Getting Started With

Adobe Photoshop CS4

- Photoshop is an Adobe software to enhance digital pictures. Photoshop is used throughout the world in many industries. Chances are today you saw many pictures that Photoshop is used.

- In advertising still shots were probably use to improve the look of products. To give the final touch that boosts the opportunity of someone to remember your product.

- Glamor shots for magazines, model headshots, and websites probably had images that were Photoshop software was used to make the subject better than the original picture.

- In sciences, business, law enforcement areas how important are pictures in their particular areas?

Why learn Photoshop?

Chapter #

Table of Contents

3

CHAPTER 1

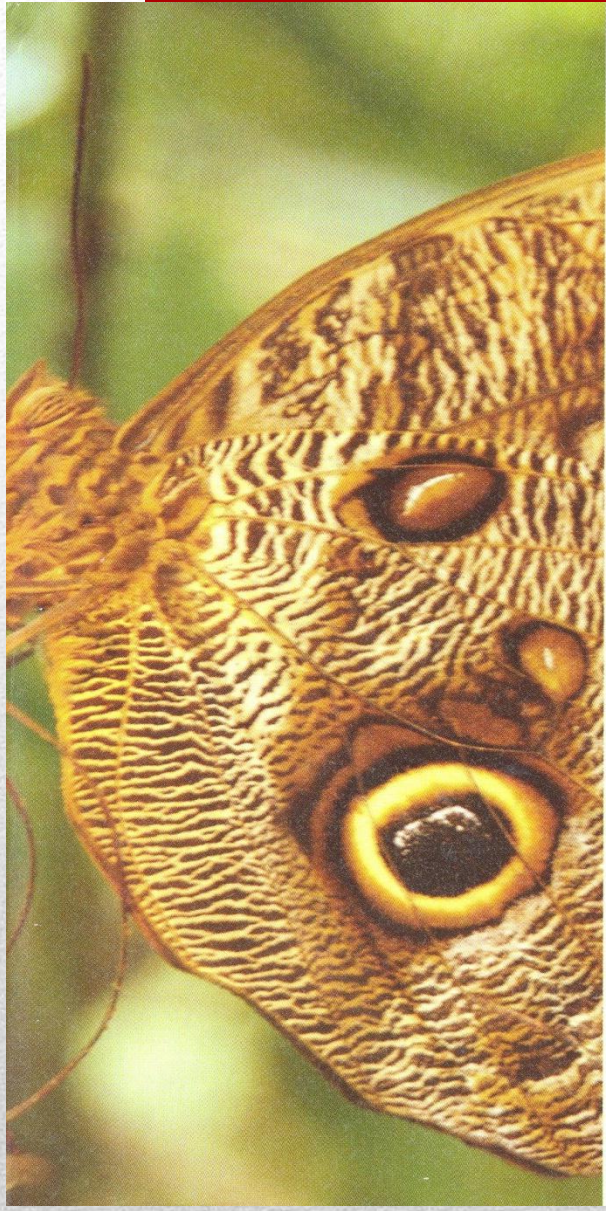Getting Started with Adobe Photoshop CS4

GETTING STARTED WITH ADOBE PHOTOSHOP CS4

1. Start Adobe Photoshop CS4

2. Learn how to open and save an image

3. Use organizational and management features

4. Examine the Photoshop window

5. Use the Layers and History panels

6. Learn about Photoshop by using Help

7. View and print an image

8. Close a file and exit Photoshop

1-1

GETTING STARTED WITH
ADOBE
PHOTOSHOP CS4

Using Photoshop

Adobe Photoshop CS4 is an image-editing program that lets you create and modify digital images. 'CS' stands for Creative Suite, a complete design environment. Although Adobe makes Photoshop available as a standalone product, it also comes bundled with all of their Creative Suite options, whether your interests lie with print design, web design, or multimedia production. A **digital image** is a picture in electronic form. Using Photoshop, you can create original artwork, manipulate color images, and retouch photographs. In addition to being a robust application popular with graphics professionals, Photoshop is practical for anyone who wants to enhance existing artwork or create new masterpieces. For example, you can repair and restore damaged areas within an image, combine images, and create graphics and special effects for the web.

QUICKTIP

In Photoshop, a digital image may be referred to as a file, document, graphic, picture, or image.

Understanding Platform User Interfaces

Photoshop is available for both Windows and Macintosh platforms. Regardless of which platform you use, the features and commands are very similar. Some of the Windows and Macintosh keyboard commands differ in name, but they have equivalent functions. For example, the [Ctrl] and [Alt] keys are used in Windows, and the ⌘ and [option] keys are used on Macintosh computers. There are also visual differences between the Windows and Macintosh versions of Photoshop due to the user interface differences found in each platform.
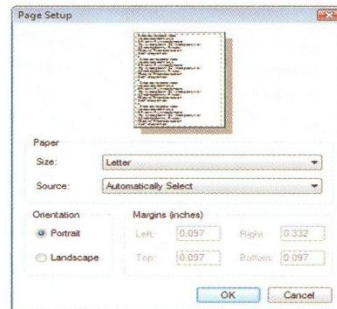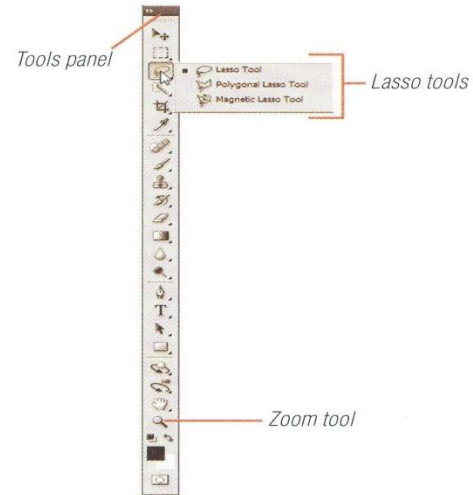
Understanding Sources

Photoshop allows you to work with images from a variety of sources. You can create your own original artwork in Photoshop, use images downloaded from the web, or use images that have been scanned or created using a digital camera. Whether you create Photoshop images to print in high resolution or optimize them for multimedia presentations, web-based functions, or animation projects, Photoshop is a powerful tool for communicating your ideas visually.

Tools You'll Use

Mr. Dave Schmidt

Adobe Photoshop CS4
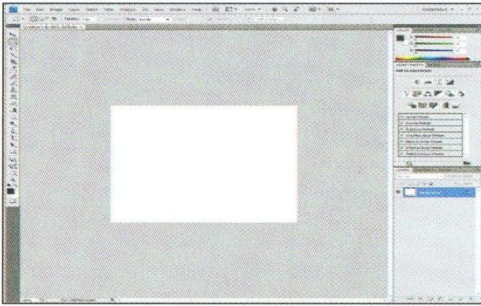
START ADOBE
PHOTOSHOP CS4

What You'll Do

In this lesson, you'll start Photoshop for Windows or Macintosh, then create a file.

Defining Image-Editing Software

Photoshop is an image-editing program. An **image-editing** program allows you to manipulate graphic images so that they can be reproduced by professional printers using full-color processes. Using panels, tools, menus, and a variety of techniques, you can modify a Photoshop image by rotating it, resizing it, changing its colors, or adding text to it. You can also use Photoshop to create and open different kinds of file formats, which enables you to create your own images, import them from a digital camera or scanner, or use files (in other formats) purchased from outside sources. Table 1 lists some of the graphics file formats that Photoshop can open and create.

Understanding Images

Every image is made up of very small squares, which are called **pixels**, and each pixel represents a color or shade. Pixels within an image can be added, deleted, or modified.

QUICKTIP

Photoshop files can become quite large. After a file is complete, you might want to **flatten** it, an irreversible process that combines all layers and reduces the file size.

Using Photoshop Features

Photoshop includes many tools that you can use to manipulate images and text. Within an image, you can add new items and modify existing elements, change colors, and draw shapes. For example, using the Lasso tool, you can outline a section of an image and drag the section onto another area of the image. You can also isolate a foreground or background image. You can extract all or part of a complex image from nearly any background and use it elsewhere.

QUICKTIP

You can create logos in Photoshop. A **logo** is a distinctive image that you can create by combining symbols, shapes, colors, and text. Logos give graphic identity to organizations, such as corporations, universities, and retail stores.

Getting Started with Adobe Photoshop CS4

Mr. Dave Schmidt   **Adobe Photoshop CS4**

You can also create and format text, called **type**, in Photoshop. You can apply a variety of special effects to type; for example, you can change the appearance of type and increase or decrease the distance between characters. You can also edit type after it has been created and formatted.

Adobe Dreamweaver CS4, a web production software program included in the Design Suite, allows you to optimize, preview, and animate images. Because Dreamweaver is part of the same suite as Photoshop, you can jump seamlessly between the two programs.

Using these two programs, you can also quickly turn any graphics image into a gif animation. Photoshop and Dreamweaver let you compress file size (while optimizing image quality) to ensure that your files download quickly from a web page. Using Photoshop optimization features, you can view multiple versions of an image and select the one that best suits your needs.

Starting Photoshop and Creating a File

The specific way you start Photoshop depends on which computer platform you are using. However, when you start Photoshop in either platform, the computer displays a **splash screen**, a window that contains information about the software, and then the Photoshop window opens.

After you start Photoshop, you can create a file from scratch. You use the New dialog box to create a file. You can also use the New dialog box to set the size of the image you're about to create by typing dimensions in the Width and Height text boxes.

TABLE 1: Some Supported Graphic File Formats

file format	filename extension	file format	filename extension
3D Studio	.3ds	Photoshop PDF	.pdf
Bitmap	.bmp	PICT file	.pct, .pic, or .pict
Cineon	.cin		
Dicom	.dcm	Pixar	.pxr
Filmstrip	.flm	QuickTime	.mov or .mp4
Google Earth	.kmz		
Graphics Interchange Format	.gif	Radiance	.hdr
		RAW	varies
JPEG Picture Format	.jpg, .jpe, or .jpeg	Scitex CT	.sct
		Tagged Image Format	.tif or .tiff
PC Paintbrush	.pcx		
Photoshop	.psd	Targa	.tga or .vda
Photoshop Encapsulated PostScript	.eps	U3D	.u3d
		Wavefront	.obj

Start Photoshop (Windows)

1. Click the **Start button** 🏁 on the taskbar.

2. Point to **All Programs**, point to **Adobe Photoshop CS4**, as shown in Figure 1, then click **Adobe Photoshop CS4**.

   TIP The Adobe Photoshop CS4 program might be found in the Start menu (in the left pane) or in the Adobe folder, which is in the Program Files folder on the hard drive (Win).

3. Click **File** on the Application bar, then click **New** to open the New dialog box.

4. Double-click the number in the Width text box, type **500**, click the **Width list arrow**, then click **pixels** (if it is not already selected).

5. Double-click the number in the Height text box, type **400**, then specify a resolution of **72** pixels/inch (if necessary).

6. Click **OK**.

   TIP By default, the document window (the background of the active image) is gray. This color can be changed by right-clicking the background and then making a color selection.

7. Click the **arrow** ▶ at the bottom of the image window, point to **Show**, then click **Document Sizes** (if it is not already displayed).

You started Photoshop in Windows, then created a file with custom dimensions. Setting custom dimensions lets you specify the exact size of the image you are creating. You changed the display at the bottom of the image window so the document size is visible.

FIGURE 1
Starting Photoshop CS4 (Windows)
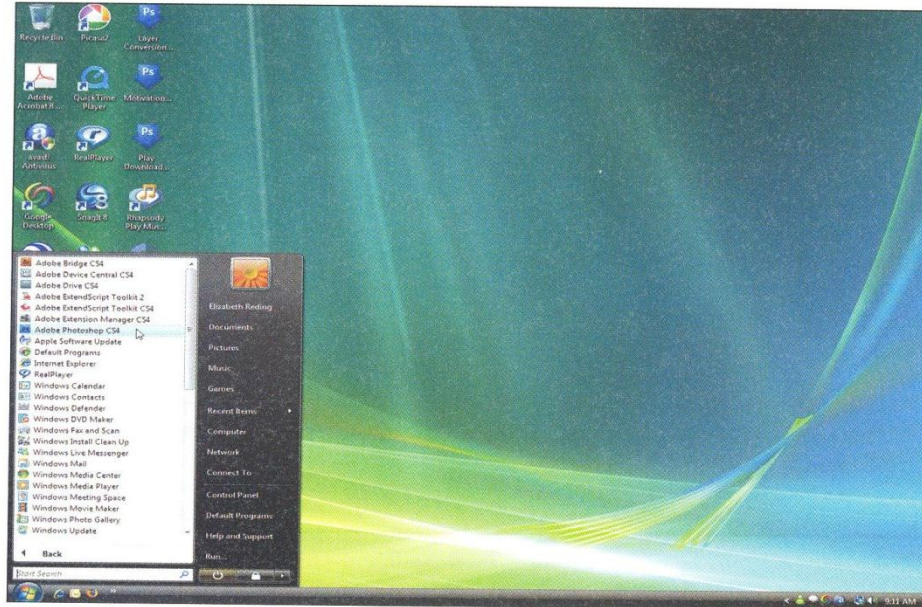
Understanding hardware requirements (Windows)
Adobe Photoshop CS4 has the following minimum system requirements:
- Processor: Intel Xeon, Xeon Dual, Centrino, or Pentium 4 processor
- Operating System: Microsoft® Windows XP SP2 or higher, or Windows Vista
- Memory: 320 MB of RAM
- Storage space: 650 MB of available hard-disk space
- Video RAM: 64 MB; Monitor with 1024×768 resolution
- 16-bit video card and Quick Time 7 for Multimedia features

FIGURE 2

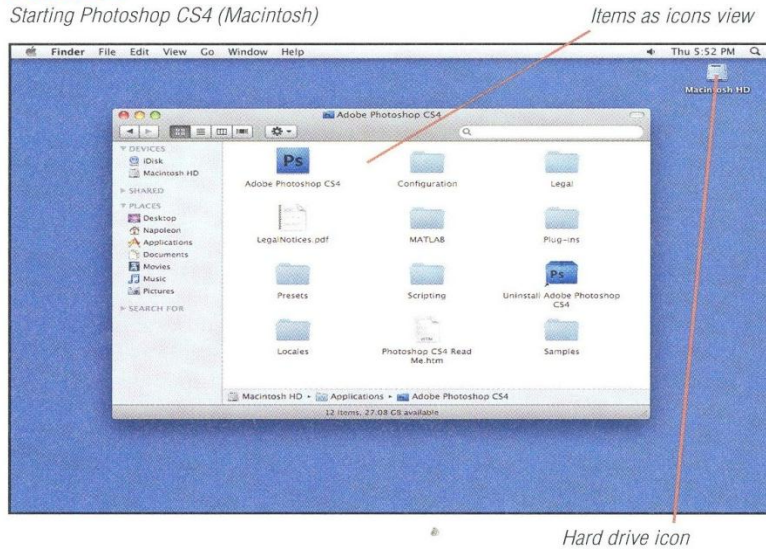*Starting Photoshop CS4 (Macintosh)*

Items as icons view

Hard drive icon

Understanding hardware requirements (Macintosh)

Adobe Photoshop CS4 has the following minimum system requirements:

- Processor: G4, G5, or Intel-based
- Operating System: Mac OS X version 10.3 through 10.5
- Memory: 320 MB of RAM (384 MB recommended)
- Storage space: 1.5 GB of available hard-disk space
- Monitor: 1024 × 768 or greater monitor resolution with 16-bit color or greater video card
- PostScript Printer PostScript Level 2, Adobe PostScript 3
- Video RAM: 64 MB
- CD-ROM Drive: CD-ROM Drive required

Start Photoshop (Macintosh)

1. Double-click the **hard drive icon** on the desktop, double-click the **Applications folder**, then double-click the **Adobe Photoshop CS4 folder**. Compare your screen to Figure 2.

2. Double-click the **Adobe Photoshop CS4 program icon**.

3. Click **File** on the Application bar, then click **New**.

   TIP   If the Color Settings dialog box opens, click No. If a Welcome screen opens, click Close.

4. Double-click the number in the Width text box, type **500**, click the **Width list arrow**, then click **pixels** (if necessary).

5. Double-click the number in the Height text box, type **400**, click the **Height list arrow**, click **pixels** (if necessary), then verify a resolution of **72** pixels/inch.

6. Click **OK**.

   TIP   The gray document window background can be turned on by clicking Window on the Application bar, then clicking Application frame.

7. Click the **arrow** ▶ at the bottom of the image window, point to **Show**, then click **Document Sizes** (if it is not already checked).

You started Photoshop for Macintosh, then created a file with custom dimensions. You verified that the document size is visible at the bottom of the image window.

LEARN HOW TO OPEN AND SAVE AN IMAGE

What You'll Do

In this lesson, you'll locate and open files using the File menu and Adobe Bridge, flag and sort files, then save a file with a new name.

Opening and Saving Files

Photoshop provides several options for opening and saving a file. Often, the project you're working on determines the techniques you use for opening and saving files. For example, you might want to preserve the original version of a file while you modify a copy. You can open a file, then immediately save it with a different filename, as well as open and save files in many different file formats. When working with graphic images you can open a Photoshop file that has been saved as a bitmap (.bmp) file, then save it as a JPEG (.jpg) file to use on a web page.

Customizing How You Open Files

You can customize how you open your files by setting preferences. **Preferences** are options you can set that are based on your work habits. For example, you can use the Open Recent command on the File menu to instantly locate and open the files that you recently worked on, or you can allow others to preview your files as thumbnails. Figure 3 shows the Preferences dialog box options for handling your files.

> TIP   In cases when the correct file format is not automatically determined, you can use the Open As command on the File menu (Win) or Open as Smart Object (Mac).

FIGURE 3
Preferences dialog box
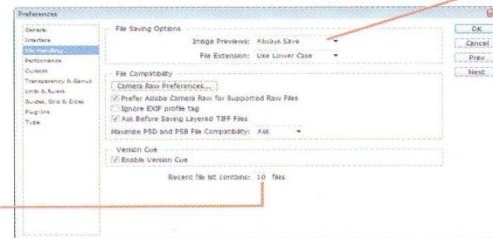
Option for thumbnail preview

Number of files to appear in Open Recent list

Getting Started with Adobe Photoshop CS4

Mr. Dave Schmidt

Adobe Photoshop CS4

Browsing Through Files

You can easily find the files you're looking for by using **Adobe Bridge**, a stand-alone application that serves as the hub for the Adobe Creative Suite. See the magnifying loupe tool in the Filmstrip view in Figure 4. You can open Adobe Bridge (or just Bridge) by clicking the Launch Bridge button on the Application bar. You can also open Bridge using the File menu in Photoshop.

When you open Bridge, a series of panels allows you to view the files on your hard drive as hierarchical files and folders. In addition to the Favorites and Folders panels in the upper-left corner of the Bridge window, there are other important areas. Directly beneath the Favorites and Folders panels is the Filter panel which allows you to review properties of images in the Content panel. In the (default) Essentials view, the Preview panel displays a window containing the Metadata and Keywords panels, which stores information about
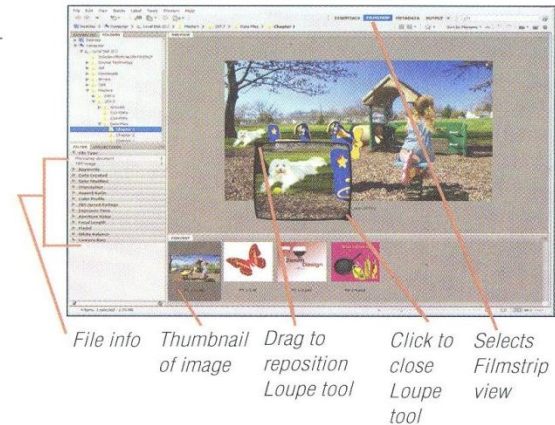
a selected file (such as keywords) that can then be used as search parameters. You can use this tree structure to find the file you are seeking. When you locate a file, you can click its thumbnail to see information about its size, format, and creation and modification dates. (Clicking a thumbnail selects the image. You can select multiple non-contiguous images by pressing and holding [Ctrl] (Win) or ⌘ (Mac) each time you click an image.) You can select contiguous images by clicking the first image, then pressing

> **TIP** Click a thumbnail while in Filmstrip view and the pointer changes to a Loupe tool that magnifies content. Drag the loupe over the filmstrip image to enlarge select areas. The arrowhead in the upper-left corner of the window points to the area to be magnified. Clicking the arrowhead closes the loupe.

FIGURE 4
Adobe Bridge window

File info   Thumbnail   Drag to   Click to   Selects
of image   reposition close   Filmstrip
Loupe tool Loupe   view
            tool

### Using the Photoshop File Info dialog box

You can use the File Info dialog box to identify a file, add a caption or other text, or add a copyright notice. The Description section allows you to enter printable text, as shown in Figure 5. For example, to add your name to an image, click File on the Application bar, click File Info, then click in the Description text box. (You can move from field to field by pressing [Tab] or by clicking in individual text boxes.) Type your name, course number, or other identifying information in the Description text box, or click stars to assign a rating. You can enter additional information in the other text boxes, then save all the File Info data as a separate file that has an .xmp extension. To print selected data from the File Info dialog box, click File on the Application bar, then click Print. Click the Color Management list arrow, then click Output. Available options are listed in the right panel. To print the filename, select the Labels check box. You can also select check boxes that let you print crop marks and registration marks. If you choose, you can even add a background color or border to your image. After you select the items you want to print, click Print.

Type information to
be printed here

FIGURE 5
File Info dialog box
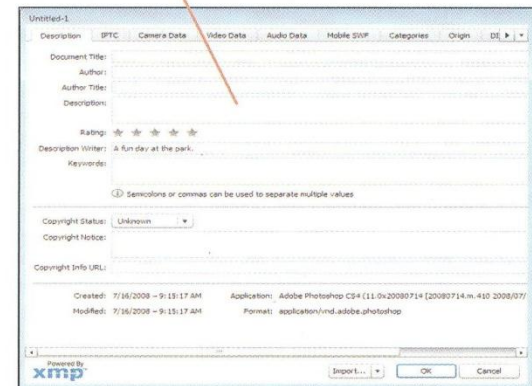
and holding [Shift] and clicking the last image in the group. You can open a file using Bridge by double-clicking its thumbnail, and find out information such as the file's format, and when it was created and edited. You can close Bridge by clicking File (Win) or Bridge CS4 (Mac) on the (Bridge) Application bar, then clicking Exit (Win) or Quit Adobe Bridge CS4 (Mac) or by clicking the window's Close button.

Understanding the Power of Bridge

In addition to allowing you to see all your images, Bridge can be used to rate (assign importance), sort (organize by name, rating, and other criteria), and label your images. Figure 4, on the previous page, contains images that are assigned a rating and shown in Filmstrip view. There are three views in Bridge (Essentials, Filmstrip, and Metadata) that are controlled by tabs to the left of the search text box. To assist in organizing your images, you can assign a color label or rating to one or more images regardless of your current view. Any number of selected images can be assigned a color label by clicking Label on the Application bar, then clicking one of the six options.

Creating a PDF Presentation

Using Bridge you can create a PDF Presentation (a presentation in the PDF file format). Such a presentation can be viewed full-screen on any computer monitor, or in Adobe Acrobat Reader as a PDF file. You can create such a presentation by opening Bridge, locating and selecting images using the file hierarchy, then clicking the Output button on the Bridge Application bar. The Output panel, shown in Figure 6, opens and displays the images you have selected. You can add images by pressing [Ctrl] (Win) or ⌘ (Mac) while clicking additional images.

FIGURE 6
Output panel in Bridge

Click to create output

Click to create PDF

Output preview

Selected thumbnails
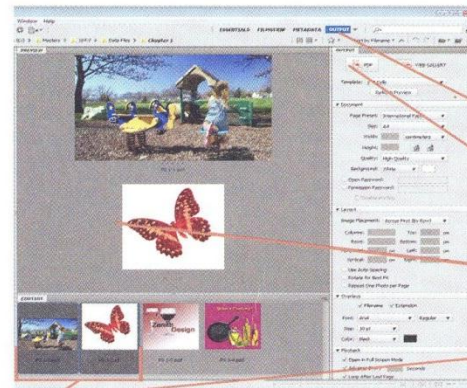
Using Save As Versus Save

Sometimes it's more efficient to create a new image by modifying an existing one, especially if it contains elements and special effects that you want to use again. The Save As command on the File menu (in Photoshop) creates a copy of the file, prompts you to give the duplicate file a new name, and then displays the new filename in the image's title bar. You use the Save As command to name an unnamed file or to save an existing file with a new name. For example, throughout this book, you will be instructed to open your Data Files and use the Save As command. Saving your Data Files with new names keeps the original files intact in case you have to start the lesson over again or you want to repeat an exercise. When you use the Save command, you save the changes you made to the open file.

FIGURE 7
Open dialog box for Windows

Look in list arrow
displays list of
available drives

FIGURE 7
Open dialog box for Macintosh
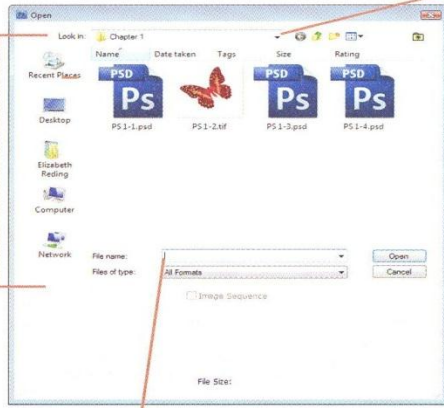
Available folders
and files may differ
from your list
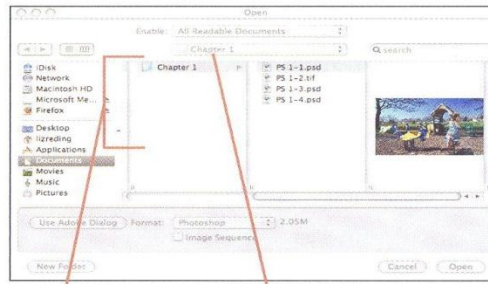
Selected filename

Available folders
and files

Current file location
list arrow

FIGURE 8
Adobe Bridge window

Essentials button

Preview of selected file
displays here

Your list may
be different

Click the Keywords
panel tab to assign
keywords to a selected
file, then click any of the
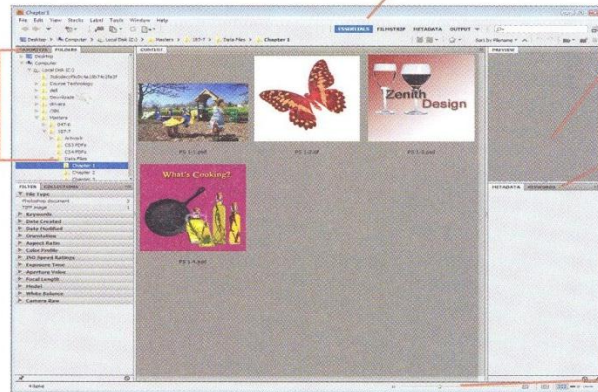displayed keywords

Drag to resize
thumbnails

Lesson 2   Learn How to Open and Save an Image

Open a file using the Application bar

1. Click **File** on the Application bar, then click **Open**.
2. Click the **Look in list arrow** (Win) or the **Current file location list arrow** (Mac), then navigate to the drive and folder where you store your Data Files.
3. Click **PS 1-1.psd,** as shown in Figure 7, then click **Open**.

   TIP   Click Update, if you receive a message stating that some text layers need to be updated.

You used the Open command on the File menu to locate and open a file.

Open a file using the Folders panel in Adobe Bridge

1. Click the **Launch Bridge button** `Br` on the Application bar, then click the **Folders panel tab** `FOLDERS` (if necessary).
2. Navigate through the hierarchical tree to the drive and folder where you store your Chapter 1 Data Files, then click the **Essentials button** if it is not already selected.
3. Drag the **slider** (at the bottom of the Bridge window) a third of the way between the Smaller thumbnail size button ▭ and the Larger thumbnail size button ▭. Compare your screen to Figure 8.
4. Double-click the **image of a butterfly** (PS 1-2.tif). Bridge is no longer visible.
5. Close the butterfly image in Photoshop.

You used the Folders panel tab in Adobe Bridge to locate and open a file. This feature makes it easy to see which file you want to use.

PHOTOSHOP 1-11

Mr. Dave Schmidt   **Adobe Photoshop CS4**

Use the Save As command

1. Verify that the **PS 1-1**.**psd window** is active.
2. Click **File** on the Application bar, click **Save As**, then compare your Save As dialog box to Figure 9.
3. If the drive containing your Data Files is not displayed, click the **Save in list arrow** (Win) or the **Where list arrow** (Mac), then navigate to the drive and folder where you store your Chapter 1 Data Files.
4. Select the current filename in the File name text box (Win) or Save As text box (Mac) (if necessary); type **Playground**, then click **Save**.

   TIP   Click OK to close the Maximize Compatibility dialog box (if necessary).

You used the Save As command on the File menu to save the file with a new name. This command makes it possible for you to save a changed version of an image while keeping the original file intact.

Change from Tabbed to Floating Documents

1. Click the **Arrange Documents button** 🖼️ ▾ on the Application bar, then click **2 Up**.

   TIP   The Arrange Documents button is a temporary change to the workspace that will be in effect for the current Photoshop session.

2. Click 🖼️ ▾ , then click **Float All in Windows**. Compare your Playground image to Figure 10.

You changed the arrangement of open documents from consolidation to a 2 Up format to each image displaying in its own window.

FIGURE 9
Save As dialog box

Your list of files might be different

New filename
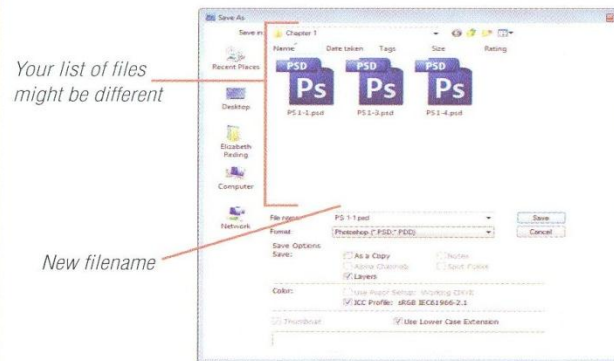
FIGURE 10
Playground image

Duplicate file has new name

Changing file formats

In addition to using the Save As command to duplicate an existing file, it is a handy way of changing one format into another. For example, you can open an image you created in a digital camera, then make modifications in the Photoshop format. To do this, open the .jpg file in Photoshop, click File on the Application bar, then click Save As. Name the file, click the Format list arrow, click Photoshop (*.psd, *.pdd) (Win) or Photoshop (Mac), then click Save. You can also change formats using Bridge by selecting the file, clicking Tools on the Application bar, pointing to Photoshop, then clicking Image Processor. Section 3 of the Image Processor dialog box lets you determine the new file format.

