and settings of your monitor as well as the lighting conditions of your work environment. You may observe different results when you actually print. Nevertheless, soft proofs can be useful.

Photoshop also lets you preview how the image will appear on a range of different printers, including most Epson models and offset printing. To view these, choose View > Proof Setup > Custom.

To convert the image to CMYK:

1. Save a copy of the image.

2. Choose Image > Mode > CMYK Color.

3. If the image has layers, Photoshop asks whether you wish to flatten these. Click Yes.

   (Because you saved a copy of the file, you can open the saved copy to recover the layers.)

Generating TIFFs

After you convert the image to CMYK and make sure it is at the correct resolution, you can save it in a print-friendly format (a format with no compression, known as a lossless format). In this exercise, you will choose the TIFF format.

Note: Although TIFF is the most common lossless image format, you can also use EPS or an Adobe PDF.

1. Choose File > Save As.

   The Save As dialog box appears (**Figure 4**).

2. In the Format box, choose TIFF (*.TIF, *.TIFF).

3. Click Save.

   The TIFF Options dialog box appears (**Figure 5**).

4. Because the image is going to a printer, you do not need to compress it. Leave Compression set to None. Leave Pixel Order set to Interleaved.

   Note: In practice, TIFF files are seldom compressed.

5. Set Byte Order to your operating system (Windows or Mac OS).

6. Because the image is going to a printer, you also don't need to save the layers. Make sure Discard Layers And Save A Copy is selected. This option flattens the layers in the image.

7. Click OK.
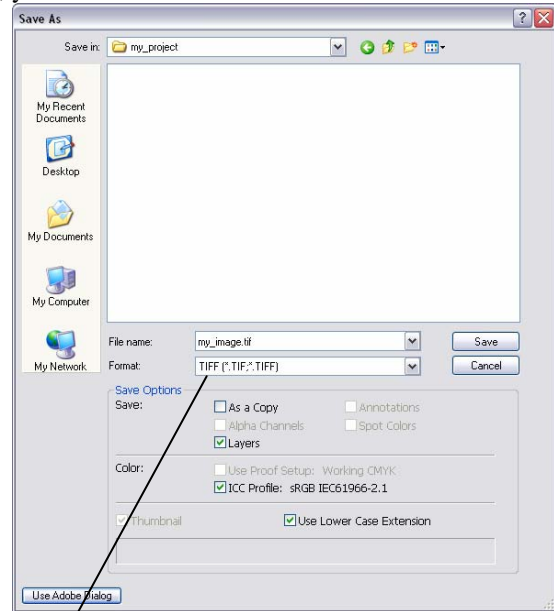
Format pop-up menu

Figure 4 Save As dialog box (Windows)
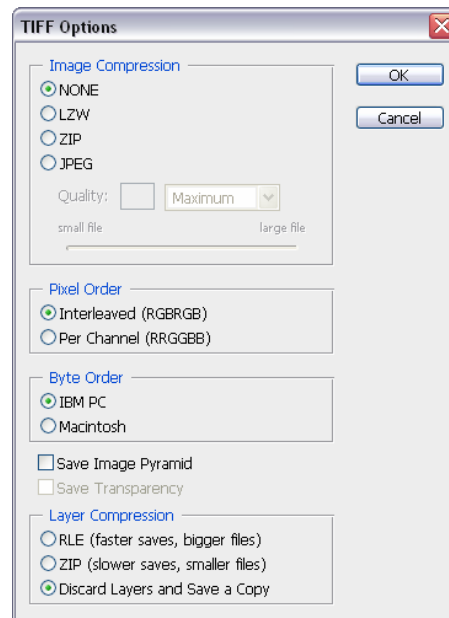
Figure 5 TIFF Options dialog box

How to resize and crop images

You will frequently want to resize and crop an image after opening it in Photoshop from a digital camera or scanner. *Cropping* means cutting some parts of the image away so only the parts you want remain.

Backing up your original

When working in Photoshop, it is generally best to leave your image at as high a resolution as possible to allow for greater flexibility when generating images.

Before making any changes to an image, you should always save the image with a new filename. You will have the most flexibility if you save it as a PSD—Photoshop's native format. You can generate TIFFs (for print) and JPEGs (for the web) from a single PSD file. For example, PSD files preserve layers, so the layers are available when you reopen the file.

Resizing images

The pixel dimensions of a bitmap image measure the number of pixels along the image's width and height. *Resolution* is the level of detail in a bitmap image and is measured in pixels per inch (ppi) or sometimes dots per inch (dpi). Images with higher resolutions produce better printed image quality, but images with higher resolutions also have bigger file sizes. For this reason, most images formatted for the web do not work well for print and vice versa.

* For images to print well, they generally should have a resolution of 300 ppi.

* For most web pages, you can safely save images at 72 ppi. Because most monitors do not display resolutions higher than this, you can reduce file size by reducing resolution.

Note: Monitor technology and Internet connection speeds are continually evolving. However, the 72-ppi standard continues to be widely used, and for the most part, you can't go wrong with it.

Changing document size

1. Open an image in Photoshop.

2. Save the image with a new name.

   This step preserves the original image in case you want to revert to it. You should always make a copy of the original before making changes.

   First, look at how the image will appear when printed (that's what you will be changing when you resize here.)

3. Choose View > Print Size.

   The image's dimensions may exceed the screen size, as they would with an image of 28 by 21 inches (the approximate dimensions of the image in **Figure 1**).
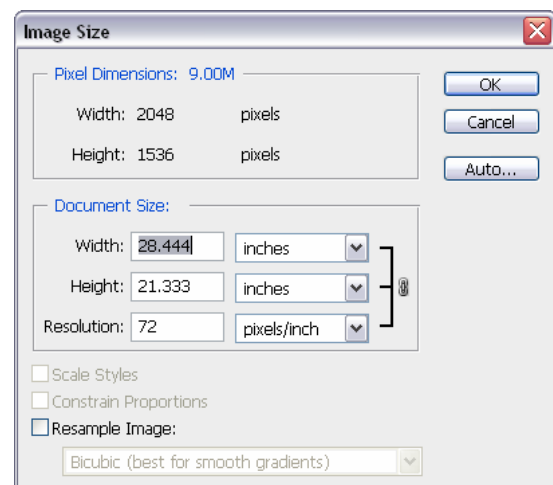

Figure 1 Image Size dialog box

4. Choose Image > Image Size.

The Image Size dialog box opens (**Figure 1**).

Notice that the dialog box lists two major categories of information about the size of the image.

- *Document Size* refers to how the document appears when printed. Document size is also a starting point for how the document will appear in another document, such as an InDesign file. In later projects, you will place Photoshop images in InDesign files.

