

Unit 3

Working with layers

Unit time: 75 minutes

Complete this unit, and you'll know how to:

- A** Create empty layers, and create layers based on a selection.
- B** Arrange and transform layers.
- C** Use Type layers to add and format text.
- D** Use opacity, layer blending modes, and layer styles to apply effects to layers.

Topic A: Creating layers

This topic covers the following Adobe ACE exam objectives for Photoshop CS3.

#	Objective
3.1	Create and arrange layers and groups.
3.6	Given a scenario, select, align, and distribute multiple layers in an image.

New layers from selections

Explanation

By default, each new Photoshop image includes a single layer of pixels, which the Layers palette identifies as the Background layer. When you deselect a floating selection on the Background layer, the selected pixels replace any pixels that were below them, maintaining a single layer of pixels.

You can isolate selected image pixels from the rest of an image by putting those pixels on their own layer. You can keep pixels on individual layers without affecting the pixels on other layers. In addition, although the Background layer doesn't contain any empty areas with no pixels, additional layers you add can contain empty areas, through which you can see the pixels in layers below.

One way you can create a layer is to convert a selection of pixels to a new layer. To create a layer from a selection:

- 1 Select the part of the image that you want to move to a new layer.
- 2 Move the pixels to a new layer by doing either of the following:
 - Choose Layer, New, Layer via Copy to create a layer containing a copy of the selected pixels. The original pixels remain on the original layer.
 - Choose Layer, New, Layer via Cut to create a layer containing the selected pixels, removing them from the original layer.
- 3 The new layer is named "Layer 1" if it's the first new layer, "Layer 2" if it's the second, and so on. You can rename the layer by double-clicking the layer name in the Layers palette, typing a new name, and pressing Enter. (If you double-click to the right of the layer name or on the layer thumbnail, you'll open the Layer Style dialog box.)

The selected layer

When an image contains multiple layers, you can work with each layer's contents individually. The Layers palette indicates which layer is selected by highlighting its name, as shown in Exhibit 3-1. To select a layer, you can click it in the Layers palette. When a layer is selected, the actions you perform will apply to that layer's contents.

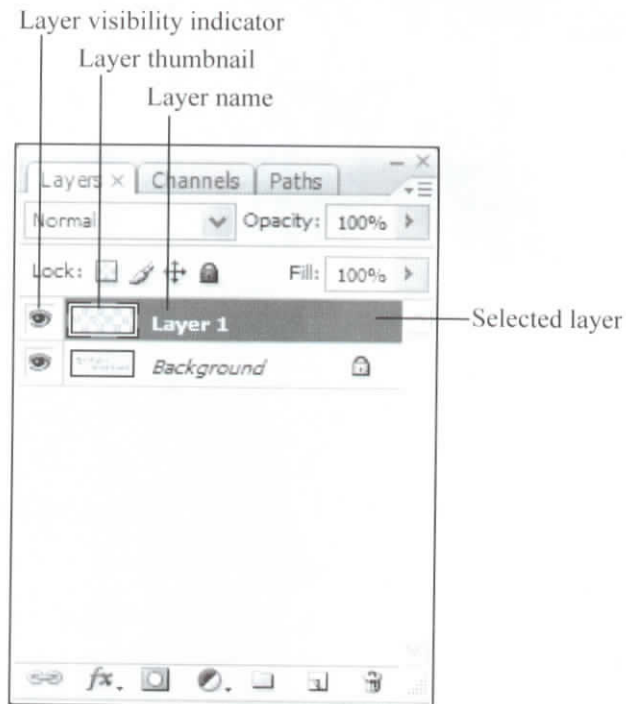


Exhibit 3-1: A selected layer in the Layers palette

Moving layer contents

After you move part of an image to a new layer, you can use the Move tool to move the layer contents within the image. If you want to move all of the pixels in a layer, you don't have to select them first; you can drag from any part of the layer, including empty areas, to move all the pixels in that layer.

Hiding layer contents

If you want to hide the contents of a layer, click the eye icon to the left of the layer's name in the Layers palette. The eye icon will disappear, indicating that the layer is hidden. You can click the same spot to make the layer visible again.

Do it!

A-1: Creating a layer from a selection**Here's how**

- 1 Open Read the classics

Save the image in Photoshop format as **My read the classics**

- 2 Select the Magic Wand tool

In the Tolerance box, enter **60**

Clear **Contiguous**

- 3 Click the bottom of the **C** in **Classics**

- 4 Choose **Layer, New, Layer via Copy**

Activate the Layers palette

- 5 In the Layers palette, double-click **Layer 1**

Type **Read the Classics**

Press **↵ ENTER**

Here's why

From the current unit folder.

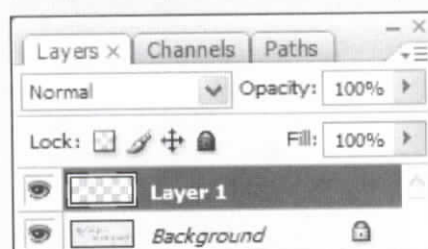
You will select the calligraphic text in the image and place that selection on a separate layer so you can manipulate it more easily.

If necessary.

(If necessary.) So that a selection can jump across non-contiguous pixels in the image.

To select all of the text. You'll create a new layer from the selected text.

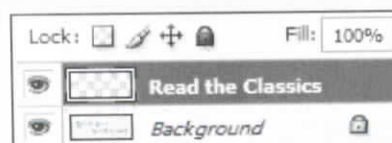
To create a new layer by copying the selected pixels.



(If necessary.) A new layer, named "Layer 1," has been created. The new layer is highlighted in the Layers palette, indicating that it's the active layer.

Next, you'll rename the layer.

(The layer name itself.) To select the layer name.

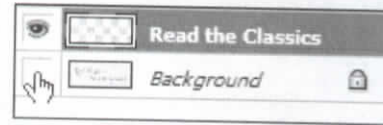



To rename the layer.

6 Select the Move tool

Point anywhere in the image and drag

To move the contents of the Read the Classics layer, which is the active layer. Because you moved the text on this layer, you can now see the original text on the Background layer below it.

7 In the Layers palette, next to the Background layer, click 

To hide the Background layer. The eye icon disappears when you click it, indicating that the layer's contents are hidden.

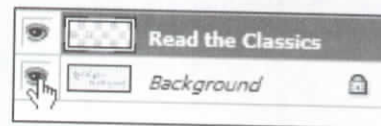
Observe the transparent space around the text in the image

The checkerboard pattern represents the transparent space.

Drag anywhere in the transparent space

To observe that you can move the layer contents without having to drag the text itself.

In the Layers palette, click the blank space next to the Background layer, where the eye icon was located



To turn on visibility for the Background layer. The eye icon reappears, indicating that the layer is visible.

8 Observe the image

Because you moved the text on the Read the Classics layer, you can probably still see the original text on the Background layer below it. In the next activity, you'll move the Read the Classics layer to another image.

9 Update the document

If the Photoshop Format Options dialog box appears, click OK.

Moving layers between images

Explanation

Another way to create a layer is to move a selection or layer from one image to another. When you move a layer to a new image, you can drag the layer from the image itself, or you can drag the layer name from the Layers palette. When you drag the layer to another image window, the layer contents appear in that image, and the layer appears in the Layers palette for that image. If you're moving a selection, the layer is named "Layer 1" in the image you moved it to. If you're moving a named layer, the layer's original name is used in the new image.

When you drag a layer to another image with the same pixel dimensions (width and height in pixels) as the original image, the layer contents will appear at the same relative position as in the original image. If the pixel dimensions don't match, then pressing Shift as you drag the layer between windows will center the layer contents in the new image.

Defringing

By default, Photoshop's selection tools apply anti-aliasing to blend the edges of a selection with the surrounding color. At the border of a selection, anti-aliasing adds pixels with colors that blend with the selected area and the pixels outside that area. However, if you later reselect an area with edge pixels that blend between two colors, those blended pixels, called a *fringe*, will be visible when you move the pixels to a different-colored background.

When you move a selection to a new layer, you can fix a fringe of pixels by using the Defringe command, as shown in Exhibit 3-2. The Defringe command colors the outer pixels with colors from deeper within the selection, replacing any fringe color.