Getting photos from your camera

You can use Bridge to move photos from your camera into your computer by plugging your camera into your computer, opening Adobe Bridge, clicking File on the (Bridge) Application bar, then clicking Get Photos from Camera. Once you do this, the Adobe Bridge CS4 Photo Downloader dialog box opens. This dialog box lets you decide from which device you'll download images, where you want to store them, and whether or not you want to rename them, among other options.
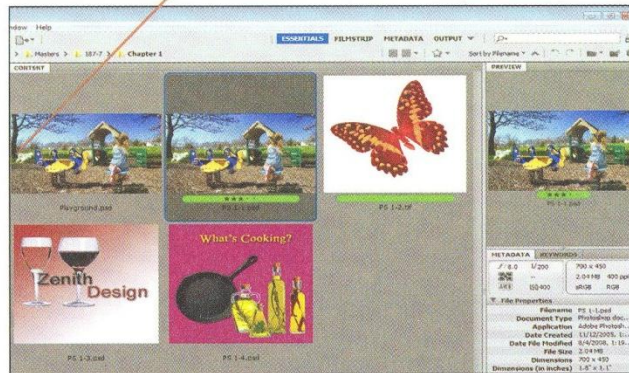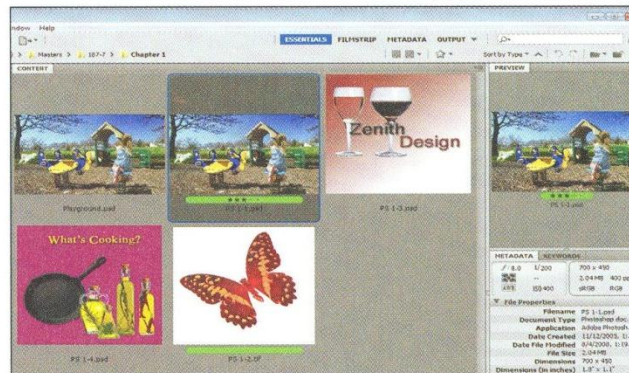
Rated and Approved file

FIGURE 11
Images in Adobe Bridge

FIGURE 12
Sorted files

Lesson 2   Learn How to Open and Save an Image

Rate and filter with Bridge

1. Click the **Launch Bridge button** ▶Br on the Application bar.

2. Click the **Folders panel tab** FOLDERS if it is not already selected, then click the drive and folder where you store your Chapter 1 Data Files on the File Hierarchy tree (if necessary).

3. Click the butterfly image, file **PS 1-2.tif** to select it.

4. Press and hold **[Ctrl]** (Win) or ⌘ (Mac), click **PS 1-1.psd** (the image of the playground), then release **[Ctrl]** (Win) or ⌘ (Mac).

5. Click **Label** on the Application bar, then click **Approved**.

6. Click **PS 1-1.psd**, click **Label** on the Application bar, then click **★★★**. See Figure 11.

7. Click **View** on the Application bar, point to **Sort**, then click **By Type**. Compare your screen to Figure 12.

   The order of the files is changed.

   TIP   You can also change the order of files (in the Content panel) using the Sort by Filename list arrow in the Filter panel. When you click the Sort by Filename list arrow, you'll see a list of sorting options. Click the option you want and the files in the Content panel will be rearranged.

8. Click **View** on the Application bar, point to **Sort**, then click **Manually**.

   TIP   You can change the Bridge view at any time, depending on the type of information you need to see.

9. Click **File** (Win) or **Adobe Bridge CS4** (Mac) on the (Bridge) Application bar, then click **Exit** or **Quit Adobe Bridge CS4** (Mac).

You labeled files using Bridge, sorted the files in a folder, then changed the sort order. When finished, you closed Bridge.

PHOTOSHOP 1-13

USE ORGANIZATIONAL AND
MANAGEMENT FEATURES

What You'll Do

In this lesson, you'll learn how to use Version Cue and Bridge.

Learning about Version Cue

Version Cue is a file versioning and management feature of the Adobe Creative Suite that can be used to organize your work whether you work in groups or by yourself. Version Cue is accessed through Bridge. You can see Version Cue in Bridge in two different locations: the Favorites tab and the Folders tab. Figure 13 shows Version Cue in the Favorites tab of Bridge. You can also view Version Cue in the Folders tab by collapsing the Desktop, as shown in Figure 14.

Understanding Version Cue Workspaces

Regardless of where in Bridge you access it (the Favorites or Folders tab), Version Cue installs a **workspace** in which it stores projects and project files, and keeps track of file versions. The Version Cue workspace can be installed locally on your own computer and can be made public or kept private. It can also be installed on a server and can be used by many users through a network.

FIGURE 13
Favorites tab in Adobe Bridge

Your list of Favorites may differ

FIGURE 14
Folders tab in Adobe Bridge

Getting Started with Adobe Photoshop CS4
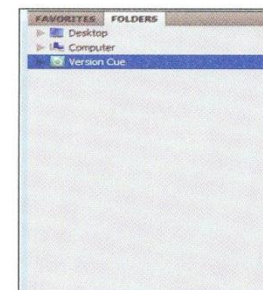
Using Version Cue's Administrative Functions

Once you log into Version Cue using Adobe Drive (shown in Figure 15), you can control who uses the workspace and how it is used with the tabs at the top of the screen. Adobe Drive, which you use to connect to Version Cue, lets you open your server, browse projects and other servers, and perform advanced tasks.

Making Use of Bridge

You've already seen how you can use Bridge to find, identify, and sort files. But did you know that you can use Bridge Center to organize, label, and open files as a group? First you select one or more files, right-click the selection (Win) or [control]-click the selection (Mac), then click Open, or Open With, to display the files in your favorite CS4 program. You can apply labels, and ratings, or sort the selected files.

QUICKTIP

You can use Bridge to stitch together panoramic photos, rename images in batches, or automate image conversions with the Tools menu. Select the file(s) in Bridge you want to modify, click Tools on the Application bar, point to Photoshop, then click a command and make option modifications.

FIGURE 15
Adobe Drive and Version Cue
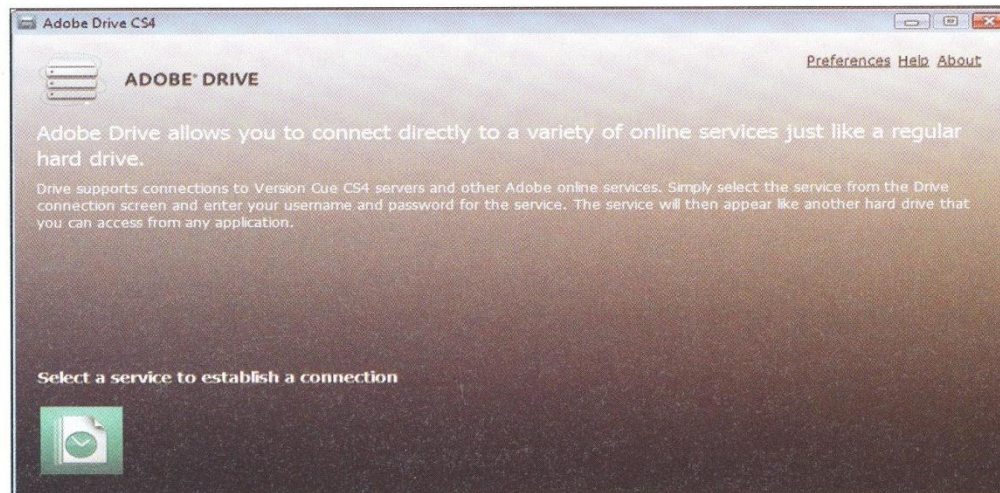
EXAMINE THE
PHOTOSHOP WINDOW

What You'll Do
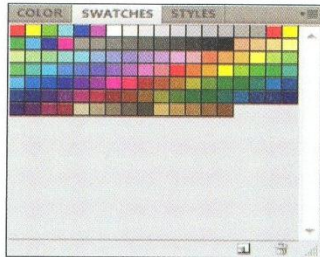
In this lesson, you'll arrange documents and change the default display, select a tool on the Tools panel, use a shortcut key to cycle through the hidden tools, select and add a tool to the Tool Preset picker, use the Window menu to show and hide panels in the workspace, and create a customized workspace.

Learning About the Workspace

The Photoshop **workspace** is the area within the Photoshop program window that includes the entire window, from the command menus at the top of your screen to the status bar (Win) at the bottom. Desktop items are visible in this area (Mac). The (Windows) workspace is shown in Figure 16.

In Windows, the area containing the menu bar (containing Photoshop commands) and the title bar (displaying the program name) is called the **Application bar**. These two areas have been combined to use space more efficiently. On the Mac, the main menus are at the top of the screen, but not on the Application bar. If the active image window is maximized, the filename of the open unnamed file is **Untitled-1**, because it has not been named. The Application bar also contains the **workspace switcher**, a Close button, and Minimize/Maximize, and Restore buttons (Win).

You can choose a menu command by clicking it or by pressing [Alt] plus the underlined letter in the menu name (Win). Some commands display shortcut keys on the right side of the menu. Shortcut keys provide an alternative way to activate menu commands. Some commands might appear dimmed, which means they are not currently available. An ellipsis after a command indicates additional choices.

DESIGNTIP   **Overcoming information overload**

One of the most common experiences shared by first-time Photoshop users is information overload. There are just too many places and things to look at! When you feel your brain overheating, take a moment and sit back. Remind yourself that the active image area is the central area where you can see a composite of your work. All the tools and panels are there to help you, not to add to the confusion. The tools and features in Photoshop CS4 are designed to be easier to find and use, making any given task faster to complete.

Finding Tools Everywhere

The **Tools panel** contains tools associated with frequently used Photoshop commands. The face of a tool contains a graphical representation of its function; for example, the Zoom tool shows a magnifying glass. You can place the pointer over each tool to display a tool tip, which tells you the name or function of that tool. Some tools have additional hidden tools, indicated by a small black triangle in the lower-right corner of the tool.

The **options bar**, located directly under the Application bar, displays the current settings for each tool. For example, when you click the Type tool, the default font and font size appear on the options bar, which can be changed if desired. You can move the options bar anywhere in the workspace for easier access. The options bar also contains the Tool Preset picker. This is the left-most tool on the options bar and displays the active tool. You can click the list arrow on this tool to select another tool without having to use the Tools panel. The options bar also contains the panel well, an area where you can assemble panels for quick access.

Panels, sometimes called palettes, are small windows used to verify settings and modify images. By default, panels appear in stacked groups at the right side of the window.

FIGURE 16
Workspace

Double-click the Application icon to close the program

Options bar

Tool Preset picker

Tools panel

Workspace

Status bar

Minimized document

Workspace switcher

Panel dock

Collapse panels to icons

Color panel

Application controls

Application bar

Document window title bar

Layers panel

Document window

Lesson 4   Examine the Photoshop Window

A collection of panels usually in a vertical orientation is called a **dock**. The dock is the dark gray bar above the collection of panels. The arrows in the dock are used to maximize and minimize the panels. You can display a panel by simply clicking the panel tab, making it the active panel. Panels can be separated and moved anywhere in the workspace by dragging their tabs to new locations. You can dock a panel by dragging its tab in or out of a dock. As you move a panel, you'll see a blue highlighted drop zone. A **drop zone** is an area where you can move a panel. You can also change the order of tabs by dragging a tab to a new location within its panel. Each panel contains a menu that you can view by clicking the list arrow in its upper-right corner.

QUICKTIP
You can reset panels to their default locations at any time by clicking Essentials on the workspace switcher. (If Essentials is not displayed, click the workspace switcher, then click Essentials.)

The **status bar** is located at the bottom of the program window (Win) or work area (Mac). It displays information, such as the file size of the active window and a description of the active tool. You can display other informa-tion on the status bar, such as the current tool, by clicking the black triangle to view a pull-down menu with more options.

Rulers can help you precisely measure and position an object in the workspace. The rulers do not appear the first time you use Photoshop, but you can display them by clicking Rulers on the View menu.

Using Tool Shortcut Keys
Each tool has a corresponding shortcut key. For example, the shortcut key for the Type tool is T. After you know a tool's shortcut key, you can select the tool on the Tools panel by pressing its shortcut key. To select and cycle through a tool's hidden tools, you press and hold [Shift], then press the tool's shortcut key until the desired tool appears.

QUICKTIP
Tools that have assigned shortcut keys have spring-loaded keyboard shortcuts. **Spring-loaded keyboard shortcuts** let you temporarily change the active tool. If, for example, you've selected the Gradient tool and you want to move an object, press and hold V. For as long as you hold V, the Move tool will be in effect. Release the V and you're back to the Gradient tool.

Customizing Your Environment
Photoshop makes it easy for you to position elements you work with just where you want them. If you move elements around to make your environment more convenient, you can always return your workspace to its original appearance by resetting the default panel locations. Once you have your work area arranged the way you want it, you can create a customized workspace by clicking the workspace switcher on the Application bar, then clicking Save Workspace. If you want to open a named workspace, click the workspace switcher, then click the name of the workspace you want to use. In addition, Photoshop comes with many customized workspaces that are designed for specific tasks.

FIGURE 17
Keyboard Shortcuts and Menus dialog box

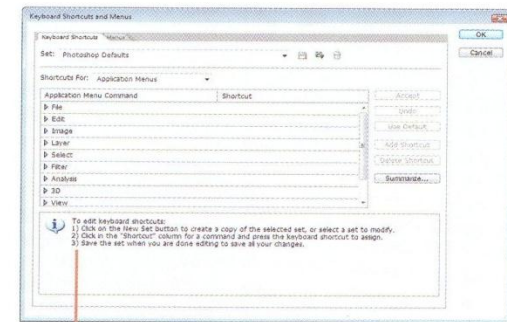*Instructions to edit shortcuts*

Creating customized keyboard shortcuts
Keyboard shortcuts can make your work with Photoshop images faster and easier. In fact, once you discover the power of keyboard shortcuts, you may never use menus again. In addition to the keyboard shortcuts that are preprogrammed in Photoshop, you can create your own. To do this, click Edit on the Application bar, then click Keyboard Shortcuts. The Keyboard Shortcuts and Menus dialog box opens, as shown in Figure 17.

DESIGNTIP Composition 101

What makes one image merely okay and another terrific? While any such judgement is subjective, there are some rules governing image composition. It goes without saying that, as the artist, you have a message you're trying to deliver ... something you're trying to say to the viewer. This is true whether the medium is oil painting, photography, or Photoshop imagery.

Elements under your control in your composition are tone, sharpness, scale, and arrangement. (You may see these items classified differently elsewhere, but they amount to the same concepts.)

Tone is the brightness and contrast within an image. Using light and shadows you can shift the focus of the viewer's eye and control the mood.

Sharpness is used to direct the viewer's eye to a specific area of an image. **Scale** is the size relationship of objects to one another, and **arrangement** is how objects are positioned to one another.

Are objects in your image contributing to clarity or clutter? Are similarly-sized objects confusing the viewer? Would blurring one area of an image change the viewer's focus?

These are tools you have to influence your artistic expression. Make sure the viewer understands what you want seen.

FIGURE 18
Hidden tools
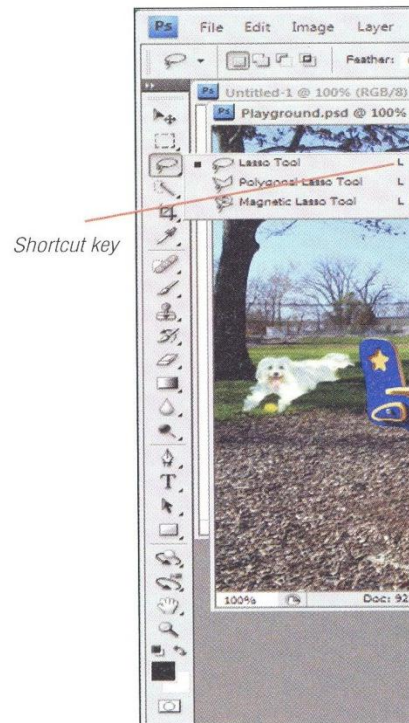
Shortcut key

Select a tool

1. Click the **Lasso tool** on the Tools panel, press and hold the mouse button until a list of hidden tools appears, then release the mouse button. See Figure 18. Note the shortcut key, L, next to the tool name.

2. Click the **Polygonal Lasso tool** on the Tools panel.

3. Press and hold **[Shift]**, press **[L]** three times to cycle through the Lasso tools, then release **[Shift]**. Did you notice how the options bar changes for each selected Lasso tool?

   TIP You can return the tools to their default setting by clicking the Click to open the Tool Preset picker list arrow on the options bar, clicking the list arrow, then clicking Reset All Tools.

You selected the Lasso tool on the Tools panel and used its shortcut key to cycle through the Lasso tools. Becoming familiar with shortcut keys can speed up your work and make you more efficient.

Learning shortcut keys

Don't worry about learning shortcut keys. As you become more familiar with Photoshop, you'll gradually pick up shortcuts for menu commands, such as saving a file, or Tools panel tools, such as the Move tool. You'll notice that as you learn to use shortcut keys, your speed while working with Photoshop will increase and you'll complete tasks with fewer mouse clicks.

Mr. Dave Schmidt   **Adobe Photoshop CS4**

Select a tool from the Tool Preset picker

1. Click the **Click to open the Tool Preset picker list arrow** ☝ ⬇ on the options bar.

   The name of a button is displayed in a tool tip, the descriptive text that appears when you point to the button. Your Tool Preset picker list will differ, and may contain no entries at all. This list can be customized by each user.

2. Deselect the **Current Tool Only check box** (if necessary). See Figure 19.

3. Double-click **Magnetic Lasso 24 pixels** in the list.

You selected the Magnetic Lasso tool using the Tool Preset picker. The Tool Preset picker makes it easy to access frequently used tools and their settings.
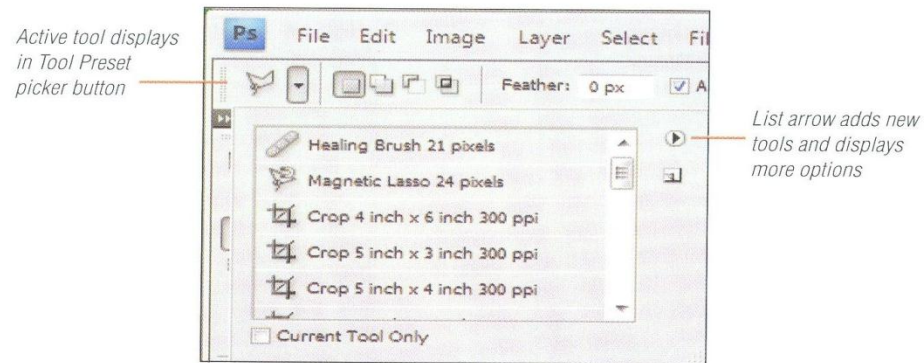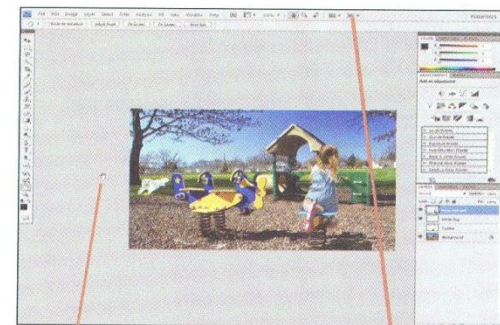

FIGURE 19
Using the Tool Preset picker

Active tool displays in Tool Preset picker button

List arrow adds new tools and displays more options

Using the Full Screen Mode

By default, Photoshop displays images in consolidated tabs. This means that each image is displayed within its own tab. You can choose from three other modes: Maximized Screen Mode, Full Screen Mode with Application Bar, and Full Screen Mode. And why would you want to stray from the familiar Standard Screen Mode? Perhaps your image is so large that it's difficult to see it all in Standard Mode, or perhaps you want a less cluttered screen. Maybe you just want to try something different. You can switch between modes by clicking the Change Screen Mode button (located in the Application controls area of the Application bar) or by pressing the keyboard shortcut F. When you click this button, the screen displays changes. Click the Hand tool (or press the keyboard shortcut H), and you can reposition the active image, as shown in Figure 20.

FIGURE 20
Full screen mode with Application bar

Use hand pointer to reposition image

Click to change screen modes

*Getting Started with Adobe Photoshop CS4*

DESIGN TIP Arranging elements

The appearance of elements in an image is important, but of equal importance is the way in which the elements are arranged. The components of any image should form a cohesive unit so that the reader is unaware of all the different parts, yet influenced by the way they work together to emphasize a message or reveal information. For example, if a large image is used, it should be easy for the reader to connect the image with any descriptive text. There should be an easily understood connection between the text and the artwork, and the reader should be able to seamlessly connect them.

FIGURE 21
Move tool added to preset picker
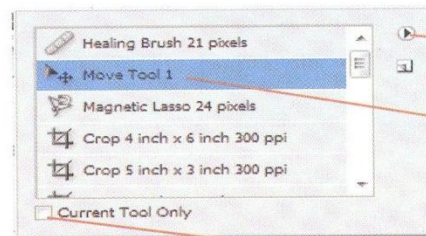
Click to display menu options

New tool added to panel

Selected check box displays only current tool

FIGURE 22
Tool Preset picker list arrow menu

Modifying a tool preset

Once you've created tool presets, you'll probably want to know how they can be deleted and renamed. To delete any tool preset, select it on the Tool Preset picker panel. Click the list arrow on the Tool Preset picker panel to view the menu, shown in Figure 22, then click Delete Tool Preset. To rename a tool preset, click the same list arrow, then click Rename Tool Preset.

Add a tool to the Tool Preset picker

1. Click the **Move tool** 🔫 on the Tools panel.
2. Click the **Click to open the Tool Preset picker list arrow** 🔫 on the options bar.
3. Click the **list arrow** 📋 on the Tool Preset picker.
4. Click **New Tool Preset**, then click **OK** to accept the default name (Move Tool 1). Compare your list to Figure 21.

   TIP   You can display the currently selected tool alone by selecting the Current Tool Only check box.

You added the Move tool to the Tool Preset picker. Once you know how to add tools to the Tool Preset picker, you can quickly and easily customize your work environment.

Change the default display

1. Click **Edit** (Win) or **Photoshop** (Mac) on the Application bar, then click **Preferences** (Win) or point to **Preferences**, then click **Interface** (Mac).
2. Click **Interface** in the left panel (Win), click the **Open Documents in Tabs check box** to deselect it, then click **OK**.

You changed the default display so that each time you open Photoshop, each image will display in its own window rather than in tabs.

Show and hide panels

1. Click **Window** on the Application bar, then verify that **Color** has a check mark next to it, then close the menu.
2. Click the **Swatches tab** next to the Color tab to make the Swatches panel active, as shown in Figure 23.
3. Click the **Collapse to Icons arrow** to collapse the panels.
4. Click the **Expand Panels arrow** to expand the panels.
5. Click **Window** on the Application bar, then click **Swatches** to deselect it.

   TIP You can hide all open panels by pressing [Shift], then [Tab], then show them by pressing [Shift], then [Tab] again. To hide all open panels, the options bar, and the Tools panel, press [Tab], then show them by pressing [Tab] again.

6. Click **Window** on the Application bar, then click **Swatches** to redisplay the Swatches panel.

You collapsed and expanded the panels, then used the Window menu to show and hide the Swatches panel. You might want to hide panels at times in order to enlarge your work area.

FIGURE 23
Active Swatches panel

Swatches tab is active
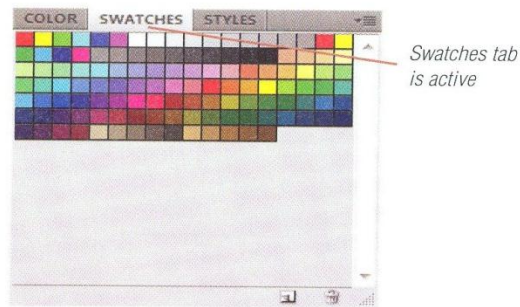
DESIGNTIP   **Balancing objects**

The **optical center** occurs approximately three-eighths from the top of the page and is the point around which objects on the page are balanced. Once the optical center is located, objects can be positioned around it. A page can have a symmetrical or asymmetrical balance relative to an imaginary vertical line in the center of the page. In a **symmetrical balance**, objects are placed equally on either side of the vertical line. This type of layout tends toward a restful, formal design. In an **asymmetrical balance,** objects are placed unequally relative to the vertical line. Asymmetrical balance uses white space to balance the positioned objects, and is more dynamic and informal. A page with objects arranged asymmetrically tends to provide more visual interest because it is more surprising in appearance.

DESIGNTIP   **Considering ethical implications**

Because Photoshop enables you to make so many dramatic changes to images, you should consider the ethical ramifications and implications of altering images. Is it proper or appropriate to alter an image just because you have the technical expertise to do so? Are there any legal responsibilities or liabilities involved in making these alterations? Because the general public is more aware about the topic of **intellectual property** (an image or idea that is owned and retained by legal control) with the increased availability of information and content, you should make sure you have the legal right to alter an image, especially if you plan on displaying or distributing the image to others. Know who retains the rights to an image, and if necessary, make sure you have written permission for its use, alteration, and/or distribution. Not taking these precautions could be costly.
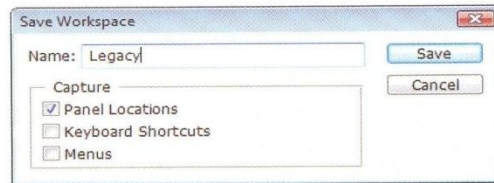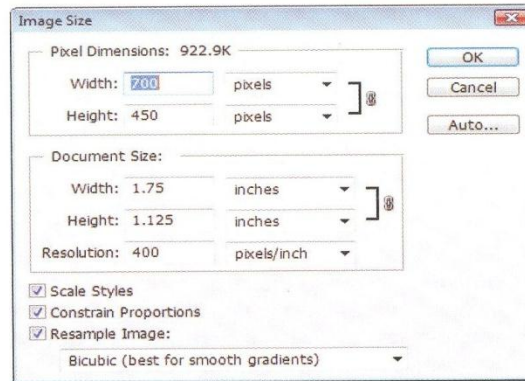
Mr. Dave Schmidt   **Adobe Photoshop CS4**

FIGURE 24
Save Workspace dialog box

FIGURE 25
Image Size dialog box

Save Workspace

Name: Legacy

Capture
- ☑ Panel Locations
- ☐ Keyboard Shortcuts
- ☐ Menus

[Save] [Cancel]

Image Size

Pixel Dimensions: 922.9K
- Width: 700 pixels
- Height: 450 pixels

Document Size:
- Width: 1.75 inches
- Height: 1.125 inches
- Resolution: 400 pixels/inch

☑ Scale Styles
☑ Constrain Proportions
☑ Resample Image:
Bicubic (best for smooth gradients)

[OK] [Cancel] [Auto...]

Create a customized workspace

1. Click **Window** on the Application bar, click **History**, then drag the newly displayed panel in the gray space beneath the Swatches panel. (*Hint:* When you drag one panel into another, you'll see a light blue line, indicating that the new panel will dock with the existing panels.)

2. Click **Window** on the Application bar, point to **Workspace**, then click **Save Workspace**.

3. Type **Legacy** in the Name text box, then verify that only **Panel Locations** has a check mark beside it, as shown in Figure 24.

4. Click **Save**.

5. Click **Window** on the Application bar, then point to **Workspace**.

   The name of the new workspace appears on the Window menu.

   TIP   You can use the Rotate View tool on the Application bar to *non-destructively* change the orientation of the image canvas. Click the Reset View button on the options bar to restore the canvas to its original angle.

6. Click **Essentials (Default)**.

7. Click the **workspace switcher** on the Application bar, then click **Legacy**.

8. Click the **workspace switcher** on the Application bar, then click **Essentials**.

You created a customized workspace, reset the panel locations, tested the new workspace, then reset the panel locations to the default setting. Customized workspaces provide you with a work area that is always tailored to your needs.

Resizing an image

You may have created the perfect image, but the size may not be correct for your print format. Document size is a combination of the printed dimensions and pixel resolution. An image designed for a website, for example, might be too small for an image that will be printed in a newsletter. You can easily resize an image using the Image Size command on the Image menu. To use this feature, open the file you want to resize, click Image on the Application bar, then click Image Size. The Image Size dialog box, shown in Figure 25, opens. By changing the dimensions in the text boxes, you'll have your image resized in no time. Note the check mark next to Resample Image. With resampling checked, you can change the total number of pixels in the image and the print dimensions independently. With resampling off, you can change either the dimensions or the resolution; Photoshop will automatically adjust whichever value you ignore.

USE THE LAYERS AND HISTORY PANELS

What You'll Do

In this lesson, you'll hide and display a layer, move a layer on the Layers panel, and then undo the move by deleting the Layer Order state on the History panel.

Learning About Layers

A **layer** is a section within an image that can be manipulated independently. Layers allow you to control individual elements within an image and create great dramatic effects and variations of the same image. Layers enable you to easily manipulate individual characteristics within an image. Each Photoshop file has at least one layer, and can contain many individual layers, or groups of layers.

You can think of layers in a Photoshop image as individual sheets of clear plastic that are in a stack. It's possible for your file to quickly accumulate dozens of layers. The **Layers panel** displays all the layers in an open file. You can use the Layers panel to create, copy, delete, display, hide, merge, lock, group or reposition layers.

QUICKTIP
In Photoshop, using and understanding layers is the key to success.

Setting preferences

The Preferences dialog box contains several topics, each with its own settings: General; Interface; File Handling; Performance; Cursors; Transparency & Gamut; Units & Rulers; Guides, Grid, & Slices; Plug-Ins; Type; and Camera Raw. To open the Preferences dialog box, click Edit (Win) or Photoshop (Mac) on the Application bar, point to Preferences, then click a topic that represents the settings you want to change. If you move panels around the workspace, or make other changes to them, you can choose to retain those changes the next time you start the program. To always start a new session with default panels, click Interface on the Preferences menu, deselect the Remember Panel Locations check box, then click OK. Each time you start Photoshop, the panels will be reset to their default locations and values.

Mr. Dave Schmidt   Adobe Photoshop CS4

Understanding the Layers Panel

The order in which the layers appear on the Layers panel matches the order in which they appear in the image; the topmost layer in the Layers panel is the topmost layer on the image. You can make a layer active by clicking its name on the Layers panel. When a layer is active, it is highlighted on the Layers panel, and the name of the layer appears in parentheses in the image title bar. Only one layer can be active at a time. Figure 26 shows an image with its Layers panel. Do you see that this image contains six layers? Each layer can be moved or modified individually on the panel to give a different effect to the overall image. If you look at the Layers panel, you'll see that the Finger Painting text layer is dark, indicating that it is currently active.