- *Pixel Dimensions* refers to the actual number of pixels contained in the image. Pixel dimensions also represent the amount of *data* in the image. Unless you select the Resample Image option, pixel dimensions will remain the same as you resize and change resolutions.

5. Make sure the Resample Image option is not selected.

The Resample option changes the amount of information in the image as you resize. For now, it's best to leave this option deselected.

Note: You can use resampling to make enlargements. However, because resampling can only estimate pixels, it is best to take the picture with a larger resolution in the first place.

6. Change the values for Width, Height, or Resolution.

Observe that the other two numbers change accordingly. For example, in **Figure 2** the resolution is 300 ppi. The height and width of the document are reduced by about 75% because more pixels are used per inch.

7. Click OK to apply changes and close the dialog box.

8. Choose View > Print Size.

The image appears resized—approximately 6.8 x 5 inches for the example used in **Figure 2**.
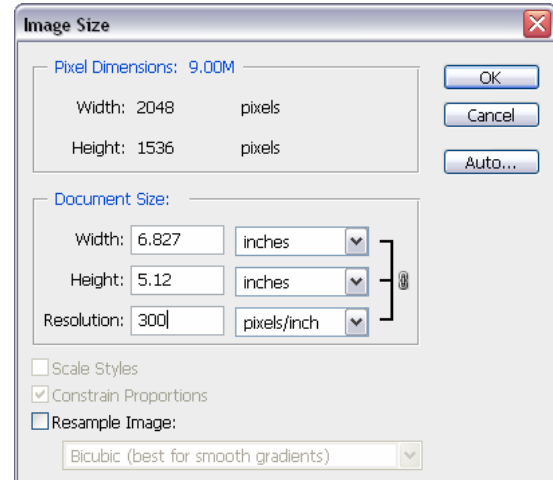

Figure 2 Image Size dialog box with resolution changed to 300 ppi

Reducing an image's size (pixel dimensions)

Although you will often want to keep pixel information, sometimes you need to reduce the total (pixel) size of an image. This step removes pixels and reduces file size. You will usually do this when preparing the image for the web or other electronic medium; for print, you will generally want to simply change the document's size. (Of course, you may want to reduce file size for other reasons, such as to preserve hard disk space or to speed up image rendering.)

To reduce an image's pixel dimensions:

1. Choose Image > Image Size.

   The Image Size dialog box opens (**Figure 1**).

   In the previous steps you attended only to the document size. This time you will ignore that area and focus on the pixel dimensions.

2. Check Resample Image. Observe that the Pixel Dimensions menus and the Constrain Proportions check box become active.

3. To maintain the image's current height/width ratio, select Constrain Proportions.

   This option automatically changes the width as you change the height, and vice versa. For example, if you start with an image of 2000-pixel width and 1000-pixel height (a 2:1 width/height ratio) and change the width to 1000 pixels, the height automatically changes to 500 pixels when Constrain Proportions is checked. Generally, selecting this option is a good idea.

   Note: You can ignore Scale Styles for now. This option comes into play only when you have styles applied to layers. The option is dimmed in **Figure 3** because the image being resized had no styles applied to layers.

4. Choose Bicubic Sharper from the Resample Image list. This option is best for reductions.

5. In the Pixel Dimensions Width box, enter the desired width in pixels.

   You can also choose a percentage by changing Pixels to Percent beside the Width box (**Figure 3**).

6. Click OK to change the image's pixel dimensions.

   Note: After the size reduction, you should apply the Unsharp Mask filter to the image by choosing Filter > Sharpen > Unsharp Mask. This will clear up any blurriness that results from the reduction.
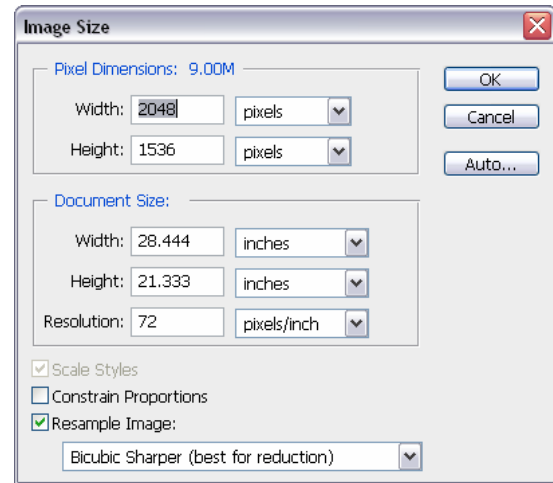

Figure 3 Image Size dialog box with Resample Image selected

Cropping images

You'll often take pictures that are larger than you need. (Taking pictures that are larger than you need, at as high a resolution as possible, gives you flexibility in selecting parts of the image.) When you crop an image, you select the part of it that you wish to show. You can also straighten the image as you crop it.

You can crop an image in one of two ways:

- You can apply the Crop command after selecting the image with one of the selection tools.

- You can use the Crop tool. (This guide covers the Crop tool.)

To crop an image by using the Crop tool:

1. Click the Crop tool in the toolbar. The pointer changes to the Crop tool.

2. You can set the size of the area to be cropped in the Options toolbar (**Figure 4**). To size the area manually, make sure all fields in the Options toolbar are empty.

Figure 4 Crop tool options

3. Drag on the image to select a crop area (**Figure 5**).

4. Move the pointer over the corner of the area.

    The pointer changes to a rotation arrow. You can rotate the crop area slightly to correct any crookedness.

    In **Figure 5**, the crop area was rotated slightly clockwise to align the horizon with the top of the image.

5. Once you are satisfied with the crop area, press Enter (Windows) or Return (Mac OS).

    The image is cut to the selected area (**Figure 6**).

Figure 5 Crop area selected

Figure 6 Crop applied

How to use selection tools

When using Photoshop CS3, you will frequently need to select parts of an image. Then you can make changes to only those parts of the image you have selected. You can also cut and paste a selection to a new background. A good idea is to practice using the selection tools. They can be tricky, but learning them is well worth the effort. The better you are at using them, the more flexibility you have with changing parts of images.

This guide covers the basics of using three different types of selection tools:

- The *Magic Wand* tool lets you select parts of an image that have similar colors.

- The *Lasso* tools let you define a selection area by hand.

- The *Marquee* tools let you select a geometrically shaped area, such as a rectangle or circle.

Using the Magic Wand

You can use the Magic Wand tool to select an area of consistent color (for example, a green flag). The Magic Wand automatically selects all adjoining pixels with the same color.

To use the Magic Wand tool:

1. Click the Magic Wand tool in the toolbar.

    The pointer looks like a magic wand.