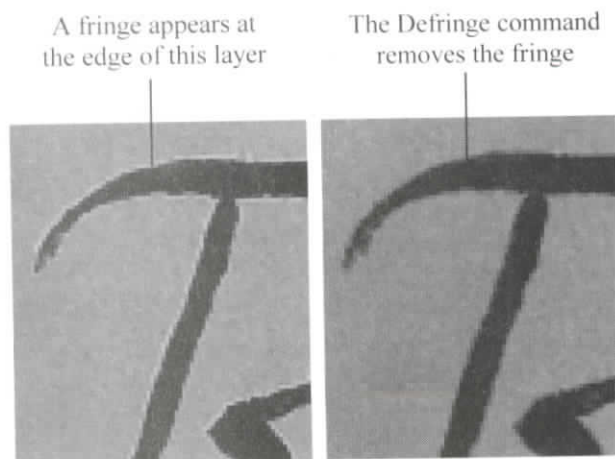


Exhibit 3-2: A layer before and after the Defringe command is applied

To apply defringing to a layer:

- 1 Choose Layer, Matting, Defringe to open the Defringe dialog box.
- 2 In the Width box, specify the number of pixels from the object's edge that you want to defringe. (For example, a Width of 2 would change the color of any fringe pixels that are two pixels away from the outer edge of the object.)
- 3 Click OK.

Do it!

A-2: Moving a selection to another image**Here's how****Here's why**

- 1 Open the Open book image

From the current unit folder.

Save the image in Photoshop format as **Literary convention**

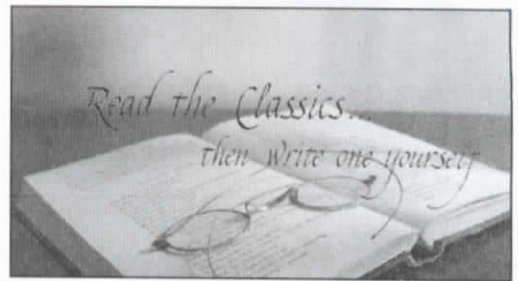
You'll move the text from the "My read the classics" image into this image.

- 2 Choose **Window, Arrange, Tile Horizontally**

To position the two image windows so that both can be seen.

Activate the "My read the classics" window

Press **SHIFT** and drag the **Read the Classics** layer name from the Layers palette to the Literary convention window



To add the Read the Classics layer to the Literary convention document, centering the layer in the image.

- 3 In the Literary convention image, zoom in on the word "Read"

To observe the fringe around the text.

- 4 Choose **Layer, Matting, Defringe...**

To open the Defringe dialog box.

Edit the Width box to read **1**

If necessary.

Click **OK**

The fringe around the text is eliminated.

- 5 Update and close
Literary convention

Update and close
My read the classics

- 6 Open Turn up the heat

From the current unit folder.

Save the image in Photoshop format as **My turn up the heat**

- 7 Open Flames

(From the current unit folder.) You will add the entire Flames image to the "My turn up the heat" image, creating a new layer.

- | | |
|---|--|
| 8 Arrange the image windows so that all are visible | Choose Window, Arrange, Tile Horizontally. |
| Activate the “My turn up the heat” window | |
| In the Layers palette, click the Alarm layer | (If necessary.) To select it. The layer you add will appear above the selected layer. In this case, you want it to appear above the Alarm layer but below the Logo layer. |
| Activate the Flames image window | |
| 9 Select the Move tool | If necessary. |
| Press SHIFT and drag the flames image into the “My turn up the heat” image | To move the flames.

Pressing Shift as you drag places the layer contents in the same relative position as in the original image. In addition, the new layer is above the Alarm layer, which you selected earlier. |
| Enlarge the “My turn up the heat” image window | To observe the whole image. |
| Name the new layer Flames | In the Layers palette, double-click “Layer 1,” type the new name, and press Enter. |
| 10 Update and close “My turn up the heat” | |
| Close Flames | Without updating it. |

Creating empty layers

Explanation

Another way to create a layer is to click the “Create a new layer” icon in the Layers palette, shown in Exhibit 3-3. This creates a blank layer above the layer that’s selected in the Layers palette. The new layer is automatically named “Layer 1,” but you can double-click the layer name to rename it.

You can also create an empty layer by pressing Alt as you click the “Create a new layer” icon; this opens the New Layer dialog box. Enter a name in the Name box, and click OK.

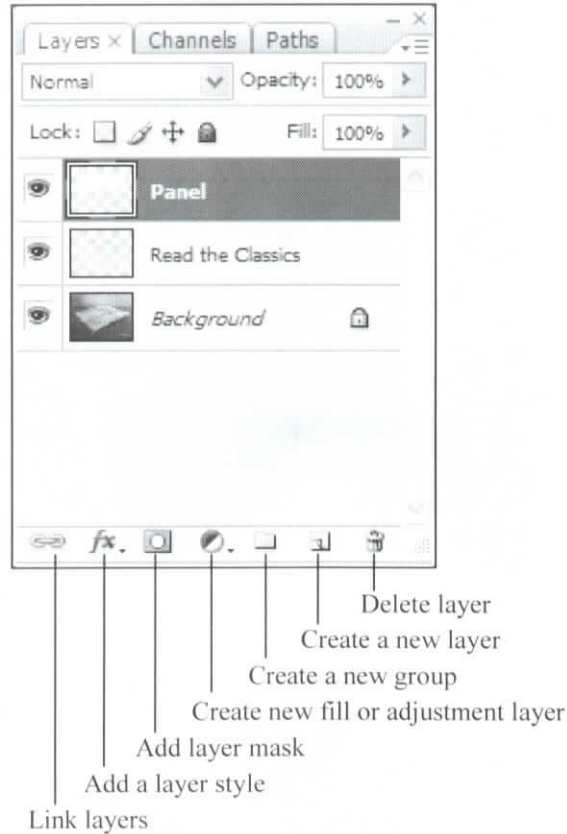


Exhibit 3-3: The Layers palette icons

Filling layers

After creating an empty layer, you can fill all or part of it by using the same techniques you’d use to fill a selection:

- Choose Edit, Fill or press Shift+Backspace to open the Fill dialog box. Specify a fill color and click OK.
- Press Ctrl+Delete or Ctrl+Backspace to fill a selection on any layer with the background color.
- Press Alt+Delete or Alt+Backspace to fill a selection with the foreground color.

Aligning and distributing layers

You can align layers with other layers, or you can align layers with a selection border. In addition, you can distribute three or more layers evenly in an image.

To align layers with one another, select the layers you want to align and choose Layer, Align. Then choose a command from the submenu, shown in Exhibit 3-4. To align layers with a selection border, first make a selection in the image; then, in the Layers palette, select the layers you want to align with the selection. Choose Layer, Align Layers To Selection, and then choose a command from the submenu.

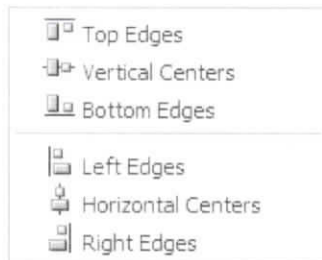


Exhibit 3-4: The Layer, Align submenu

You can also distribute layers evenly in an image. For example, you might have a background image, as shown in Exhibit 3-5, and you might want to arrange photos of employees along the left edge of it. You could first select the layers with the *employee* photos, as well as the background layer. You could then choose Layer, Align, Left Edges to align the photos with the leftmost edge of the image, as shown in Exhibit 3-6. Then you could distribute the photos, as shown in Exhibit 3-7, by selecting only those layers and choosing Layer, Distribute, Top Edges.

You can also use the Align and Distribute buttons on the options bar when layers are selected.