QUICKTIP

Get in the habit of shifting your eye from the image in the work area to the Layers panel. Knowing which layer is active will save you time and help you troubleshoot an image.
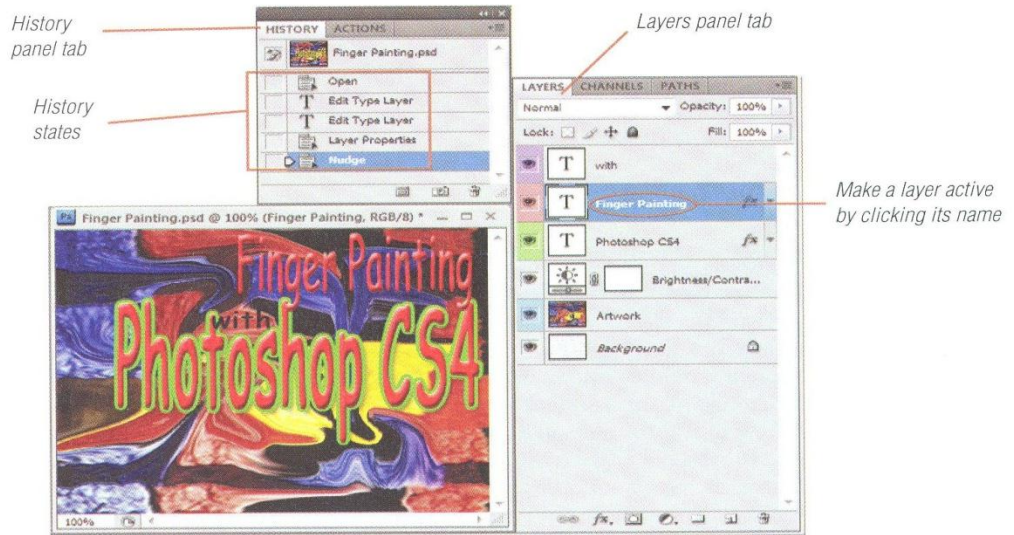
Displaying and Hiding Layers

You can use the Layers panel to control which layers are visible in an image. You can show or hide a layer by clicking the Indicates layer visibility button next to the layer thumbnail. When a layer is hidden, you are not able to merge it with another, select it, or print it. Hiding some layers can make it easier to focus on particular areas of an image.

Using the History Panel

Photoshop records each task you complete in an image on the **History panel**. This record of events, called states, makes it easy to see what changes occurred and the tools or commands that you used to make the modifications. The History panel, shown in Figure 26, displays up to 20 states and automatically updates the list to display the most recently performed tasks. The list contains the name of the tool or command used to change the image. You can delete a state on the History panel by selecting it and dragging it to the Delete current state button. Deleting a state is equivalent to using the Undo command. You can also use the History panel to create a new image from any state.

QUICKTIP

When you delete a History state, you undo all the events that occurred after that state.

FIGURE 26
Layers and History panels

History panel tab

History states

Layers panel tab

Make a layer active by clicking its name

Mr. Dave Schmidt   **Adobe Photoshop CS4**

Hide and display a layer

1. Click the **Toddler layer** on the Layers panel.

> TIP Depending on the size of the window, you might only be able to see the initial characters of the layer name.

2. Verify that the **Show Transform Controls check box** on the options bar is not checked, then click the **Indicates layer visibility button** ☐ on the Toddler layer to display the image, as shown in Figure 27.

> TIP By default, transparent areas of an image have a checkerboard display on the Layers panel.

3. Click the **Indicates layer visibility button** 👁 on the Toddler layer to hide the layer.

You made the Toddler layer active on the Layers panel, then clicked the Indicates layer visibility button to display and hide a layer. Hiding layers is an important skill that can be used to remove distracting elements. Once you've finished working on a specific layer, you can display the additional layers.

FIGURE 27
Playground image
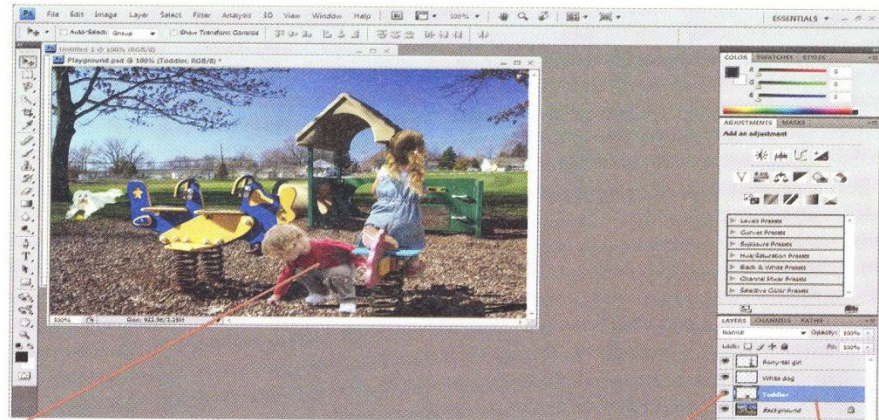
Visible Toddler layer

Indicates layer visibility button

Toddler layer

DESIGNTIP **Overcoming the fear of white space**

One design element that is often overlooked is *white space*. It's there on every page, and it doesn't seem to be doing much, does it? Take a look at a typical page in this book. Is every inch of space filled with either text or graphics? Of course not. If it were it would be impossible to read and it would be horribly ugly. The best example of the use of white space are the margins surrounding a page. This white space acts as a visual barrier—a resting place for the eyes. Without white space, the words on a page would crowd into each other, and the effect would be a cramped, cluttered, and hard to read page. Thoughtful use of white space makes it possible for you to guide the reader's eye from one location on the page to another. For many, one of the first design hurdles that must be overcome is the irresistible urge to put too much *stuff* on a page. When you are new to design, you may want to fill each page completely. Remember, less is more. Think of white space as a beautiful frame setting off an equally beautiful image.
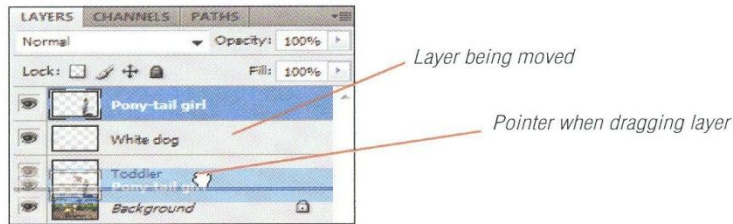
Getting Started with Adobe Photoshop CS4

Mr. Dave Schmidt   **Adobe Photoshop CS4**

FIGURE 28
Layer moved in Layers panel

LAYERS CHANNELS PATHS

Normal Opacity: 100%

Lock: Fill: 100%

Pony-tail girl

White dog

Toddler

Background

Layer being moved

Pointer when dragging layer

FIGURE 29
Result of moved layer

Visible shadow and
toddler's arm

History panel tab

Layer Order state
created when the
layer was moved

New layer
location
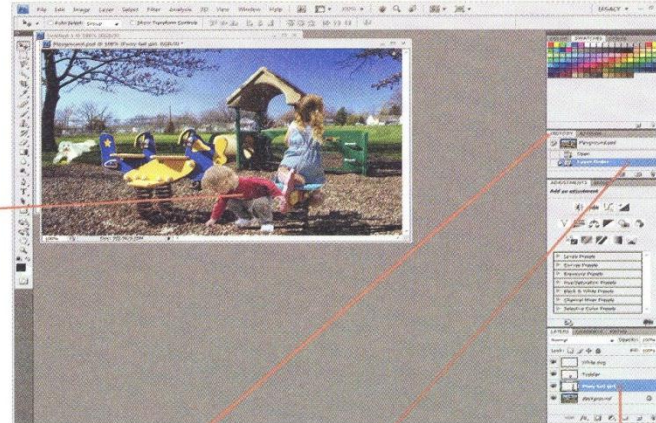
FIGURE 30
Deleting a History state

HISTORY ACTIONS

PS 1-1.psd

Open

Layer Order

Selected state

Pointer when dragging a history
state to the Delete current state
button

Lesson 5   Use the Layers and History Panels
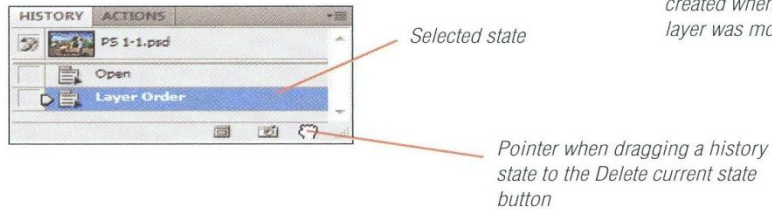
Move a layer on the Layers panel and delete a state on the History panel

1. Click the **Indicates layer visibility button** on the Toddler layer on the Layers panel.

2. Click the **workspace switcher list arrow** on the Application bar, then click **Legacy**.

3. Click and drag the **Pony-tail girl layer** on the Layers panel, beneath the Toddler layer in the panel, as shown in Figure 28.

   The shadow of the toddler is now visible. See Figure 29.

4. Click **Layer Order** on the History panel, then drag it to the **Delete current state button** on the History panel, as shown in Figure 30.

   TIP   Each time you close and reopen an image, the History panel is cleared.

   The shadow of the toddler is now less visible.

5. Click **File** on the Application bar, then click **Save**.

You moved the Pony-tail girl layer so it was behind the Toddler layer, then returned it to its original position by dragging the Layer Order state to the Delete current state button on the History panel. You can easily use the History panel to undo what you've done.

PHOTOSHOP 1-27

LEARN ABOUT PHOTOSHOP
BY USING HELP

What You'll Do

In this lesson, you'll open Help, then view and find information from the list of topics and the Search feature.

Understanding the Power of Help

Photoshop features an extensive Help system that you can use to access definitions, explanations, and useful tips. Help information is displayed in a browser window, so you must have web browser software installed on your computer to view the information; however, you do not need an Internet connection to use Photoshop Help.

Using Help Topics

The Home page of the Help window has links in the right pane that you can use to retrieve information about Photoshop commands and features. In the left pane is a list of topics from which you can choose. Help items have a plus sign (+) to the left of the

topic name. The plus sign (+) indicates that there are subtopics found within. To see the subtopics, click the plus sign (+). Topics and subtopics are links, meaning that the text is clickable. When you click any of the links, the right pane will display information (which may also contain links). The Search feature is located in a tab on the toolbar (above the left and right panes) in the form of a text box. You can search the Photoshop Help System by typing in the text box, then pressing [Enter] (Win) or [return] (Mac).

FIGURE 31
Topics in the Help window

Help links

Getting Started with Adobe Photoshop CS4

Mr. Dave Schmidt   **Adobe Photoshop CS4**

FIGURE 32
Contents section of the Help window

Choosing Colors topic in Contents

Subtopic
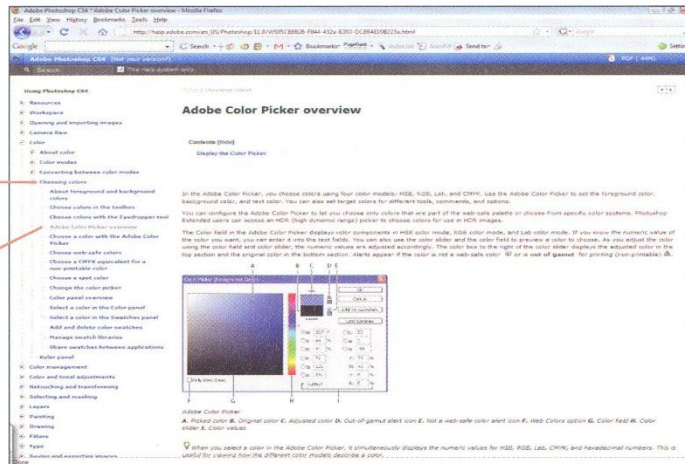
1. Click **Help** on the Application bar, then click **Photoshop Help**.

   TIP   You can also open the Help window by pressing **[F1]** (Win) or ⌘ **[/]** (Mac).

2. Click the **plus sign (+)** to the left of the word **Color**.

3. Click **the plus sign (+)** to the left of **Choosing colors**, then click **Adobe Color Picker overview** in the left pane. See Figure 32.

   TIP   You can maximize the window (if you want to take advantage of the full screen display).

   Bear in mind that Help is web-driven and, like any web site, can change as errors and inconsistencies are found.

You used the Photoshop Help command on the Help menu to open the Help window and view a topic in Contents.

Understanding the differences between monitor, images, and device resolution

Image resolution is determined by the number of pixels per inch (ppi) that are printed on a page. Pixel dimensions (the number of pixels along the height and width of a bitmap image) determine the amount of detail in an image, while image resolution controls the amount of space over which the pixels are printed. High resolution images show greater detail and more subtle color transitions than low resolution images. Device resolution or printer resolution is measured by the ink dots per inch (dpi) produced by printers. You can set the resolution of your computer monitor to determine the detail with which images will be displayed. Each monitor should be calibrated to describe how the monitor reproduces colors. Monitor calibration is one of the first things you should do because it determines whether your colors are being accurately represented, which in turn determines how accurately your output will match your design intentions.

Mr. Dave Schmidt   **Adobe Photoshop CS4**

Get help and support

1. Click **Help** on the Application bar, then click **Photoshop Help**.

2. Click the **link** beneath the Community Help icon (*http://www.adobe.com/go/lr_Photoshop_community*). Compare your Help window to Figure 33.

You accessed the Community Help feature.

FIGURE 33
Community Help window
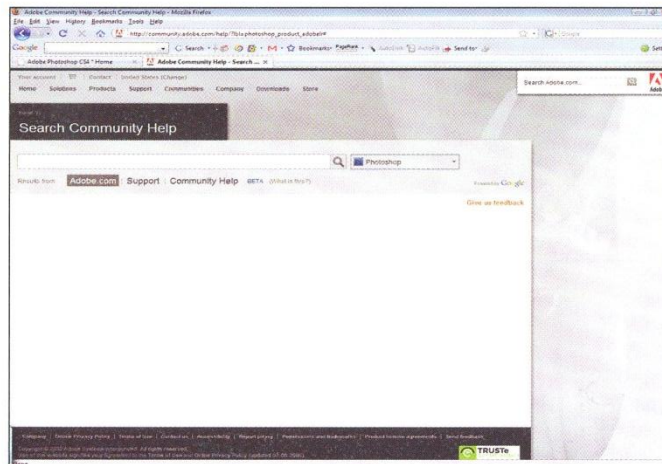
Using How-To Help features

Using Help would always be easy if you knew the name of the feature you wanted up look up. To help you find out how to complete common tasks, Photoshop has a listing of "How-To's" in the Help menu. Click Help on the Application bar, point to the How-To you'd like to read, as shown in Figure 34, then click the item about which you want more information.

FIGURE 34
How-To Help topics

Getting Started with Adobe Photoshop CS4
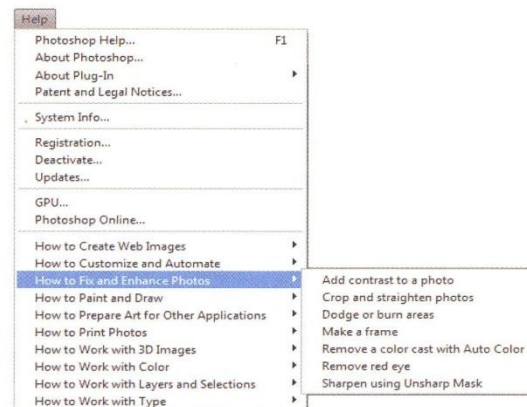
FIGURE 35
Search text box in Help

Search text box

FIGURE 36
Additional keyboard shortcuts

Keys for using panels

This is not a complete list of keyboard shortcuts. This table lists only those shortcuts that are not displayed in menu commands or tool tips.

Result	Windows	Mac OS
Set options (except for Actions, Animation, Styles, Brushes, Tool Presets, and Layer Comps panels)	Alt-click New button	Option-click New button
Delete without confirmation (except for the Brushes panel)	Alt-click Delete button	Option-click Delete button
Apply value and keep text box active	Shift + Enter	Shift + Return
Load as a selection	Control-click channel, layer, or path thumbnail.	Command-click channel, layer, or path thumbnail.
Add to current selection	Control + Shift-click channel, layer, or path thumbnail.	Command + Shift-click channel, layer, or path thumbnail.
Subtract from current selection	Control + Alt-click channel, path, or layer thumbnail.	Command + Option-click channel, path, or layer thumbnail.
Intersect with current selection	Control + Shift + Alt-click channel, path, or layer thumbnail.	Command + Shift + Option-click channel, path, or layer thumbnail.
Show/Hide all panels	Tab	Tab
Show/Hide all panels except the toolbox and options bar	Shift + Tab	Shift + Tab
Highlight options bar	Select tool and press Enter	Select tool and press Return
Increase/decrease units by 10 in a pop-up menu	Shift + Up Arrow/Down Arrow	Shift + Up Arrow/Down Arrow

Find information using Search

1. Click the **Search text box** in the Help window.
2. Type **print quality**, then press **[Enter]** (Win) or **[return]** (Mac).

   TIP   You can search for multiple words by inserting a space; do not use punctuation in the text box.

3. Scroll down the left pane (if necessary), click **2** or **Next** to go to the next page, scroll down (if necessary), click **Why colors sometimes don't match**, then compare your Help screen to Figure 35.
4. Click the **Close box** on your browser window or tab when you are finished reading the topic.

You entered a search term, viewed search results, then closed the Help window.

Finding hidden keyboard shortcuts

There are oodles of keyboard shortcuts in Photoshop, and not all of them are listed in menus. Figure 36 contains a table of additional keyboard shortcuts that are not available on menus or ScreenTips. You can find this help topic by searching on keyboard shortcuts.

VIEW AND PRINT
AN IMAGE

What You'll Do

In this lesson, you'll use the Zoom tool on the Application bar and Tools panel to increase and decrease your views of the image. You'll also change the page orientation settings in the Page Setup dialog box, and print the image.

Getting a Closer Look

When you edit an image in Photoshop, it is important that you have a good view of the area that you are focusing on. Photoshop has a variety of methods that allow you to enlarge or reduce your current view. You can use the Zoom tool by clicking the image to zoom in on (magnify the view) or zoom out of (reduce the view) areas of your image. Zooming in or out enlarges or reduces your *view*, not the actual image. The maximum zoom factor is 1600%. The current zoom percentage appears in the document's title bar, on the Navigator panel, on the status bar, and on the Application bar. When the Zoom tool is selected, the options bar provides additional choices for changing your view, as shown in Figure 37. For example, the Resize Windows To Fit check box automatically resizes the window whenever you magnify or reduce the view. You can also change the zoom percentage using the Navigator panel and the status bar by typing a new value in the zoom text box.

Printing Your Image

In many cases, a professional print shop might be the best option for printing a Photoshop image to get the highest quality. Lacking a professional print shop, you can print a Photoshop image using a standard black-and-white or color printer from within Photoshop, or you can switch to Bridge and then choose to send output to a PDF or Web Gallery. The printed image will be a composite of all visible layers. The quality of your printer and paper will affect the appearance of your output. The Page Setup dialog box displays options for printing, such as paper orientation. **Orientation** is the direction in which an image appears on the page. In **portrait orientation**, the image is printed with the shorter edges of the paper at the top and bottom. In **landscape orientation**, the image is printed with the longer edges of the paper at the top and bottom.

Use the Print command when you want to print multiple copies of an image. Use the Print One Copy command to print a single copy without making dialog box selections,

Mr. Dave Schmidt   Adobe Photoshop CS4

and use the Print dialog box when you want to handle color values using color management.

Understanding Color Handling in Printing

The Print dialog box that opens when you click Print on the File menu lets you determine how colors are output. You can click the Color Handling list arrow to choose whether to use color management, and whether Photoshop or the printing device should control this process. If you let Photoshop determine the colors, Photoshop performs any necessary conversions to color values appropriate for the selected printer. If you choose to let the printer determine the colors, the printer will convert document color values to the corresponding printer color values. In this scenario, Photoshop does not alter the color values. If no color management is selected, no color values will be changed when the image is printed.

Viewing an Image in Multiple Views

You can use the New Window command (accessed by pointing to Arrange on the Window menu) to open multiple views of the same image. You can change the zoom percentage in each view so you can spotlight the areas you want to modify, and then modify the specific area of the image in each view. Because you are working on the same image in multiple views, not in multiple versions, Photoshop automatically applies the changes you make in one view to all views. Although you can close the views you no longer need at any time, Photoshop will not save any changes until you save the file.

FIGURE 37
Zoom tool options bar

Zooms the window to the print resolution

Selected check box resizes window

Displays image at 100% magnification

Choosing a Photoshop version

You may have noticed that the title bar on the images in this book say 'Adobe Photoshop CS4 Extended'. What's that about? Well, the release of the Adobe Creative Suite 4 offers two versions of Photoshop: Adobe Photoshop CS4 and Adobe Photoshop CS4 Extended. The Extended version has additional animation and measurement features and is ideal for multimedia creative professionals, film and video creative professionals, graphic and web designers who push the limits of 3D and motion, as well as those professionals in the fields of manufacturing, medicine, architecture, engineering and construction, and science and research. Photoshop CS4 is ideal for professional photographers, serious amateur photographers, graphic and web designers, and print service providers.

Mr. Dave Schmidt   **Adobe Photoshop CS4**

Use the Zoom tool

1. Click the **Indicates layer visibility button** 👁 on the Layers panel for the Toddler layer so the layer is no longer displayed.

2. Click the **Zoom tool** 🔍 on the Application bar.

   TIP   You can also click the Zoom tool on the Tools panel.

3. Select the **Resize Windows To Fit check box** (if it is not already selected) on the options bar.

4. Position the **Zoom In pointer** ⊕ over the center of the image, then click the **image**.

   TIP   Position the pointer over the part of the image you want to keep in view.

5. Press **[Alt]** (Win) or **[option]** (Mac), then when the Zoom Out pointer appears, click the center of the image twice with the **Zoom Out pointer** ⊖.

6. Release **[Alt]** (Win) or **[option]** (Mac), then compare your image to Figure 38.

   The zoom factor for the image is 66.7%. Your zoom factor may differ.

You selected the Zoom tool on the Tools panel and used it to zoom in to and out of the image. The Zoom tool makes it possible to see the detail in specific areas of an image, or to see the whole image at once, depending on your needs.

Using the Navigator panel

You can change the magnification factor of an image using the Navigator panel or the Zoom tool on the Tools panel. You can open the Navigator panel by clicking Window on the Application bar, then clicking Navigator. By double-clicking the Zoom text box on the Navigator panel, you can enter a new magnification factor, then press [Enter] (Win) or [return] (Mac). The magnification factor—shown as a percentage—is displayed in the lower-left corner of the Navigator panel, as shown in Figure 39. The red border in the panel, called the Proxy Preview Area, defines the area of the image that is magnified. You can drag the Proxy Preview Area inside the Navigator panel to view other areas of the image at the current magnification factor.

FIGURE 38
Reduced image

Zoom tool options

Zoom percentage changed

Zoom tool on Tools panel

FIGURE 39
Navigator panel

Viewed area of image

Getting Started with Adobe Photoshop CS4

FIGURE 40
Page Setup dialog box
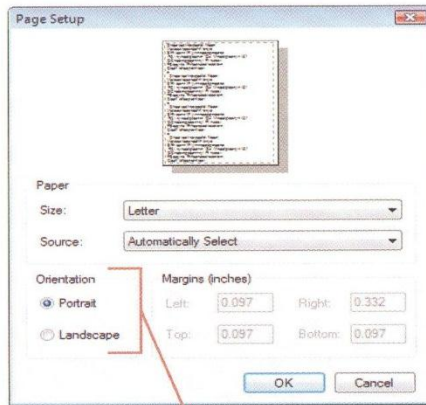
Orientation options

*Drag handles surrounding
preview to resize image*

Scaling options

*Copies to
be printed*

*Positioning
options*
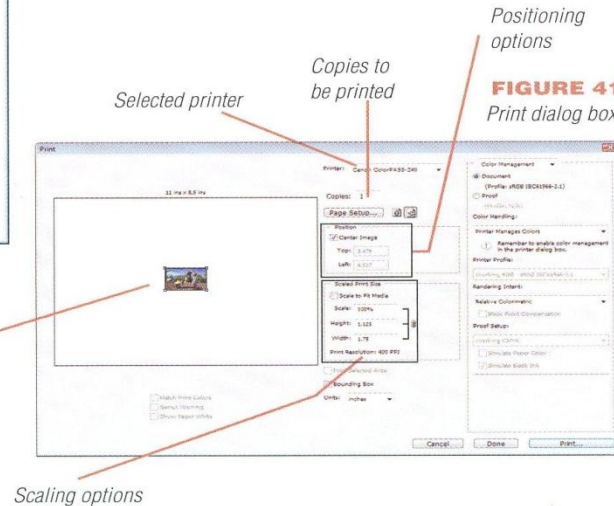
Selected printer

FIGURE 41
Print dialog box

1. Click **File** on the Application bar, then click **Page Setup** to open the Page Setup dialog box, as shown in Figure 40.

   TIP   If you have not selected a printer using the Print Center, a warning box might appear (Mac).

   Page setup and print settings vary slightly in Macintosh.

2. Click the **Landscape option button** in the Orientation section (Win) or **Click the Landscape icon** (Mac), then click **OK**.

   TIP   Choose either Landscape option (Mac).

3. Click **File** on the Application bar, click **Print**, then click **Proceed** in the message box that opens. If a PostScript dialog box opens, click **OK** (Mac).

4. Make sure that **1** appears in the Copies text box, then click **Print**. See Figure 41.

   TIP   You can use the handles surrounding the image preview in the Print dialog box to scale the print size.

You used the Page Setup command on the File menu to open the Page Setup dialog box, changed the page orientation, then printed the image. Changing the page orientation can make an image fit better on a printed page.

Previewing and creating a Proof Setup

You can create and save a Proof Setup, which lets you preview your image to see how it will look when printed on a specific device. This feature lets you see how colors can be interpreted by different devices. By using this feature, you can decrease the chance that the colors on the printed copy of the image will vary from what you viewed on your monitor. Create a custom proof by clicking View on the Application bar, pointing to Proof Setup, then clicking Custom. Specify the conditions in the Customize Proof Condition dialog box, then click OK. Each proof setup has the .psf extension and can be loaded by clicking View on the Application bar, pointing to Proof Setup, clicking Custom, then clicking Load.

Create a PDF with Bridge

1. Click the **Launch Bridge button** ▶Br on the Application bar.

2. Click the **Folders tab** (if necessary), then click **Chapter 1** in the location where your Data Files are stored in the Folders tab (if necessary).

3. Click the **Output button** in the Bridge options bar.

4. Click the **PDF button** in the Output tab.

5. Click **Playground.psd,** hold **[Shift]**, click **PS 1-4.psd** in the Content tab, then release **[Shift]**.

6. Click the **Template list arrow**, click ***5 Contact Sheet**, click **Refresh Preview**, then compare your screen to Figure 1-42.

7. Scroll down the Output panel, click **Save**, locate the folder where your Data Files are stored, type **your name Chapter 1 files** in the text box, then click **Save.** You may need to click OK to close a warning box.

You launched Adobe Bridge, then generated a PDF which was printed using Adobe Acrobat.

FIGURE 42
PDF Output options in Bridge
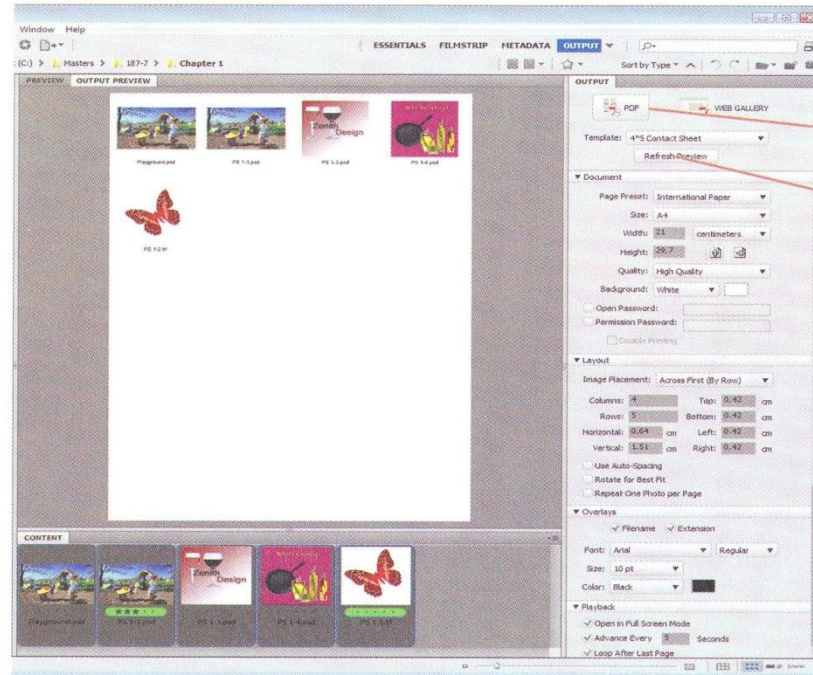
PDF option

Click to refresh preview screen

DESIGNTIP   **Using contrast to add emphasis**

Contrast is an important design principle that uses opposing elements, such as colors or lines, to produce an intensified effect in an image, page, or publication. Just as you can use a font attribute to make some text stand out from the rest, you can use contrasting elements to make certain graphic objects stand out. You can create contrast in many ways: by changing the sizes of objects; by varying object weights, such as making a line heavier surrounding an image; by altering the position of an object, such as changing the location on the page, or rotating the image so it is positioned on an angle; by drawing attention-getting shapes or a colorful box behind an object that makes it stand out (called a **matte**); or by adding carefully selected colors that emphasize an object.

Mr. Dave Schmidt   **Adobe Photoshop CS4**

FIGURE 43
Web Gallery options in Bridge
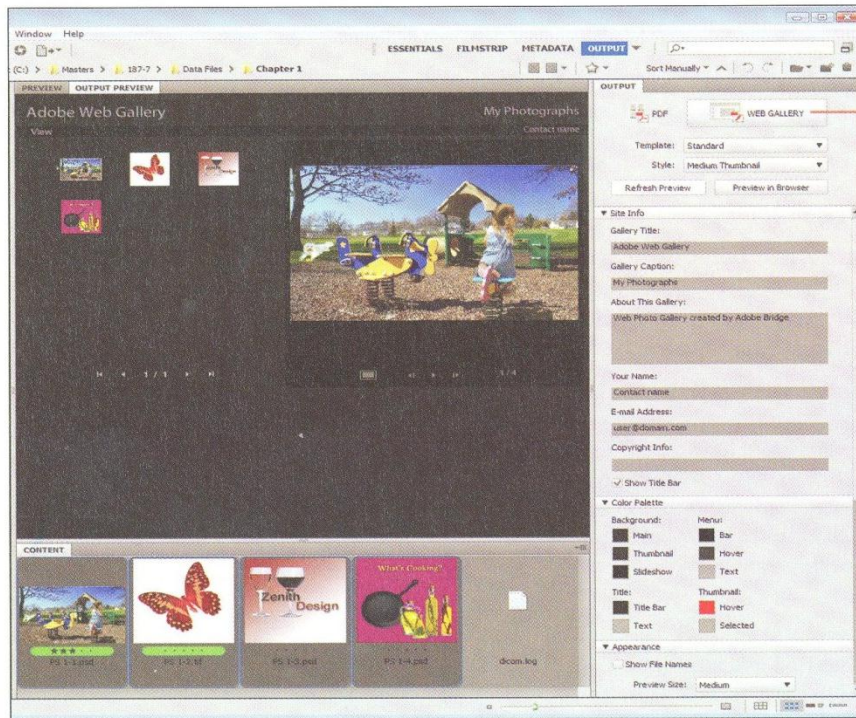
Web Gallery button

Create a Web Gallery with Bridge

1. Verify that Bridge is open.

2. Click the **Web Gallery button** in the Output tab, click **Refresh Preview**, then compare your screen to Figure 43.

3. Click the **View Slideshow button** in the Output Preview window, then click the **Play Slideshow button**.

4. Scroll down the Output panel, click the **Save to Disk option button**, click the **Browse button**, locate the folder where your Data Files are stored, then click **OK** (Win) or **Choose** (Mac).