2. In your image, click an area of consistent color. In **Figure 1**, the table is about to be clicked.

    After you click, the selected area is indicated by a dotted line (**Figure 2**).

    Observe that the initial selection captures only part of the area because of subtle color variations in the photo. To select the whole area, you need to add to the selection. You can do so by Shift-clicking other areas.
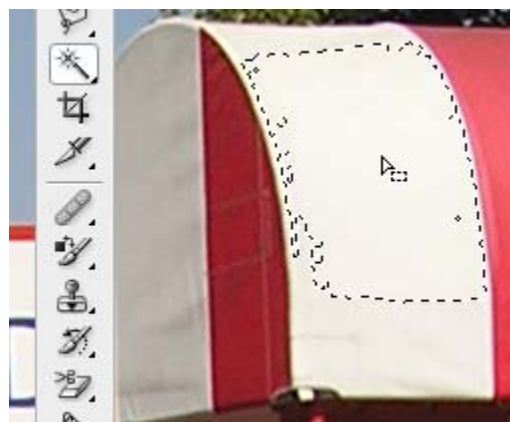

Figure 1 The Magic Wand tool

Figure 2 Initial selection with the Magic Wand

3. Hold down the Shift key.

The pointer changes to a magic wand with a plus (+) symbol. This indicates that clicking will add to the selected area. While holding down the Shift key, continue clicking until you have selected the entire area (**Figure 3**).

4. Once you have selected the entire area, you can make changes to it, such as applying the Patchwork filter (Filter > Texture > Patchwork) (**Figure 4**).

Figure 3 Adding areas with the Magic Wand

Figure 4 Filter applied to selection

Using the Marquee tools

The Marquee selection tools select areas with predefined shapes:

- The Rectangular Marquee selects a rectangular area (or a square area when used with the Shift key).

- The Elliptical Marquee selects an elliptical area (or a circular area when used with the Shift key).

- The Single Row or Single Column Marquee selects a 1-pixel-wide row or column.

Using the Rectangular Marquee tool

1. Click the Rectangular Marquee tool in the toolbar.

    The pointer changes to a cross (**Figure 5**).

2. Click and drag the pointer across the area you wish to select.

3. When you have completed your selection, release the mouse.

    The area remains selected (**Figure 6**).

    Note: To adjust the location of the selection slightly, press the arrow keys.

    Any changes you make now apply only to the selection. For example, you can choose Image > Adjustments > Photo Filter to apply an orange tinge to the selected area (**Figure 7**). You can also apply any of the other filters to the selection.
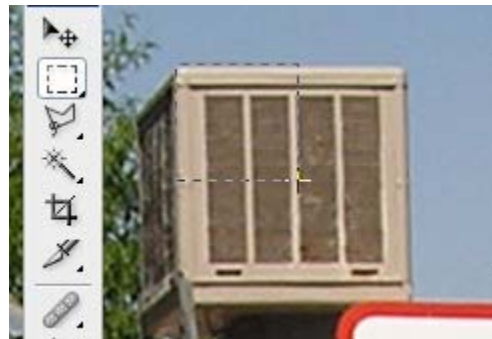

Figure 5 Rectangular Marquee tool selected

Figure 6 Selection complete

Figure 7 Photo Filter applied to selection

Smoothing the edges of selections

Often you can improve results by softening the edges of selections, especially if you plan to copy the selection to a new background. You can use two options to smooth edges: *anti-aliasing* and *feathering*. Both options are available through the Options bar when you choose selection tools.

Anti-aliasing smoothes the edges of a selection by softening the color transition between edge pixels and background pixels. Because only the edge pixels change, no detail is lost. The effect of anti-aliasing is slight, but it can be effective in many situations. You can apply anti-aliasing to selections made by the Lasso tool, the Polygonal Lasso tool, the Magnetic Lasso tool, the Elliptical Marquee tool, and the Magic Wand tool.

Note: You must select anti-aliasing *before* using the tool. After you make a selection, you cannot add anti-aliasing.

Feathering blurs a selection's edges by adding a transition boundary between the selection and its surrounding pixels. You can set the width of this boundary in the Options bar. In many cases, a boundary of 3–5 pixels is sufficient. (This blurring can cause some loss of detail at the edge of the selection.) The effect of feathering is more dramatic than anti-aliasing, but it may be necessary to achieve the results you want when you move objects to a markedly different background. You can define feathering for the Lasso tool, the Polygonal Lasso tool, or the Magnetic Lasso tool, or the Marquee tools as you use the tool, or you can add feathering to an existing selection.

Note: You will not see the effects of feathering until you move, cut, copy, or fill the selection.

Using the Lasso tools

Photoshop has three Lasso tools, so named because they let you enclose a selection in a flexible shape—just like a rope.

- The Lasso selection tool is the most difficult to use but the most precise of the Photoshop selection tools. Using it, you select areas by hand.

- The Polygonal Lasso is slightly easier to use, allowing you to select areas by using straight lines and selection points.

- The Magnetic Lasso tool automatically snaps to the borders of defined areas in the image. It is best used with objects that contrast sharply with their background.

This guide explains how to use the Polygonal Lasso. Using the Lasso is similar, but the selection is entirely freehand. Experiment with all three lassos after you are comfortable with the Polygonal Lasso.

Using the Polygonal Lasso to copy an image to a new background

1. Click and hold the Lasso in the toolbar and select the Polygonal Lasso tool from the menu (**Figure 8**).

   The pointer changes to the Polygonal Lasso.

   Note: Once you select the Polygonal lasso, it appears by default when you open Photoshop.

Figure 8 The Polygonal Lasso tool in the toolbar

2. In the Options toolbar, make sure Add To Selection is selected and set Feather to 3 px (**Figure 9**).

   When you increase Feather slightly, you ensure that the edges of the selection will be soft and the object will blend better into a new background.

Figure 9 Polygonal Lasso options

3. Click the border of the object you wish to select. (It may help to increase the object's magnification.)

4. Next, move the pointer a short distance away along the object's border and click again (**Figure 10**). As you do so, you form a connected segment with endpoints.
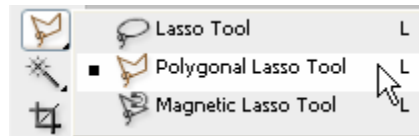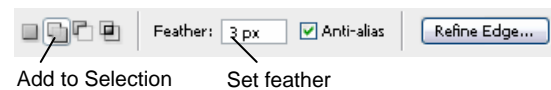

Figure 10 Clicking to create selection endpoints

5. Continue creating small segments until you enclose the entire object.

   Even if the object has round edges, you can generally select these if you make your segments small enough. When you move the pointer over your original starting point, a closed circle appears next to the Polygon lasso pointer (**Figure 11**).