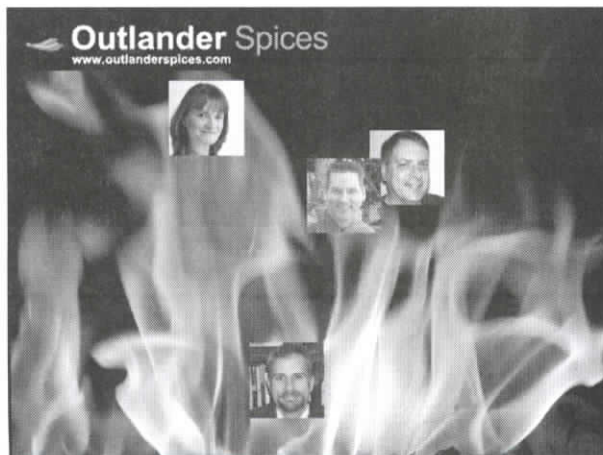


Exhibit 3-5: The original image with layers unaligned

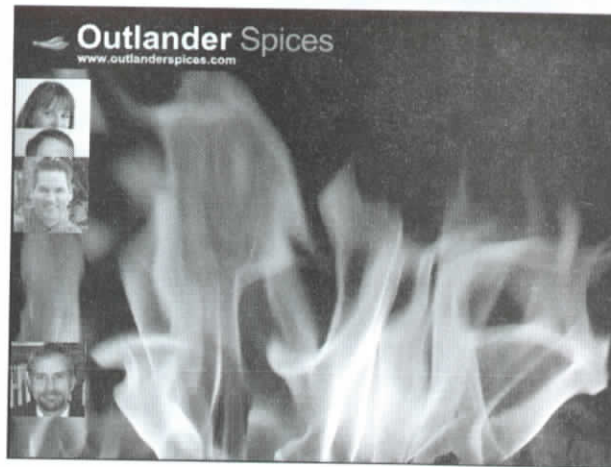


Exhibit 3-6: Layers aligned by the leftmost edges



Exhibit 3-7: Layers distributed evenly based on their top edges

Do it!

A-3: Creating and filling empty layers

Here's how

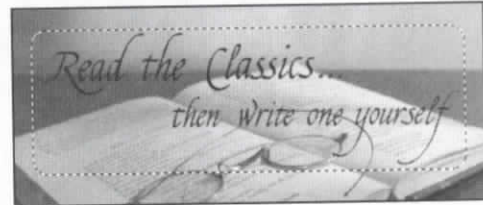
Here's why

- 1 Open Literary convention
- 2 Select the Rectangular Marquee tool

On the options bar, edit the Feather box to read **30**

Create a rectangular marquee around the text, as shown

From the current unit folder.



You'll align the text layer with the selection edge.

- 3 In the Layers palette, select the **Read the Classics** layer


Choose **Layer, Align Layers to Selection, Vertical Centers**

Choose **Layer, Align Layers to Selection, Horizontal Centers**

If necessary.

To vertically align the center of the layer with the center of the selection.

To horizontally align the center of the layer with the center of the selection.

- 4 In the Layers palette, click 

(The "Create a new layer" button.) To create an empty layer, "Layer 1." Because the new layer is automatically selected, the selection marquee is active on the new layer.

Name the new layer **Panel**

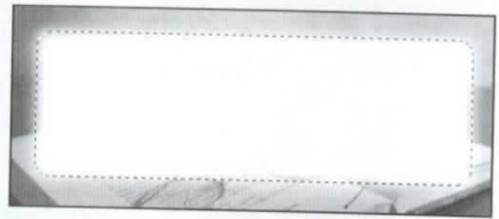
5 Choose **Edit, Fill...**

From the Use list, select
Background Color

Click **OK**

To open the Fill dialog box.

To select the current background color of white.



To fill the current selection with white. The white fill is added to the Panel layer.

6 Deselect the selection

7 Update the file

Topic B: Modifying layers

This topic covers the following Adobe ACE exam objectives for Photoshop CS3.

#	Objective
3.1	Create and arrange layers and groups.
3.6	Given a scenario, select, align, and distribute multiple layers in an image.

Arranging layers

Explanation

After you create multiple layers in an image, you can modify them either individually or together. For example, you can move, rotate, or flip the contents of a single layer or several layers at once.

When an image uses multiple layers, you might need to arrange them to display the image the way you want. You can control how layers overlap one another, and you can move multiple layers as a unit.

The layer stacking order

When you create a layer, it appears above whichever layer is currently selected. The content of each layer overlaps the content of any layers that are lower in the Layers palette. If you want to change the layer stacking order, you can drag the layers up or down in the Layers palette. You can also choose an option from the Layer, Arrange submenu: Bring to Front (to make the selected layer the top layer), Bring Forward (to move it up one level in the stacking order), Send Backward (to move it down one level in the stacking order), or Send to Back (to move it directly above the Background layer).

Selecting multiple layers

If you want to work with several layers at once, you can select them and then perform an action. For example, if you want to move the contents of two layers, you can select both layers and then drag in the image to move them.

To select multiple layers, do any of the following:

- In the Layers palette, click a layer to select it; then press Ctrl and click each additional layer you want to select.
- In the Layers palette, click the first layer you want to select; then press Shift and click the last layer you want to select. This will select both of those layers, along with all layers between them.
- When you're using the Move tool, check Auto Select on the options bar; then, from the list, select Layer so you can select a layer by clicking any pixels belonging to that layer. Press Shift and click pixels from additional layers to select multiple layers.

Linking layers

If you think you'll need to regularly manipulate a group of layers as a unit, you can link them. When layers are linked, their contents will always move as a unit, even if only one of the layers is selected.

To link layers, select all the layers you want to link, and click the Link layers icon at the bottom of the Layers palette. When you select a layer that's linked to other layers, a chain icon appears next to each of the linked layers in the Layers palette, as shown in Exhibit 3-8. If you want to remove a link from linked layers, select all the layers with links you want to remove and click the Link layers icon.

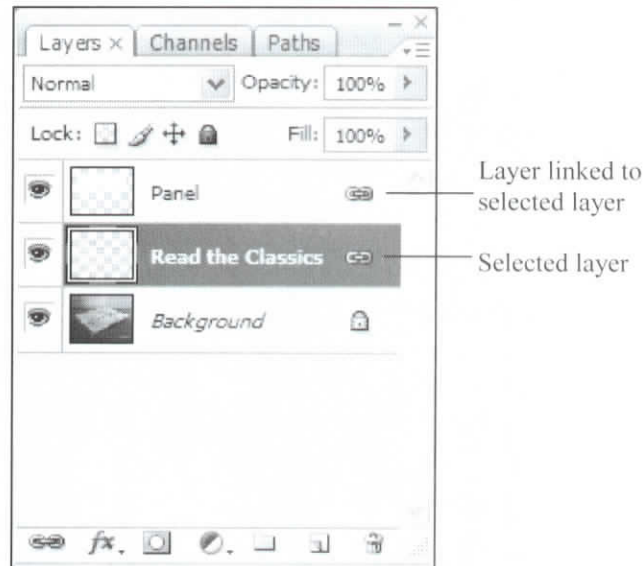


Exhibit 3-8: Two linked layers in the Layers palette

Color-coding layers

If an image contains many layers, it can be difficult to find a specific one quickly. To help make certain ones stand out, you can apply a color that appears in the visibility column. This color appears only in the Layers palette and doesn't affect the layer's contents in the image. To add a color to a layer, display the Layers palette menu and choose Layer Properties to open the Layer Properties dialog box. Select a color from the Color list and click OK. (You can also open the Layer Properties dialog box by choosing Layer, Layer Properties.)

Layer edges

When you're working with layers that contain empty pixels, it can sometimes be useful to see layer boundaries. For example, if a layer contains a feathered selection, the boundaries might extend further than you think. To view layer boundaries, choose View, Show, Layer Edges.

Do it!

B-1: Working with multiple layers**Here's how**

- 1 In the Layers palette, drag the thumbnail of the Panel layer below the Read the Classics layer, as shown

- 2 Verify that the Panel layer is still selected

Press **SHIFT** and click the **Read the Classics** layer

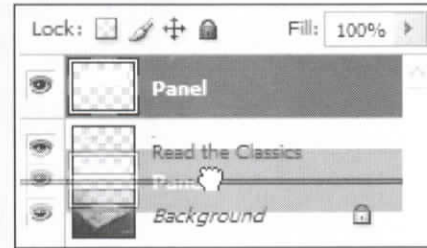
- 3 Click 

- 4 Select the Background layer

- 5 Select the Panel layer

- 6 Select the Move tool, and drag anywhere in the image

Position the linked layers' contents in the image as shown

Here's why

To make the layer with the text visible in the image. You'll link the Read the Classics and Panel layers.

