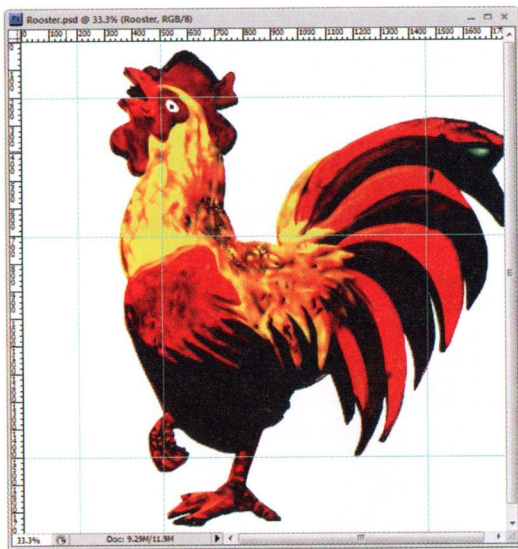
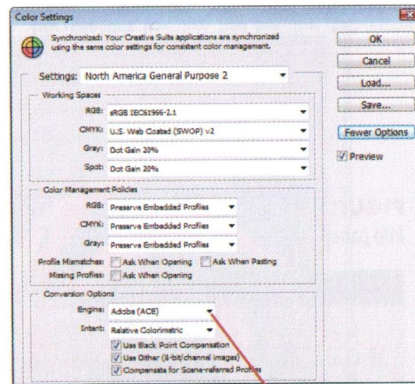



FIGURE 3*Image with rulers displayed***FIGURE 4***Color Settings dialog box**Intent list arrow*

Creating a rendering intent

The use of a rendering intent determines how colors are converted by a color management system. A color management system is used to keep colors looking consistent as they move between devices. Colors are defined and interpreted using a profile. You can create a rendering intent by clicking Edit on the Application bar, then clicking Color Settings. Click the More Options button in the Color Settings dialog box, click the Intent list arrow shown in Figure 4, then click one of the four options. Since a gamut is the range of color that a color system can display or print, the rendering intent is constantly evaluating the color gamut and deciding whether or not the colors need adjusting. So, colors that fall inside the destination gamut may not be changed, or they may be adjusted when translated to a smaller color gamut.

Set the default foreground and background colors

1. Start Photoshop, open PS 4-1.psd from the drive and folder where you save your Data Files, then save it as **Rooster**.
 - TIP** Whenever the Photoshop Format Options dialog box appears, click OK to maximize compatibility.
2. Click the **Default Foreground and Background Colors** button  on the Tools panel.
 - TIP** If you accidentally click the Set foreground color button, the Color Picker (Foreground Color) dialog box opens.
3. Change the status bar so the document sizes display (if necessary).
 - TIP** Document sizes will not display in the status bar if the image window is too small. Drag the lower-right corner of the image window to expand the window and display the menu button and document sizes.
4. Display the rulers in pixels (if necessary), show the guides (if necessary), then compare your screen to Figure 3.

- TIP** You can right-click (Win) or [control]-click (Mac) one of the rulers to choose Pixels, Inches, Centimeters, Millimeters, Points, Picas, or Percent as a unit of measurement, instead of using the Rulers and Units Preferences dialog box.


You set the default foreground and background colors and displayed rulers in pixels.

Change the background color using the Color panel



1. Click the **Background layer** on the Layers panel.
2. Display the History and Layers workspace.
3. Click the **Color panel tab** **COLOR** (if necessary).
4. Drag each color slider on the Color panel until you reach the values shown in Figure 5.

The active color changes to the new color. Did you notice that this image is using the RGB mode?

TIP You can also double-click each component's text box on the Color panel and type the color values.

5. Click the **Paint Bucket tool**  on the Tools panel.

TIP If the Paint Bucket tool is not visible on the Tools panel, click the Gradient tool on the Tools panel, press and hold the mouse button until the list of hidden tools opens, then click the Paint Bucket tool.

6. Click the image with the **Paint Bucket pointer** .
7. Drag the **Paint Bucket state** on the History panel onto the **Delete current state button** .

TIP You can also undo the last action by clicking Edit on the menu bar, then clicking Undo Paint Bucket.

You set new values in the Color panel, used the Paint Bucket tool to change the background to that color, then undid the change. You can change colors on the Color panel by dragging the sliders or by typing values in the color text boxes.

FIGURE 5

Color panel with new color

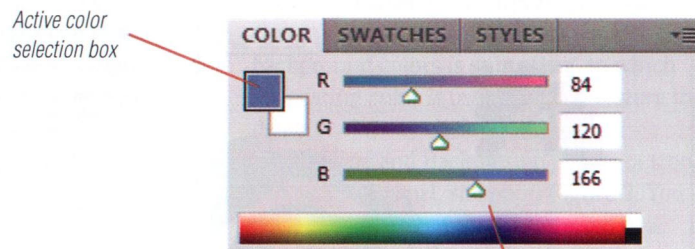
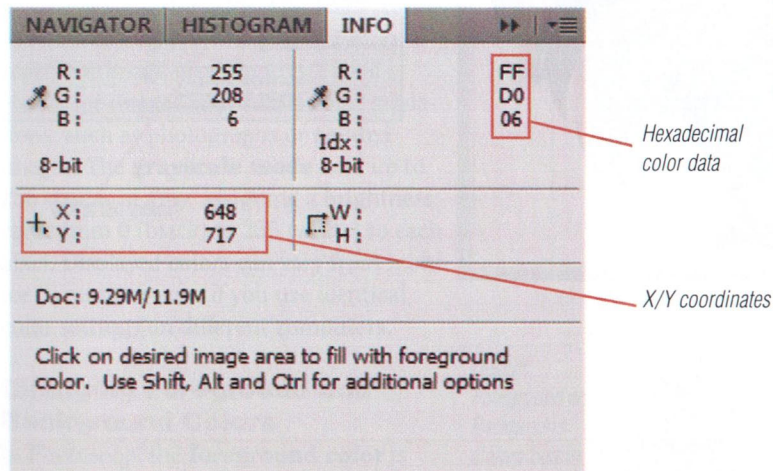