6. Click to close the selection (**Figure 12**).

7. Open the Layers palette. Click the Create A New Layer button to add a new layer (**Figure 13**).

8. With the object's layer (the original layer) selected, choose Edit > Cut.

9. Select the new layer and choose Edit > Paste to paste the selection into the new layer.

10. Select the original layer (the background layer) and choose Select > All.

11. Press Delete to remove the original background.

12. With the background layer still selected, click the Paint Bucket tool.

Closed circle
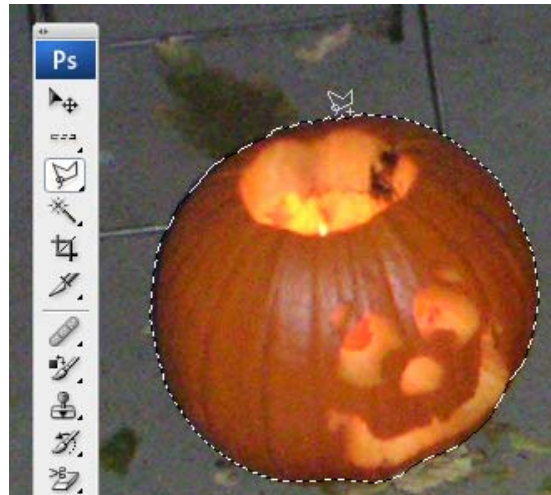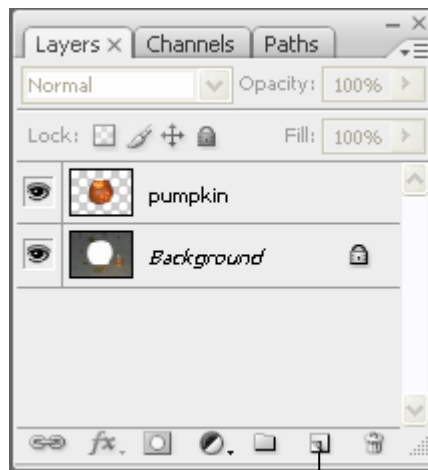
Figure 11 Closing the loop

Figure 12 Selection complete

Create A New Layer button

Figure 13 Layers palette

13. Click in the background layer to add a new background color (**Figure 14**).

Observe that the object's layers blend into the background. This is because of the feathering you added to the selection.

Figure 14 Object with a new background

Principles and rules of copyright

Copyright is protection for intellectual property.

Intellectual property consists of anything an individual has written or created. It might be music, text, pictures, photographs, sounds, and so on.

Fair use doctrine is part of the copyright laws. It states that limited portions of material may be used without written permission for certain purposes, such as reporting the news or schoolwork. It doesn't define "limited," though, so be sure you don't overuse material. The fair use doctrine requires you to give credit to the author or creator of any material you use.

Derivative works are copyrighted materials that have been altered or changed. Such material is protected by copyright laws. If you alter a copyrighted photograph by using computer software, that photograph is still protected, and you may not use it without written permission.

Academic standards for copyrighted material are higher than others. Because scholars and researchers study so many different ideas and are responsible for sharing those ideas with the world, they are required to satisfy higher standards of honesty. They must give credit not only when quoting someone else's exact words but also for the ideas those words represent. As a researcher, you cannot paraphrase what someone else says and not give credit for it.

Bibliographies are lists of sources that have been used in research. When using the Internet for research or for design work, you need to give credit where it is due. Often, people who use graphics and images from the Internet for publication on their own web page create a list of image credits rather than a bibliography.

Rules of Copyright

1. You cannot use copyrighted material without written permission from the creator of the material (or from its copyright holder).

2. Material can be protected even if it does not display the © symbol. Even if no mention is made regarding copyright, you must assume that all material from another source is protected.

3. Penalties for violating copyright laws can range from mild to severe. If you break the copyright law, you might simply receive an e-mail message from the author asking you to stop using the material. If you publish the material on a website, the webmaster might shut down your site. Or you could be sued by the author or prosecuted by federal authorities.

4. To make sure you are not violating any copyright law, it is important that you do the following:

   • Write or send e-mail to the author or creator and ask permission to use the material. Do not use it until you are given permission.

   • Follow the directions on the site regarding use of material. You might be asked to create a link on your page or to notify the author or creator.

   • Most important: *Do not* use any material if you don't have written permission.

5. To copyright your own material, the copyright notice for visually perceptible material must contain one or more of the following elements:

- The symbol © (the letter C in a circle), or the word "Copyright," or the abbreviation "Copr."; and

- The year of first publication

- The name of the owner of copyright

  o Example: © 2005 Adobe Systems, Inc.

- Phonorecords and sound recordings use the letter P in a circle, and

- The copyright notice should be affixed in such a way as to "give reasonable notice of the claim of copyright."

For more information on copyrights, visit the United States Copyright Office on the web at www.copyright.gov.

How to use the Acrobat 8 interface and basic navigation

The Acrobat 8 Professional work area **(Figure 1)** includes a *document pane* that displays Adobe PDF documents and a *navigation pane* (on the left) that helps you browse through an open PDF document. The *toolbars* at the top of the work area are grouped according to feature type and provide the controls for working with PDF documents. You can also open a *How To* window with an overview of common tasks.

Acrobat work area

The *work area* occupies the entire space within the Acrobat window. It includes the printable area containing the document, toolbars, menu items, and navigation pane.

The *toolbars* contain buttons for many commonly used tools and commands in Acrobat, such as accessing basic file functions, zooming, rotating, and using selection tools.

The *navigation pane,* located on the left side of the document window, allows access to bookmarks, thumbnail page views, and other navigational elements. Click an icon on the left side to open the navigation pane.

Pages provides thumbnail page views and indicates what portion of the page is visible.

Bookmarks are links to specific points of interest in the PDF document.