5. Click **Save** in the Create Gallery section of the Output panel, then click **OK** when the Gallery has been created.

6. Click **File** on the Bridge menu, then click **Exit** (Win) or click **Adobe Bridge CS4**, then click **Quit Adobe Bridge CS4** (Mac).

You launched Adobe Bridge, then generated a Web Gallery.

Mr. Dave Schmidt   **Adobe Photoshop CS4**

CLOSE A FILE
AND EXIT PHOTOSHOP

What You'll Do

New...	Ctrl+N
Open...	Ctrl+O
Browse in Bridge...	Alt+Ctrl+O
Open As...	Alt+Shift+Ctrl+O
Open As Smart Object...	
Open Recent	▶
Share My Screen...	
Device Central...	
Close	Ctrl+W
Close All	Alt+Ctrl+W
Close and Go To Bridge...	Shift+Ctrl+W
Save	Ctrl+S
Save As...	Shift+Ctrl+S
Check In...	
Save for Web & Devices...	Alt+Shift+Ctrl+S
Revert	F12
Place...	
Import	▶
Export	▶
Automate	▶
Scripts	▶
File Info...	Alt+Shift+Ctrl+I
Page Setup...	Shift+Ctrl+P
Print...	Ctrl+P
Print One Copy	Alt+Shift+Ctrl+P
Exit	Ctrl+Q

▶ *In this lesson, you'll use the Close and Exit (Win) or Quit (Mac) commands to close a file and exit Photoshop.*

Concluding Your Work Session

At the end of your work session, you might have opened several files; you now need to decide which ones you want to save.

QUICKTIP

If you share a computer with other people, it's a good idea to reset Photoshop's preferences back to their default settings. You can do so when you start Photoshop by clicking Window on the Application bar, pointing to Workspace, then clicking Essentials (Default).

Closing Versus Exiting

When you are finished working on an image, you need to save and close it. You can close one file at a time, or close all open files at the same time by exiting the program. Closing a file leaves Photoshop open, which allows you to open or create another file. Exiting Photoshop closes the file, closes Photoshop, and returns you to the desktop, where you can choose to open another program or shut down the computer. Photoshop will prompt you to save any changes before it closes the files. If you do not modify a new or existing file, Photoshop will close it automatically when you exit.

QUICKTIP

To close all open files, click File on the Application bar, then click Close All.

Using Adobe online

Periodically, when you start Photoshop, an Update dialog box might appear, prompting you to search for updates or new information on the Adobe website. If you click Yes, Photoshop will automatically notify you that a download is available; however, you do not have to select it. You can also obtain information about Photoshop from the Adobe Photoshop website (*www.adobe.com/products/photoshop/main.html*), where you can link to downloads, tips, training, galleries, examples, and other support topics.

Getting Started with Adobe Photoshop CS4

FIGURE 44
Closing a file using the File menu

Workspace switcher

Close command

Exit command

1. Click the **workspace switcher**, then click **Essentials**.

2. Click **File** on the Application bar, then compare your screen to Figure 44.

3. Click **Close**.

   TIP   You can close an open file (without closing Photoshop) by clicking the Close button in the image window. Photoshop will prompt you to save any unsaved changes before closing the file.

4. If asked to save your work, click **Yes** (Win) or **Save** (Mac).

5. Click **File** on the Application bar, then click **Exit** (Win) or click **Photoshop** on the Application bar, then click **Quit Photoshop** (Mac).

   TIP   To exit Photoshop and close an open file, click the Close button in the program window. Photoshop will prompt you to save any unsaved changes before closing.

6. If asked to save your work (the untitled file), click **No**.

You closed the current file and exited the program by using the Close and Exit (Win) or Quit (Mac) commands.

DESIGNTIP   **Using a scanner and a digital camera**

If you have a scanner, you can import print images, such as those taken from photographs, magazines, or line drawings, into Photoshop. Remember that images taken from magazines are owned by others, and that you need permission to distribute them. There are many types of scanners, including flatbed or single-sheet feed. You can also use a digital camera to create your own images. A digital camera captures images as digital files and stores them on some form of electronic medium, such as a SmartMedia card or memory stick. After you upload the images from your camera to your computer, you can work with images in Photoshop.

You can open a scanned or uploaded image (which usually has a .jpg extension or another graphics file format) by clicking File on the Application bar, then clicking Open. All Formats is the default file type, so you should be able to see all available image files in the Open dialog box. Locate the folder containing your scanned or digital camera images, click the file you want to open, then click Open. A scanned or digital camera image contains all its imagery in a single layer. You can add layers to the image, but you can only save these new layers if you save the image as a Photoshop image (with the extension .psd).

Power User Shortcuts

Key: Menu items are indicated by ➤ between the menu name and its command.
Blue bold letters are shortcuts for selecting tools on the Tools panel.

to do this:	use this method:
Close a file	[Ctrl][W] (Win) ⌘[W] (Mac)
Create a new file	[Ctrl][N] (Win), ⌘[N] (Mac)
Create a workspace	Window ➤ Workspace ➤ Save Workspace
Drag a layer	🖐
Exit Photoshop	[Ctrl][Q] (Win), ⌘[Q] (Mac)
Hide a layer	👁
Lasso tool	🔗 or **L**
Modify workspace display	ESSENTIALS ▾
Open a file	[Ctrl][O] (Win), ⌘[O] (Mac)
Launch Bridge	▶Br
Open Help	[F1] (Win), ⌘ [/] (Mac)
Open Preferences dialog box	[Ctrl][K] (Win) ⌘[K] (Mac)
Page Setup	[Shift][Ctrl][P] (Win) [Shift]⌘[P] (Mac)
Print File	File ➤ Print or, [Ctrl][P] (Win) ⌘[P] (Mac)

to do this:	use this method:
Reset preferences to default settings	[Shift][Alt][Ctrl] (Win) [Shift] option ⌘ (Mac)
Save a file	[Ctrl][S] (Win) ⌘[S] (Mac)
Show a layer	☐
Show hidden lasso tools	[Shift] **L**
Show History panel	▣
Show or hide all open panels	[Shift][Tab]
Show or hide all open panels, the options bar, and the Tools panel	[Tab]
Show or hide Swatches panel	Window ➤ Swatches
Use Save As	[Shift][Ctrl][S] (Win) [Shift]⌘[S] (Mac)
Zoom in	🔍 [Ctrl][+] (Win), ⌘[+] (Mac)
Zoom out	[Alt] 🔍 (Win) [Ctrl][-] (Win), ⌘[−] (Mac)
Zoom tool	🔍 or **Z**

Getting Started with Adobe Photoshop CS4

Mr. Dave Schmidt   **Adobe Photoshop CS4**

Start Adobe Photoshop CS4.

1. Start Photoshop.
2. Create a new image that is 500 × 500 pixels, accept the default resolution, then name and save it as **Review**.

Open and save an image.

1. Open PS 1-3.psd from the drive and folder where you store your Data Files, and if prompted, update the text layers.
2. Save it as **Zenith Design Logo**.

Use organizational and management features.

1. Open Adobe Bridge.
2. Click the Folders tab, then locate the folder that contains your Data Files.
3. Close Adobe Bridge.

Examine the Photoshop window.

1. Locate the image title bar and the current zoom percentage.
2. Locate the menu you use to open an image.
3. View the Tools panel, the options bar, and the panels that are showing.
4. Click the Move tool on the Tools panel, then view the Move tool options on the options bar.
5. Create, save and display a customized workspace (based on Essentials) called History and Layers that captures panel locations and displays the History panel above the Layers panel.

Use the Layers and History panels.

1. Drag the Wine Glasses layer so it is above the Zenith layer, then use the History panel to undo the state.

2. Drag the Wine Glasses layer above the Zenith layer again.
3. Use the Indicates layer visibility button to hide the Wine Glasses layer.
4. Make the Wine Glasses layer visible again.
5. Hide the Zenith layer.
6. Show the Zenith layer.
7. Show the Tag Line layer.

Learn about Photoshop by using Help.

1. Open the Adobe Photoshop CS4 Help window.
2. Using the Index, find information about resetting to the default workspace.

Mr. Dave Schmidt   **Adobe Photoshop CS4**

3. Print the information you find.
4. Close the Help window.

View and print an image.

1. Make sure that all the layers are visible in the Layers panel.
2. Click the Zoom tool, then make sure the setting is selected to resize the window to fit.

3. Zoom in on the wine glasses twice.
4. Zoom out to the original perspective.
5. Print one copy of the image.
6. Save your work.

Close a file and exit Photoshop.

1. Compare your screen to Figure 45, then close the Zenith Design Logo file.

2. Close the Review file.
3. Exit (Win) or Quit (Mac) Photoshop.

FIGURE 45
Completed Skills Review

Mr. Dave Schmidt   **Adobe Photoshop CS4**
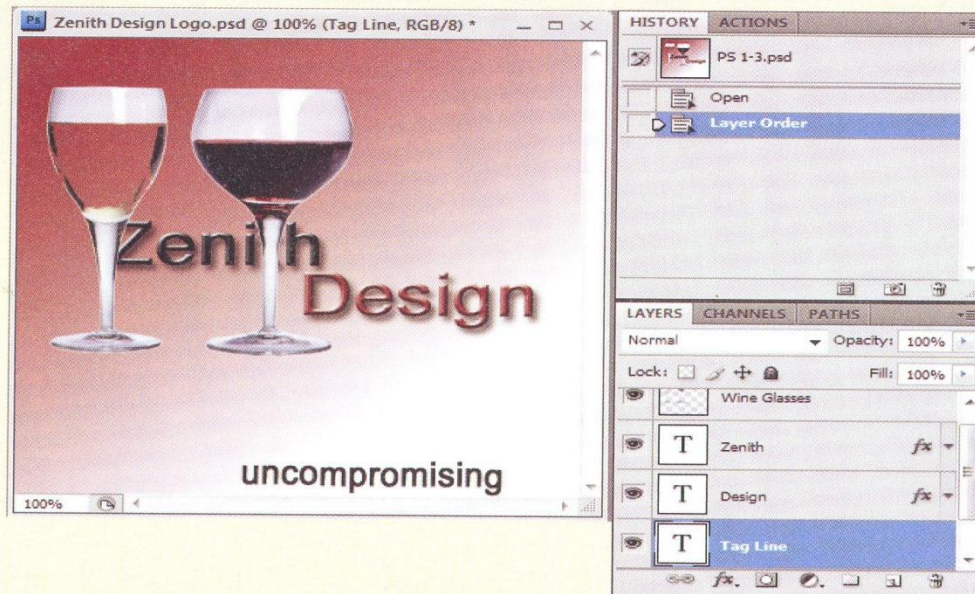
PROJECT BUILDER 1

As a new Photoshop user, you are comforted knowing that Photoshop's Help system provides definitions, explanations, procedures, and other helpful information. It also includes examples and demonstrations to show how Photoshop features work. You use the Help system to learn about image size and resolution.

1. Open the Photoshop Help window.
2. Click the Workspace topic in the topics list.
3. Click the Panels and menus subtopic, in the left pane, then click Enter values in panels, dialog boxes, and the options bar topic.
4. Click the Display context menus topic, then read this topic.
5. Click the Opening and importing images topic in the left pane.
6. Click the Image size and resolution topic in the left pane, then click About monitor resolution. Print out this topic, then compare your screen to the sample shown in Figure 46.

FIGURE 46
Sample Project Builder 1
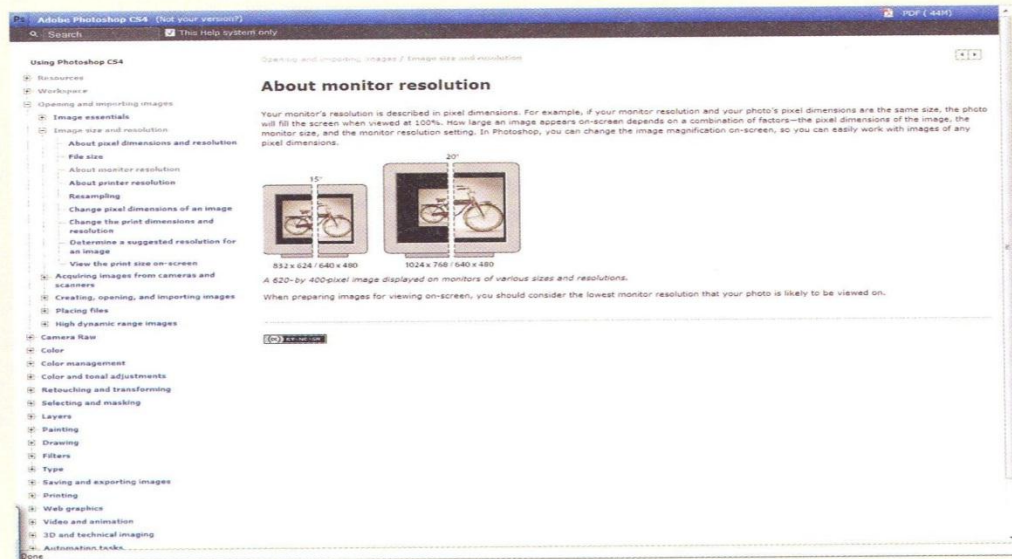
Kitchen Experience, your local specialty cooking shop, has just added herb-infused oils to its product line. They have hired you to draft a flyer that features these new products. You use Photoshop to create this flyer.

1. Open PS 1-4.psd, then save it as **Cooking**.
2. Display the Essentials workspace (if necessary).
3. Make the Measuring Spoons layer visible.
4. Drag the Oils layer so the content appears behind the Skillet layer content.
5. Drag the Measuring Spoons layer above the Skillet layer.
6. Save the file, then compare your image to the sample shown in Figure 47.

FIGURE 47
Sample Project Builder 2

Mr. Dave Schmidt   **Adobe Photoshop CS4**
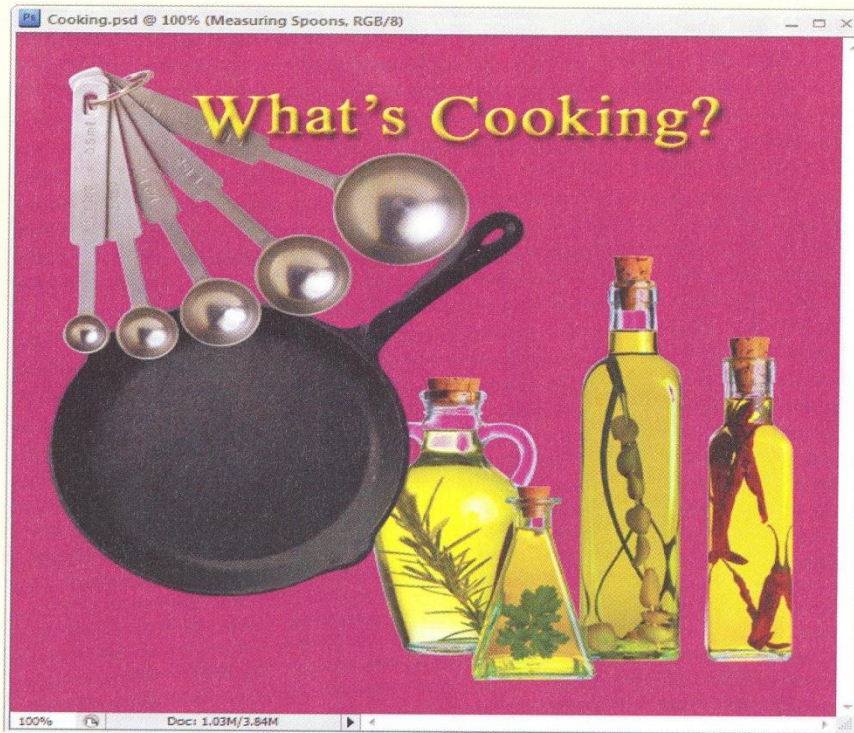
DESIGN PROJECT

As an avid, albeit novice Photoshop user, you have grasped the importance of how layers affect your image. With a little practice, you can examine a single-layer image and guess which objects might display on their own layers. Now, you're ready to examine the images created by Photoshop experts and critique them on their use of layers.

1. Connect to the Internet, and use your browser to find interesting artwork located on at least two websites.
2. Download a single-layer image (in its native format) from each website.
3. Start Photoshop, then open the down-loaded images.
4. Save one image as **Critique-1** and the other as **Critique-2** in the Photoshop format (use the .psd extension).
5. Analyze each image for its potential use of layers.

Getting Started with Adobe Photoshop CS4

Mr. Dave Schmidt   Adobe Photoshop CS4

6. Open the File Info dialog box for Critique-1.psd, then type in the Description section your speculation as to the number of layers there might be in the image, their possible order on the Layers panel, and how moving the layers would affect the image.

7. Close the dialog box.

8. Compare your image to the sample shown in Figure 48, then close the files.

FIGURE 48
Sample Design Project

Getting Started with Adobe Photoshop CS4

Mr. Dave Schmidt   **Adobe Photoshop CS4**
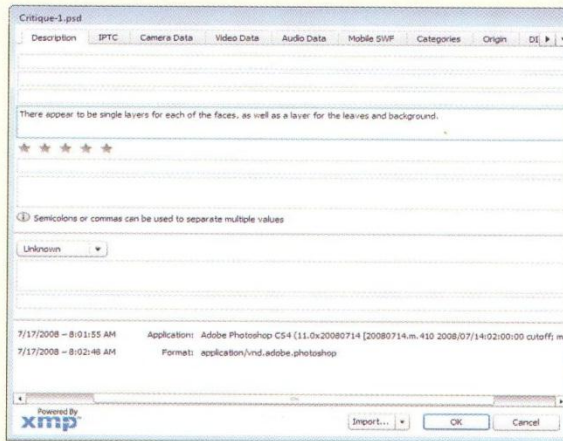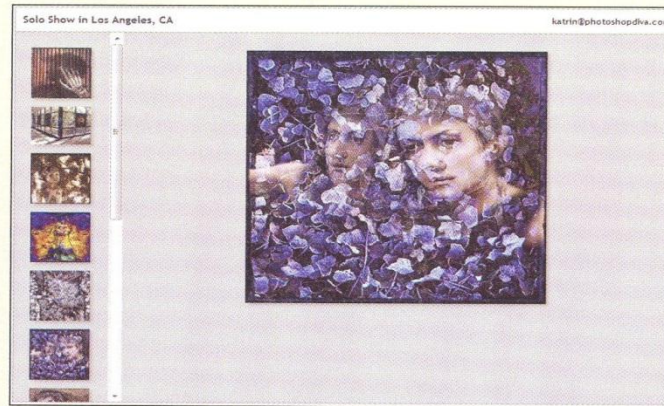
PORTFOLIO PROJECT

You are preparing to work on a series of design projects to enhance your portfolio. You decide to see what information on digital imaging is available on the Adobe website. You also want to increase your familiarity with the Adobe website so that you can take advantage of product information and support, user tips and feedback, and become a more skilled Photoshop user.

1. Connect to the Internet and go to the Adobe website at *www.adobe.com*.
2. Point to Products, then find the link for the Photoshop family, as shown in Figure 49.
3. Use the links on the web page to search for information about digital imaging options.
4. Print the relevant page(s).
5. Start Photoshop and open the Photoshop Help window.
6. Search for information about Adjusting the Monitor Display, then print the relevant page(s).

7. Evaluate the information in the documents, and then compare any significant differences.

FIGURE 49
Completed Portfolio Project

CHAPTER 2

Working with Layers

chapter

2
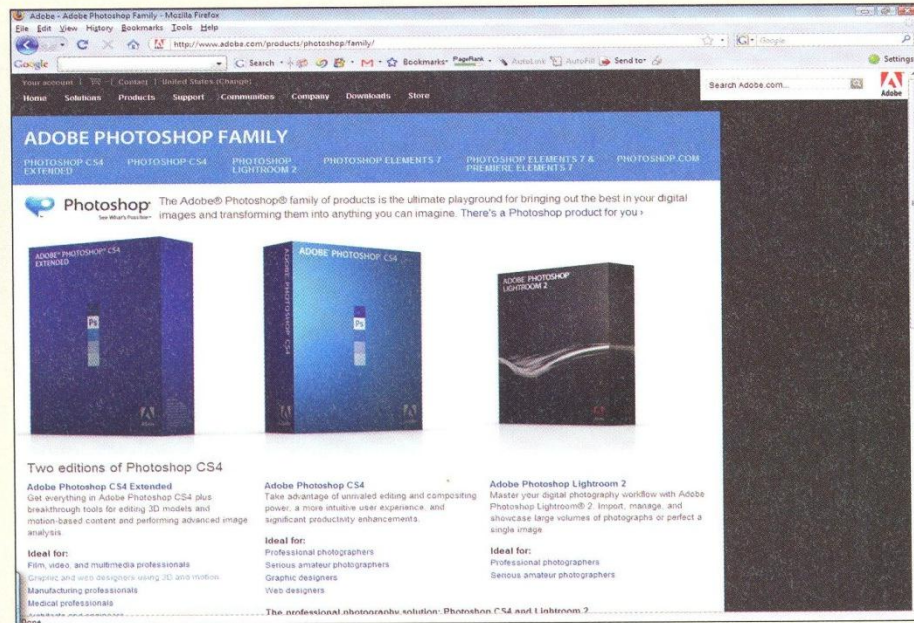
WORKING WITH LAYERS

1. Examine and convert layers

2. Add and delete layers

3. Add a selection from one image to another

4. Organize layers with layer groups and colors

ADOBE PHOTOSHOP CS4

2-1
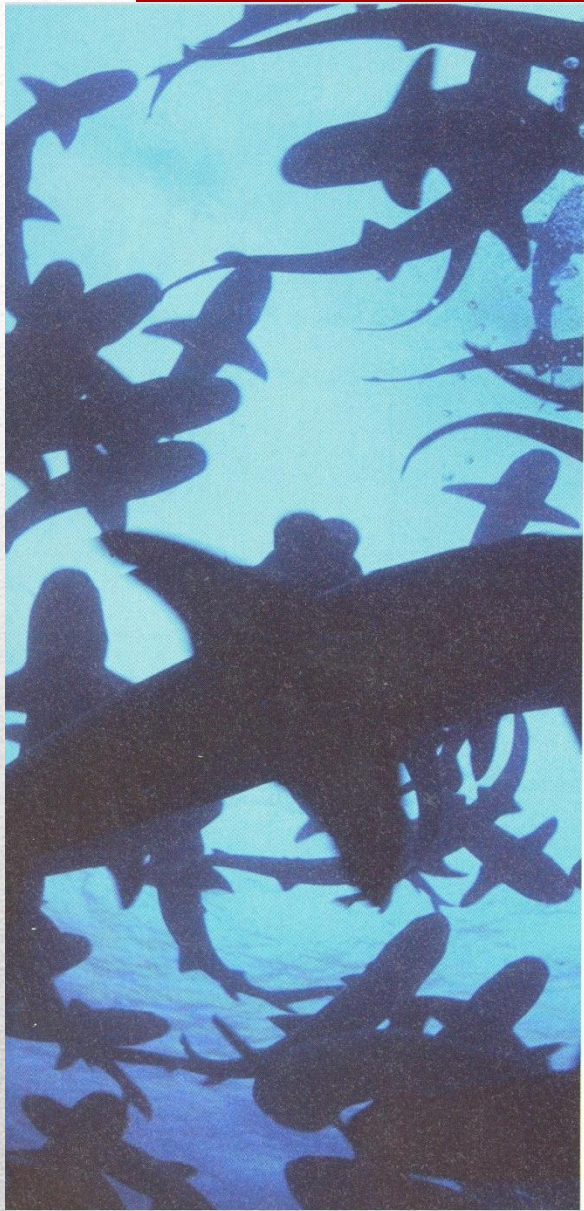
Layers Are Everything

You can use Photoshop to create sophisticated images in part because a Photoshop image can contain multiple layers. Each object created in Photoshop can exist on its own individual layer, making it easy to control the position and quality of each layer in the stack. Depending on your computer's resources, you can have a maximum of 8000 layers in each Photoshop image with each layer containing as much or as little detail as necessary.

QUICKTIP

The transparent areas in a layer do not increase file size.

Understanding the Importance of Layers

Layers make it possible to manipulate the tiniest detail within your image, which gives you tremendous flexibility when you make changes. By placing objects, effects, styles, and type on separate layers, you can modify them individually *without* affecting other layers. The advantage to using multiple layers is that you can isolate effects and images on one layer without affecting the others. The disadvantage of using multiple layers is that your file size might become very large. However, once your image is finished, you can dramatically reduce its file size by combining all the layers into one.

Using Layers to Modify an Image

You can add, delete, and move layers in your image. You can also drag a portion of an image, called a **selection**, from one Photoshop image to another. When you do this, a new layer is automatically created. Copying layers from one image to another makes it easy to transfer a complicated effect, a simple image, or a piece of type. You can also hide and display each layer, or change its opacity. **Opacity** is the ability to see through a layer so that layers beneath it are visible. The more opacity a layer has, the less see-through (transparent) it is. You can continuously change the overall appearance of your image by changing the order of your layers, until you achieve just the look you want.

2-2

Tools You'll Use

EXAMINE AND CONVERT LAYERS

What You'll Do
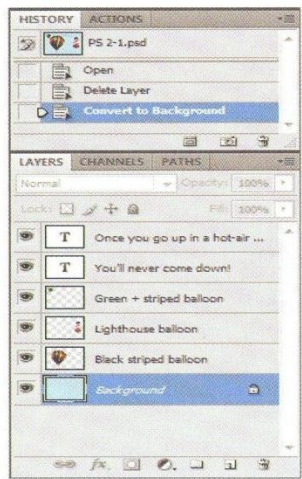
In this lesson, you'll use the Layers panel to delete a Background layer and the Layer menu to create a Background layer from an image layer.

Learning About the Layers Panel

The **Layers panel** lists all the layers within a Photoshop file and makes it possible for you to manipulate one or more layers. By default, this panel is located in the lower-right corner of the screen, but it can be moved to a new location by dragging the panel's tab. In some cases, the entire name of the layer might not appear on the panel. If a layer name is too long, an ellipsis appears, indicating that part of the name is hidden from view. You can view a layer's entire name by holding the pointer over the name until the full name appears. The **layer thumbnail** appears to the left of the layer name and contains a miniature picture of the layer's content, as shown in Figure 1. To the left of the layer thumbnail, you can add color, which you can use to easily identify layers. The Layers panel also contains common buttons, such as the Delete layer button and the Create new layer button.

Recognizing Layer Types

The Layers panel includes several types of layers: Background, type, adjustment, and image (non-type). The Background layer—whose name appears in italics—is always at the bottom of the stack. Type layers—layers that contain text—contain the type layer icon in the layer thumbnail, and image layers display a thumbnail of their contents. Adjustment layers, which make changes to layers, have a variety of thumbnails, depending on the kind of adjustment. Along with dragging selections from one Photoshop image to another, you can also drag objects created in other applications, such as Adobe

Working with Layers

Mr. Dave Schmidt   Adobe Photoshop CS4

Dreamweaver, Adobe InDesign, or Adobe Flash, onto a Photoshop image, which creates a layer containing the object you dragged from the other program window.

QUICKTIP

It is not necessary for a Photoshop image to have a Background layer. However, if you don't have a Background layer, the background will take on the properties of all the layers and their opacities, which is more memory intensive than an object layer.

Organizing Layers

One of the benefits of using layers is that you can create different design effects by rearranging their order. Figure 2 contains the same layers as Figure 1, but they are arranged differently. Did you notice that the yellow-striped balloon is partially obscured by the black-striped balloon and the lighthouse balloon? This reorganization was created by dragging the layer containing the yellow balloon below the Black striped balloon layer and by dragging the Lighthouse balloon layer above Layer 2 on the Layers panel. When organizing layers, you may find it helpful to resize the Layers panel so you can see more layers within the image.

QUICKTIP

Did you notice the horizontal and vertical lines in the figures? Although you may find them distracting, these lines are moveable guides that you can use to help you place objects precisely. As you continue working in Photoshop, you'll find they are very useful—and soon you probably won't even notice them.

Lesson 1   Examine and Convert Layers

FIGURE 1
Image with multiple layers

Layers panel list arrow

Type layer thumbnail
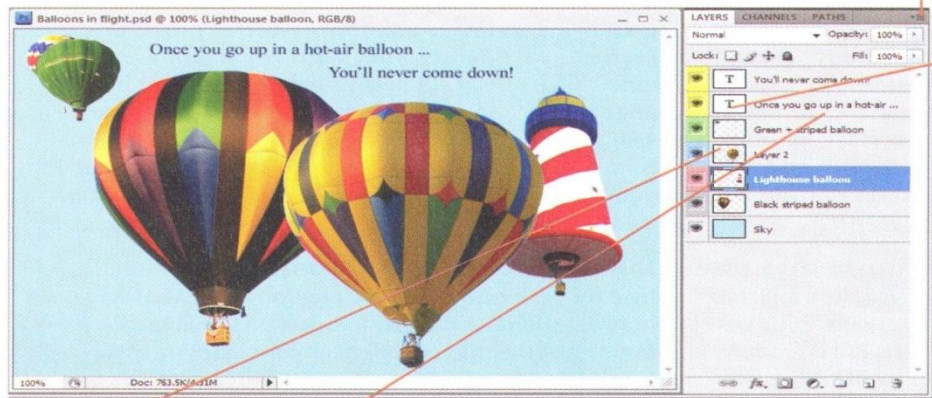
Image layer thumbnail

Position mouse over layer name to display full title

FIGURE 2
Layers rearranged
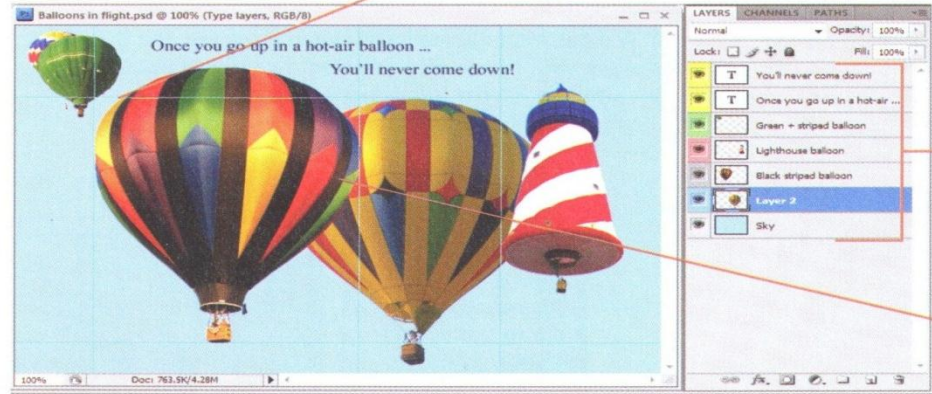
Guide

New layer order

Overlapping balloons

PHOTOSHOP 2-5

Converting Layers

When you open an image created with a digital camera, you'll notice that the entire image appears in the Background layer. The Background layer of any image is the initial layer and is always located at the bottom of the stack. You cannot change its position in the stack, nor can you change its opacity or lighten or darken its colors. You can, however, convert a Background layer into an image layer (non-type layer), and you can convert an image layer into a Background layer. You need to modify the image layer *before* converting it to a Background layer. You might want to convert a Background layer into an image layer so that you can use the full range of editing tools on the layer content. You might want to convert an image layer into a Background layer after you have made all your changes and want it to be the bottom layer in the stack.