FIGURE 6

Info panel

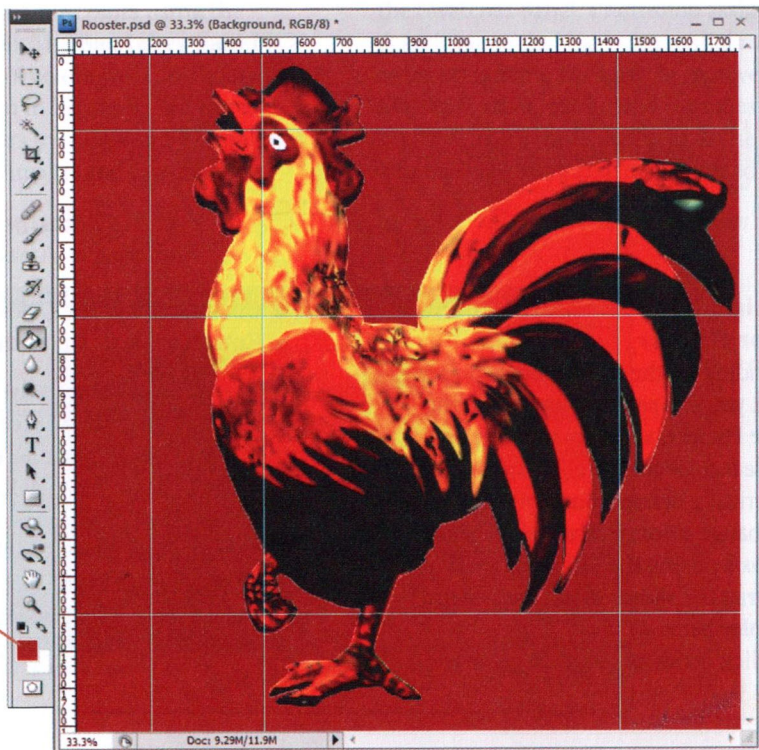


Using ruler coordinates

Photoshop rulers run along the top and left sides of the document window. Each point on an image has a horizontal and vertical location. These two numbers, called X and Y coordinates, appear on the Info panel (which is located in the tab group with the Navigator and Histogram panels) as shown in Figure 6. The X coordinate refers to the horizontal location, and the Y coordinate refers to the vertical location. You can use one or both sets of guides to identify coordinates of a location, such as a color you want to sample. If you have difficulty seeing the ruler markings, you can increase the size of the image; the greater the zoom factor, the more detailed the measurement hashes.

FIGURE 7

New foreground color applied to Background layer





New foreground color

Using hexadecimal values in the Info panel


Colors can be expressed in a hexadecimal value, three pairs of letters or numbers that define the R, G, and B components of a color. The three pairs of letters/numbers are expressed in values from 00 (minimum luminance) to ff (maximum luminance). 000000 represents the value of black, ffffff is white, and ff0000 is red. To view hexadecimal values in the Info panel, click the Info panel list arrow, then click Panel Options. Click Web Color from either the First Color Readout or Second Color Readout Mode list arrow, then click OK. This is just one more way you can exactly determine a specific color in an image.

Change the background color using the Eyedropper tool

1. Click the **Background layer** on the Layers panel.
2. Click the **Eyedropper tool**  on the Tools panel.
3. Click the **red part of the rooster's crown** in the image with the **Eyedropper pointer** , using the Info panel and the blue guides to help ensure accuracy.

The Set foreground color button displays the red color that you clicked (or sampled).

TIP Don't worry if you see a warning sign on the Color panel.

4. Click the **Paint Bucket tool**  on the Tools panel.
5. Click the image, then compare your screen to Figure 7.

You might have noticed that in this instance, it doesn't matter where on the layer you click, as long as the correct layer is selected.

6. Save your work.

You used the Eyedropper tool to sample a color as the foreground color, then used the Paint Bucket tool to change the background color to the color you sampled. Using the Eyedropper tool is a convenient way of sampling a color in any Photoshop image.

Select a color using the Color Picker dialog box



1. Click the **Set foreground color** button on the Tools panel, then verify that the H: option button is selected in the Color Picker dialog box.
2. Click the **R: option** button.
3. Click the **bottom-right corner** of the Color field (purple), as shown in Figure 10.

TIP If the Warning: out-of-gamut for printing indicator appears next to the color, then this color exceeds the printable range.

4. Click **OK**.

You opened the Color Picker dialog box, selected a different color mode, and then selected a new color.

Select a color using the Swatches panel

1. Click the **Swatches panel tab** **SWATCHES**.
2. Click the **second swatch from the left in the first row** (RGB Yellow), as shown in Figure 11. Did you notice that the foreground color on the Tools panel changed to a light, bright yellow?
3. Click the **Paint Bucket tool**  on the Tools panel (if it is not already selected).
4. Click the image with the **Paint Bucket pointer** , then compare your screen to Figure 12.

You opened the Swatches panel, selected a color, and then used the Paint Bucket tool to change the background to that color.