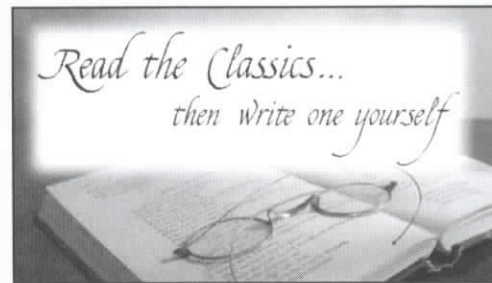
To select both layers.

(The Link layers icon at the bottom of the Layers palette.) To link the selected layers. Link icons appear to the right of both layers.


The link icons don't appear next to the layer names when neither of the linked layers is selected.

You'll drag the contents of the Panel layer to move the contents of the two linked layers together.

The contents of the Read the Classics and Panel layers move together.



You'll visually associate the two layers in the Layers palette by color-coding them.

- | | | |
|---|--|---|
| 7 | In the upper-right corner of the Layers palette, click  | To display the palette menu. |
| | Choose Layer Properties... | To open the Layer Properties dialog box for the Panel layer. |
| | From the Color list, select Yellow | |
| | Click OK | To color the visibility column for the Panel layer yellow. |
| 8 | Select the Read the Classics layer and color it yellow | Display the palette menu and choose Layer Properties. Select Yellow from the Color list and click OK. |
| 9 | Update and close the file | |

The Free Transform command

Explanation

In addition to moving layers and selections, you can rotate, resize, and skew them by using the Free Transform command. Each transformation you perform can introduce a bit of distortion, so if you plan to perform multiple transformations, you should do them all at once to minimize any distortion. To transform a layer or selection:

- 1 Select the content you want to transform.
 - In the Layers palette, select the layer containing the content you want to transform.
 - Use a selection tool to select the area you want to transform.
- 2 Choose Edit, Free Transform. Transform handles appear around the selected content, and the transform registration point appears in the center. The *transform registration point* determines the point around which any transformations occur.
- 3 Drag the transform registration point to the desired location within the transform borders. For example, moving the point to the bottom-left corner will allow you to rotate the item around its bottom-left corner.
- 4 Transform the item by manipulating the transform handles.
 - To move the item, drag from within the transform border.
 - To resize the item, drag the transform handles. To resize the item proportionally, press Shift as you drag a corner handle.
 - To rotate the item, drag from outside the transform border.
 - To skew the item, press Ctrl and drag a transform handle.
 - To create a perspective effect, press Ctrl+Alt+Shift and drag a transform handle.
- 5 To apply the transformations, press Enter. Or, to remove the transform handles without accepting the changes, press Esc.

The transformations you apply will appear on the options bar. As you drag the layer or selection to transform it, you can note, for example, the percentage you're increasing or decreasing it; or you can enter specific values on the options bar. You can also perform a single transformation on a selection or layer by choosing a command from the Edit, Transform submenu.

Do it!

B-2: Transforming layers

Here's how

- 1 Open Bus banner

Save the image as **My bus banner**

- 2 Verify that the Banner layer is selected

Choose **Edit, Free Transform**

Press **SHIFT** and drag the top-right corner of the banner down and to the left, as shown

- 3 Point anywhere within the layer—but not on the transform registration point—and drag to place the banner as shown

Press the arrow keys as necessary to position the banner as shown

Here's why

You'll resize the Banner layer so that the banner is a bit smaller than its original size.

Transform handles and a transform border appear around the layer.



To resize the layer proportionately to about 77%.



To center the top-right and bottom-right corners within the white space between the bus window and the stripe. On the options bar, the X and Y values should be approximately 535 px and 404 px, respectively.

Next, you'll transform the banner so it looks more realistic.

- 4 Press **CTRL** + **ALT** + **SHIFT** and drag the bottom-left handle down so that the bottom edge of the banner is parallel with the black stripe on the bus, as shown



To create a perspective effect.

- Press **CTRL** and drag the top-left handle as shown



To skew the banner to approximately match the angle of the bus panel below the left edge of the banner.

- Press **CTRL** and drag the bottom-right handle as shown



To skew the handle to approximately match the angle of the bus panel below the right edge of the banner.

- 5 Press **ENTER**



To complete the transformation.

- 6 Update and close the image

Topic C: Using Type layers

This topic covers the following Adobe ACE exam objectives for Photoshop CS3.

#	Objective
3.1	Create and arrange layers and groups.
6.3	Given a scenario, alter the properties of type.

Creating Type layers

Explanation

You can use Photoshop's Type tool to add text to an image. When you begin adding text, a new Type layer is automatically created to hold it. The text you add to the Type layer is editable, so you can return to it at any time to edit or format it.

Because the text is editable, you can't work with it the same way you work with image areas made up of pixels. However, you can convert editable text to pixels. You can then work with the text by using the same techniques you'd use to work with other image areas, but you won't be able to edit or format the text.

To add text to an image:

- 1 In the Tools palette, click the Horizontal Type tool.
- 2 In the image, click where you want to begin adding text. An insertion point will appear where you clicked, and a Type layer will appear in the Layers palette.
- 3 On the options bar, shown in Exhibit 3-9, specify the formatting options you want to use.
- 4 If you want to specify the text color, click the "Set the text color" button on the options bar to open the Select text color dialog box. Click or enter values to select a color, and then click OK. You can also use the Color and Swatches palettes to set the text color.
- 5 Type to add the desired text to the image.
- 6 To change the formatting, select the text you want to format and then specify formatting options on the options bar. There are several ways to select text:
 - Drag across the text to select it.
 - Double-click to select one word.
 - Triple-click to select all text on a single line.
 - Click four times to select all text in a paragraph.
 - Click five times, or choose Select, All, to select all text on the Type layer.
- 7 On the options bar, click the "Commit any current edits" button to apply your changes and exit edit mode. Or cancel the current edits and exit edit mode by pressing Esc or by clicking the "Cancel any current edits" button.

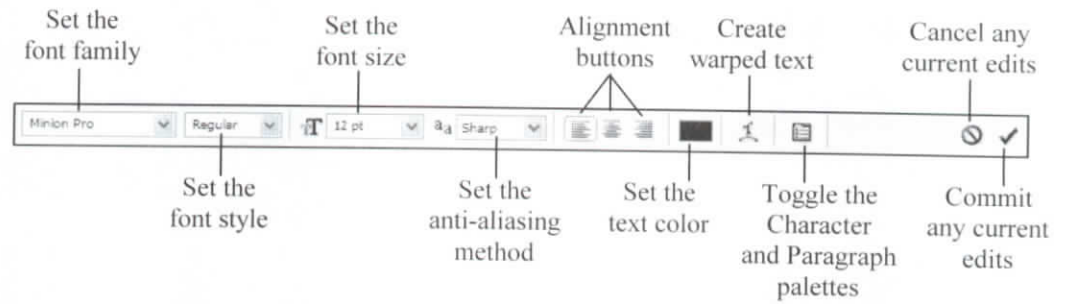


Exhibit 3-9: Formatting options when a Type tool is selected

Although you can't manipulate and modify the contents of a Type layer by using all the same techniques you'd use for pixel-based layers, you can move and transform Type layers just as you'd move and transform pixel-based layers. Before you move or transform text, though, be sure to exit edit mode.

Do it!


C-1: Adding text to an image**Here's how****Here's why**

1 Open My turn up the heat

From the current unit folder.

2 Set the foreground and background colors to their defaults

(If necessary.) To set the foreground color to black. The text you add will use the current foreground color.

3 In the Tools palette, click 

The Horizontal Type tool.

In the image, click near the bottom-left corner

To add the insertion point and create a Type layer.


Type **turn up the**

Use only lowercase characters.

4 Triple-click the text

To select it.

On the options bar, from the "Set the font family" list, select **Arial Black**

Edit the "Set the font size" box to read **25** and then press 

To set the type size to 25 points.

On the options bar, click 

(The "Commit any current edits" button.) To exit edit mode and apply the changes.