QUICKTIP

Before converting an image layer to a Background layer, you must first delete the existing Background layer. You can delete a Background layer by selecting it on the Layers panel, then dragging it to the Delete layer button on the Layers panel.

Using rulers and changing units of measurement

You can display horizontal and vertical rulers to help you better position elements. To display or hide rulers, click View on the Application bar, then click Rulers. (A check mark to the left of the Rulers command indicates that the rulers are displayed.) In addition to displaying or hiding rulers, you can also choose from various units of measurement. Your choices include pixels, inches, centimeters, millimeters, points, picas, and percentages. Pixels, for example, display more tick marks and can make it easier to make tiny adjustments. You can change the units of measurement by clicking Edit [Win] or Photoshop [Mac] on the Application bar, pointing to Preferences, then clicking Units & Rulers. In the Preferences dialog box, click the Rulers list arrow, click the units you want to use, then click OK. The easiest way to change units of measurement, however, is shown in Figure 3. Once the rulers are displayed, right-click (Win) or [Ctrl]-click (Mac) either the vertical or horizontal ruler, then click the unit of measurement you want. When displayed, the Info panel, displays the current coordinates in your image. Regardless of the units of measurement in use, the X/Y coordinates are displayed in the Info panel.

FIGURE 3
Changing units of measurement
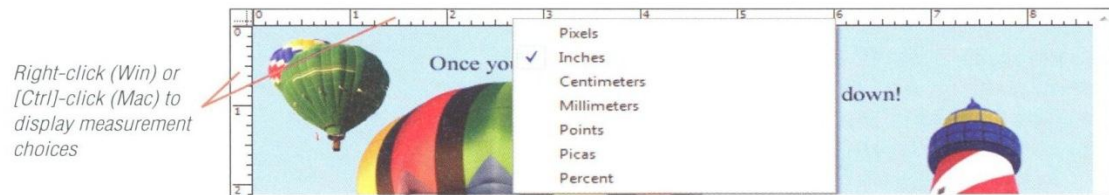
Right-click (Win) or [Ctrl]-click (Mac) to display measurement choices

Pixels
✓ Inches
Centimeters
Millimeters
Points
Picas
Percent

Mr. Dave Schmidt   **Adobe Photoshop CS4**

FIGURE 4
Warning box

Yout title bar may
differ (Mac)

Adobe Photoshop CS4 Extended

ⓘ   Delete the layer "Background"?

[Yes]   [No]

☐ Don't show again
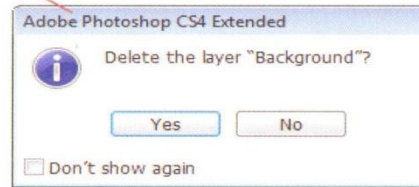
FIGURE 5
Background layer deleted

LAYERS CHANNELS PATHS

Normal   ▾ Opacity: 100% ▸
Lock: ☐ ✒ ✛ 🔒   Fill: 100% ▸

👁 [T] Once you go up in a hot-air ...
👁 [T] You'll never come down!
👁 Green + striped balloon
👁 Lighthouse balloon
👁 Black striped balloon
👁 Sky

Background layer
no longer present

FIGURE 6
New Background layer added to Layers panel
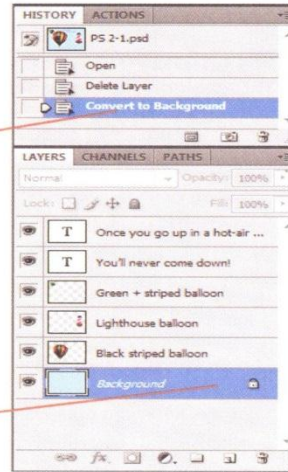
History state
indicating layer
conversion

HISTORY ACTIONS
     🔹 PS 2-1.psd
     Open
     Delete Layer
     Convert to Background

LAYERS CHANNELS PATHS
Normal   ▾ Opacity: 100% ▸
Lock: ☐ ✒ ✛ 🔒   Fill: 100% ▸
👁 [T] Once you go up in a hot-air ...
👁 [T] You'll never come down!
👁 Green + striped balloon
👁 Lighthouse balloon
👁 Black striped balloon
👁 Background 🔒

New
Background
layer

Lesson 1   Examine and Convert Layers

Convert an image layer into a Background layer

1. Open PS 2-1.psd from the drive and folder where you store your Data Files, then save it as **Balloons in flight**.

   TIP If you receive a warning box about maximum compatibility, or a message stating that some of the text layers need to be updated before they can be used for vector-based output, and/or a warning box about maximum compatibility, click Update and/or click OK.

2. Click **View** on the Application bar, click **Rulers** if your rulers are not visible, then make sure that the rulers are displayed in pixels.

   TIP If you are unsure which units of measurement are used, right-click (Win) or [Ctrl]-click (Mac) one of the rulers, then verify that Pixels is selected, or click Pixels (if necessary).

3. Click the **workspace switcher** on the Application bar, then click **History and Layers** (created in the Skills Review in Chapter 1).

4. On the Layers panel, scroll down, click the **Background layer**, then click the **Delete layer button** 🗑 .

5. Click **Yes** in the dialog box, as shown in Figure 4, then compare your Layers panel to Figure 5.

6. Click **Layer** on the Application bar, point to **New**, then click **Background From Layer**.

   The Sky layer has been converted into the Background layer. Did you notice that in addition to the image layer being converted to the Background layer that a state now appears on the History panel that says Convert to Background? See Figure 6.

7. Save your work.

You displayed the rulers and switched to a previously created workspace, deleted the Background layer of an image, then converted an image layer into the Background layer. You can convert any layer into the Background layer, as long as you first delete the existing Background layer.

PHOTOSHOP 2-7

ADD AND DELETE LAYERS

What You'll Do
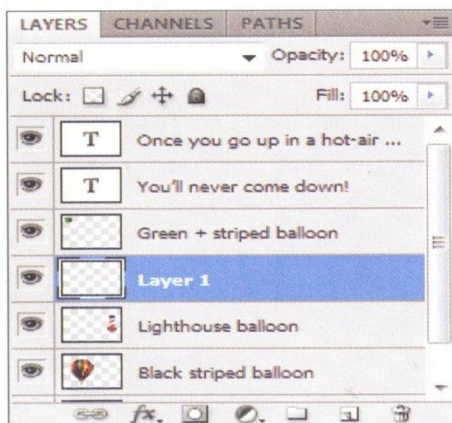
In this lesson, you'll create a new layer using the New command on the Layer menu, delete a layer, and create a new layer using buttons on the Layers panel.

Adding Layers to an Image

Because it's so important to make use of multiple layers, Photoshop makes it easy to add and delete layers. You can create layers in three ways:

- Use the New command on the Layer menu.
- Use the New Layer command on the Layers panel menu.
- Click the Create a new layer button on the Layers panel.

QUICKTIP

See Table 1 for tips on navigating the Layers panel.

Objects on new layers have a default opacity setting of 100%, which means that objects on lower layers are not visible. Each layer

Merging layers

You can combine multiple image layers into a single layer using the merging process. Merging layers is useful when you want to combine multiple layers in order to make specific edits permanent. (This merging process is different from flattening in that it's selective. Flattening merges *all* visible layers.) In order for layers to be merged, they must be visible and next to each other on the Layers panel. You can merge all visible layers within an image, or just the ones you select. Type layers cannot be merged until they are **rasterized** (turned into a bitmapped image layer), or converted into uneditable text. To merge two layers, make sure that they are next to each other and that the Indicates layer visibility button is visible on each layer, then click the layer in the higher position on the Layers panel. Click Layer on the Application bar, then click Merge Down. The active layer and the layer immediately beneath it will be combined into a single layer. To merge all visible layers, click the Layers panel list arrow, then click Merge Visible. Most layer commands that are available on the Layer menu, such as Merge Down, are also available using the Layers panel list arrow.

Mr. Dave Schmidt   Adobe Photoshop CS4

has the Normal (default) blending mode applied to it. (A **blending mode** is a feature that affects a layer's underlying pixels, and is used to lighten or darken colors.)

Naming a Layer

Photoshop automatically assigns a sequential number to each new layer name, but you can rename a layer at any time. So, if you have four named layers and add a new layer, the default name of the new layer will be Layer 1. Although calling a layer "Layer 12" is fine, you might want to use a more descriptive name so it is easier to distinguish one layer from another. If you use the New command on the Layer menu, you can name the layer when you create it. You can rename a layer at any time by using either of these methods:

- Click the Layers panel list arrow, click Layer Properties, type the name in the Name text box, then click OK.
- Double-click the name on the Layers panel, type the new name, then press [Enter] (Win) or [return] (Mac).

Deleting Layers from an Image

You might want to delete an unused or unnecessary layer. You can use any of four methods to delete a layer:

- Click the name on the Layers panel, click the Layers panel list arrow, then click Delete Layer, as shown in Figure 7.
- Click the name on the Layers panel, click the Delete layer button on the Layers panel, then click Yes in the warning box.
- Click the name on the Layers panel, press and hold [Alt] (Win) or [option] (Mac), then click the Delete layer button on the Layers panel.
- Drag the layer name on the Layers panel to the Delete layer button on the Layers panel.
- Right-click a layer (Win) or [Ctrl]-click a layer (Mac).

You should be certain that you no longer need a layer before you delete it. If you delete a layer by accident, you can restore it during the current editing session by deleting the Delete Layer state on the History panel.

QUICKTIP
Photoshop always numbers layers sequentially, no matter how many layers you add or delete.

TABLE 1: Shortcuts for Navigating the Layers Panel

Use the combination:	to navigate:
[Alt][[] (Win) or [option][[] (Mac)	down the Layers panel
[Alt][]] (Win) or [option][]] (Mac)	up the Layers panel
[Ctrl][[] (Win) or $\mathcal{H}$[[] (Mac)	down one layer*
[Ctrl][]] (Win) or $\mathcal{H}$[[] (Mac)	up one layer*
[Ctrl][Shift] [[] (Win) or $\mathcal{H}$[Shift] [[] (Mac)	to bottom of stack*
[Ctrl][Shift] []] (Win) or $\mathcal{H}$[Shift] []] (Mac)	to top of stack*
	*Excluding the Background layer

Layers panel list arrow

Layers panel menu

Delete Layer command

Delete layer button

Create a new layer button

Mr. Dave Schmidt   **Adobe Photoshop CS4**
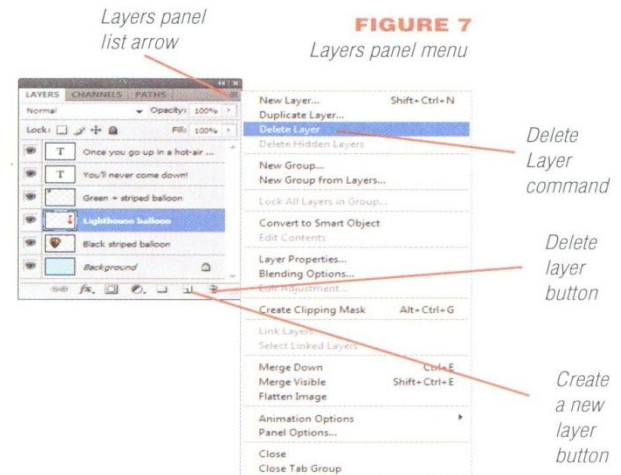
Add a layer using the Layer menu

1. Click the **Lighthouse balloon layer** on the Layers panel.

2. Click **Layer** on the Application bar, point to **New**, then click **Layer** to open the New Layer dialog box, as shown in Figure 8.

   A new layer will be added above the active layer.

   TIP You can change the layer name in the New Layer dialog box before it appears on the Layers panel.

3. Click **OK**.

   The New Layer dialog box closes and the new layer appears above the Lighthouse balloon layer on the Layers panel. The New Layer state is added to the History panel. See Figure 9.

   You created a new layer above the Lighthouse balloon layer using the New command on the Layer menu. The layer does not yet contain any content.

FIGURE 8
New Layer dialog box

FIGURE 9
New layer in Layers panel
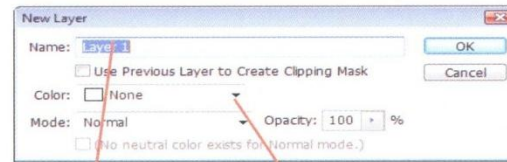
Default name determined by existing layer names

Color list arrow

New Layer history state
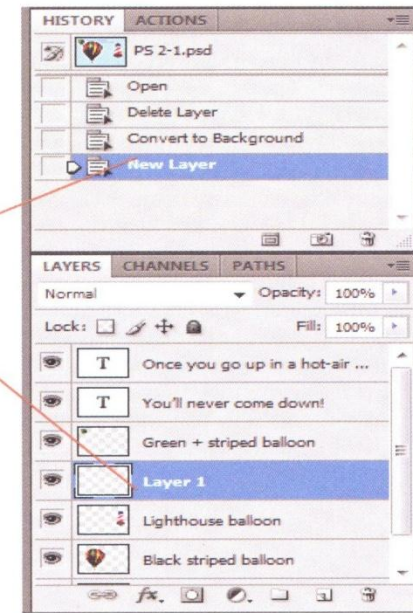
New layer

Inserting a layer beneath the active layer

When you add a layer to an image either by using the Layer menu or clicking the Create a new layer button on the Layers panel, the new layer is inserted above the active layer. But there might be times when you want to insert the new layer beneath, or in back of, the active layer. You can do so easily, by pressing [Ctrl] (Win) or ⌘ (Mac) while clicking the Create a new layer button on the Layers panel.

FIGURE 10
New layer with default settings
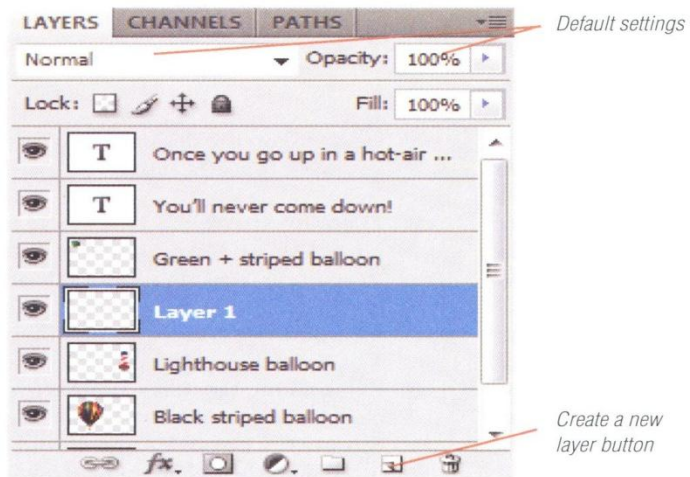
Default settings

Create a new layer button

Lesson 2   Add and Delete Layers

Delete a layer

1. Position the **Layer selection pointer** over Layer 1 on the Layers panel.

2. Drag **Layer 1** to the **Delete layer button** on the Layers panel.

   TIP   You can also delete the layer by dragging the New Layer state on the History panel to the Delete current state button.

3. If the Delete the layer "Layer 1" dialog box opens, click the **Don't show again check box**, then click **Yes**.

   TIP   Many dialog boxes let you turn off this reminder feature by selecting the Don't show again check box. Selecting these check boxes can improve your efficiency.

You used the Delete layer button on the Layers panel to delete a layer.

Add a layer using the Layers panel

1. Click the **Lightouse balloon layer** on the Layers panel, if it is not already selected.

2. Click the **Create a new layer button** on the Layers panel, then compare your Layers panel to Figure 10.

3. Save your work.

You used the Create a new layer button on the Layers panel to add a new layer.

ADD A SELECTION FROM ONE
IMAGE TO ANOTHER

What You'll Do
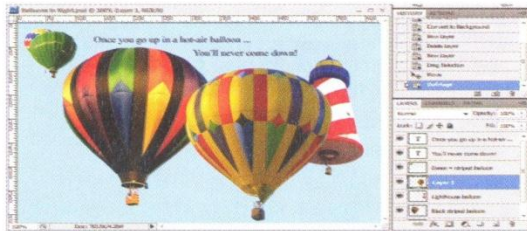
In this lesson, you'll use the Invert check box in the Color Range dialog box to make a selection, drag the selection to another image, and remove the fringe from a selection using the Defringe command.

Understanding Selections

Often the Photoshop file you want to create involves using an image or part of an image from another file. To use an image or part of an image, you must first select it. Photoshop refers to this as "making a selection." A selection is an area of an image surrounded by a **marquee**, a dashed line that encloses the area you want to edit or move to another image, as shown in Figure 11. You can drag a marquee around a selection using four marquee tools: Rectangular Marquee, Elliptical Marquee, Single Row Marquee, and Single Column Marquee. Table 2 displays the four marquee tools and other selection tools. You can set options for

each tool on the options bar when the tool you want to use is active.

Understanding the Extract and Color Range Commands

In addition to using selection tools, Photoshop provides other methods for incorporating imagery from other files. The **Extract command**, located on the Filter menu, separates an image from a background or surrounding imagery. You can use the **Color Range command**, located on the Select menu, to select a particular color contained in an existing image. Depending on the area you want, you can use the Color Range dialog box to extract a portion of an image.

Cropping an image
You might find an image that you really like, except that it contains a particular portion that you don't need. You can exclude, or **crop**, certain parts of an image by using the Crop tool on the Tools panel. Cropping hides areas of an image from view *without* decreasing resolution quality. To crop an image, click the Crop tool on the Tools panel, drag the pointer around the area you *want to keep*, then press [Enter] (Win) or [return] (Mac).

Working with Layers

For example, you can select the Invert check box to choose one color and then select the portion of the image that is every color *except* that one. After you select all the imagery you want from another image, you can drag it into your open file.

Making a Selection and Moving a Selection

You can use a variety of methods and tools to make a selection, which can then be used as a specific part of a layer or as the entire layer. You use selections to isolate an area you want to alter. For example, you can use the Magnetic Lasso tool to select complex shapes by clicking the starting point, tracing an approximate outline, then clicking the ending point. Later, you can use the Crop tool to trim areas from a selection. When you use the Move tool to drag a selection to the destination image, Photoshop places the selection in a new layer above the previously active layer.

Defringing Layer Contents

Sometimes when you make a selection, then move it into another image, the newly selected image can contain unwanted pixels that give the appearance of a fringe, or halo. You can remove this effect using a Matting command called Defringe. This command is available on the Layer menu and allows you to replace fringe pixels with the colors of other nearby pixels. You can determine a width for replacement pixels between 1 and 200. It's magic!

FIGURE 11
Marquee selections

Area selected using the Rectangular Marquee tool

Specific element selected using the Magnetic Lasso tool
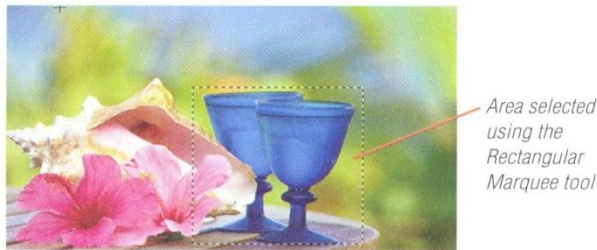
TABLE 2: Selection Tools

tool	tool name	tool	tool name
▢	Rectangular Marquee tool	⬭	Lasso tool
○	Elliptical Marquee tool	⬭	Polygonal Lasso tool
⊏⊐	Single Row Marquee tool	⬭	Magnetic Lasso tool
▯	Single Column Marquee tool	◿	Eraser tool
⌗	Crop tool	⬭	Background Eraser tool
✳	Magic Wand tool	⬭	Magic Eraser tool

Make a color range selection

1. Open PS 2-2.psd from the drive and folder where you store your Data Files, save it as **Yellow striped balloon**, click the **title bar**, then drag the **window** to an empty area of the workspace so that you can see both images.

   TIP When more than one file is open, each has its own set of rulers. The ruler on the inactive file appears dimmed.

2. With the Yellow striped balloon image selected, click **Select** on the Application bar, then click **Color Range**.

   TIP If the background color is solid, you can select the Invert check box to pick only the pixels in the image area.

3. Click the **Image option button**, then type **150** in the Fuzziness text box (or drag the **slider** all the way to the right until you see **150**).

4. Position the **Eyedropper pointer** 🖋 in the **blue background** of the image in the Color Range dialog box, then click the **background**.

5. Select the **Invert check box**. Compare the settings in your dialog box to Figure 12.

6. Click **OK**, then compare your Yellow striped balloon.psd image to Figure 13.

You opened a file and used the Color Range dialog box to select the image pixels by selecting the image's inverted colors. Selecting the inverse is an important skill in making selections.

FIGURE 12
Color Range dialog box
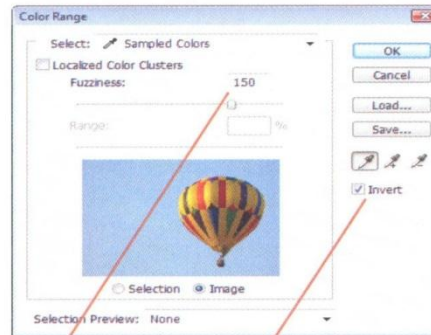
Fuzziness text box   Invert check box

FIGURE 13
Marquee surrounding selection
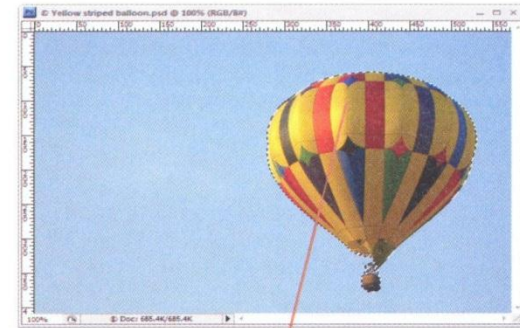
Marquee surrounds everything that is the inverse of the blue background

Using the Place command

You can add an image from another image to a layer using the Place command. Place an image in a Photoshop layer by clicking File on the Application bar, then clicking Place. The placed artwork appears *flattened* inside a bounding box at the center of the Photoshop image. The artwork maintains its original aspect ratio; however, if the artwork is larger than the Photoshop image, it is resized to fit. The Place command works well if you want to insert a multi-layered image in another image. (If all you want is a specific layer from an image, you should just drag the layer you want into an image and not use the Place command.)

FIGURE 14
Yellow striped balloon image dragged to Balloons in flight image
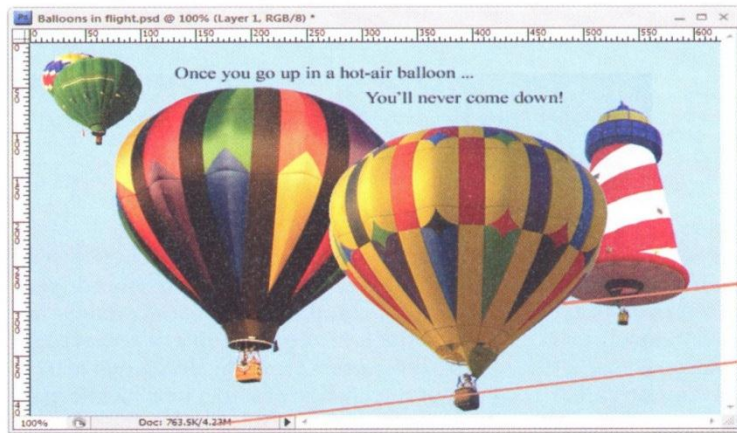
Slight fringe surrounds object

Document sizes selected

FIGURE 15
New layer defringed
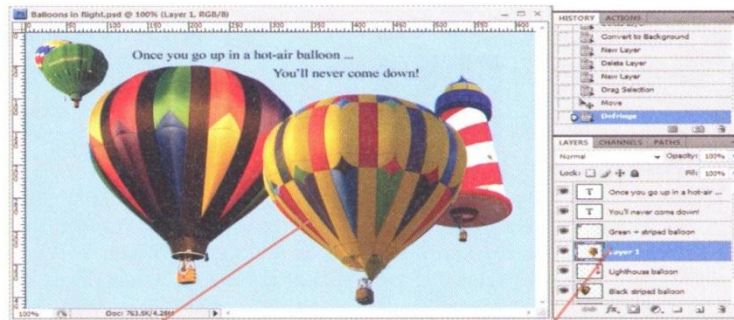
Yellow striped balloon in image

Yellow striped balloon moved to active layer in image

Lesson 3   Add a Selection from One Image to Another

ORGANIZE LAYERS WITH
LAYER GROUPS AND COLORS

What You'll Do

In this lesson, you'll use the Layers panel menu to create, name, and color a layer group, and then add layers to it. You'll add finishing touches to the image, save it as a copy, then flatten it.

Understanding Layer Groups

A **layer group** is a Photoshop feature that allows you to organize your layers on the Layers panel. A layer group contains individual layers. For example, you can create a layer group that contains all the type layers in your image. To create a layer group, you click the Layers panel list arrow, then click New Group. As with layers, it is helpful to choose a descriptive name for a layer group.

QUICKTIP

You can press [Ctrl][G] (Win) or ⌘ [G] (Mac) to place the selected layer in a layer group.

Organizing Layers into Groups

After you create a layer group, you simply drag layers on the Layers panel directly on top of the layer group. You can remove layers from a layer group by dragging them out of the layer group to a new location on the Layers panel or by deleting them. Some changes made to a layer group, such as blending mode or opacity changes, affect every layer in the layer group. You can choose to expand or collapse layer groups, depending on the amount of information you need to see. Expanding a layer group

Duplicating a layer

When you add a new layer by clicking the Create a new layer button on the Layers panel, the new layer contains default settings. However, you might want to create a new layer that has the same settings as an existing layer. You can do so by duplicating an existing layer to create a copy of that layer and its settings. Duplicating a layer is also a good way to preserve your modifications, because you can modify the duplicate layer and not worry about losing your original work. To create a duplicate layer, select the layer you want to copy, click the Layers panel list arrow, click Duplicate Layer, then click OK. The new layer will appear above the original.

shows all of the layers in the layer group, and collapsing a layer group hides all of the layers in a layer group. You can expand or collapse a layer group by clicking the triangle to the left of the layer group icon. Figure 16 shows one expanded layer group and one collapsed layer group.

Adding Color to a Layer

If your image has relatively few layers, it's easy to locate the layers. However, if your image contains many layers, you might need some help in organizing them. You can organize layers by color-coding them, which makes it easy to find the layer or the group

you want, regardless of its location on the Layers panel. For example, you can put all type layers in red or put the layers associated with a particular portion of an image in blue. To color the Background layer, you must first convert it to a regular layer.

QUICKTIP

You can also color-code a layer group without losing the color-coding you applied to individual layers.

Flattening an Image

After you make all the necessary modifications to your image, you can greatly reduce

the file size by flattening the image. **Flattening** merges all visible layers into a single Background layer and discards all hidden layers. Make sure that all layers that you want to display are visible before you flatten the image. Because flattening removes an image's individual layers, it's a good idea to make a copy of the original image *before* it is flattened. The status bar displays the file's current size and the size it will be when flattened. If you work on a Macintosh, you'll find this information in the lower-left corner of the document window.

FIGURE 16
Layer groups

Right-pointing triangle indicates collapsed layer group

Down-pointing triangle indicates expanded layer group

Different colors used within a layer group

Layer group icon

Individual layers in layer group are indented

Lesson 4   Organize Layers with Layer Groups and Colors
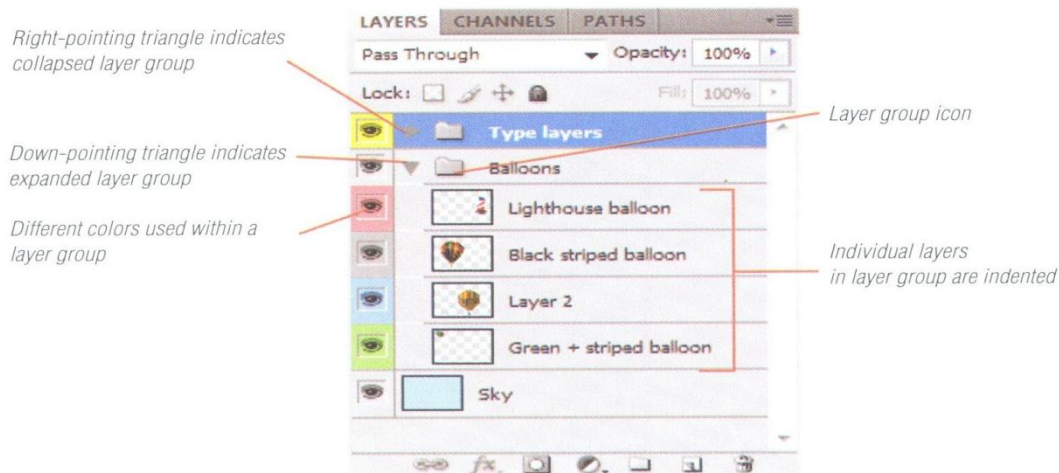
Understanding Layer Comps

The ability to create a **layer comp**, a variation on the arrangement and visibility of existing layers, is a powerful tool that can make your work more organized. You can create a layer comp by clicking the Layer Comps button on the vertical dock (if it's visible), or by clicking Window on the Application bar, then clicking Layer Comps. Clicking the Create New Layer Comp button on the panel opens the New Layer Comp dialog box, shown in Figure 17, which allows you to name the layer comp and set parameters.

Using Layer Comps

Multiple layer comps, shown in Figure 18, make it easy to switch back and forth between variations on an image theme. Say, for example, that you want to show a client multiple arrangements of layers. The layer comp is an ideal tool for this.