FIGURE 10

Color Picker dialog box

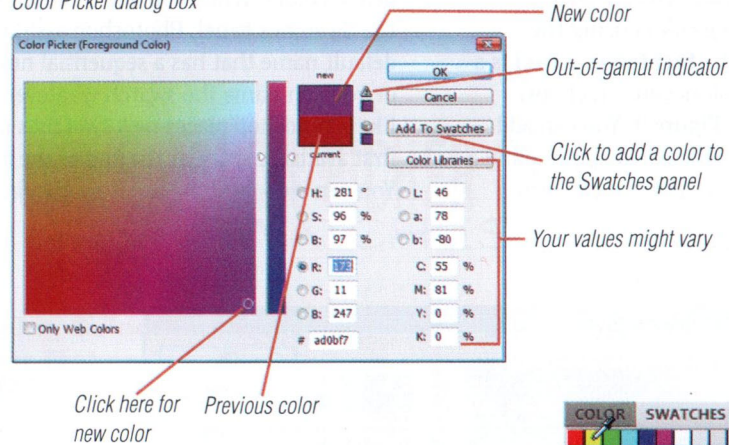


FIGURE 11

Swatches panel

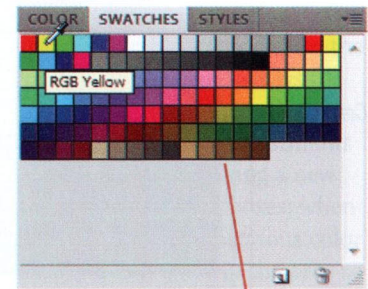
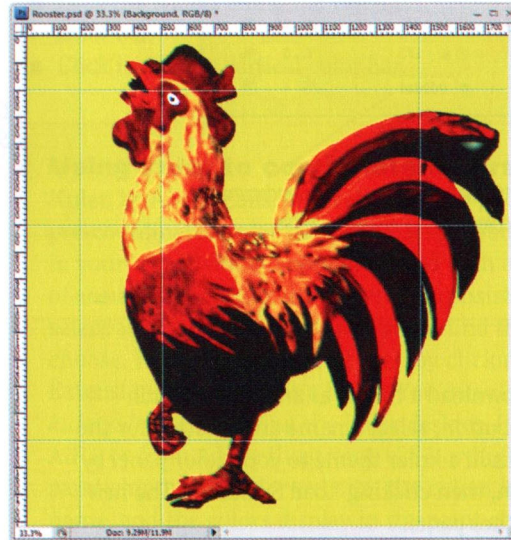


FIGURE 12

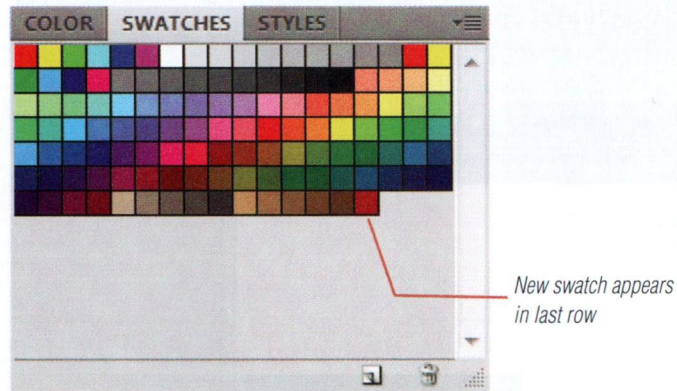
New foreground color applied to Background layer



Your swatches on the last row might vary

FIGURE 13



Swatch added to Swatches panel



Maintaining your focus


Adobe Photoshop is probably unlike any other program you've used before. In other programs, there's a central area on the screen where you focus your attention. In Photoshop, there's the workspace containing your document, but you've probably already figured out that if you don't have the correct layer selected in the Layer's panel, things won't quite work out as you expected. In addition, you have to make sure you've got the right tool selected in the Tools panel. You also need to keep an eye on the History panel. As you work on your image, it might feel a lot like negotiating a shopping mall parking lot on the day before a holiday: you've got to be looking in a lot of places at once.

Add a new color to the Swatches panel

1. Click the **Eyedropper tool**  on the Tools panel.
2. Click **above and to the left of the rooster's eye** at coordinates **500 X/200 Y**.
TIP Use the Zoom tool whenever necessary to enlarge/decrease your workspace so you can better see what you're working on.
3. Click the **empty area to the right of the last swatch** in the bottom row of the Swatches panel with the **Paint Bucket pointer** .
4. Type **Rooster eye surround** in the Name text box.
5. Click **OK** in the Color Swatch Name dialog box.
TIP To delete a color from the Swatches panel, press [Alt] (Win) or [option] (Mac), position the pointer over a swatch, then click the swatch.
6. Save your work, then compare the new swatch on your Swatches panel to Figure 13.

You used the Eyedropper tool to sample a color, and then added the color to the Swatches panel, and gave it a descriptive name. Adding swatches to the Swatches panel makes it easy to reuse frequently used colors.

Use kuler from a web browser

1. Open your favorite browser, then type **kuler.adobe.com** in the URL text box.
2. Click the **Sign In** link, then type your **Adobe ID** and **password**. (If you don't have an Adobe ID, click the Register link and follow the instructions.)
3. Click the **Newest** link, then compare your results with Figure 14. (Your color results will be different.)
4. Type **wine olives** in the Search text box, press **[Enter]** (Win) or **[return]** (Mac). The swatch shown in Figure 1.5 will display.
5. Click the **Download this theme as an Adobe Swatch Exchange file button** , find the location where you save your Data Files in the Select location for download by kuler.adobe.com dialog box, then click **Save**.
6. Sign Out from kuler, then activate Photoshop.
7. Click the **Swatches list arrow**, then click **Load Swatches**.
8. Find the location where you save your Data Files, click the **Files of type list arrow** (Win), click **Swatch Exchange (*.ASE)**, click **Wine, Olives and Cheese**, then click **Load**.

You searched the kuler website and downloaded a color theme to your Photoshop Swatches panel.