5 Observe the Layers palette

The Type layer is automatically named "turn up the," based on the text contained in the layer.

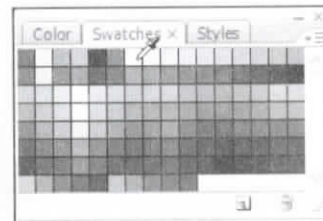
6 Using the Horizontal Type tool, click the center of the image

To create a new Type layer and place the insertion point.

Activate the Swatches palette tab

You'll specify a white fill.

In the Swatches palette, click the white swatch, as shown



To specify White as the text color.

7 Type **HEAT**

Use all uppercase letters. Photoshop uses the font family you selected previously, Arial Black.

8 Format the text as **70 pt**

Click

9 Choose **Edit, Transform, Rotate 90° CCW**

10 Press and hold **CTRL**

Drag to place “HEAT” near the image’s right edge, as shown

11 Update the file

Edit the value in the “Set the font size” box and press Enter.

To commit the changes and exit edit mode.

Next, you’ll rotate the word “HEAT” 90° counterclockwise.

To rotate the text. Next, you’ll move the word “HEAT.”

To temporarily access the Move tool.



Paragraph text

Explanation

When you add text with a Type tool, the text won't wrap to a new line until you press Enter. Text you add when you click on an image with a Type tool is called *point text*. If you want to create text that automatically wraps within a designated border, you can use a Type tool to specify a *bounding box* by dragging in the image. Text you add within a bounding box is called *paragraph text*.

Do it!

C-2: Adding paragraph text to an image

Here's how

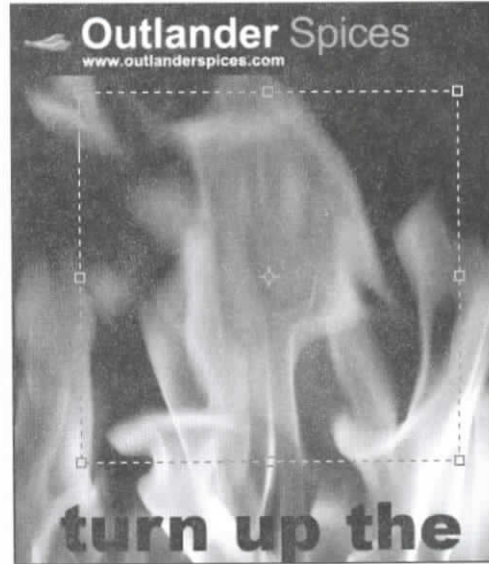
- 1 Using the Horizontal Type tool, drag to create a rectangular bounding box, as shown

- 2 Set the text formatting to **Arial, 7 pt**
- 3 Type **Our newest line of spices redefines "hot." Grab some at one of our grocery store kiosks, and get ready to swelter.**

Press  twice

Type
Consider yourself warned.

Here's why



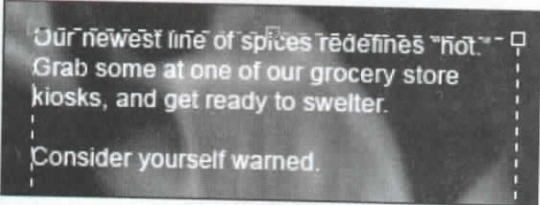
To create a Type layer with a defined area for paragraph text.

Use the options bar.

To add space between the first paragraph and the next.

- 4 Point to the right side's resize handle

Drag to adjust the width of the text boundary so the text re-flows as shown



Our newest line of spices redefines "hot."
Grab some at one of our grocery store kiosks, and get ready to swelter.
Consider yourself warned.

- 5 Update the file

Text formatting

Explanation

To format or edit type on a Type layer, you must be in edit mode. To switch to edit mode to edit or format existing text:

- Use a Type tool to click existing text on a Type layer.
- Using any tool, double-click the thumbnail next to a Type layer in the Layers palette to automatically switch to the Type tool and select all text on that Type layer.

Although you can specify some text formatting by using the options bar, you can select from a greater number of options by using the Character and Paragraph palettes. You can open these palettes by clicking the “Toggle the Character and Paragraph palettes” button on the options bar or by choosing Window, Character or Window, Paragraph. In addition, by default, each palette appears as an icon in the left-hand palette dock.

In the Character and Paragraph palettes, shown in Exhibit 3-10 and Exhibit 3-11, you can specify formatting values by pointing to a formatting icon and dragging left or right. This is called *scrubbing*, and as you scrub, the values you select are applied to the selected text. Scrubbing is useful for applying formatting values visually (you can see the effects of the changes as you make them).

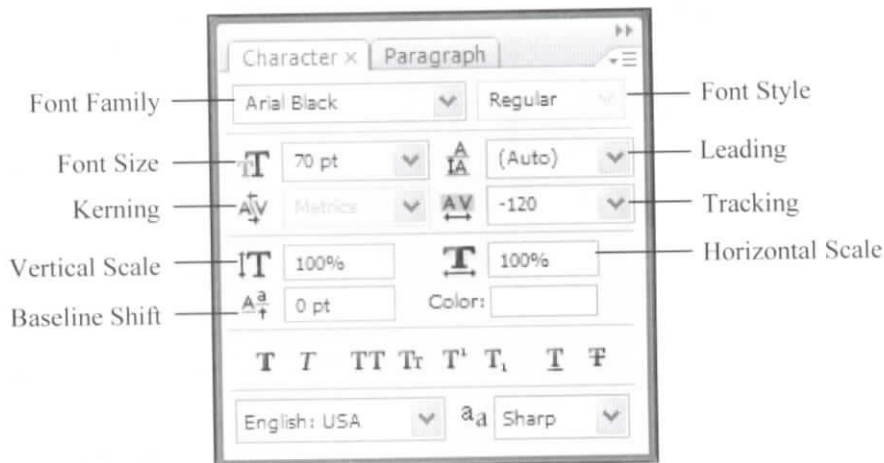


Exhibit 3-10: The Character palette

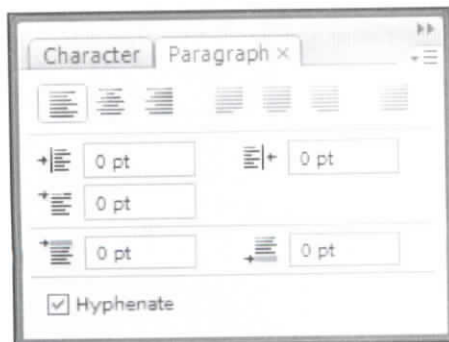


Exhibit 3-11: The Paragraph palette



The following table explains some of the settings available in the Character palette.

Setting	Description
Kerning	Increases or decreases the horizontal space between specific pairs of characters, as opposed to several characters or whole blocks of text.
Leading	Adjusts the vertical space between lines of type.
Tracking	Loosens or tightens spacing between selected characters or blocks of text, rather than between specific pairs of characters, as with kerning.

Do it!

C-3: Formatting text

Here's how

- 1 In the Layers palette, on the HEAT layer, double-click 
- 2 On the options bar, click 
- 3 In the Character palette, point to the Tracking icon, as shown

Drag to the left to scrub the tracking value

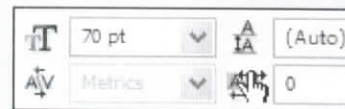
When the tracking value is **-120**, release the mouse button

- 4 In the Character palette, scrub the Font Size to fill the height of the image

Here's why

(The layer thumbnail.) To select all of the text in the HEAT layer.

To display the Character palette. You'll adjust the tracking of the selected word.



You'll drag back and forth to adjust (or scrub) the tracking value to change the horizontal space between characters.

Dragging to the left decreases the tracking value.



To position the characters closer together.

(Point to the Text Size icon and drag to the right.) A value of about 86 pt will fill the image height.

5 Commit the current edit

6 Select the Move tool

Press the arrow keys to move
“HEAT” to the indicated position

7 Activate the Swatches palette tab

In the Character palette, next to
Color, click as shown

In the Swatches palette, click the
Dark Red color icon, as shown

Click **OK**

8 Close the Character palette

9 Update and close the image

Click the “Commit any current edits” button.