How To includes quick links to overviews of common tasks, online support, and the complete Acrobat 8 Professional Help.
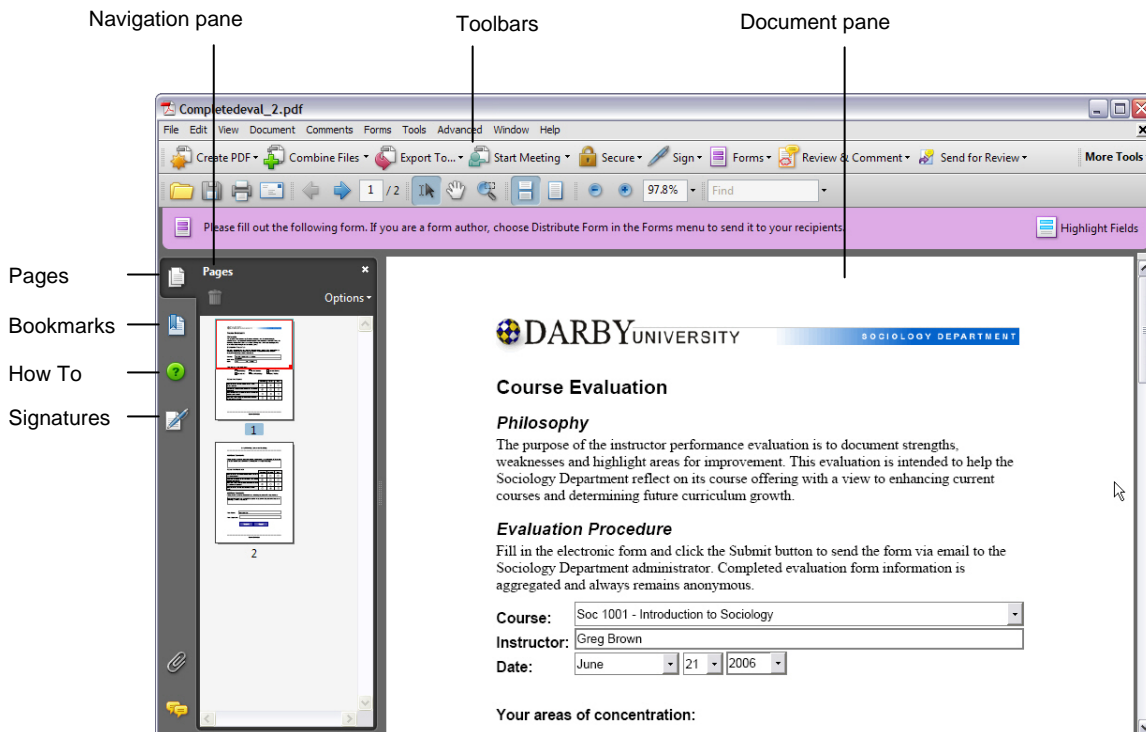

Figure 1 Acrobat work area

Acrobat toolbars

The Acrobat *toolbar* area includes toolbars grouped by feature type, some of which appear by default and some of which are hidden **(Figure 2)**. To view all the toolbar options, select View > Toolbars. The check marks in the menu indicate which toolbars are currently viewable.
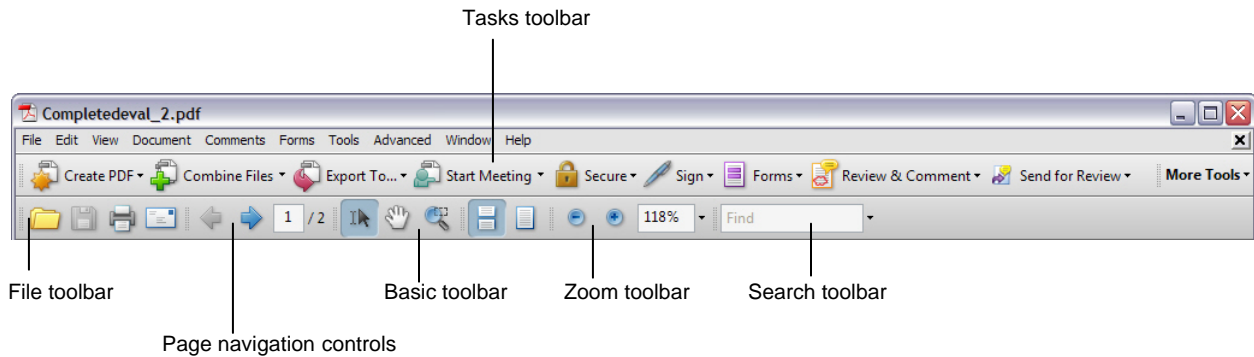
Figure 2 Acrobat toolbars

The *Tasks toolbar* provides easy access to menu commands associated with creating a PDF, commenting and markup tools, security settings, form functions, and options for sending a document for review.

The *File toolbar* allows you to open, save, print, and e-mail the current document.

The *Page Navigation controls* provide buttons and page numbers to go to the page you want.

From the *Basic toolbar*, you can use the Select, Hand, and Marquee Zoom tools.

The *Zoom toolbar* contains tools and settings that adjust the size and view of the current document.

Use the *Search toolbar* to search for text contained within a PDF document.

To view other Acrobat toolbar options, select View > Toolbars.

Navigating and viewing a PDF document

Acrobat offers a variety of ways to navigate PDF documents. You can navigate PDF documents by clicking the Previous Page and Next Page buttons or by using bookmarks and page thumbnails. You can modify a page view by using the Zoom tool options or the Hand tool.

The navigation controls **(Figure 3)** provide an easy way to move among pages in a document.

- Click the arrow buttons to go to the previous or next page in the document.

- You can also go to a page by typing its number in the Current Page box and then pressing Enter (Windows) or Return (Mac OS).
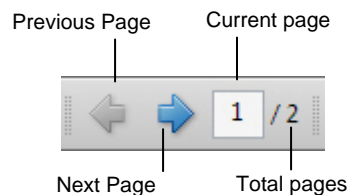
Figure 3 Navigation controls

Using bookmarks to browse through a document

The *Bookmarks tab* (**Figure 4**), which appears in the navigation pane, acts as a table of contents and usually represents the chapters and sections in a document.

1. To view bookmarks, click the Bookmarks tab on the left side of the work area, or select View > Navigation Panels > Bookmarks.

2. Click a bookmark to jump to a topic.

3. Click the plus sign (+) next to a parent bookmark to expand the child bookmarks, or click the minus sign (–) to hide them.
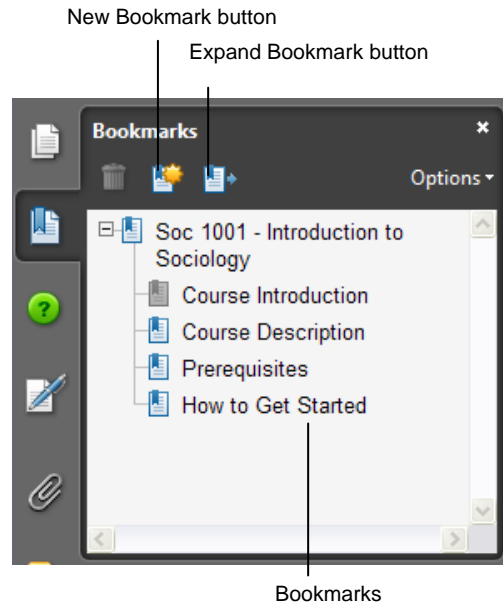
New Bookmark button

Expand Bookmark button

Bookmarks

Figure 4 Bookmarks tab

Using page thumbnails to browse through a document

The *Pages tab* (**Figure 5)** provides miniature previews of document pages (thumbnails) with which you can change the display of pages or go to other pages.