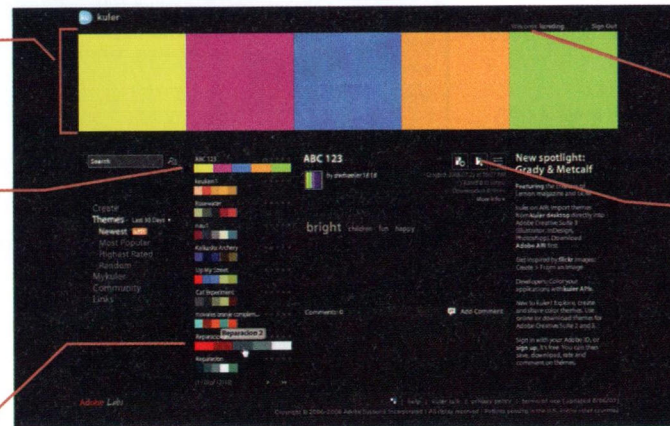
FIGURE 14

Kuler website

Color chip for active theme: the displayed theme will vary

Active color theme is expanded

Hover pointer over a theme to expand it



Indicates the current user

Click to download the active theme

FIGURE 15

Theme in kuler

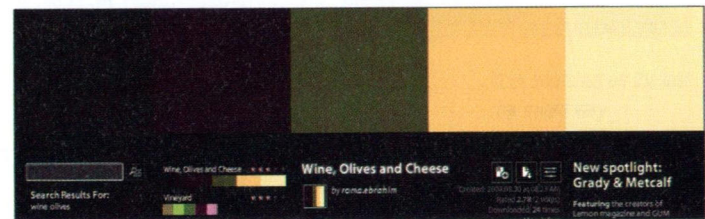
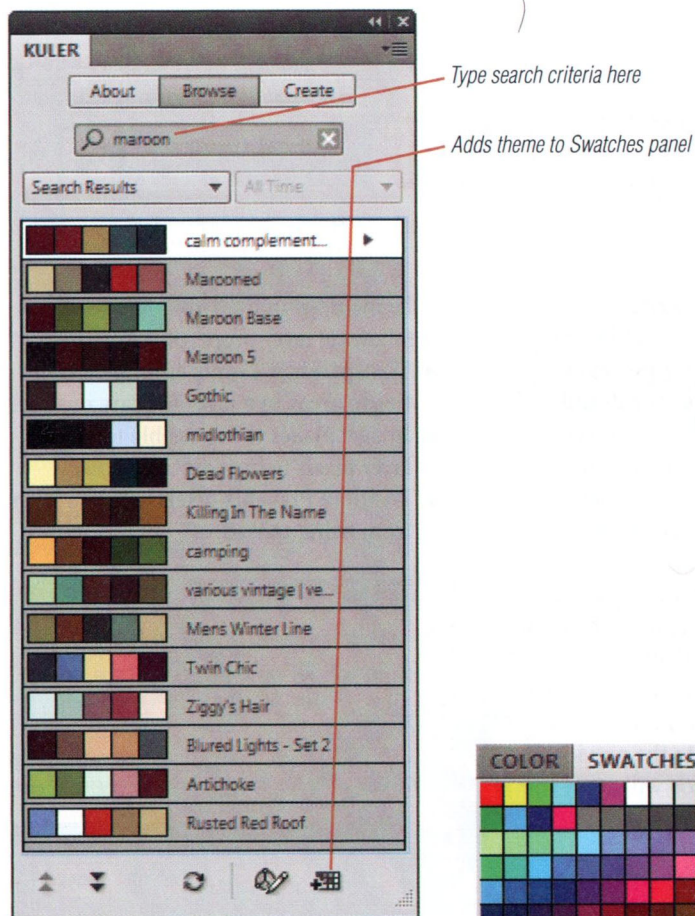


FIGURE 16

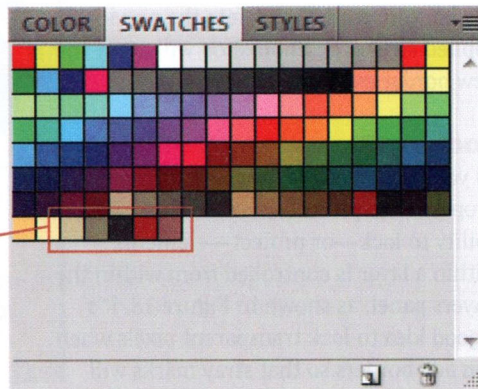
Kuler panel




Marooned theme swatches added to panel

FIGURE 17

Theme added to Swatches panel



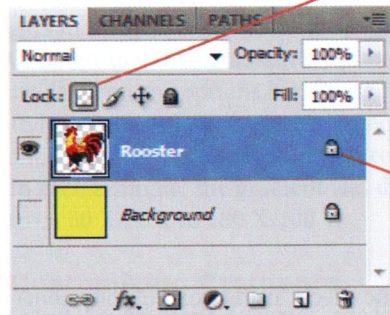
Use kuler from Photoshop

1. Click **Window** on the Application bar, point to **Extensions**, then click **Kuler**.
2. Click the **Search text box** , type **maroon**, then press **[Enter]** (Win) or **[return]** (Mac). Compare your kuler panel to Figure 16.
TIP Your kuler panel may differ as themes change frequently.
3. Click the **Marooned** theme, then click the **Add selected theme to swatches button** . Compare your Swatches panel to Figure 17.
4. Close the kuler panel.

You opened kuler in Photoshop, then added a color theme to the Swatches panel.