FIGURE 17
New Layer Comp dialog box
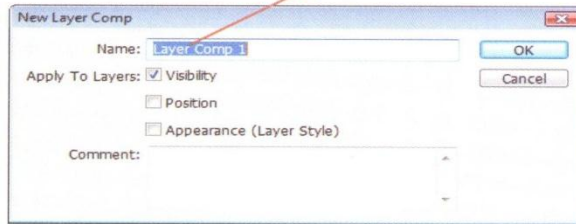
Type new comp name

FIGURE 18
Multiple Layer Comps in image
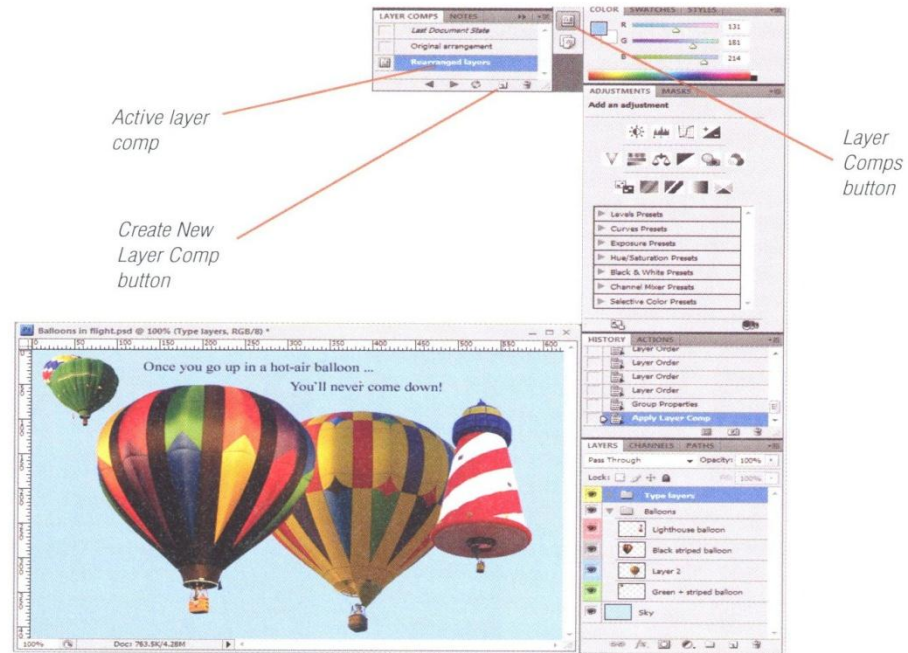
Active layer comp

Create New Layer Comp button

Layer Comps button

FIGURE 19
New Group dialog box

New layer group name
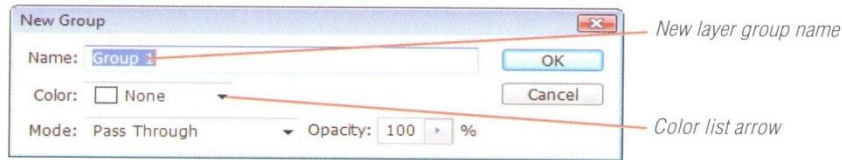
Color list arrow

FIGURE 20
New layer group in Layers panel

New layer group

FIGURE 21
Layers added to the All Type layer group

Layer group icon (folder)

Down-pointing arrow indicates expanded layer group

Layers within group are indented
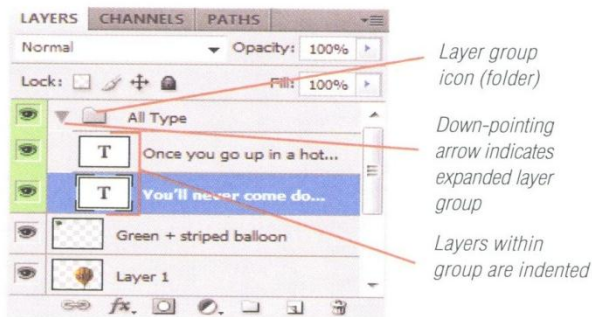
Lesson 4   Organize Layers with Layer Groups and Colors

Create a layer group

1. Click the **Green + striped balloon layer**, click the **Layers panel list arrow** ▾≡ , then click **New Group**.

   The New Group dialog box opens, as shown in Figure 19.

   TIP Photoshop automatically places a new layer group above the active layer.

2. Type **All Type** in the Name text box.

3. Click the **Color list arrow**, click **Green**, then click **OK**.

   The New Group dialog box closes. Compare your Layers panel to Figure 20.

You used the Layers panel menu to create a layer group, then named and applied a color to it. This new group will contain all the type layers in the image.

Move layers to the layer group

1. Click the **Once you go up in a hot-air balloon layer** on the Layers panel, then drag it on to the **All Type layer group**.

2. Click the **You'll never come down! layer**, drag it on to the **All Type layer group**, then compare your Layers panel to Figure 21.

   TIP If the You'll never come down! layer is not below the Once you go up in a hot-air balloon layer, move the layers to match Figure 21.

3. Click the **triangle** ▽ to the left of the layer group icon (folder) to collapse the layer group.

You created a layer group, then moved two layers into that layer group. Creating layer groups is a great organization tool, especially in complex images with many layers.

Rename a layer and adjust opacity

1. Double-click **Layer 1**, type **Yellow striped balloon**, then press **[Enter]** (Win) or **[return]** (Mac).

2. Double-click the **Opacity text box** on the Layers panel, type **85**, then press **[Enter]** (Win) or **[return]** (Mac).

3. Drag the **Yellow striped balloon layer** beneath the Lighthouse balloon layer, then compare your image to Figure 22.

4. Save your work.

You renamed the new layer, adjusted opacity, and rearranged layers.

Create layer comps

1. Click **Window** on the Application bar, then click **Layer Comps**.

2. Click the **Create New Layer Comp button** ⬛ on the Layer Comps panel.

3. Type **Green off/Yellow off** in the Name text box, as shown in Figure 23, then click **OK**.

4. Click the **Indicates layer visibility button** 👁 on the Green + striped balloon layer and the Yellow striped balloon layer.

5. Click the **Update Layer Comp button** 🔄 on the Layer Comps panel. Compare your Layer Comps panel to Figure 24.

6. Save your work, then click the **Layer Comps button** on the vertical dock to close the Layer Comps panel.

You created a Layer Comp in an existing image.

FIGURE 22
Finished image

Renamed and moved layer
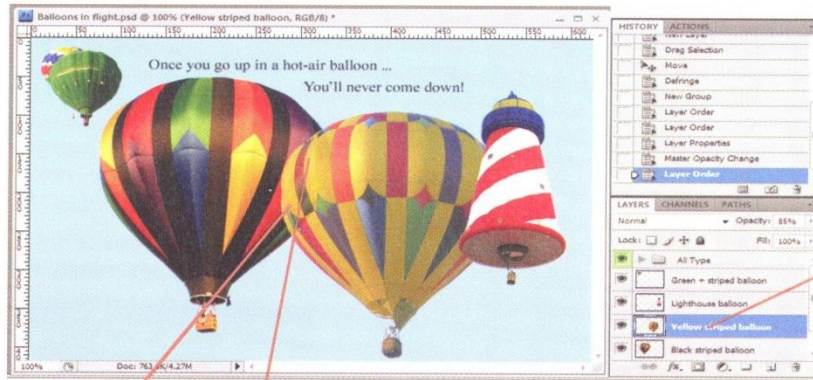
Overlapping balloon layers

Lower opacity allows pixels on lower layers to show through

FIGURE 23
New Layer Comp dialog box

New Layer Comp name
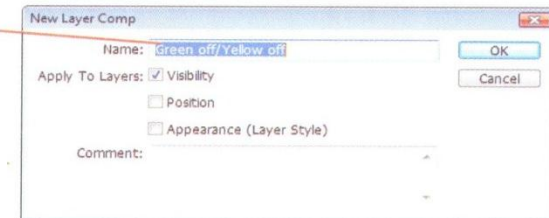
FIGURE 24
Layer Comps panel
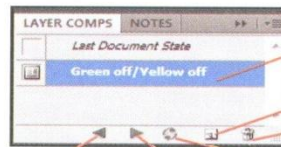
Active Layer Comp

Create New Layer Comp

Delete Layer Comp

Apply Previous Selected Layer Comp

Apply Next Selected Layer Comp

Update Layer Comp

Working with Layers

Mr. Dave Schmidt

Adobe Photoshop CS4

FIGURE 25
Save As dialog box
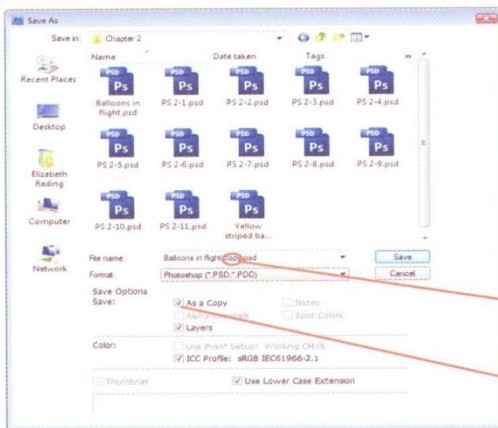
The word "copy" is added to file name

Select check box to create a copy of the current file

FIGURE 26
Flattened image layer
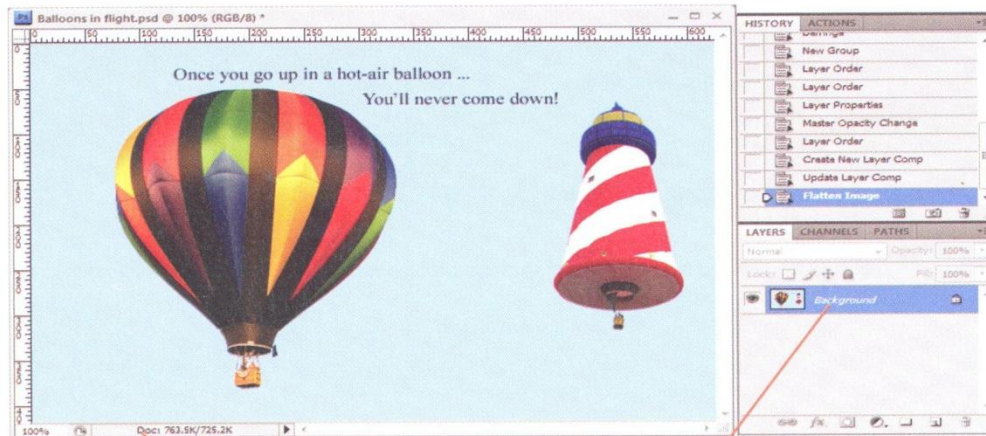
Flattened file size

Flattened image contains one layer

Lesson 4   Organize Layers with Layer Groups and Colors

Flatten an image

1. Click **File** on the Application bar, then click **Save As**.

2. Click the **As a Copy check box** to add a check mark, then compare your dialog box to Figure 25.

   TIP If "copy" does not display in the File name text box, click this text box and type copy to add it to the name.

3. Click **Save**.

   Photoshop saves and closes a copy of the file containing all the layers and effects.

4. Click **Layer** on the Application bar, then click **Flatten Image**.

5. Click **OK** in the warning box, if necessary, then save your work.

6. Compare your Layers panel to Figure 26.

7. Click the **workspace switcher** on the Application bar, then click **Essentials**.

8. Close all open images, then exit Photoshop.

You saved the file as a copy, and then flattened the image. The image now has a single layer.

SKILLS REFERENCE

Power User Shortcuts

to do this:	use this method:
Adjust layer opacity	Click Opacity list arrow on Layers panel, drag opacity slider or Double-click Opacity text box, type a percentage
Change measurements	Right-click (Win) or [Ctrl]-click (Mac) ruler
Color a layer	Click Layers panel list arrow, Layer Properties, Color list arrow
Create a layer comp	Click Create New Layer Comps button on the Layer Comps panel
Create a layer group	, New Group
Delete a layer	
Defringe a selection	Layer ➤ Matting ➤ Defringe

to do this:	use this method:
Flatten an image	Layer ➤ Flatten Image
Use the Move tool	or **V**
Make a New Background layer from existing layer	Layer ➤ New ➤ Background From Layer
Make a New layer	Layer ➤ New ➤ Layer or
Rename a layer	Double-click layer name, type new name
Select color range	Select ➤ Color Range
Show/Hide Rulers	View ➤ Rulers [Ctrl][R] (Win) [R] (Mac)
Update a layer comp	

Key: Menu items are indicated by ➤ between the menu name and its command. Blue bold letters are shortcuts for selecting tools on the Tools panel.

Working with Layers

Examine and convert layers.

1. Start Photoshop.
2. Open PS 2-3.psd from the drive and folder where you store your Data Files, update any text layers if necessary, then save it as **Music Store**.
3. Make sure the rulers appear and that pixels are the unit of measurement.
4. Delete the Background layer.
5. Verify that the Rainbow blend layer is active, then convert the image layer to a Background layer.
6. Save your work.

Add and delete layers.

1. Make Layer 2 active.
2. Create a new layer above this layer using the Layer menu.
3. Accept the default name (Layer 4), and change the color of the layer to Red.
4. Delete Layer 4.
5. Make Layer 2 active (if it is not already the active layer), then create a new layer using the Create a new layer button on the Layers panel.
6. Save your work.

Add a selection from one image to another.

1. Open PS 2-4.psd.
2. Reposition this image of a horn by dragging the window to the right of the Music Store image.
3. Open the Color Range dialog box. (*Hint*: Use the Select menu.)
4. Verify that the Image option button is selected, the Invert check box is selected, then set the Fuzziness to 0.
5. Sample the white background in the preview window in the dialog box, then close the dialog box.
6. Use the Move tool to drag the selection into the Music Store image.
7. Position the selection so that the upper-left edge of the instrument matches the sample shown in Figure 27.
8. Defringe the horn selection (in the Music Store image) using a 3 pixel width.
9. Close PS 2-4.psd.
10. Drag Layer 4 above Layer 3.
11. Rename Layer 4 **Horn**.
12. Change the opacity for the Horn layer to 55%.
13. Drag the Horn layer so it is beneath Layer 2.
14. Hide Layer 1.
15. Hide the rulers.
16. Save your work.

Mr. Dave Schmidt   Adobe Photoshop CS4

Organize layers with layer groups and colors.

1. Create a Layer Group called **Type Layers** and assign the color yellow to the group.
2. Drag the following layers into the Type Layers folder: Allegro, Music Store, Layer 2.
3. Delete Layer 2, then collapse the Layer Group folder.
4. Move the Notes layer beneath the Horn layer.
5. Create a layer comp called **Notes layer on**.
6. Update the layer comp.
7. Hide the Notes layer.
8. Create a new layer comp called **Notes layer off**, then update the layer comp.
9. Display the previous layer comp, save your work, then close the tab group. (*Hint:* Click the Layer Comps list arrow, then click Close Tab Group.)
10. Save a copy of the Music Store file using the default naming scheme (add 'copy' to the end of the existing filename).
11. Flatten the original image. (*Hint*: Be sure to discard hidden layers.)
12. Save your work, then compare your image to Figure 27.

FIGURE 27
Completed Skills Review

PHOTOSHOP 2-24

Working with Layers
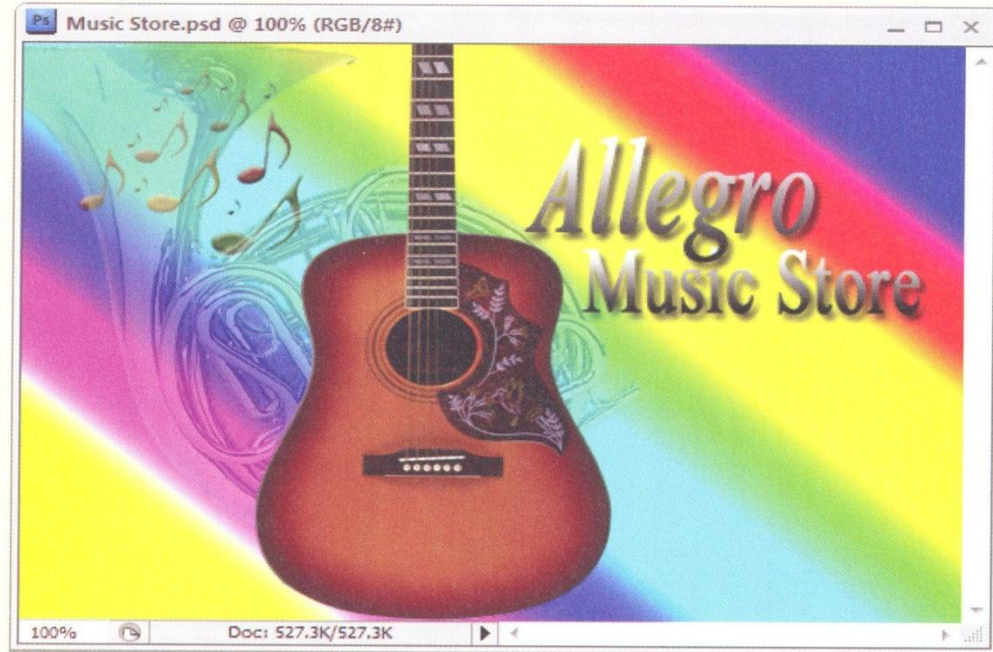
A credit union is developing a hotline for members to use to help abate credit card fraud as soon as it occurs. They're going to distribute ten thousand refrigerator magnets over the next three weeks. As part of their effort to build community awareness of the project, they've sponsored a contest for the magnet design. You decide to enter the contest.

1. Open PS 2-5.psd, then save it as **Combat Fraud**. The Palatino Linotype font is used in this file. Please make a substitution if this font is not available on your computer.
2. Open PS 2-6.psd, use the Color Range dialog box or any selection tool on the Tools panel to select the cell phone image, then drag it to the Outlaw Fraud image.
3. Rename the newly created layer **Cell Phone** if necessary, then apply a color to the layer on the Layers panel. Make sure the Cell Phone layer is beneath the type layers.
4. Convert the Background layer to an image layer, then rename it **Banner**.
5. Change the opacity of the Banner layer to any setting you like.
6. Defringe the Cell Phone layer using the pixel width of your choice.
7. Save your work, close PS 2-6.psd, then compare your image to the sample shown in Figure 28.

FIGURE 28
Completed Project Builder 1

Mr. Dave Schmidt   Adobe Photoshop CS4

Your local 4-H chapter wants to promote its upcoming fair and has hired you to create a promotional billboard commemorating this event. The Board of Directors decides that the billboard should be humorous.

1. Open PS 2-7.psd, then save it as **4H Billboard**. Substitute any missing fonts.
2. Open PS 2-8.psd, use the Color Range dialog box or any selection tool on the Tools panel to create a marquee around the llama, then drag the selection to the 4-H Billboard image.
3. Name the new layer **Llama**.
4. Change the opacity of the Llama layer to 90% and defringe the layer containing the llama.
5. Save your work, then compare your image to the sample shown in Figure 29.

FIGURE 29
Completed Project Builder 2
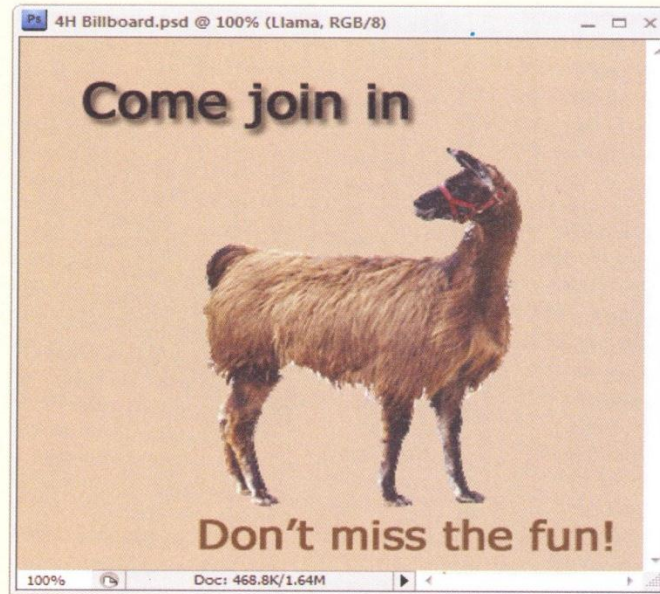
DESIGN PROJECT

A friend of yours has designed a new heat-absorbing coffee cup for take-out orders. She is going to present the prototype to a prospective vendor, but first needs to print a brochure. She's asked you to design an eye-catching cover.

1. Open PS 2-9.psd, update the text layers if necessary, then save it as **Coffee Cover**. The Garamond font is used in this file. Please make a substitution if this font is not available on your computer.
2. Open PS 2-10.psd, then drag the entire image to Coffee Cover.
3. Close PS 2-10.psd.
4. Rename Layer 1 with the name **Mocha**.
5. Delete the Background layer and convert the Mocha layer into a new Background layer.
6. Reposition the layer objects so they look like the sample. (*Hint*: You might have to reorganize the layers in the stack so all layers are visible.)
7. Create a layer group above Layer 2, name it **Hot Shot Text**, apply a color of your choice to the layer group, then drag the type layers to it.
8. Save your work, then compare your image to Figure 30.

FIGURE 30
Completed Design Project

Working with Layers

Mr. Dave Schmidt   Adobe Photoshop CS4
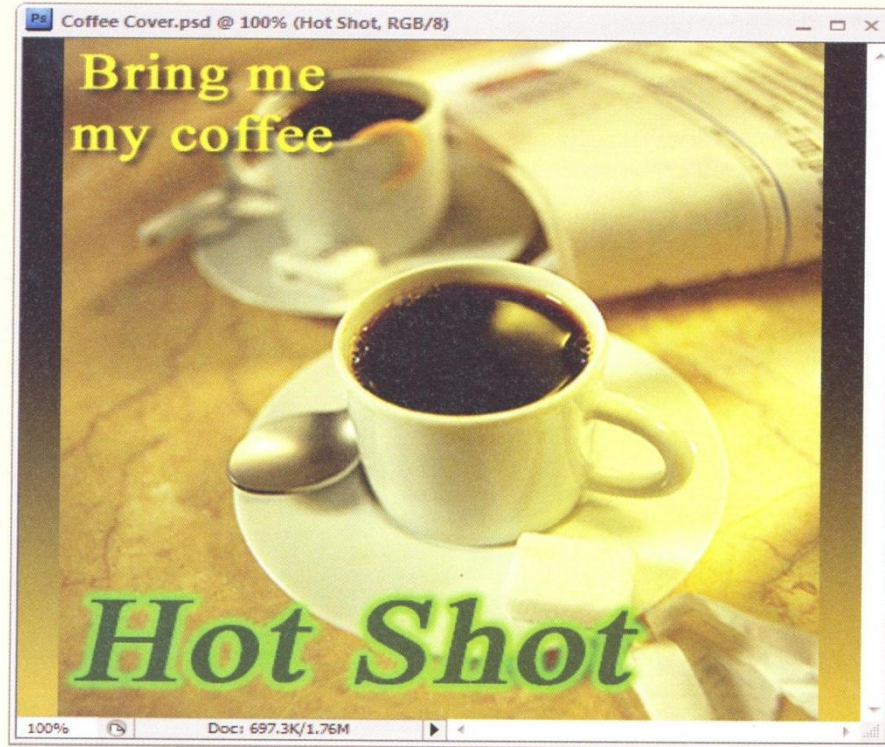
Harvest Market, a line of natural food stores, and the trucking associations in your state have formed a coalition to deliver fresh fruit and vegetables to food banks and other food distribution programs. The truckers want to promote the project by displaying a sign on their trucks. Your task is to create a design that will become the Harvest Market logo. Keep in mind that the design will be seen from a distance.

1. Open PS 2-11.psd, then save it as **Harvest Market**. Update the text layers as necessary.

2. Obtain at least two images of different-sized produce. You can obtain images by using what is available on your computer, scanning print media, or connecting to the Internet and downloading images.

3. Open one of the produce files, select it, then drag or copy it to the Harvest Market image. (*Hint*: Experiment with some of the other selection tools. Note that some tools require you to copy and paste the image after you select it.)

4. Repeat step 3, then close the two produce image files.

5. Set the opacity of the Market layer to 80%.

6. Arrange the layers so that smaller images appear on top of the larger ones. (You can move layers to any location in the image you choose.)

7. Create a layer group for the type layers, and apply a color to it.

Working with Layers

Mr. Dave Schmidt   Adobe Photoshop CS4

8. You can delete any layers you feel do not add to the image. (In the sample image, the Veggies layer has been deleted.)
9. Save your work, then compare your image to Figure 31.
10. What are the advantages and disadvantages of using multiple images? How would you assess the ease and efficiency of the selection techniques you've learned? Which styles did you apply to the type layers, and why?

FIGURE 31
Completed Portfolio Project

CHAPTER 3

Making Selections

chapter

3

MAKING
SELECTIONS

1. Make a selection using shapes
2. Modify a marquee
3. Select using color and modify a selection
4. Add a vignette effect to a selection

3-1
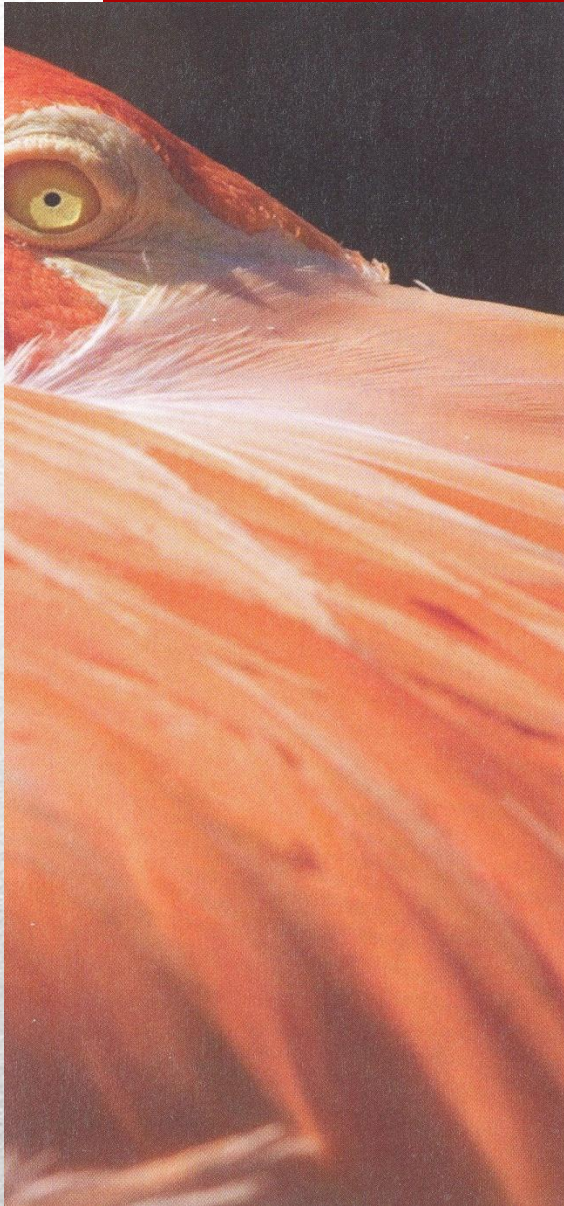
Combining Images

Most Photoshop images are created using a technique called **compositing**—combining images from different sources. These sources include other Photoshop images, royalty-free images, pictures taken with digital cameras, and scanned artwork. How you get all those images into your Photoshop images is an art unto itself. You can include additional images by using tools on the Tools panel and menu commands. And to work with all these images, you need to know how to select them—or exactly the parts you want to work with.

Understanding Selection Tools

The two basic methods you can use to make selections are using a tool or using color. You can use three free-form tools to create your own unique selections, four fixed area tools to create circular or rectangular selections, and a wand tool to make selections using color. In addition, you can use menu commands to increase or decrease selections that you made with these tools, or make selections based on color.

Understanding Which Selection Tool to Use

With so many tools available, how do you know which one to use? After you become familiar with the different selection options, you'll learn how to look at images and evaluate selection opportunities. With experience, you'll learn how to identify edges that can be used to isolate imagery, and how to spot colors that can be used to isolate a specific object.

Combining Imagery

After you decide on an object that you want to place in a Photoshop image, you can add the object to another image by cutting, copying, and pasting, dragging and dropping objects using the Move tool, or using the **Clipboard**, the temporary storage area provided by your operating system.

Mr. Dave Schmidt

Adobe Photoshop CS4

Tools You'll Use

Marquee tools

- ☐ Rectangular Marquee Tool   M
- ◯ Elliptical Marquee Tool   M
- Single Row Marquee Tool
- Single Column Marquee Tool

Rectangular Marquee tool

Magnetic Lasso tool

Magic Wand tool

Spot Healing Brush tool

Lasso tools

- Lasso Tool   L
- Polygonal Lasso Tool   L
- ■ Magnetic Lasso Tool   L

Select

All	Ctrl+A
Deselect	Ctrl+D
Reselect	Shift+Ctrl+D
Inverse	Shift+Ctrl+I
All Layers	Alt+Ctrl+A
Deselect Layers	
Similar Layers	
Color Range...	
Refine Edge...	Alt+Ctrl+R
Modify ▶	Border...
	Smooth...
Grow	Expand...
Similar	Contract...
	Feather... Shift+F6
Transform Selection	
Edit in Quick Mask Mode	
Load Selection...	
Save Selection...	

3-3

MAKE A SELECTION
USING SHAPES

What You'll Do
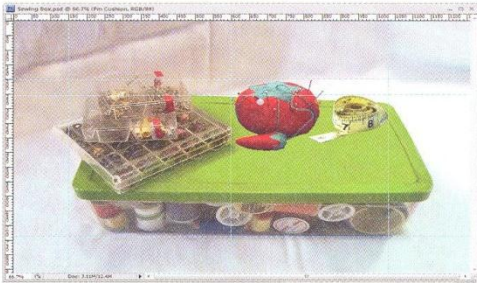
In this lesson, you'll make selections using a marquee tool and a lasso tool, position a selection with the Move tool, deselect a selection, and drag a complex selection into another image.

Selecting by Shape

The Photoshop selection tools make it easy to select objects that are rectangular or elliptical in nature. It would be a boring world if every image we wanted fell into one of those categories, so fortunately, they don't. While some objects are round or square, most are unusual in shape. Making selections can sometimes be a painstaking process because many objects don't have clearly defined edges. To select an object by shape, you need to click the appropriate tool on the Tools panel, then drag the pointer around the object. The selected area is defined by a **marquee**, or series of dotted lines, as shown in Figure 1.

Creating a Selection

Drawing a rectangular marquee is easier than drawing an elliptical marquee, but with practice, you'll be able to create both types of marquees easily. Table 1 lists the tools you can use to make selections using shapes. Figure 2 shows a marquee surrounding an irregular shape.

QUICKTIP

A marquee is sometimes referred to as *marching ants* because the dots within the marquee appear to be moving.

Using Fastening Points

Each time you click one of the marquee tools, a fastening point is added to the image. A **fastening point** is an anchor within the marquee. When the marquee pointer reaches the initial fastening point (after making its way around the image), a very small circle appears on the pointer, indicating that you have reached the starting point. Clicking the pointer when this circle appears closes the marquee. Some fastening points, such as those in a circular marquee, are not visible, while others, such as those created by the Polygonal or Magnetic Lasso tools, are visible.

Selecting, Deselecting, and Reselecting

After a selection is made, you can move, copy, transform, or make adjustments to it. A selection stays selected until you unselect, or **deselect**, it. You can deselect a selection by clicking Select on the Application bar, then clicking Deselect. You can reselect a deselected object by clicking Select on the Application bar, then clicking Reselect.

FIGURE 1
Elliptical Marquee tool used to create marquee

Elliptical Marquee tool surrounds object
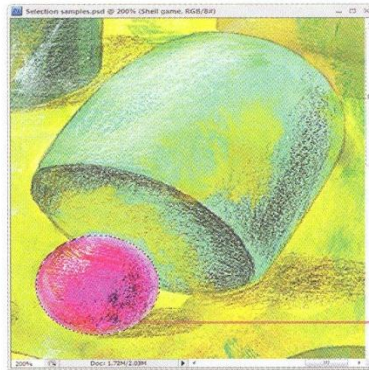
QUICKTIP

Correcting a Selection Error

At some point, you'll spend a lot of time making a complex selection only to realize that the wrong layer was active. Remember the History panel? Every action you do is automatically recorded, and you can use the selection state to retrace your steps and recoup the time spent. Your fix may be as simple as selecting the proper History state and changing the active layer in the Layers panel.