1. To view page thumbnails of your current document, click the Pages tab on the left side of the work area, or select View > Navigation Panels > Pages.

2. Click a page thumbnail to jump to that page in the document.

3. To change the viewing area, place the pointer at the bottom of the red page-view box on the thumbnail. When the pointer changes to a hand, drag the box to a new location on the page.

4. To change the page magnification, position the pointer over the lower-right corner of the page-view box until the pointer changes to a two-headed arrow. Drag the corner of the box to reduce or expand the view on the current page.
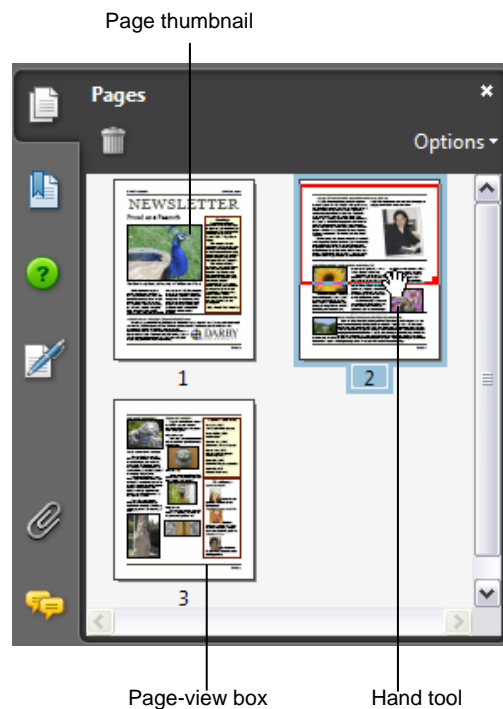
Page thumbnail

Page-view box   Hand tool

Figure 5 Pages tab

Using the Basic and Zoom toolbars to increase or decrease page magnification

The Basic **(Figure 6)** and Zoom toolbars **(Figure 7)** offer several methods for changing the magnification of PDF documents.

- Select and drag with the Marquee Zoom to enlarge areas of a page.

- Click the Zoom Out or Zoom In button in the toolbar.

- Type a magnification percentage in the Zoom box and press Enter (Windows) or Return (Mac OS).

- Select a preset magnification percentage in the Zoom pop-up menu.

- To resize a page to a preset size, select Actual Size, Fit Page, or Fit Width in the Zoom pop-up menu.
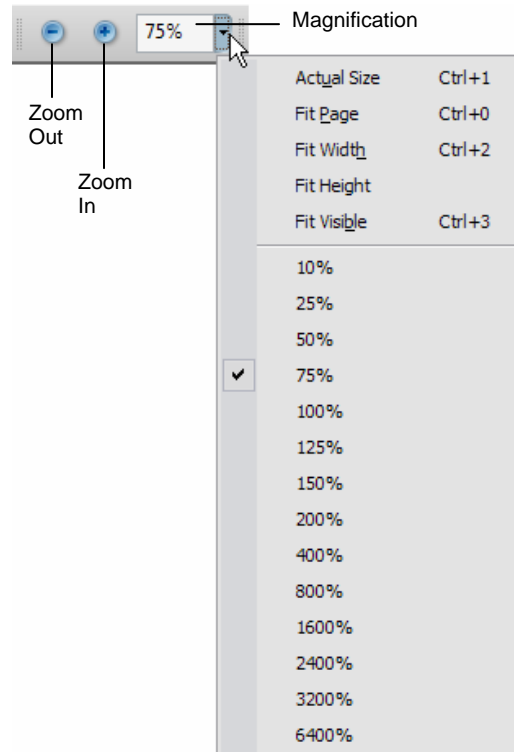

Figure 6 Basic toolbar

Figure 7 **Zoom toolbar**

Setting the page layout orientation

You can use the Page Display menu **(Figure 8)** to display the pages of a document in the following orientations:

- *Single Page* displays one page in the document pane at a time.

- *Single Page Continuous* arranges the pages in a continuous vertical column.

- *Two-Up* arranges the pages side by side, displaying one or two pages at a time.

- *Two-Up Continuous* arranges the pages side by side in a continuous vertical column. If a document has more than two pages, the first page appears on the right to ensure proper display of two-page spreads.

To set the page layout, select View > Page Display and select a page layout orientation.
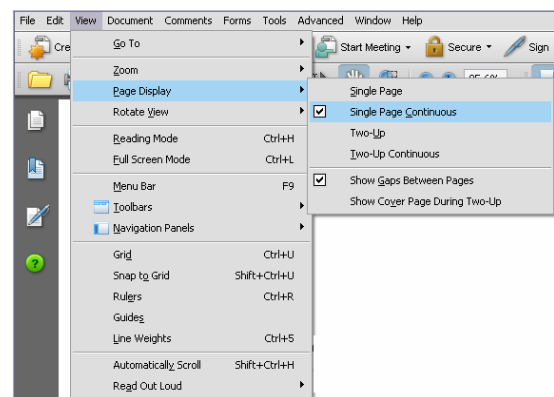

Figure 8 Page Display menu options

Using the Hand tool to adjust the page position

Moving an Adobe PDF page with the Hand tool is like moving a piece of paper on a desk with your hand. You can use the Hand tool to move around the page and view all the areas of it.

- To adjust the page position, select the Hand tool from the Basic toolbar and drag the current page up and down (**Figure 9**).

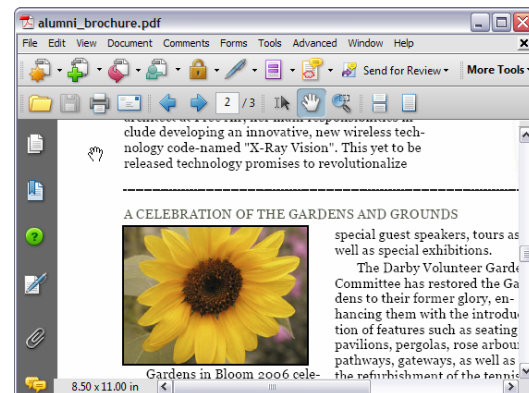- At high magnification, you can drag the page left or right to view different areas on the page.

Figure 9 Using the Hand tool to adjust the page

Automatically scroll through a document (accessibility tip)

Acrobat lets you scroll through long PDFs without using keystrokes or mouse actions.

- To scroll automatically through a document, select View > Automatically Scroll.

- To change the scrolling speed, press a number key (9 is the fastest and 0 is the slowest) or press the Up Arrow or Down Arrow on your keyboard.