FIGURE 19

Locking transparent pixels

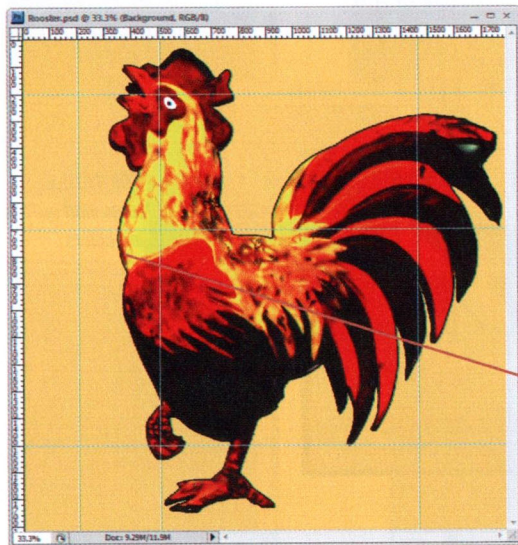


Lock transparent pixels button

Lock icon

FIGURE 21

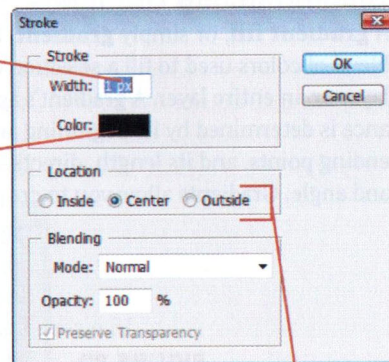
Border added to image



Border

FIGURE 20

Stroke dialog box








Your default stroke width might vary

Changes stroke color








Location options

Create a border

1. Click the **Indicates layer visibility button**  on the Background layer on the Layers panel.
TIP You can click the Indicates layer visibility button to hide distracting layers.
2. Click the **Default Foreground and Background Colors button** .
The foreground color will become the default border color.
3. Click the **Rooster layer** on the Layers panel.
4. Click the **Lock transparent pixels button**  on the Layers panel. See Figure 19.
The border will be applied only to the pixels on the edge of the rooster.
5. Click **Edit** on the menu bar, then click **Stroke** to open the Stroke dialog box. See Figure 20.
6. Type **5** in the Width text box, click the **Inside option button**, then click **OK**.
TIP Determining the correct border location can be confusing. Try different settings until you achieve the look you want.
7. Click the **Indicates layer visibility button**  on the Background layer on the Layers panel.
8. Activate the Background layer on the Layers panel, click the newly-added tan-colored box in the Swatches panel (255 R, 211 G, 114 B), click the **Paint Bucket tool**  on the Tools panel, then click the image.
9. Save your work, then compare your image to Figure 21.

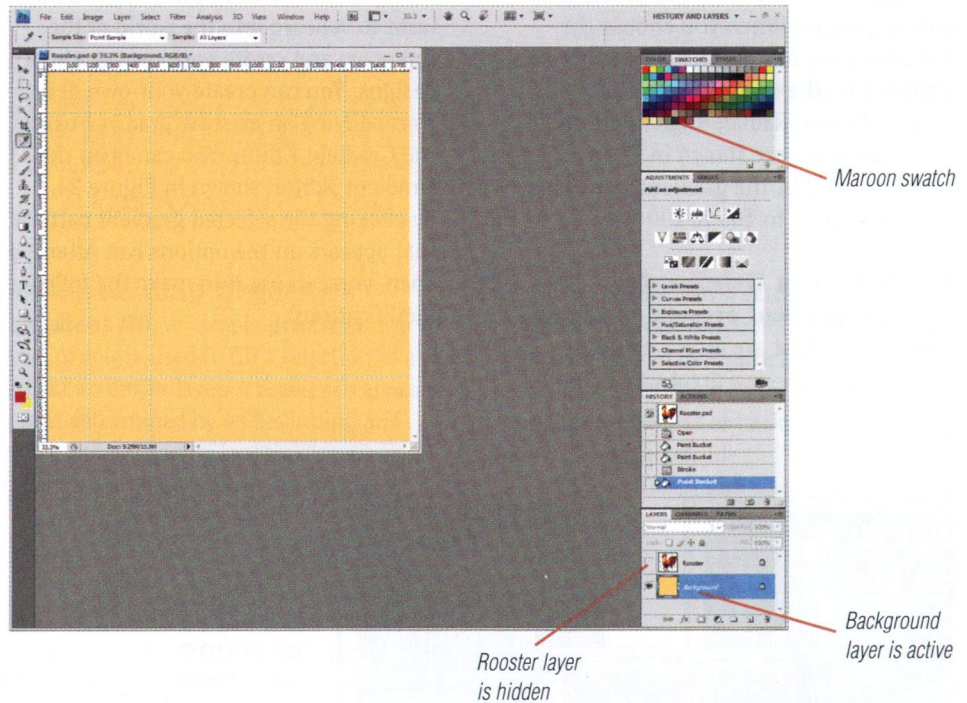
You hid a layer, changed the foreground color to black, locked transparent pixels, then used the Stroke dialog box to apply a border to the image.

Create a gradient from a sample color

1. Verify that the **Eyedropper tool**  is selected.
2. Click the **yellow neck** in the image at coordinates **500 X/600 Y**.
TIP To accurately select the coordinates, adjust the zoom factor as necessary.
3. Click the **Switch Foreground and Background Colors button**  on the Tools panel.
4. Click the **Maroon swatch** (R=180 G=25 B=29) on the Swatches panel (one of the new swatches you added) with the **Eyedropper pointer** .
5. Click the **Indicates layer visibility button**  on the Rooster layer, as shown in Figure 25.
6. Click the **Paint Bucket tool**  on the Tools panel, then press and hold the mouse button until the list of hidden tools opens.
7. Click the **Gradient tool**  on the Tools panel, then click the **Angle Gradient button**  on the options bar (if it is not already selected).
8. Click the **Click to open Gradient picker list arrow** on the options bar, then click **Foreground to Background** (the first gradient fill in the first row), as shown in Figure 26.

You sampled a color on the image to set the background color, changed the foreground color using an existing swatch, selected the Gradient tool, and then chose a gradient fill and style.

FIGURE 25
Rooster layer hidden



Click to open Gradient picker list arrow

FIGURE 26
Gradient picker

Foreground to Background (Current foreground and background colors)

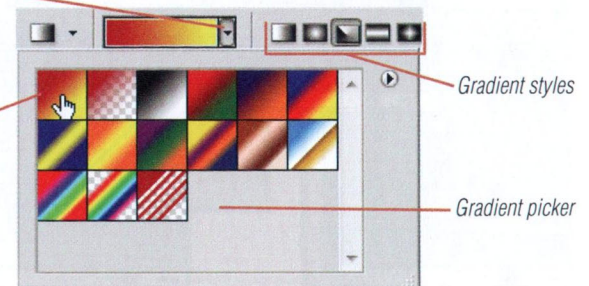


FIGURE 27

Gradient fill applied to Background layer



Apply a gradient fill

1. Click the **Click to open Gradient picker list arrow** to close the Gradient picker.
TIP You can also close the Gradient picker by pressing [Esc] (Win) or [esc] (Mac).
2. Drag the **Gradient pointer** from **1430 X/200 Y** to **200 X/1500 Y** using the Info panel and the guides to help you create the gradient in the work area.
3. Click the **Indicates layer visibility button** on the Rooster layer.