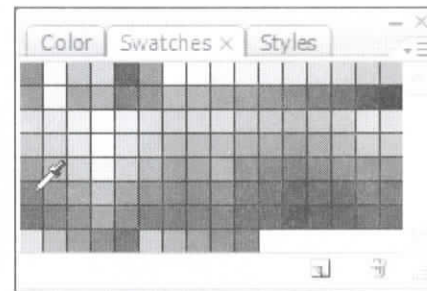


Flush with the top, right, and bottom edges of
the image.

(If necessary.) To view the Swatches palette.



To open the Select text color dialog box.



To apply that color to “HEAT.”

To close the dialog box.

Click the double-arrow button in the palette’s
top-right corner.

Topic D: Using layer effects

This topic covers the following Adobe ACE exam objective for Photoshop CS3.

#	Objective
3.5	Create and save a layer style.

Layer opacity

Explanation

When an image includes multiple layers, you can apply effects to individual layers to change their appearance. For example, you can lower a layer's opacity so you can see through it to the layer below.


A simple way to change a layer's opacity is to specify a value in the Opacity box in the Layers palette. At 100% opacity, a layer is solid, and you can't see through it at all. At 0% opacity, the layer is completely invisible (transparent). Lowering a layer's opacity is useful whenever you want underlying layers to be partially visible behind the layer.

There are several ways to change the selected layer's opacity:

- Edit the value in the Opacity box.
- Click the triangle to the right of the Opacity box, and drag the Opacity slider that appears.
- With the Move tool selected, type a single number to specify opacity in increments of 10%. For example, typing 1 specifies 10% opacity, 2 specifies 20%, and so on. Typing 0 (zero) specifies 100% opacity. Type two digits quickly to specify that opacity value.

Do it!

D-1: Adjusting opacity

Here's how	Here's why
1 Open Literary convention	From the current unit folder.
Observe the feathering around the edges of the white rectangular area	You'll reduce the opacity of the Panel layer so that the pixels underneath will show through partially.
2 Select the Panel layer	If necessary.
3 In the Layers palette, click the arrow to the right of the Opacity box	To access the Opacity slider.
Drag the Opacity slider	To experiment with various opacity values.
Set the Opacity level to 50%	
Press 	To close the Opacity slider.
4 Update and close the file	

Layer blending modes

Explanation

You can create sophisticated layer effects by applying *blending modes*, which blend a layer into underlying layers in a variety of ways. For example, if you apply the Multiply blending mode to a layer, the pixels in that layer combine with pixels in layers below to darken where they overlap. If you apply the Screen blending mode to a layer, the pixels in that layer combine with pixels in layers below to lighten where they overlap. Both of these examples are shown in Exhibit 3-12.

Applying a blending mode is a *nondestructive effect*, meaning that it doesn't permanently alter the pixels in the image. You can remove a blending mode or apply a different blending mode at any time.

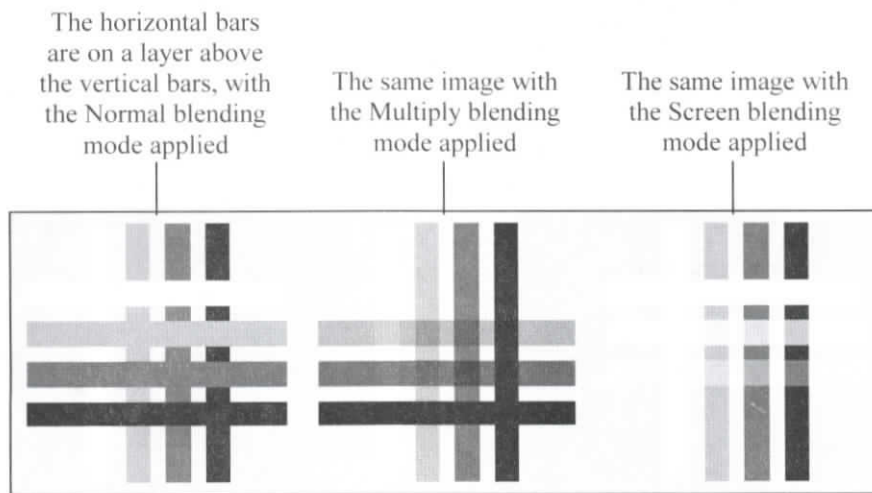


Exhibit 3-12: Several examples of how layer blending modes affect image layers

To apply a blending mode, first select the layer to which you want to apply it. Next, in the Layers palette, from the Blending mode list, select a blending mode, as shown in Exhibit 3-13.

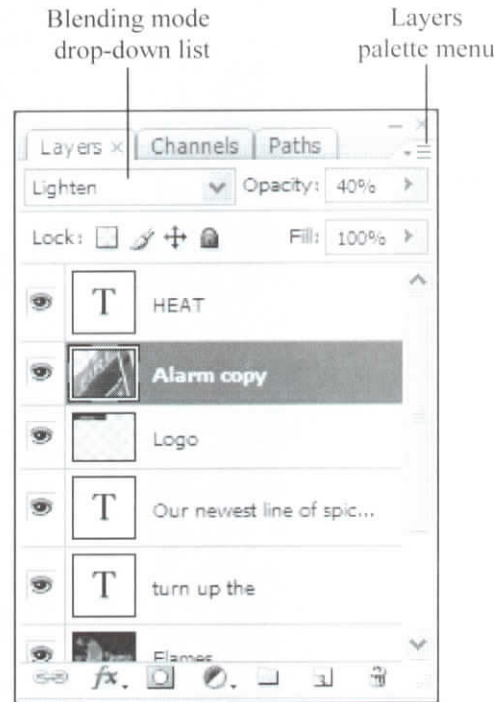


Exhibit 3-13: The Blending mode list in the Layers palette

The modes in the Blending mode list are organized into groups, with similar modes grouped together and separated by horizontal lines. Because it can be difficult to anticipate exactly how a particular blending mode will affect an image, you might want to experiment by first selecting a blending mode that you think will give the results you want and then trying other modes in the same group. To quickly apply the next blending mode in the list, press Alt+Shift++ (Alt + Shift + plus sign). To move backward in the list, press Alt+Shift+– (Alt + Shift + minus sign).

The following table describes each blending mode, along with the keyboard shortcut for applying it. The *blend color* is the pixel color in the layer to which you're applying the blending mode. The blend color mixes with the color below—the *base color*—to produce the *result color*.

Blending mode	Shortcut	Description
Normal	ALT + SHIFT + N	Applies no blending effect. This is the default mode.
Dissolve	ALT + SHIFT + I	Randomly paints each pixel to create the result color. The result depends on the opacity at the pixel location.
Darken	ALT + SHIFT + K	Uses whichever color is darker: the blend color or the base color.
Multiply	ALT + SHIFT + M	Multiplies the blend color with the base color. The result is always a darker color than either of the original colors.
Color Burn	ALT + SHIFT + B	Darkens the base color to reflect the blend color by increasing the contrast.
Linear Burn	ALT + SHIFT + A	Darkens the base color by decreasing brightness. Similar to Color Burn, but the Linear Burn result is usually darker than the Color Burn result.
Darker Color		Displays the darkest values from the blend and base colors.
Lighten	ALT + SHIFT + G	Uses whichever color is lighter: the blend color or the base color.
Screen	ALT + SHIFT + S	Multiplies the inverse of the colors being blended. The result is always a lighter color than either of the original colors. Screening with a black color does not change the color beneath. Screening with white produces white, as shown in Exhibit 3-12.
Color Dodge	ALT + SHIFT + D	Brightens the base color to match the blend color by decreasing contrast.
Linear Dodge (Add)	ALT + SHIFT + W	Brightens the base color to match the blend color by increasing brightness. The result of Linear Dodge is usually brighter than the result of Color Dodge.
Lighter color		Displays the lightest values from the blend and base colors.
Overlay	ALT + SHIFT + O	Multiplies or screens colors based on the base color. The highlights or shadows of the objects below show through, while mid-range colors and patterns are blended as with Multiply mode.
Soft Light	ALT + SHIFT + F	Darkens or lightens the image, depending on the color being blended. If the blend color is lighter than 50% gray, the image is lightened. If the blend color is darker than 50% gray, the image is darkened. The effect is to make the shadows and highlights more pronounced.