- To reverse the direction of the scrolling, press the hyphen or minus (–) sign key.

- To jump to the next or previous page, press the Left Arrow or Right Arrow key on your keyboard.

- To stop automatic scrolling, press Esc or select View > Automatically Scroll again.

How to create a PDF

With Adobe Acrobat 8 Professional, you can convert a variety of file formats to Adobe Portable Document Format (PDF), a universal file format that preserves all the fonts, formatting, images, and colors of a source file, regardless of the application and platform used to create it. Adobe PDF files are compact and can be exchanged, viewed, navigated, and printed by anyone with free Adobe Reader software, while maintaining document integrity.

In addition to creating Adobe PDF files from virtually any software application, you can create PDF files in Adobe Acrobat Professional by scanning and capturing paper documents and by downloading and converting web pages.

Using Acrobat Distiller

The Acrobat Distiller application tool comes with Adobe Acrobat. Distiller takes page information from a document and converts and compresses the information for viewing with the free Acrobat Reader or Acrobat application.

The fonts, graphics, and layout of the document are transformed into a digital portable document that can print to the highest resolution of a selected output device such as a printer or viewing screen.

Acrobat Distiller settings

Acrobat Distiller provides easy and repeatable Adobe PDF creation according to your specifications. You can choose from several sets of default Adobe PDF settings or you can define customized settings to create PDF files specifically tailored to your needs.

To choose from the default Distiller settings:

1. Start Acrobat.

2. In the Acrobat menu, select Advanced >
   Print Production > Acrobat Distiller.

   In the Acrobat Distiller dialog box (**Figure 1**), several settings are available for creating your PDF files.

3. Select one of the options from the Default Settings menu for use in creating PDF files. The following choices are suggested, depending on the document's intended use:

   - Use the Smallest File Size option to create the most compact PDF file for use primarily on-screen and for occasional printing (100 pixels per inch, or ppi).

   - Use the Standard option to create PDF files suitable for on-screen viewing and most print jobs (150 ppi).

   - The High Quality Print option creates better image-quality print jobs (300 ppi).

   - Use the other print options when you are working with service bureaus that handle specialized PDF files.
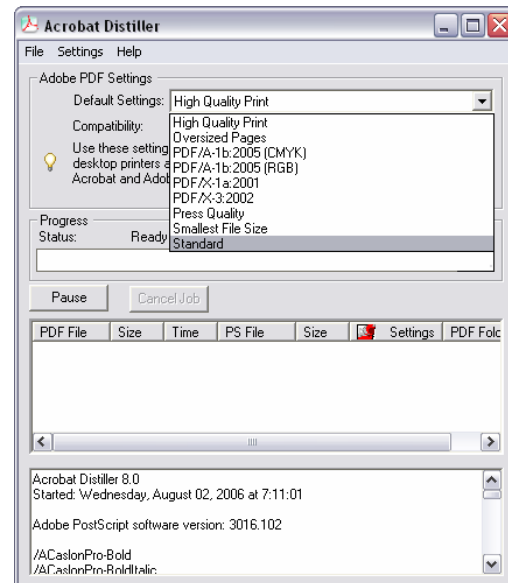

Figure 1 Default Distiller settings

To create custom Adobe PDF settings:

1. Start Distiller by selecting Advanced >
   Print Production > Acrobat Distiller.

2. In the Acrobat Distiller menu, select Settings >
   Edit Adobe PDF Settings.

3. Change the desired options in the various panels of the
   Adobe PDF Settings dialog box (**Figure 2**).

4. Click Save As to save your changes as a different Adobe
   PDF settings file. Enter a unique descriptive name and
   then click Save.

   - *General* options set Adobe PDF file compatibility,
     default page size (for EPS files), resolution, and
     other file settings.

   - *Images* options reduce file size by changing the way
     images, text, and line art are compressed.

   - *Fonts* options affect font embedding.

   - *Color* options specify how to manage color.

   - *Advanced* options affect the conversion from
     PostScript, as well as how the conversion handles
     JPEGs and so on. See Adobe Acrobat help for more
     detail.

   - *Standards* options create PDF/A-compliant files for
     archiving or PDF/X-compliant files for more
     reliable prepress use.
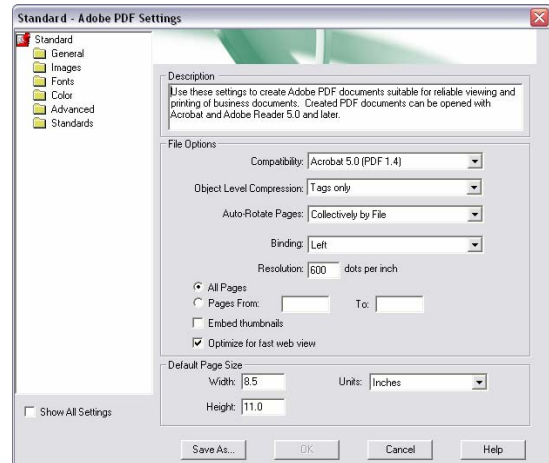
Figure 2 Adobe PDF Settings dialog box

Creating an Adobe PDF file

There are several ways to create PDF documents. In addition to converting files directly from within Acrobat, you
can use one of the following methods, depending on the application of the source file.

Use the *Adobe PDF Printer* to create a PDF file from any application that has a print command. This is the most
common method for converting files to PDF.

PDFMaker converts documents directly to PDF files from a variety of Microsoft applications, including Word,
PowerPoint, Excel, Outlook, Access, and Internet Explorer.

Use the *Save As* or *Export* command to create an Adobe PDF file from Adobe applications such as Adobe InDesign,
Adobe Photoshop, Adobe Illustrator, and Adobe PageMaker. These programs install and preconfigure all of the
necessary components for creating PDF files.

Creating an Adobe PDF file by using the Adobe PDF printer

To create an Adobe PDF file by using the Adobe PDF printer:

1. Open the file you want to convert to an Adobe PDF file in its authoring application, and select File > Print.

2. Select Adobe PDF from the list of printers (**Figure 3**).

3. In the Print dialog box, click OK.

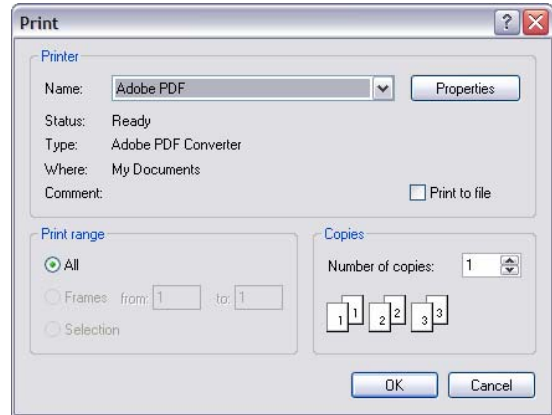4. When prompted, give the file a name and click Save.