The Rooster layer appears against the new background, as shown in Figure 27.

- TIP** It is a good practice to save your work early and often in the creation process, especially before making significant changes or printing.
4. Save your work.

You applied the gradient fill to the background. You can create dramatic effects using the gradient fill in combination with foreground and background colors.

Collaborating with ConnectNow

Adobe has created a tool to help you collaborate with others: ConnectNow. This online tool lets you share information and collaborate with others. Using screen sharing, chat, shared notes, audio, and video, you can more effectively manage your workflow and get your work done. Open ConnectNow from within Photoshop by clicking File on the Application bar, then clicking Share My Screen or type www.adobe.com/acom/connectnow in your favorite browser. Once you have logged into Adobe ConnectNow, you can invite participants, share your computer screen, and upload files. ConnectNow uses the metaphor of a meeting, into which you invite participants and use pod tools to interact. When you are finished, you click the End Meeting command from the Meeting menu. You can use the Connections panel in Photoshop by clicking Window on the Application bar, pointing to Extensions, then clicking Connections to log in and check for updates.

Change the color mode

1. Open PS 4-2.psd from the drive and folder where you store your Data Files, save it as **Rooster Colorized**, then turn off the rulers if they are displayed.
2. Click **Image** on the Application bar, point to **Mode**, then click **Grayscale**.
3. Click **Flatten** in the warning box, then click **Discard**.

The color mode of the image is changed to grayscale, and the image is flattened so there is only a single layer. All the color information in the image has been discarded.

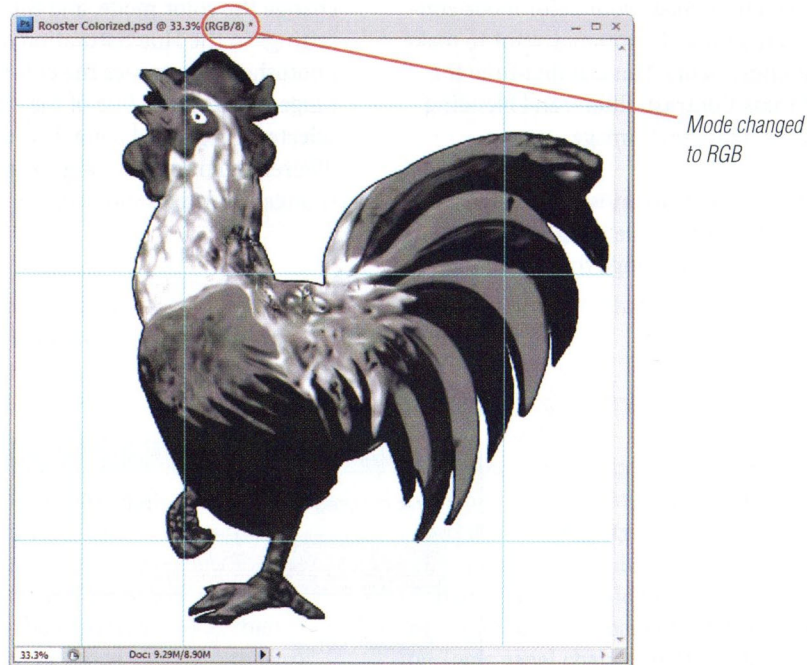
4. Click **Image** on the Application bar, point to **Mode**, then click **RGB Color**.

The color mode is changed back to RGB color, although there is still no color in the image. Compare your screen to Figure 29.

You converted the image to Grayscale, which discarded the existing color information. Then you changed the color mode to RGB color.

FIGURE 29

Image with RGB mode



Converting color images to grayscale

Like everything else in Photoshop, there is more than one way of converting a color image into one that is black and white. Changing the color mode to grayscale is the quickest method. You can also make this conversion through desaturation by clicking Image on the menu bar, pointing to Adjustments, then clicking Black & White, or Desaturate. Converting to Grayscale mode generally results in losing contrast, as does the desaturation method, while using the Black & White method retains the contrast of the original image.

FIGURE 30
Hue/Saturation dialog box

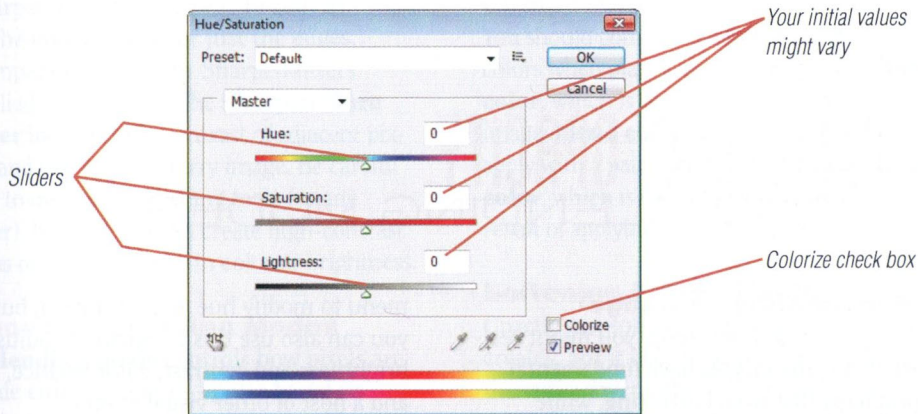
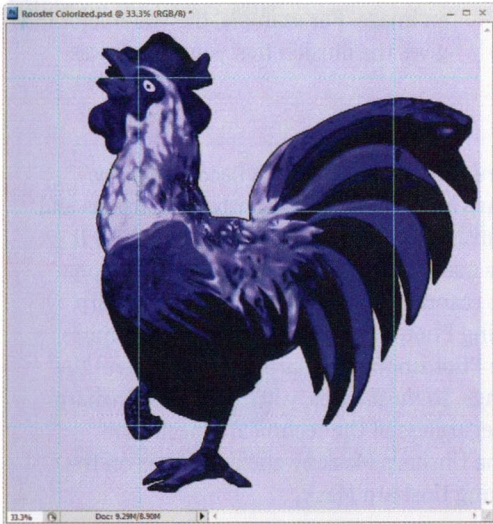


FIGURE 31
Colorized image



Colorize a grayscale image

1. Click **Image** on the Application bar, point to **Adjustments**, then click **Hue/Saturation** to open the Hue/Saturation dialog box, as shown in Figure 30.
2. Click the **Colorize check box** in the Hue/Saturation dialog box to add a check mark.
3. Drag the **Hue slider** until the text box displays **240**.