TABLE 1: Selection Tools by Shape

tool	button	effect
Rectangular Marquee tool		Creates a rectangular selection. Press [Shift] while dragging to create a square.
Elliptical Marquee tool		Creates an elliptical selection. Press [Shift] while dragging to create a circle.
Single Row Marquee tool		Creates a 1-pixel-wide row selection.
Single Column Marquee tool		Creates a 1-pixel-wide column selection.
Lasso tool		Creates a freehand selection.
Polygonal Lasso tool		Creates straight line selections. Press [Alt] (Win) or [option] (Mac) to create freehand segments.
Magnetic Lasso tool		Creates selections that snap to an edge of an object. Press [Alt] (Win) or [option] (Mac) to alternate between freehand and magnetic line segments.

FIGURE 2
Marquee surrounding irregular shape

Lesson 1   Make a Selection Using Shapes
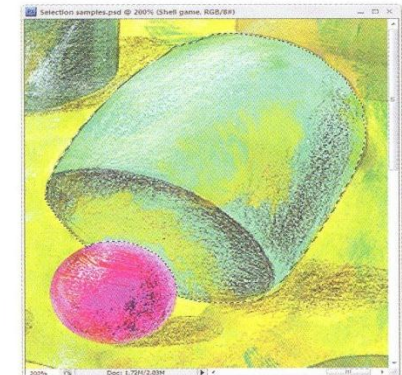
PHOTOSHOP 3-5

Placing a Selection

You can place a selection in a Photoshop image in many ways. You can copy or cut a selection, then paste it to a different location in the same image or to a different image. You can also use the Move tool to drag a selection to a new location.

Using Guides

Guides are non-printing horizontal and vertical lines that you can display on top of an image to help you position a selection. You can create an unlimited number of horizontal and vertical guides. You create a guide by displaying the rulers, positioning the pointer on either ruler, then clicking and dragging the guide into position. Figure 3 shows the creation of a horizontal guide in a file that contains two existing guides. You delete a guide by selecting the Move tool on the Tools panel, positioning the pointer over the guide, then clicking and dragging it back to its ruler. If the Snap feature is enabled, as you drag an object toward a guide, the object will be pulled toward the guide. To turn on the Snap feature, click View on the Application bar, then click Snap. A check mark appears to the left of the command if the feature is enabled.

FIGURE 3
Creating guides in image
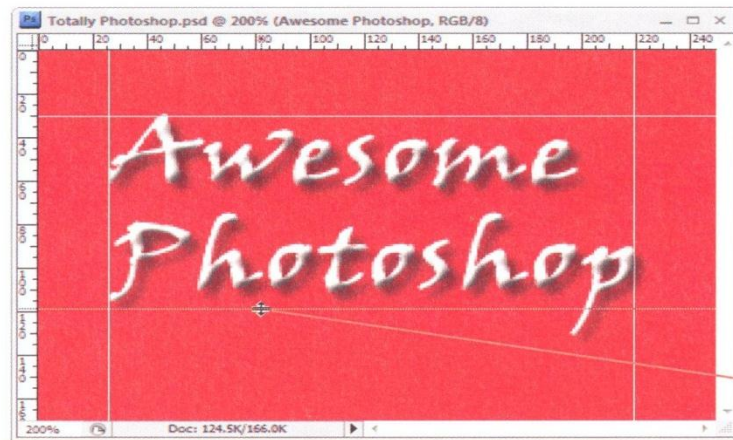
Dragging a guide to a new location

FIGURE 4

Rectangular Marquee tool selection
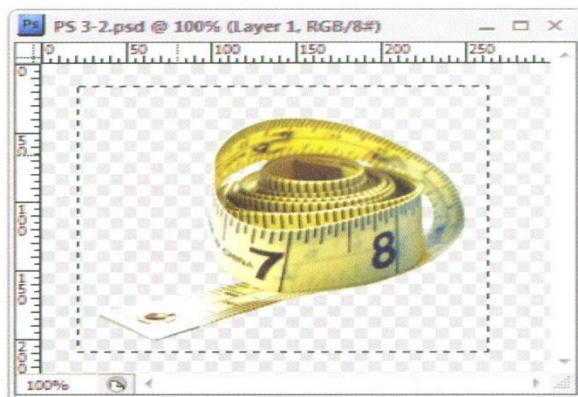
TABLE 2: Working with a Selection

if you want to:	then do this:
Move a selection (an image) using the mouse	Position the ⤧ over the selection, then drag the marquee and its contents
Copy a selection to the Clipboard	Activate image containing the selection, click Edit ➤ Copy
Cut a selection to the Clipboard	Activate image containing the selection, click Edit ➤ Cut
Paste a selection from the Clipboard	Activate image where you want the selection, click Edit ➤ Paste
Delete a selection	Make selection, then press [Delete] (Win) or [delete] (Mac)
Deselect a selection	Press [Ctrl][D] (Win) or ⌘[D] (Mac)

Lesson 1   Make a Selection Using Shapes

Create a selection with the Rectangular Marquee tool

1. Start Photoshop, open PS 3-1.psd from the drive and folder where you store your Data Files, save it as **Sewing Box**, then click **OK** if the Maximize compatibility dialog box displays.

2. Click the **workspace switcher** on the Application bar, click **Analysis**, click the **Layers tab**, then display the rulers (if necessary) in pixels.

3. Open PS 3-2.psd, then display the rulers in pixels for this image (if necessary).

4. Click the **Rectangular Marquee tool** ▭ on the Tools panel.

5. Make sure the value in the Feather text box on the options bar is **0 px**.

   Feathering determines the amount of blur between the selection and the pixels surrounding it.

6. Drag the **Marquee pointer** ✛ to select the tape measure from approximately **20 H/20 V** to **260 H/210 V**. See Figure 4.

   The first measurement refers to the horizontal ruler (H); the second measurement refers to the vertical ruler (V).

   | TIP   You can also use the X/Y coordinates displayed in the Info panel.

7. Click the **Move tool** ⤧ on the Tools panel, then drag the selection to any location in the Sewing Box image.

   The selection now appears in the Sewing Box image on a new layer (Layer 1).

   | TIP   Table 2 describes methods you can use to work with selections in an image.

Using the Rectangular Marquee tool, you created a selection in an image, then you dragged that selection into another image. This left the original image intact, and created a copy of the selection in the destination image.

PHOTOSHOP 3-7

Position a selection with the Move tool

1. Verify that the **Move tool** ⊹ is selected on the Tools panel, and display the rulers (if necessary).

2. If you do not see guides in the Sewing Box image, click **View** on the Application bar, point to **Show**, then click **Guides**.

3. Drag the **tape measure** so that the top-right corner snaps to the ruler guides at approximately **1030 H/250 V**. Compare your image to Figure 5.

   Did you feel the snap to effect as you positioned the selection within the guides? This feature makes it easy to properly position objects within an image.

   > TIP If you didn't feel the image snap to the guides, click View on the Application bar, point to Snap To, then click Guides.

4. Rename Layer 1 **Tape Measure**.

You used the Move tool to reposition a selection in an existing image, then you renamed the layer.

FIGURE 5
Rectangular selection in image
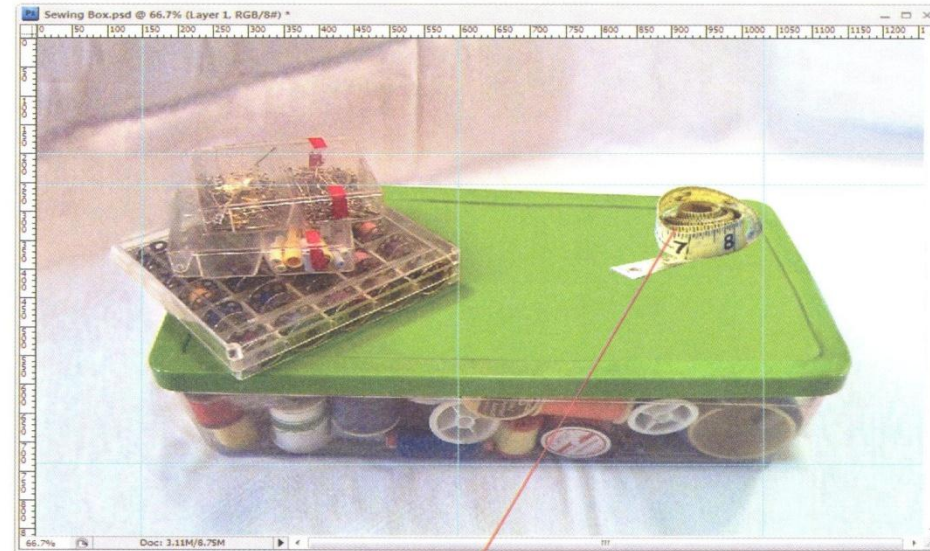
Tape measure

Using Smart Guides

Wouldn't it be great to be able to see a vertical or horizontal guide as you move an object? Using Smart Guides, you can do just that. Smart Guides are turned on by clicking View on the Application bar, pointing to Show, then clicking Smart Guides. Once this feature is turned on, horizontal and vertical purple guidelines appear automatically when you draw a shape or move an object. This feature allows you to align layer content as you move it.

Mr. Dave Schmidt   **Adobe Photoshop CS4**

FIGURE 6

Deselect command

Shortcut can be used instead of clicking the menu

FIGURE 7

Save Selection dialog box
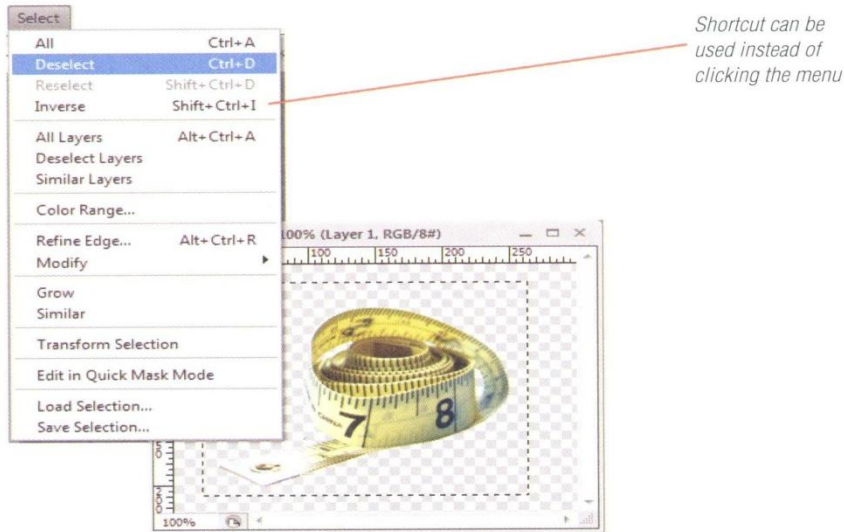
Deselect a selection

1. Click **Window** on the Application bar, then click **PS 3-2.psd**.

   TIP If you can see the window of the image you want anywhere on the screen, you can just click it to make it active instead of using the Window menu.

2. Click **Select** on the Application bar, then click **Deselect**, as shown in Figure 6.

You hid the active layer, then used the Deselect command on the Select menu to deselect the object you had moved into this image. When you deselect a selection, the marquee no longer surrounds it.

Saving and loading a selection

Any selection can be saved independently of the surrounding image, so that if you want to use it again in the image, you can do so without having to retrace it using one of the marquee tools. Once a selection is made, you can save it in the image by clicking Select on the Application bar, then clicking Save Selection. The Save Selection dialog box opens, as shown in Figure 7; be sure to give the selection a meaningful name. When you want to load a saved selection, click Select on the Application bar, then click Load Selection. Click the Channel list arrow, click the named selection, then click OK.

Lesson 1   Make a Selection Using Shapes

Create a selection with the Magnetic Lasso tool

1. Click the **Magnetic Lasso tool** 🔲 on the Tools panel, then change the settings on the options bar so that they are the same as those shown in Figure 8. Table 3 describes Magnetic Lasso tool settings.

2. Open PS 3-3.psd from the drive and folder where you store your Data Files.

3. Click the **Magnetic Lasso tool pointer** 🔲 once anywhere on the edge of the pin cushion, to create your first fastening point.

   TIP If you click a spot that is not at the edge of the pin cushion, press [Esc] (Win) or ⌘ [Z] (Mac) to undo the action, then start again.

4. Drag the **Magnetic Lasso tool pointer** 🔲 slowly around the pin cushion (clicking at the top of each pin may be helpful) until it is almost entirely selected, then click directly over the initial fastening point. See Figure 9.

   Don't worry about all the nooks and crannies surrounding the pin cushion: the Magnetic Lasso tool will select those automatically. You will see a small circle next to the pointer when it is directly over the initial fastening point, indicating that you are closing the selection. The individual segments turn into a marquee.

   TIP If you feel that the Magnetic Lasso tool is missing some major details while you're tracing, you can insert additional fastening points by clicking the pointer while dragging. For example, click the mouse button at a location where you want to change the selection shape.

You created a selection with the Magnetic Lasso tool.

FIGURE 8
Options for the Magnetic Lasso tool

FIGURE 9
Creating a selection with the Magnetic Lasso tool
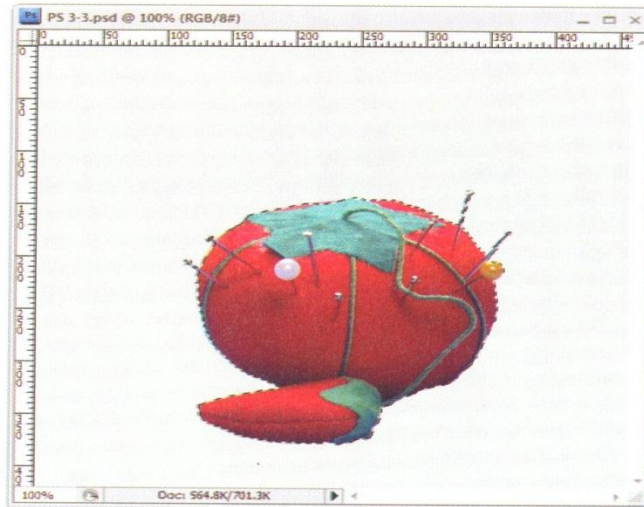
Mastering the art of selections

You might feel that it is difficult when you first start making selections. Making selections is a skill, and like most skills, it takes a lot of practice to become proficient. In addition to practice, make sure that you're comfortable in your work area, that your hands are steady, and that your mouse is working well. A non-optical mouse that is dirty will make selecting an onerous task, so make sure your mouse is well cared for and is functioning correctly.

FIGURE 10
Selection copied into image

Defringing the layer
reduces the amount
of the original
background that
appears; your results
will vary

Complex selection
includes only object,
no background
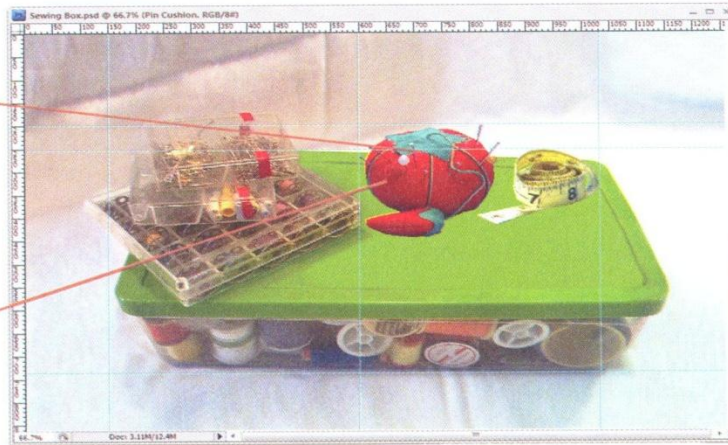
TABLE 3: Magnetic Lasso Tool Settings

setting	description
Feather	The amount of blur between the selection and the pixels surrounding it. This setting is measured in pixels and can be a value between 0 and 250.
Anti-alias	The smoothness of the selection, achieved by softening the color transition between edge and background pixels.
Width	The interior width by detecting an edge from the pointer. This setting is measured in pixels and can have a value from 1 to 40.
Contrast	The tool's sensitivity. This setting can be a value between 1 percent and 100 percent: higher values detect high-contrast edges.
Frequency	The rate at which fastening points are applied. This setting can be a value between 0 and 100: higher values insert more fastening points.

Lesson 1   Make a Selection Using Shapes

Move a complex selection to an existing image

1. Click the **Move tool** on the Tools panel.

   TIP   You can also click the Click to open the Tool Preset picker list arrow on the options bar, then double-click the Move tool.

2. Use the **Move tool pointer** to drag the pin cushion selection to the Sewing Box image.

   The selection appears on a new layer (Layer 1).

3. Drag the object so that the left edge of the pin cushion snaps to the guide at approximately **600 Y** and the top of the pin cushion snaps to the guide at **200 X** using the coordinates on the info panel.

4. Use the Layer menu to defringe the new Layer 1 at a width of **1** pixel.

5. Close the PS 3-3.psd image without saving your changes.

6. Rename the new layer **Pin Cushion** in the Sewing Box image.

7. Save your work, then compare your image to Figure 10.

8. Click **Window** on the Application bar, then click **PS 3-2.psd**.

9. Close the PS 3-2.psd image without saving your changes.

You dragged a complex selection into an existing Photoshop image. You positioned the object using ruler guides and renamed a layer. You also defringed a selection to eliminate its white border.

MODIFY A MARQUEE

What You'll Do

In this lesson, you'll move and enlarge a marquee, drag a selection into a Photoshop image, then position a selection using ruler guides.

Changing the Size of a Marquee

Not all objects are easy to select. Sometimes, when you make a selection, you might need to change the size or shape of the marquee.

The options bar contains selection buttons that help you add to and subtract from a marquee, or intersect with a selection. The marquee in Figure 11 was modified into the one shown in Figure 12 by clicking the Add to selection button. After the Add to selection button is active, you can draw an additional marquee (directly adjacent to the selection), and it will be added to the current marquee.

One method you can use to increase the size of a marquee is the Grow command. After you make a selection, you can increase the marquee size by clicking Select on the Application bar, then by clicking Grow. The Grow command selects pixels adjacent to the marquee that have colors similar to those specified by the Magic Wand tool. The Similar command selects both adjacent and non-adjacent pixels.

QUICKTIP

While the Grow command selects adjacent pixels that have similar colors, the Expand command increases a selection by a specific number of pixels.

Modifying a Marquee

While a selection is active, you can modify the marquee by expanding or contracting it, smoothing out its edges, or enlarging it to add a border around the selection. These four commands, Expand, Contract, Smooth, and Border, are sub-menus of the Modify command, which is found on the Select menu. For example, you might want to enlarge your selection. Using the Expand command, you can increase the size of the selection, as shown in Figure 13.

Moving a Marquee

After you create a marquee, you can move the marquee to another location in the same image or to another image entirely. You might want to move a marquee if you've drawn it in the wrong image or the wrong location. Sometimes it's easier to draw a marquee elsewhere on the page, and then move it to the desired location.

QUICKTIP

You can always hide and display layers as necessary to facilitate making a selection.
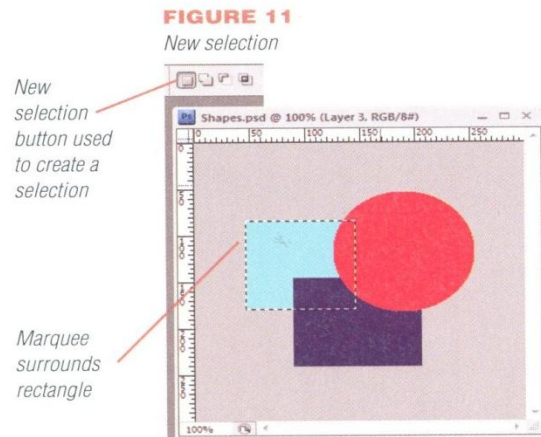
FIGURE 12
Selection with additions

Add to selection button adds new selection to the existing selection

Single marquee surrounds all shapes

Add to selection pointer

FIGURE 11
New selection

New selection button used to create a selection

Marquee surrounds rectangle
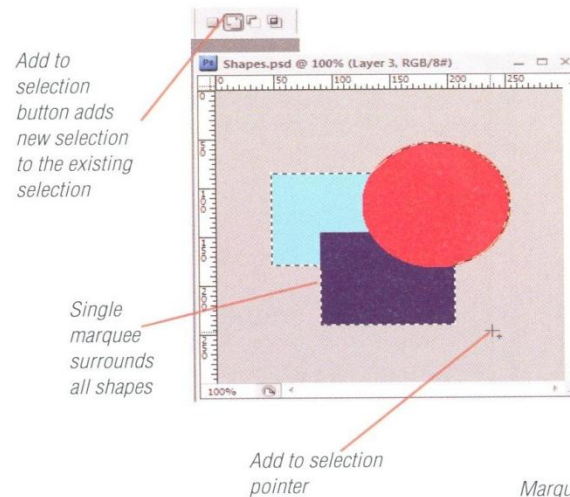
Using the Quick Selection Tool

The Quick Selection tool lets you paint-to-select an object from the interior using a resizeable brush. As you paint the object, the selection grows. Using the Auto-Enhance check box, rough edges and blockiness are automatically reduced to give you a perfect selection. As with other selection tools, the Quick Selection tool has options to add and subtract from your selection.

FIGURE 13
Expanded selection

Marquee expanded by 5 pixels
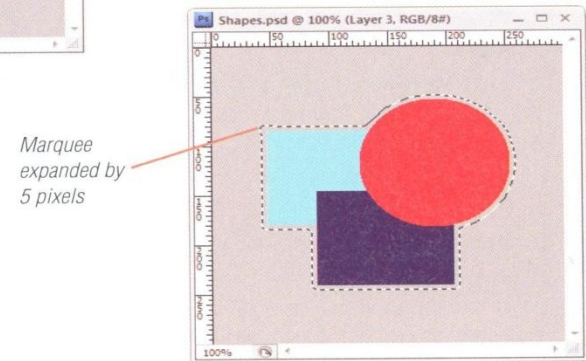
Adding and subtracting from a selection

Of course knowing how to make a selection is important, but it's just as important to know how to make alterations in an existing selection. Sometimes it's almost impossible to create that perfect marquee on the first try. Perhaps your hand moved while you were tracing, or you just got distracted. Using the Add to selection, Subtract from selection, and Intersect with selection buttons (which appear with all selection tools), you can alter an existing marquee without having to start from scratch.

Lesson 2   Modify a Marquee

Move and enlarge a marquee

1. Open PS 3-4.psd from the drive and folder where you store your Data Files. Change the zoom factor to **200%**.

2. Click the **Elliptical Marquee tool** ⬭ on the Tools panel.

   TIP   The Elliptical Marquee tool might be hidden under the Rectangular Marquee tool.

3. Click the **New selection button** ▫ on the options bar (if it is not already selected).

4. Drag the **Marquee pointer** ╋ to select the area from approximately **150 X/50 Y** to **200 X/130 Y**. Compare your image to Figure 14.

5. Position the **pointer** ▷ in the center of the selection.

6. Drag the **Move pointer** ▶ so the marquee covers the thimble, at approximately **100 X/100 Y**, as shown in Figure 15.

   TIP   You can also nudge a selection to move it, by pressing the arrow keys. Each time you press an arrow key, the selection moves one pixel in the direction of the arrow.

7. Click the **Magic Wand tool** ✎ on the Tools panel, then enter a Tolerance of **16,** and select the **Anti-alias** and **Contiguous checkboxes**.

8. Click **Select** on the Application bar, then click **Similar**.

9. Click **Select** on the Application bar, point to **Modify**, then click **Expand**.

10. Type **1** in the Expand By text box of the Expand Selection dialog box, then click **OK**.

11. Deselect the selection.

You created a marquee, then dragged the marquee to reposition it. You then enlarged a selection marquee by using the Similar and Expand commands.

PHOTOSHOP 3-14

FIGURE 14
Selection in image
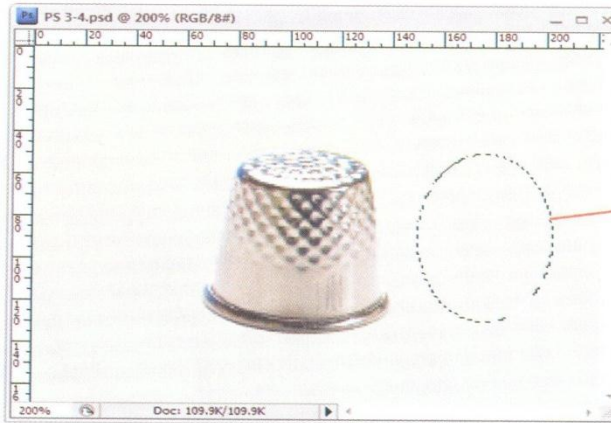
Marquee created with Elliptical Marquee tool

FIGURE 15
Moved selection
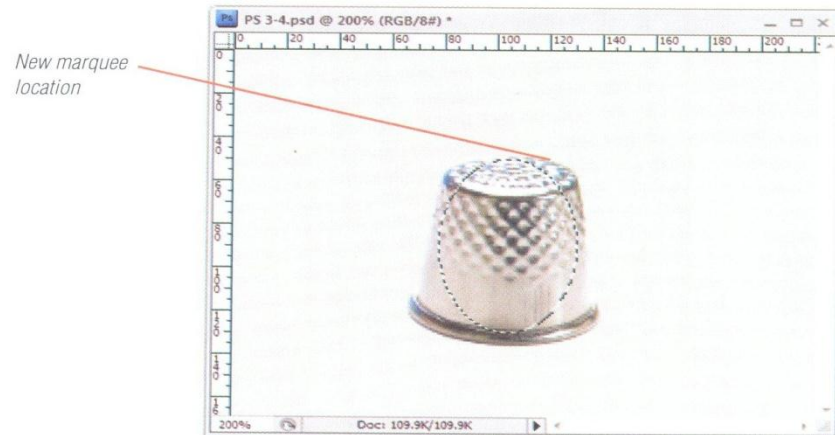
New marquee location

Making Selections

FIGURE 16
Quick Selection tool settings

FIGURE 17
Selection in file
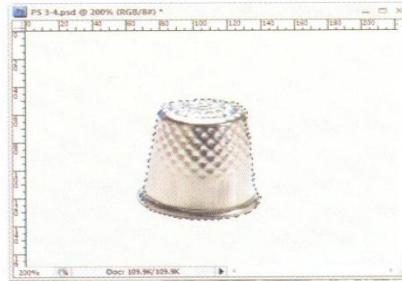
FIGURE 18
Selection moved to the Sewing Box image
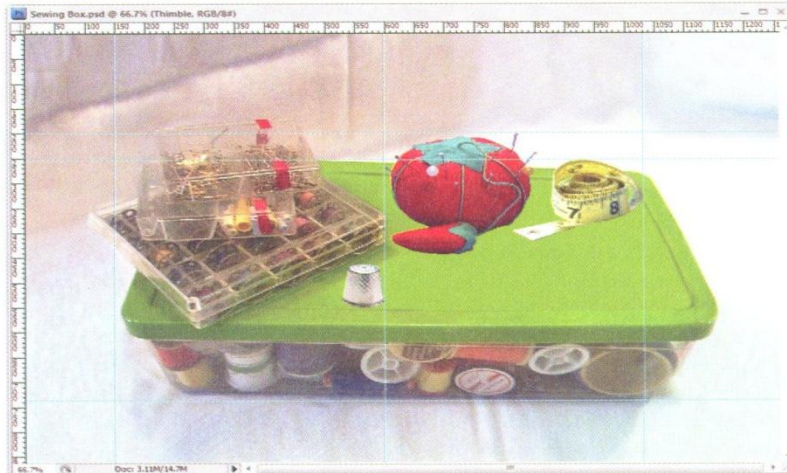
Lesson 2   Modify a Marquee

1. Click the **Quick Selection tool** on the Tools panel, then adjust your settings using Figure 16.

    TIP   If you need to change the Brush settings, click Brush list arrow on the options bar, then drag the sliders so the settings are 10 px diameter, 0% hardness, 1% spacing, 0° angle, 100% roundness, and Pen Pressure size.

2. Position the pointer in the **center of the thimble,** then slowly drag the pointer to the outer edges until the object is selected. See Figure 17.

    TIP   Sometimes making a selection is easy, sometimes . . . not so much. Time and practice will hone your selection skills. It will get easier.

3. Click the **Move tool** on the Tools panel.

4. Position the **Move pointer** over the selection, then drag the **thimble** to the Sewing Box image.

5. Drag the **thimble** so that it is to the left of the pin cushion and snaps to the vertical guide at approximately **600 X/550Y**.

6. Defringe the thimble using a setting of **1** pixel.

7. Rename the new layer **Thimble**.

8. Save your work on the sewing box image, then compare your image to Figure 18.

9. Make **PS 3-4.psd** active.

10. Close PS 3-4.psd without saving your changes.

You selected an object using the Quick Selection tool, then you dragged the selection into an existing image.

SELECT USING COLOR AND
MODIFY A SELECTION

What You'll Do
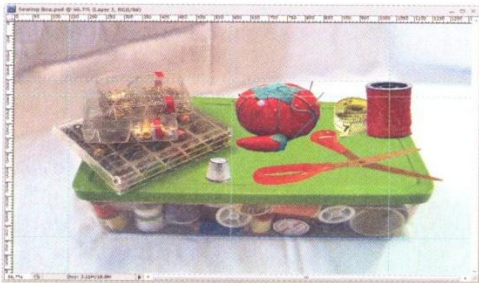
In this lesson, you'll make selections using both the Color Range command and the Magic Wand tool. You'll also flip a selection, then fix an image using the Healing Brush tool.

Selecting with Color

Selections based on color can be easy to make, especially when the background of an image is different from the image itself. High contrast between colors is an ideal condition for making selections based on color. You can make selections using color with the Color Range command on the Select menu, or you can use the Magic Wand tool on the Tools panel.

Using the Magic Wand Tool

When you select the Magic Wand tool, the following options are available on the options bar, as shown in Figure 19:

- The four selection buttons.
- The Tolerance setting, which allows you to specify whether similar pixels will be selected. This setting has a value from 0 to 255, and the lower the value, the closer in color the selected pixels will be.
- The Anti-alias check box, which softens the selection's appearance.
- The Contiguous check box, which lets you select pixels that are next to one another.
- The Sample All Layers check box, which lets you select pixels from multiple layers at once.

Knowing which selection tool to use

The hardest part of making a selection might be determining which selection tool to use. How are you supposed to know if you should use a marquee tool or a lasso tool? The first question you need to ask yourself is, "What do I want to select?" Becoming proficient in making selections means that you need to assess the qualities of the object you want to select, and then decide which method to use. Ask yourself: Does the object have a definable shape? Does it have an identifiable edge? Are there common colors that can be used to create a selection?