Figure 3 Sample Print dialog box

Creating PDF documents from multiple files within Acrobat

In addition to converting individual files to Adobe PDF directly from Acrobat, you can combine different file types into one Adobe PDF file by using the Create PDF From Multiple Files command. You can also use this command to add or combine existing PDF files.

To create a PDF document from multiple files:

1. In the Acrobat menu, select File > Create PDF > From Multiple Files.

   The Combine Files dialog box opens.

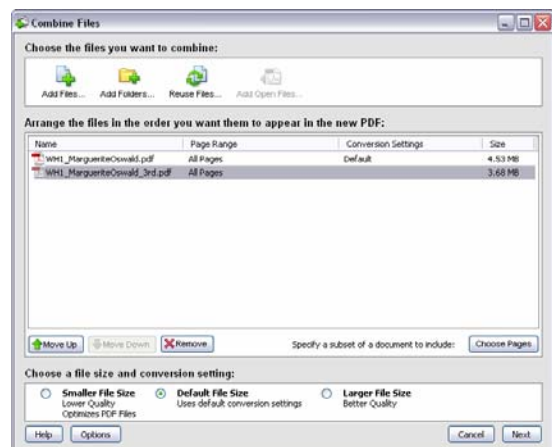2. In the Combine Files dialog box (**Figure 4**), click Add Files.

Figure 4 Combine multiple files into one PDF

The Add Files dialog box appears (**Figure 5**).

3. Navigate to and select the files to include in the PDF. Click Add Files **(Figure 5)**.

   The Add Files dialog box closes.

   Note: Hold down the Ctrl key (Windows) or Command key (Mac OS) to select more than one file.

4. In the Combine Files dialog box, you can rearrange file order by selecting a filename and clicking the Move Up or Move Down button.

5. Click Next.

   You are prompted to select the type of PDF you want to create **(Figure 6)**.

   - *Merge Files Into A Single PDF:* Combines the selected files into one sequentially numbered PDF.

   - *Assemble Files Into A PDF Package:* Creates separate PDF files but wraps them into one PDF package file.

6. Select the type of PDF file you want and click Create.

   The Combining Files dialog box appears.

   When the conversion is complete, you are ready to save the consolidated PDF file.

7. In the Combine Files dialog box, click Save.

   The Save As dialog box appears.

8. Select a location for the file, enter a name for the file, and click Save.
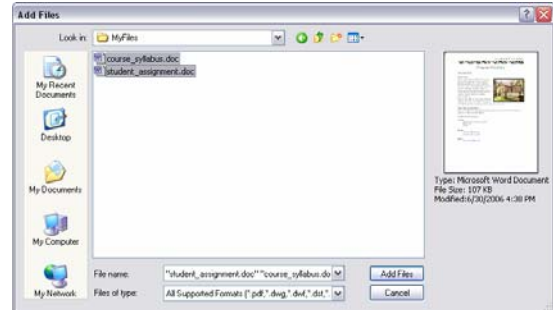
   The new PDF file opens in Acrobat.

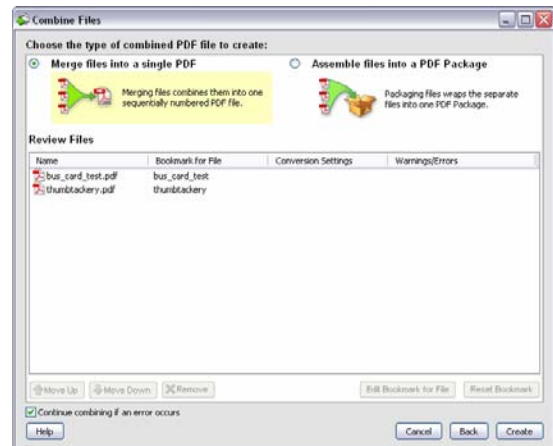**Figure 5** Select files to add to the PDF file

Figure 6 Select how to combine the files

Converting web pages to PDF files

In Acrobat, you can download HTML pages from the World Wide Web or an intranet and convert them to Adobe PDF just by specifying a URL.

To convert web pages to PDF:

1. From the Acrobat menu, select File > Create PDF > From Web Page.

2. In the Create PDF From Web Page dialog box (**Figure 7**), type or paste a URL into the URL box and specify the number of levels you want to include.

   Given the varied size and organization of many websites, you may want to begin by downloading only the first level of website pages.

3. Click the Settings button.

   The Web Page Conversion Settings dialog box appears (**Figure 8**).

4. Verify that all four options are selected under PDF Settings.

   This will provide the most versatility after the web pages are converted.

5. Click OK to close the settings window.

6. In the Create PDF From Web Page dialog box, click Create to begin the downloading and conversion process.

   Once the conversion is complete, a temporary PDF document opens.

7. Use the Save As command in the File menu to save the document.
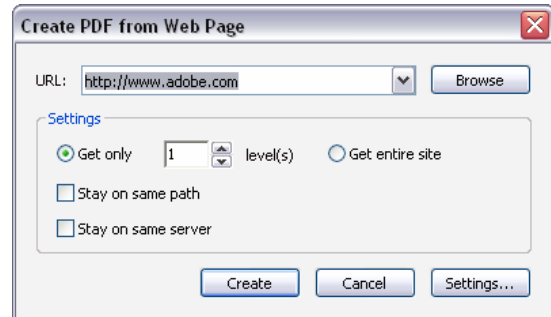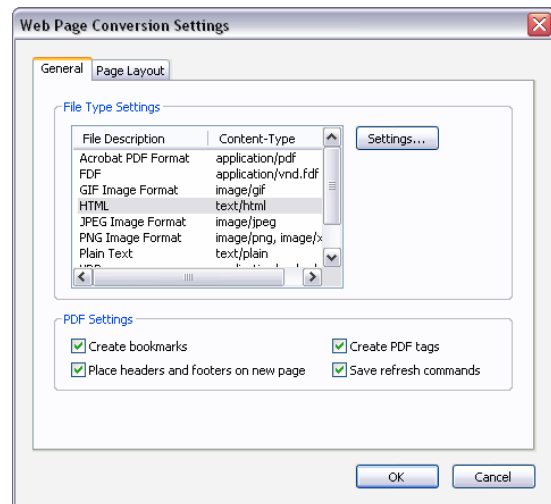
Figure 7 **Create PDF From Web Page dialog box**

Figure 8 Web Page Conversion Settings dialog box