TIP You can also type values in the text boxes in the Hue/Saturation dialog box. Negative numbers must be preceded by a minus sign or a hyphen. Positive numbers can be preceded by an optional plus sign (+).

4. Drag the **Saturation slider** until the text box displays **55**.
5. Drag the **Lightness slider** until the text box displays **-15**.
6. Click **OK**.
7. Save your work, then compare your screen to Figure 31.

You colorized a grayscale image by adjusting settings in the Hue/Saturation dialog box.

Understanding the Hue/Saturation dialog box

The Hue/Saturation dialog box is an important tool in the world of color enhancement. Useful for both color and grayscale images, the saturation slider can be used to boost a range of colors. By clicking the Edit list arrow, you can isolate which colors (all, cyan, blue, magenta, red, yellow, or green) you want to modify. Using this tool requires patience and experimentation, but gives you great control over the colors in your image.

FIGURE 33
Brightness/Contrast dialog box

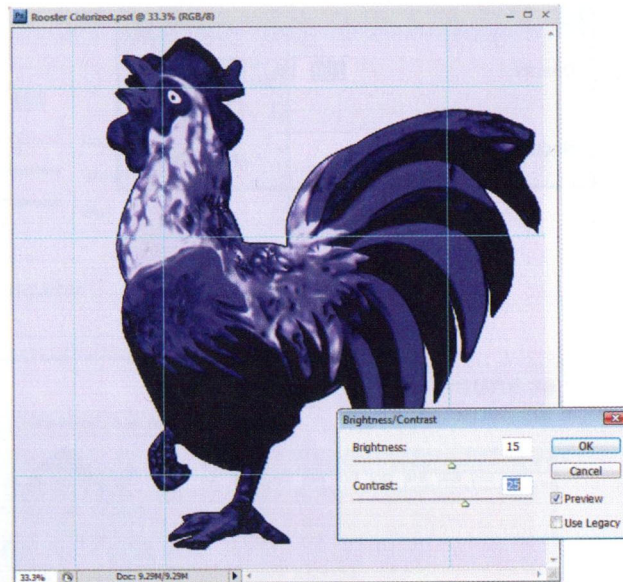
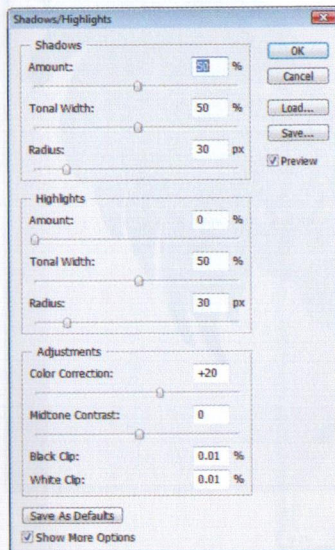


FIGURE 34
Shadows/Highlights dialog box



Adjust brightness and contrast

1. Click **Image** on the Application bar, point to **Adjustments**, then click **Brightness/Contrast** to open the Brightness/Contrast dialog box.
2. Drag the **Brightness slider** until **15** appears in the Brightness text box.
3. Drag the **Contrast slider** until **25** appears in the Contrast text box. Compare your screen to Figure 33.
4. Click **OK**.

You adjusted settings in the Brightness/Contrast dialog box. The image now looks much brighter, with a higher degree of contrast, which obscures some of the finer detail in the image.

Correcting shadows and highlights

The ability to correct shadows and highlights will delight photographers everywhere. This image correction feature (opened by clicking Image on the Application bar, pointing to Adjustments, then clicking Shadows/Highlights) lets you modify overall lighting and make subtle adjustments. Figure 34 shows the Shadows/Highlights dialog box with the Show More Options check box selected. Check out this one-stop shopping for shadow and highlight adjustments!

Work with a filter, a blending mode, and an opacity setting

1. Click **Filter** on the Application bar, point to **Sharpen**, then click **Sharpen More**.
The border and other features of the image are intensified.
2. Click **Edit** on the Application bar, then click **Fade Sharpen More** to open the Fade dialog box, as shown in Figure 35.
3. Drag the **Opacity slider** until **45** appears in the Opacity text box.
The opacity setting softened the lines applied by the Sharpen More filter.
4. Click the **Mode list arrow**, then click **Dissolve**.
The Dissolve setting blends the surrounding pixels.
5. Click **OK**.
6. Save your work, then compare your image to Figure 36.

You applied the Sharpen More filter, then adjusted the opacity and changed the color mode in the Fade dialog box. The border in the image looks crisper than before, with a greater level of detail.