Using the Color Range Command

You can use the Color Range command to make the same selections as with the Magic Wand tool. When you use the Color Range command, the Color Range dialog box opens. This dialog box lets you use the pointer to identify which colors you want to use to make a selection. You can also select the Invert check box to *exclude* the chosen color from the selection. The **fuzziness** setting is similar to tolerance, in that the lower the value, the closer in color pixels must be to be selected.

Transforming a Selection

After you place a selection in a Photoshop image, you can change its size and other qualities by clicking Edit on the Application bar, pointing to Transform, then clicking any of the commands on the submenu. After you select certain commands, small squares called **handles** surround the selection. To complete the command, you drag a handle until the image has the look you want, then press [Enter] (Win) or [return] (Mac). You can also use the Transform submenu to flip a selection horizontally or vertically.

Understanding the Healing Brush Tool

If you place a selection then notice that the image has a few imperfections, you can fix the image. You can fix imperfections such as dirt, scratches, bulging veins on skin, or wrinkles on a face using the Healing Brush tool on the Tools panel.

Using the Healing Brush Tool

This tool lets you sample an area, then paint over the imperfections. What is the result? The less-than-desirable pixels seem to disappear into the surrounding image. In addition to matching the sampled pixels, the Healing Brush tool also matches the texture, lighting, and shading of the sample. This is why the painted pixels blend so effortlessly into the existing image. Corrections can be painted using broad strokes, or using clicks of the mouse.

FIGURE 19
Options for the Magic Wand tool

Mr. Dave Schmidt   Adobe Photoshop CS4
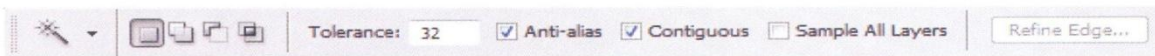
Select using color range

1. Open PS 3-5.psd from the drive and folder where you store your Data Files.

2. Click **Select** on the Application bar, then click **Color Range**.

3. Click the **Image option button** (if it is not already selected).

4. Click the **Invert check box** to add a check mark (if necessary).

5. Verify that your settings match those shown in Figure 20, click anywhere in the background area surrounding the sample image, then click **OK**.

   The Color Range dialog box closes and the spool of thread in the image is selected.

6. Click the **Move tool** ![Move tool icon] on the Tools panel.

7. Drag the selection into Sewing Box.psd, then position the selection as shown in Figure 21.

8. Rename the new layer **Thread**.

9. Defringe the spool of thread using a setting of **1** pixel.

10. Activate **PS 3-5.psd**, then close this file without saving any changes.

You made a selection within an image using the Color Range command on the Select menu, and dragged the selection to an existing image.

FIGURE 20
Completed Color Range dialog box

Modifies tolerance

Image sample appears here

Selected check box excludes selected color
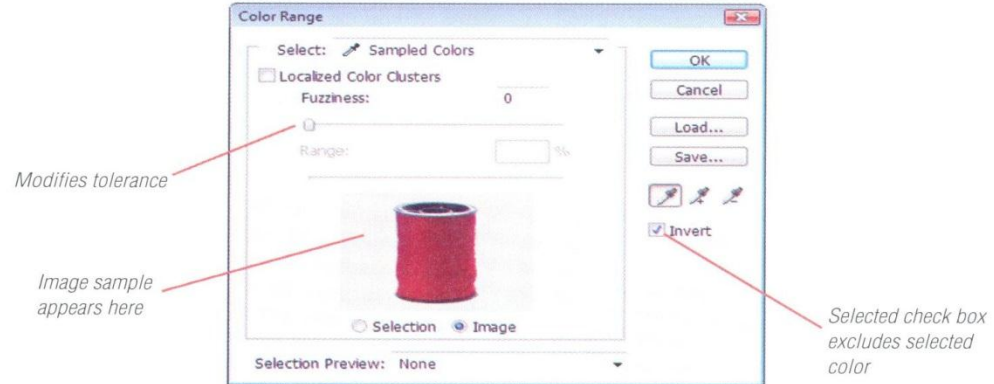
FIGURE 21
Selection in image
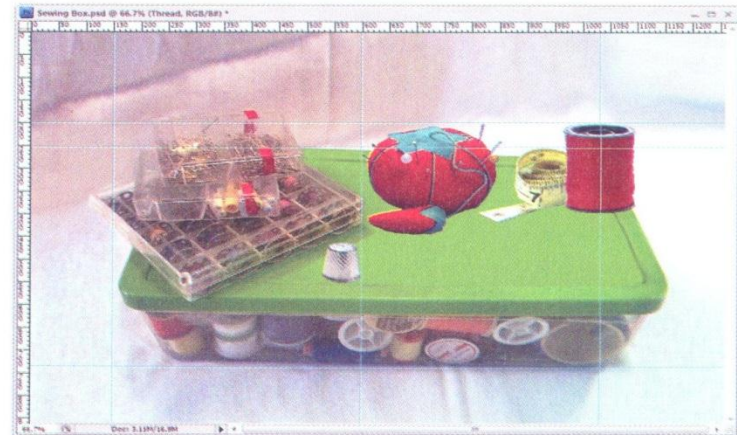
Making Selections

FIGURE 22
Magic Wand tool settings

| ⚡ ▾ | 🔲 🔲 🔲 🔲 | Tolerance: 10 | ☑ Anti-alias ☐ Contiguous ☐ Sample All Layers | Refine Edge... |
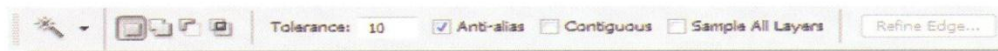
FIGURE 23
Selected area

PS 3-6.psd @ 100% (RGB/8)

100%   Doc: 843.8K/843.4K
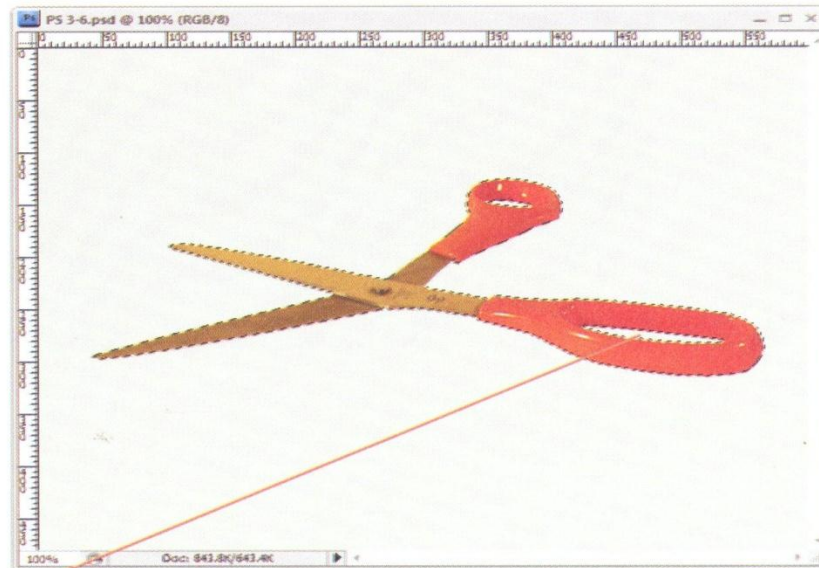
*Selection excludes
background color*

1. Open PS 3-6.psd from the drive and folder where you store your Data Files.

2. Click the **Magic Wand tool** ⚡ on the Tools panel.

3. Change the settings on the options bar to match those shown in Figure 22.

4. Click anywhere in the background area of the image (such as **50 X/50 Y**).

   TIP   Had you selected the Contiguous check box, the pixels within the handles *would not* have been selected. The Contiguous check box is a powerful feature of the Magic Wand tool.

5. Click **Select** on the Application bar, then click **Inverse**. Compare your selection to Figure 23.

6. Click the **Move tool** ✋ on the Tools panel, then drag the selection into Sewing Box.psd.

You made a selection using the Magic Wand tool, then dragged it into an existing image. The Magic Wand tool is just one more way you can make a selection. One advantage of using the Magic Wand tool (versus the Color Range tool) is the Contiguous check box, which lets you choose pixels that are next to one another.

Flip a selection

1. Click **Edit** on the Application bar, point to **Transform**, then click **Flip Horizontal**.

2. Rename Layer 1 as **Scissors**.

3. Defringe **Scissors** using a **1** pixel setting.

4. Drag the flipped selection with the **Move tool pointer** ▶︎⊹ so it is positioned as shown in Figure 24.

5. Make **PS 3-6.psd** the active file, then close PS 3-6.psd without saving your changes.

6. Save your work.

You flipped and repositioned a selection. Sometimes it's helpful to flip an object to help direct the viewer's eye to a desired focal point.

FIGURE 24
Flipped and positioned selection

Getting rid of red eye

When digital photos of your favorite people have that annoying red eye, what do you do? You use the Red Eye tool to eliminate this effect. To do this, select the Red Eye tool (which is grouped on the Tools panel with the Spot Healing Brush tool, the Healing Brush tool, and the Patch tool), then either click a red area of an eye or draw a selection over a red eye. When you release the mouse button, the red eye effect is removed.

FIGURE 25

FIGURE 25
Healing Brush tool options

FIGURE 26
Healed area

Crack removed
from image
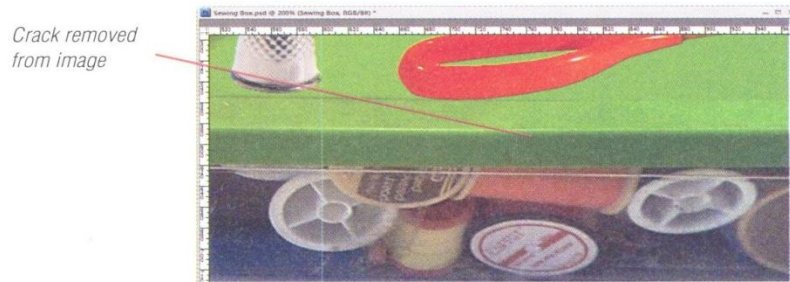
FIGURE 27
*Image after using the Healing Brush*
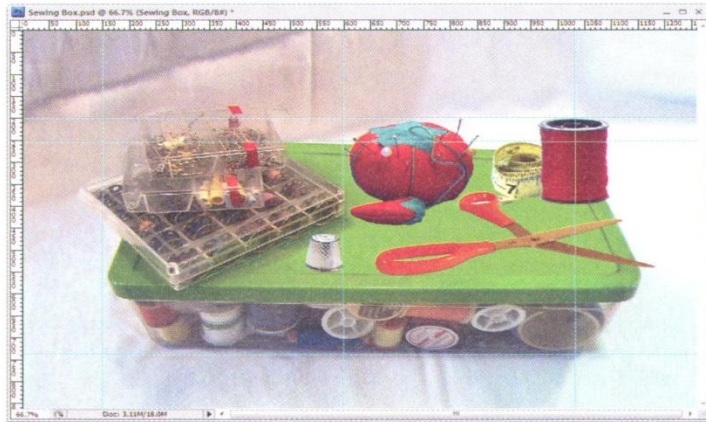
Lesson 3   Select Using Color and Modify a Selection

Fix imperfections with the Healing Brush tool

1. Click the **Sewing Box layer** on the Layers panel, then click the **Zoom tool** 🔍 on the Tools panel.

2. Click the image with the **Zoom tool pointer** ⊕ above the pink spool of thread (in the box) at **750 X/600 Y** until the zoom factor is **200%** and you can see the crack in the lid of the box.

3. Click the **Healing Brush tool** 🩹 on the Tools panel. Change the settings on the options bar to match those shown in Figure 25.

   > TIP   If you need to change the Brush settings, click the Brush list arrow on the options bar, then drag the sliders so the settings are 10 px diameter, 0% hardness, 1% spacing, 0° angle, 100% roundness, and Pen Pressure size.

4. Press and hold **[Alt]** (Win) or **[option]** (Mac), click next to the crack at any location on the green lid, such as **700 X/580 Y**, then release **[Alt]** (Win) or **[option]** (Mac).

   You sampled an area of the box that is not cracked so that you can use the Healing Brush tool to paint a damaged area with the sample.

5. Click the crack (at approximately **720 X/580 Y**).

6. Repeat steps 4 and 5, each time choosing a new source location, then clicking at a parallel location on the crack.

   Compare the repaired area to Figure 26.

7. Click the **Zoom tool** 🔍 on the Tools panel press and hold **[Alt]** (Win) or **[option]** (Mac), click the center of the image with the **Zoom tool pointer** ⊖ until the zoom factor is **66.67%**, then release **[Alt]** (Win) or **[option]** (Mac).

8. Save your work, then compare your image to Figure 27.

You used the Healing Brush tool to fix an imperfection in an image.

PHOTOSHOP 3-21

ADD A VIGNETTE EFFECT
TO A SELECTION

What You'll Do

In this lesson, you'll create a vignette effect, using a layer mask and feathering.

Understanding Vignettes

Traditionally, a **vignette** is a picture or portrait whose border fades into the surrounding color at its edges. You can use a vignette effect to give an image an old-world appearance. You can also use a vignette effect to tone down an overwhelming background. You can create a vignette effect in Photoshop by creating a mask with a blurred edge. A **mask** lets you protect or modify a particular area and is created using a marquee.

Creating a Vignette

A **vignette effect** uses feathering to fade a marquee shape. The **feather** setting blurs the area between the selection and the surrounding pixels, which creates a distinctive fade at the edge of the selection. You can create a vignette effect by using a marquee or lasso tool to create a marquee in an image layer. After the selection is created, you can modify the feather setting (a 10- or 20-pixel setting creates a nice fade) to increase the blur effect on the outside edge of the selection.

Getting that Healing feeling

The Spot Healing Brush tool works in much the same way as the Healing Brush tool in that it removes blemishes and other imperfections. Unlike the Healing Brush tool, the Spot Healing Brush tool does not require you to take a sample. When using the Spot Healing Brush tool, you must choose whether you want to use a proximity match type (which uses pixels around the edge of the selection as a patch) or a create texture type (which uses all the pixels in the selection to create a texture that is used to fix the area). You also have the option of sampling all the visible layers or only the active layer.
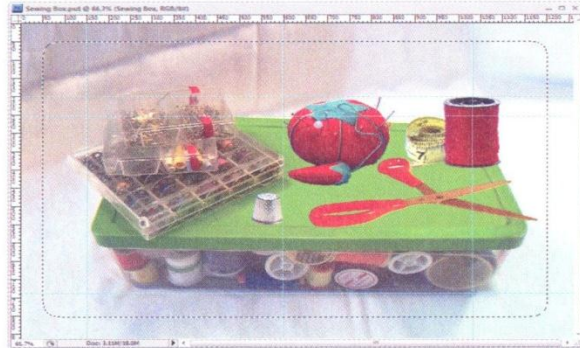
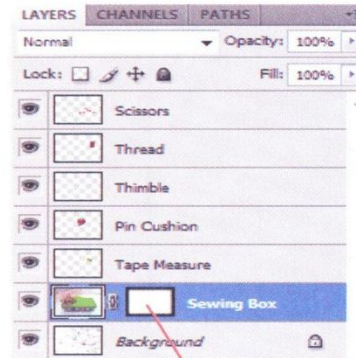**FIGURE 28**
Marquee in image

FIGURE 29
Layers panel

Feathered mask creates
vignette effect

FIGURE 30
Vignette in image

Vignette effect
fades border

*Lesson 4   Add a Vignette Effect to a Selection*

Create a vignette

1. Verify that the **Sewing Box layer** is selected.
2. Click the **Rectangular Marquee tool** ☐ on the Tools panel.
3. Change the **Feather setting** on the options bar to **20px**.
4. Create a selection with the **Marquee pointer** ✛ from **50 X/50 Y** to **1200 X/800 Y**, as shown in Figure 28.
5. Click **Layer** on the Application bar, point to **Layer Mask**, then click **Reveal Selection**.

   The vignette effect is added to the layer.

   Compare your Layers panel to Figure 29.
6. Click **View** on the Application bar, then click **Rulers** to hide them.
7. Click **View** on the Application bar, then click **Clear Guides**.
8. Save your work, then compare your image to Figure 30.
9. Close the Sewing Box image, select **Essentials** from the workspace switcher, then exit Photoshop.

You created a vignette effect by adding a feathered layer mask. You also rearranged layers and defringed a selection. Once the image was finished, you hid the rulers and cleared the guides.

SKILLS REFERENCE

Power User Shortcuts

to do this:	use this method:
Copy selection	Click Edit ➢ Copy or [Ctrl][C] (Win) or ⌘[C] (Mac)
Create vignette effect	Marquee or Lasso tool, create selection, click Layer ➢ Layer Mask ➢ Reveal Selection
Cut selection	Click Edit ➢ Cut or [Ctrl][X] (Win) or ⌘[X] (Mac)
Deselect object	Select ➢ Deselect or [Ctrl][D] (Win) or ⌘[D] (Mac)
Elliptical Marquee tool	⬭ or [Shift] **M**
Flip image	Edit ➢ Transform ➢ Flip Horizontal
Grow selection	Select ➢ Grow
Increase selection	Select ➢ Similar
Lasso tool	⬯ or [Shift] **L**
Magnetic Lasso tool	⬰ or [Shift] **L**
Move tool	⯈ or **V**

to do this:	use this method:
Move selection marquee	Position pointer in selection, drag to new location
Paste selection	Edit ➢ Paste or [Ctrl][V] (Win) or ⌘[V] (Mac)
Polygonal Lasso tool	⬲ or [Shift] **L**
Rectangular Marquee tool	⬚ or [Shift] **M**
Reselect a deselected object	Select ➢ Reselect, or [Shift][Ctrl][D] (Win) or [Shift] ⌘[D] (Mac)
Select all objects	Select ➢ All, or [Ctrl][A] (Win) or ⌘[A] (Mac)
Select using color range	Select ➢ Color Range, click sample area
Select using Magic Wand tool	⬱ or **W**, then click image
Select using Quick Selection tool	⬳ or [Shift] **W**, then drag pointer over image
Single Column Marquee tool	▯
Single Row Marquee tool	▭

Key: Menu items are indicated by ➢ between the menu name and its command. Blue bold letters are shortcuts for selecting tools on the Tools panel.

PHOTOSHOP 3-24

Making Selections

Make a selection using shapes.

1. Open PS 3-7.psd from the drive and folder where you store your Data Files, substitute any missing fonts, then save it as **Cool cats**.
2. Open PS 3-8.tif.
3. Display the rulers in each image window (if necessary), switch to the Analysis workspace, then display the Layers panel.
4. Use the Rectangular Marquee tool to select the entire image in PS 3-8.tif. (*Hint*: Reset the Feather setting to 0 pixels, if necessary.)
5. Deselect the selection.
6. Use the Magnetic Lasso tool to create a selection surrounding only the Block cat in the image. (*Hint*: You can use the Zoom tool to make the image larger.)
7. Drag the selection into the Cool cats image, positioning it so the right side of the cat is at 490 X, and the bottom of the right paw is at 450 Y.
8. Save your work.
9. Close PS 3-8.tif without saving any changes.

Modify a marquee.

1. Open PS 3-9.tif.
2. Change the settings on the Magic Wand tool to Tolerance = 5, and make sure that the Contiguous check box is selected.
3. Use the Elliptical Marquee tool to create a marquee from 100 X/50 Y to 200 X/100 Y, using a setting of 0 in the Feather text box.
4. Use the Grow command on the Select menu.
5. Use the Inverse command on the Select menu.

6. Drag the selection into the Cool cats image, positioning it so the upper-left corner of the selection is near 0 X/0 Y.
7. Defringe the new layer using a width of 2 pixels.
8. Save your work.
9. Close PS 3-9.tif without saving any changes.

Select using color and modify a selection.

1. Open PS 3-10.tif.
2. Use the Color Range dialog box to select only the kitten.
3. Drag the selection into the Cool cats image.
4. Flip the kitten image (in the Cool cats image) horizontally.

FIGURE 31
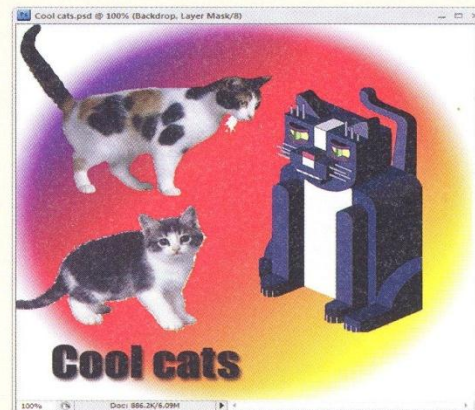*Completed Skills Review project*

5. Position the kitten image so the bottom right snaps to the ruler guides at 230 X/450 Y.
6. Defringe the kitten using a width of 2 pixels.
7. Save your work.
8. Close PS 3-10.tif without saving any changes.

Add a vignette effect to a selection.

1. Use a 15-pixel feather setting and the Backdrop layer to create an elliptical selection surrounding the contents of the Cool cats image.
2. Add a layer mask that reveals the selection.
3. Hide the rulers and guides, then switch to the Essentials workspace.
4. Save your work.
5. Compare your image to Figure 31.

PROJECT BUILDER 1

As a professional photographer, you often take photos of people for use in various publications. You recently took a photograph of a woman that will be used in a marketing brochure. The client is happy with the overall picture, but wants the facial lines smoothed out. You decide to use the Healing Brush tool to ensure that the client is happy with the final product.

1. Open PS 3-11.psd, then save it as **Portrait**.
2. Make a copy of the Original layer using the default name, or the name of your choice.
3. Use the Original copy layer and the Healing Brush tool to smooth the appearance of facial lines in this image. (*Hint*: You may have greater success if you use short strokes with the Healing Brush tool than if you paint long strokes.)
4. Create a vignette effect on the Original copy layer that reveals the selection using an elliptical marquee.
5. Reorder the layers (if necessary), so that the vignette effect is visible.
6. Save your work, then compare your image to the sample shown in Figure 32.

FIGURE 32
Completed Project Builder 1

Making Selections

Mr. Dave Schmidt   **Adobe Photoshop CS4**
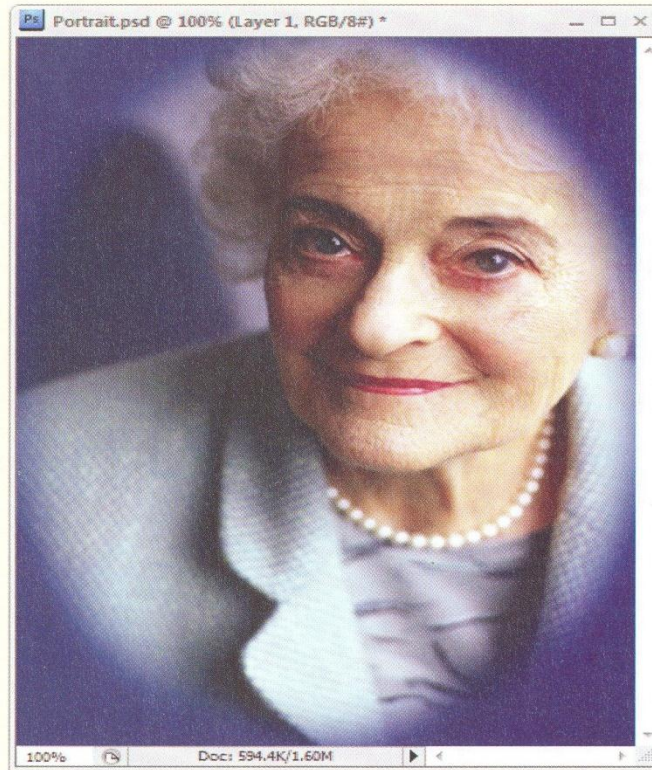
PROJECT BUILDER 2

The St. Louis Athletic Association, which sponsors the St. Louis Marathon, is holding a contest for artwork to announce the upcoming race. Submissions can be created on paper or computer-generated. You feel you have a good chance at winning this contest, using Photoshop as your tool.

1. Open PS 3-12.psd, then save it as **Marathon Contest**.
2. Locate at least two pieces of appropriate artwork—either on your hard disk, in a royalty-free collection, or from scanned images—that you can use in this file.
3. Use any appropriate methods to select imagery from the artwork.
4. After the selections have been made, copy each selection into Marathon Contest.
5. Arrange the images into a design that you think will be eye-catching and attractive.
6. Deselect the selections in the files you are no longer using, and close them without saving the changes.
7. Add a vignette effect to the Backdrop layer.
8. Display the type layers if they are hidden.
9. Defringe any layers, as necessary.
10. Save your work, then compare your screen to the sample shown in Figure 33.

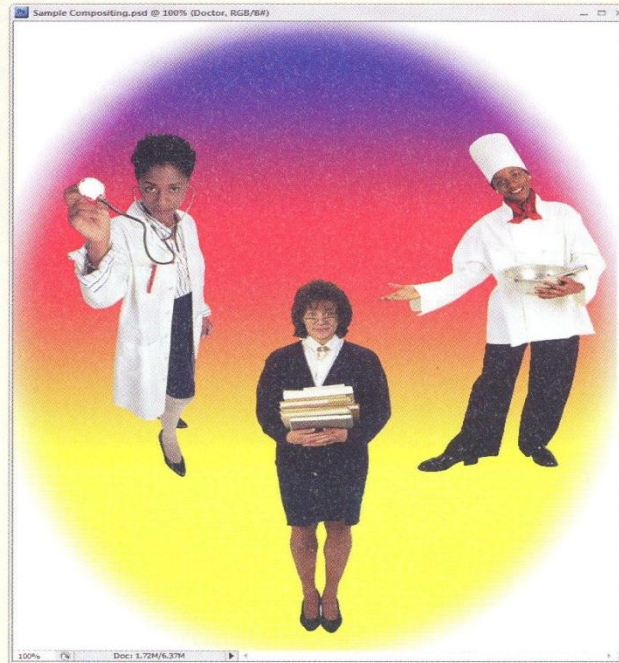**FIGURE 33**
Completed Project Builder 2
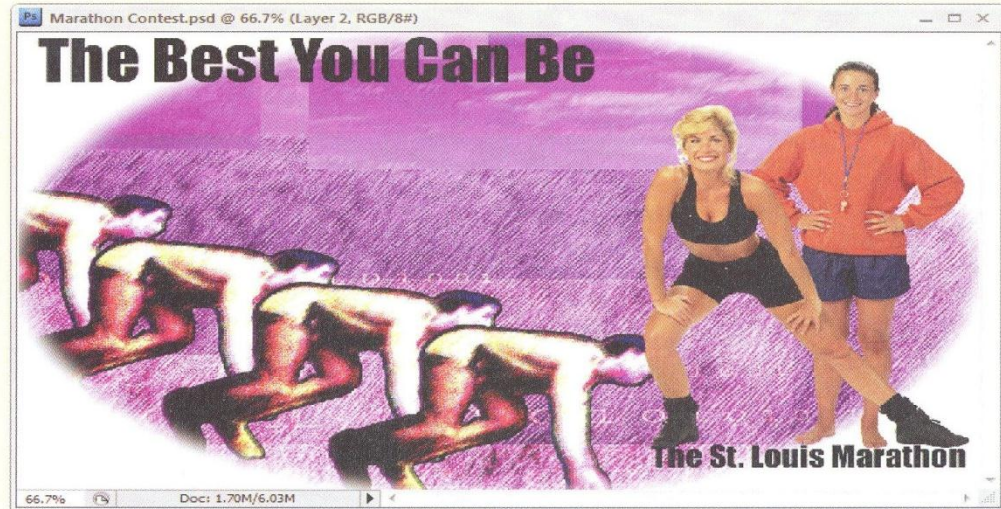
DESIGN PROJECT

You are aware that there will be an opening in your firm's design department. Before you can be considered for the job, you need to increase your Photoshop compositing knowledge and experience. You have decided to teach yourself, using informational sources on the Internet and images that can be scanned or purchased.

1. Connect to the Internet and use your browser and favorite search engine to find information on image compositing. (Make a record of the site you found so you can use it for future reference, if necessary.)
2. Create a new Photoshop image, using the dimensions of your choice, then save it as **Sample Compositing**.
3. Locate at least two pieces of artwork—either on your hard disk, in a royalty-free collection, or from scanned images—that you can use. (The images can contain people, plants, animals, or inanimate objects.)
4. Select the images in the artwork, then copy each into the Sample Compositing image, using the method of your choice.
5. Rename each of the layers using meaningful names.
6. Apply a color to each new layer.
7. Arrange the images in a pleasing design. (*Hint*: Remember that you can flip any image, if necessary.)

8. Deselect the selections in the artwork, then close the files without saving the changes.
9. If desired, create a background layer for the image.
10. If necessary, add a vignette effect to a layer.

11. Defringe any images as you see necessary.
12. Save your work, then compare your screen to the sample shown in Figure 34.

### FIGURE 34
Completed Design Project

At your design firm, a Fortune 500 client plans to start a 24-hour cable sports network called Total Sportz that will cover any nonprofessional sporting event. You have been asked to create some preliminary designs for the network, using images from multiple sources.

1. Open PS 3-13.psd, then save it as **Total Sportz**. (*Hint*: Click Update to close the warning box regarding missing fonts, if necessary.)
2. Locate several pieces of sports-related artwork—either on your hard disk, in a royalty-free collection, or from scanned images. Remember that the images should not show professional sports figures, if possible.
3. Select imagery from the artwork and move it into the Total Sportz image.
4. Arrange the images in an interesting design. (*Hint*: Remember that you can flip any image, if necessary.)
5. Change each layer name to describe the sport in the layer image.
6. Deselect the selections in the files that you used, then close the files without saving the changes.

7. If necessary, add a vignette effect to a layer and/or adjust opacity.
8. Defringe any images (if necessary).

9. Save your work, then compare your image to the sample shown in Figure 35.

FIGURE 35
Completed Portfolio Project

Mr. Dave Schmidt   **Adobe Photoshop CS4**
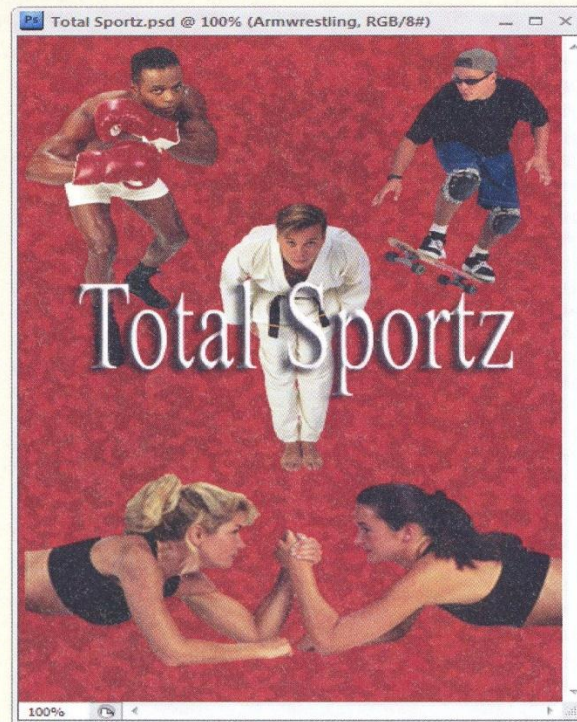
CHAPTER 4

Incorporating Color Techniques

Mr. Dave Schmidt

113