Blending mode	Shortcut	Description
Hard Light	ALT + SHIFT + H	Similar to Soft Light but with a more pronounced effect, as if you're shining a bright spotlight.
Vivid Light	ALT + SHIFT + V	For blend colors lighter than 50% gray, lightens the image by increasing contrast. For darker blend colors, darkens the image by decreasing contrast.
Linear Light	ALT + SHIFT + J	Similar to Vivid Light, except that it lightens or darkens an image by increasing or decreasing brightness.
Pin Light	ALT + SHIFT + Z	Replaces colors, depending on the blend color's brightness. For lighter blend colors, pixels darker than the blend color are replaced, and the lighter pixels don't change. For darker blend colors, the pixels lighter than the blend color are replaced, and the darker pixels don't change.
Hard Mix	ALT + SHIFT + L	Replaces colors to generate a posterized image consisting of up to eight colors. Generally, lighter colors lighten the result, and darker colors darken the result.
Difference	ALT + SHIFT + E	Subtracts the brighter color from the darker color. Blending with white inverts the base color.
Exclusion	ALT + SHIFT + X	Creates an effect similar to Difference but with less contrast.
Hue	ALT + SHIFT + U	Creates an effect by using the luminance and saturation of the pixels below and the hue of the blend color. If the blend object is a solid color, the underlying image is colorized.
Saturation	ALT + SHIFT + T	Creates an effect by using the luminance and color of the pixels below and the saturation of the blend color.
Color	ALT + SHIFT + C	Creates an effect by using the luminance of the pixels below and the saturation and color of the blend color. If the blend object is a solid color, the underlying image is colorized, usually with a more pronounced effect than that produced by the Hue blending mode.
Luminosity	ALT + SHIFT + Y	Creates an effect by using the saturation and color of the pixels below and the luminance of the blend color.

Duplicating layers

Some blending mode effects are difficult to achieve with a single copy of the layer. You might want to duplicate a layer and apply a blending mode to the copy. Use any of the following techniques to duplicate a layer:

- In the Layers palette, drag the layer onto the “Create a new layer” icon.
- From the Layers palette menu, choose Duplicate Layer. In the Duplicate Layer dialog box, enter a name for the duplicate layer, and click OK.
- With no pixels selected, choose Layer, New, Layer via Copy or press Ctrl+J.

Do it!

D-2: Applying layer blending modes

Here's how	Here's why
1 Open My turn up the heat	(From the current unit folder.) You'll make the Alarm layer blend with the one below.
2 Hide the Flames layer	In the Layers palette, click the eye icon to the left of the Flames layer.
3 Select the Alarm layer	You'll try several blending modes to see how they blend the Alarm and Background layers.
From the Blending mode list, select Soft Light	In the Layers palette.
From the Blending mode list, select Linear Light	
From the Blending mode list, select Overlay	
4 Show the Flames layer	
Select the Flames layer	
Select the Linear Dodge (Add) blending mode	You can see the effect of the blending mode on all three layers, but the word "FIRE" on the alarm isn't as clear as you'd like.
5 Select the Alarm layer	
Display the Layers palette menu	Click the arrow in the top-right corner of the palette.
Choose Duplicate Layer...	To open the Duplicate Layer dialog box.
Click OK	To create a duplicate layer named "Alarm Copy."
6 Drag the Alarm Copy layer below the Logo layer	The top layer in the image.
Set the blending mode for the Alarm Copy layer to Lighten	
Set the opacity for the Alarm Copy layer to 40%	
7 Move the Alarm Copy layer above the Logo layer	To see the "E" in "FIRE" more clearly.
8 Update the image	

Layer styles

Explanation

Another way to apply an effect to a layer is to apply a layer style. *Layer styles* apply effects such as drop shadows and inner glows to an entire layer. Like blending modes, layer styles are nondestructive, so you can modify or remove them at any time.

You can apply a layer style by using the Layer Style dialog box. To open the Layer Style dialog box, do any of the following:

- In the Layers palette, click the “Add a layer style” icon and select the layer style you want to apply.
- Choose Layer, Layer Style. From the submenu that appears, choose the layer style you want to apply.
- In the Layers palette, double-click a pixel-based layer’s thumbnail, or double-click to the right of the layer name for non-pixel-based or Type layers.

To specify options in the Layer Style dialog box, click a style’s name in the Styles list. Selecting a style’s name displays the style’s options and checks its associated check box, applying the current settings to the layer. If you want to apply a style without viewing its style options, check the associated check box. After specifying all the style settings you want to use, click OK.

The following table describes the styles available in the Layer Styles dialog box.

Layer style	Description
Drop Shadow	Creates a shadow behind the layer’s contents. Using this effect can make objects or text appear to be floating above the image.
Inner Shadow	Creates a shadow inside the edges of the layer’s contents, making the layer appear to be recessed.
Outer Glow	Creates a glow emanating from the outside edge of a layer’s contents.
Inner Glow	Creates a glow emanating from the inside edge of a layer’s contents.
Bevel and Emboss	Combines highlights and shadows to make a layer’s contents appear to be either beveled, making the content appear to be raised from the image’s surface, or embossed, making the content appear to be recessed into the image’s surface.
Satin	Shades the interior of the layer’s contents to produce a satiny finish.
Color Overlay	Fills the layer’s contents with a color.
Gradient Overlay	Fills the layer’s contents with a gradient.
Pattern Overlay	Fills the layer’s contents with a pattern.
Stroke	Creates an outline on the layer’s content by using a color, gradient, or pattern.

Do it!

D-3: Applying layer styles**Here's how**

- 1 In the Layers palette, double-click the space to the right of the HEAT layer's name, as shown

Move the dialog box

On the left side of the dialog box, in the Styles list, select **Outer Glow**

- 2 Under Structure, increase the Noise value

Set the Noise value as desired

- 3 Under Elements, increase the Spread value

Under Elements, increase the Size value

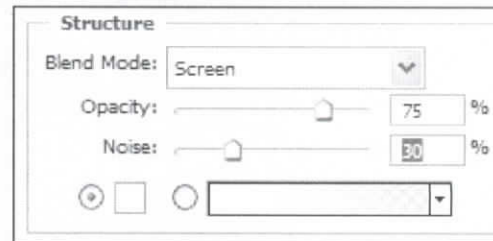
Here's why

To open the Layer Style dialog box.

So that you can see the word "HEAT" in the image. By default, in the Layer Style dialog box, Preview is checked, so you can observe the effects of the settings you specify while keeping the dialog box open.

To check the Outer Glow layer style and view its settings.

To add "noise" to the layer. In this case, you want to create a burning effect.

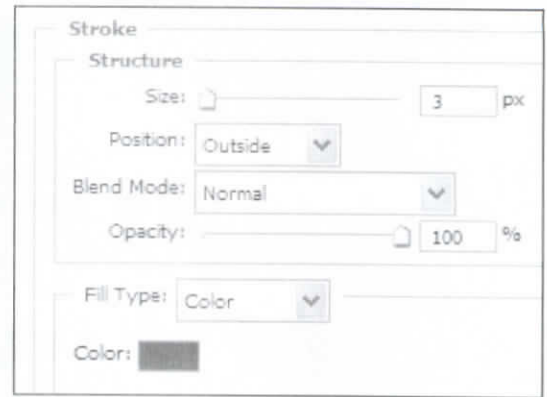


A value of about 30 creates the desired effect.

To make the Noise effect more apparent. A value of about 20 creates the desired effect.

To increase the spread of the noise around the text. A value of about 30 creates the desired effect.

- 4 From the Styles list, select **Stroke**



To activate the Stroke style and display the Stroke settings for the Type layer.

Drag the Size slider all the way to the left

To narrow the stroke around the text to one pixel.

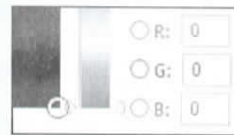
From the Position list, select **Center**

To center the stroke on the edges of the text.

- 5 Click the swatch next to “Color”

To open the Select stroke color dialog box.