FIGURE 35
Fade dialog box

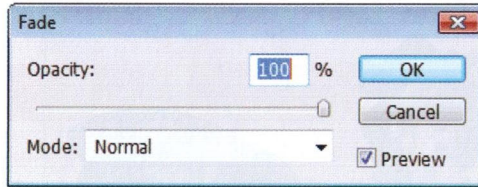


FIGURE 36
Image settings adjusted

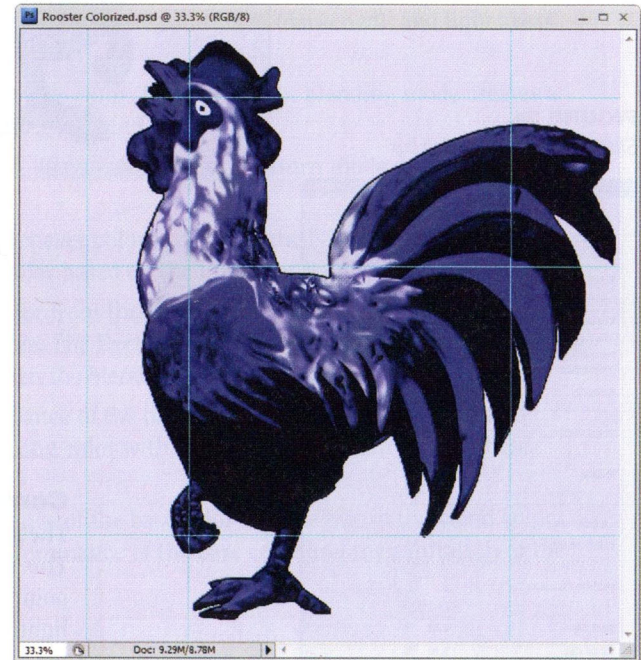


FIGURE 37

Color Balance dialog box

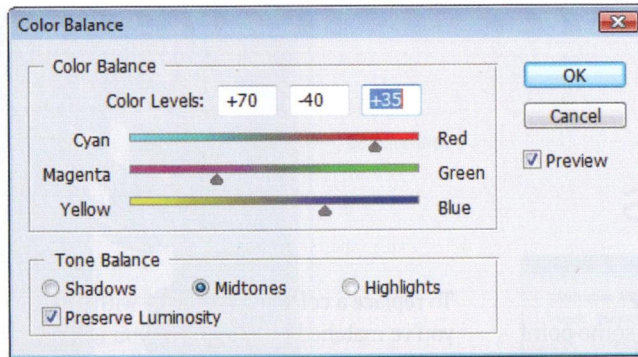
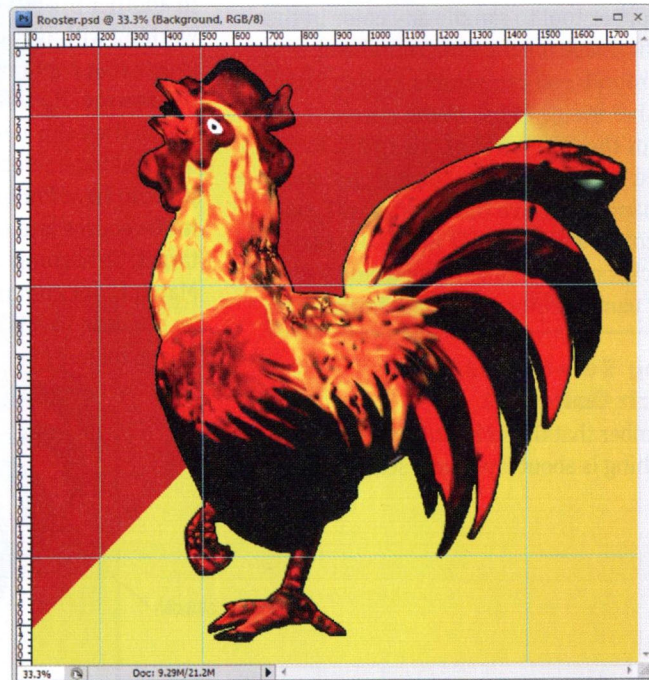


FIGURE 38

Image with colors balanced



Adjust color balance

1. Switch to the Rooster image, with the Background layer active.
The image you worked with earlier in this chapter becomes active.
2. Click **Image** on the Application bar, point to **Adjustments**, then click **Color Balance**.
3. Drag the **Cyan-Red slider** until **+70** appears in the first text box.
4. Drag the **Magenta-Green slider** until **-40** appears in the middle text box.
5. Drag the **Yellow-Blue slider** until **+35** appears in the last text box, as shown in Figure 37.
Subtle changes were made in the color balance in the image.
6. Click **OK**.
7. Save your work, then compare your image to Figure 38.

You balanced the colors in the Rooster image by adjusting settings in the Color Balance dialog box.

FIGURE 39

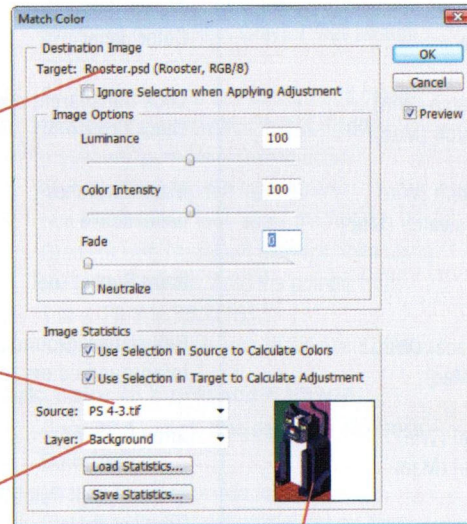
Selection in source image



Selected area

FIGURE 40

Match Color dialog box



Name of target image

Name of source image

Layer containing selection in source

Sample of layer in source

FIGURE 41

Image with matched colors



Modified selection

Match a color

1. Click the **Rooster layer** on the Layers panel, then zoom (once) into the eye of the rooster.
2. Click the **Magic Wand tool**  on the Tools panel.
3. Verify that the **Anti-alias** and **Contiguous** check boxes on the options bar are selected, then set the **Tolerance** to **10**.
4. Click the image with the **Magic Wand pointer**  on the white of the eye at approximately **550 X/210 Y**.
5. Open PS 4-3.tif from the drive and folder where you store your Data Files, zoom into the image (if necessary), change the tolerance to **40**, then click the **light green part of the cat's eye** (at **100 X/95 Y**) with the **Magic Wand pointer** . Compare your selection to Figure 39.
6. Activate the **Rooster image**, click **Image** on the Application bar, point to **Adjustments**, then click **Match Color**.
7. Click the **Source list arrow**, then click **PS 4-3.tif**. Compare your settings to Figure 40.
8. Click **OK**.
9. Deselect the selection, turn off the rulers and the guides, save your work, then compare your image to Figure 41.
10. Close all open images, display the Essentials workspace then exit Photoshop.

You used the Match Color dialog box to replace a color in one image with a color from another image. The Match Color dialog box makes it easy to sample colors from other images, giving you even more options for incorporating color into an image.