Drag in the indicated area



To specify a black color. The R, G, and B values should all be zero.

Click **OK**

To close the Select stroke color dialog box.

- 6 At the top of the Styles list, select **Blending Options: Default**

To display the Blending Options settings.

From the Blend Mode list, select **Soft Light**



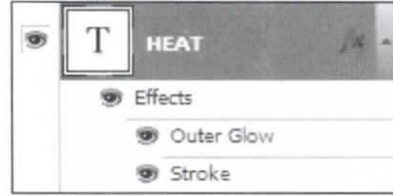
To allow the flames to show through the word “HEAT.”


7 Click **OK**

To apply the options to the image.

8 In the Layers palette, observe the HEAT layer

Now you'll hide and then show the layer effects to see how the settings you created for the layer affect the image.



To the left of "Outer Glow," click 

To view the effects applied to the layer.

To hide the Outer Glow effect.

Turn the Outer Glow effect back on

Click the area to the left of the effect name.

Hide and show the Stroke effect

9 Update and close the document

Unit summary: Working with layers

- Topic A** In this topic, you created a **layer** based on pixels copied from an existing layer. You also created an empty layer and added a fill to part of that layer. Finally, you aligned layer contents with a selection edge.
- Topic B** In this topic, you rearranged the **layer stacking order**. You also worked with multiple layers and **linked** layers. Finally, you learned how to use the **Free Transform** command to resize, rotate, and skew layers.
- Topic C** In this topic, you used the Horizontal Type tool to create **Type layers** containing point text and paragraph text. You also learned how to format the text on Type layers.
- Topic D** In this topic, you adjusted **layer opacity** by using the Opacity box in the Layers palette. You also blended layers by applying **layer blending modes**. Finally, you used the Layer Style dialog box to apply **layer styles**, such as outlines, glows, and shadows.

Independent practice activity

In this activity, you'll change the layer stacking order and reposition layer contents. You'll load selections and move selected content between images. You'll also transform layer content, and add and format type.

- 1 From the current unit folder, open "Turn up the heat practice," and save the image as **My turn up the heat practice**.
- 2 Move the **turn up the** layer above the **HEAT** layer, and position the **turn up the** text as shown in Exhibit 3-14.
- 3 Select the **Logo** and **Our newest line** layers together, and press the arrow keys to move the contents of both layers up and to the left slightly. Update and close the image.
- 4 Open both the Bird 2 and Bird on beach images. Arrange the windows so that both images are visible.
- 5 In the Bird 2 image, load the Bird channel as a selection, and then drag it to the Bird on beach image. Position the birds as shown in Exhibit 3-15. Save the image as **My bizteam ad**.
- 6 Use the Free Transform command to reduce the size of the foreground bird, as shown in Exhibit 3-16. (*Hint: Hold down the Shift key while dragging the transform handles. Press Enter to commit the transformation.*)
- 7 To the left of the seagulls, add a Type layer. Type **Team not exactly** (with no punctuation after); then press Enter and type **flocking together?** (with the question mark).
- 8 Format the text as Arial Black, 40 point, with black fill and 0 tracking, and position the text as shown in Exhibit 3-17. (*Hint: Remember to commit the changes when you're done.*)
- 9 Below the existing text, add a new Type layer, and type **We can help**. Position the text as shown in Exhibit 3-18.
- 10 Add a third Type layer with the text **Bizteam Development Consulting** on one line, followed by **Business solutions that work** on the next line. Format the text as Times New Roman, 30 point, and position it as shown in Exhibit 3-19.

- 11 Apply a light color to the text in the “Team not exactly flocking together?” layer. (*Hint:* Use the Character palette.)
- 12 Apply a drop-shadow layer style, using the settings shown in Exhibit 3-20. (*Hint:* Double-click to the right of the layer name to open the Layer Style dialog box.)
- 13 Adjust the color of the Type layer, if necessary, so that the drop shadow is clearly visible, as shown in Exhibit 3-21. Update and close all images.

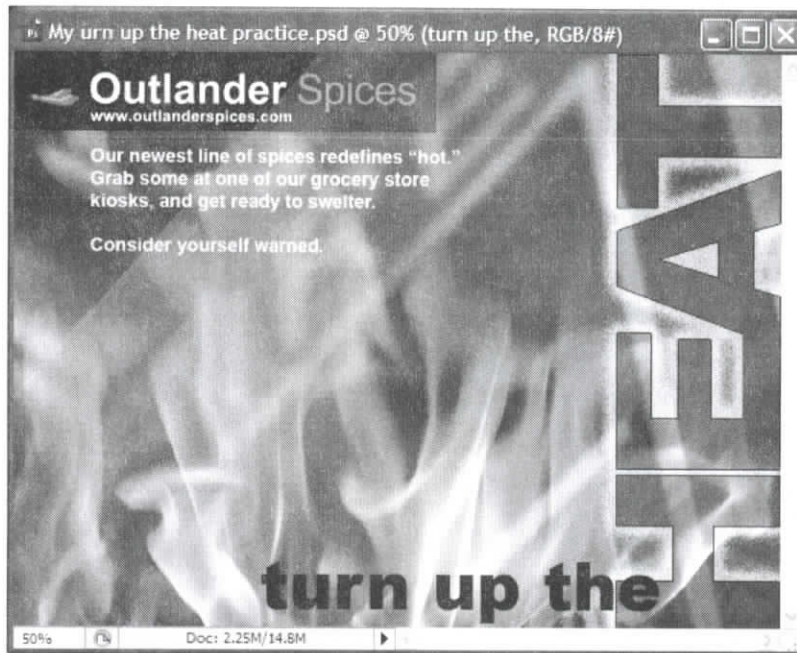


Exhibit 3-14: The “My turn up the heat practice” file as it appears after Step 2 of the independent practice activity

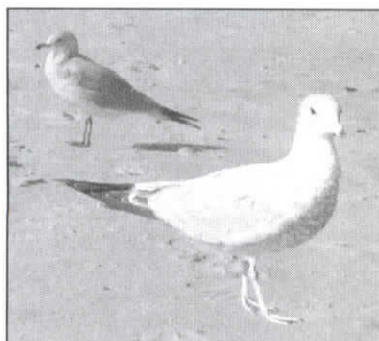


Exhibit 3-15: The placement of the birds after Step 5

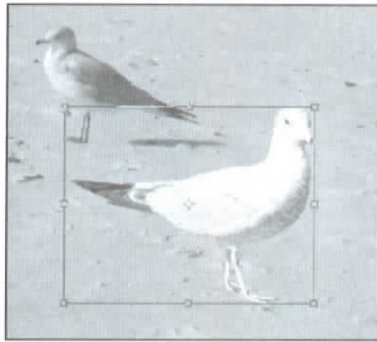


Exhibit 3-16: The resized bird as it appears after Step 6

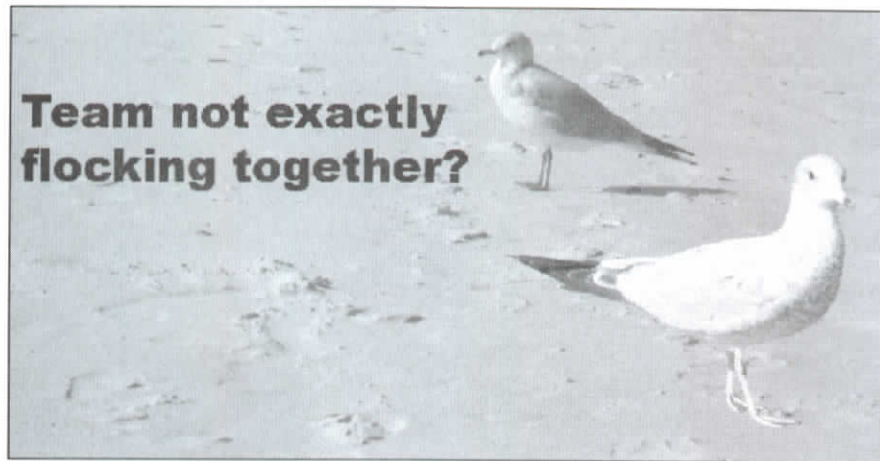


Exhibit 3-17: The text as it appears after Step 8

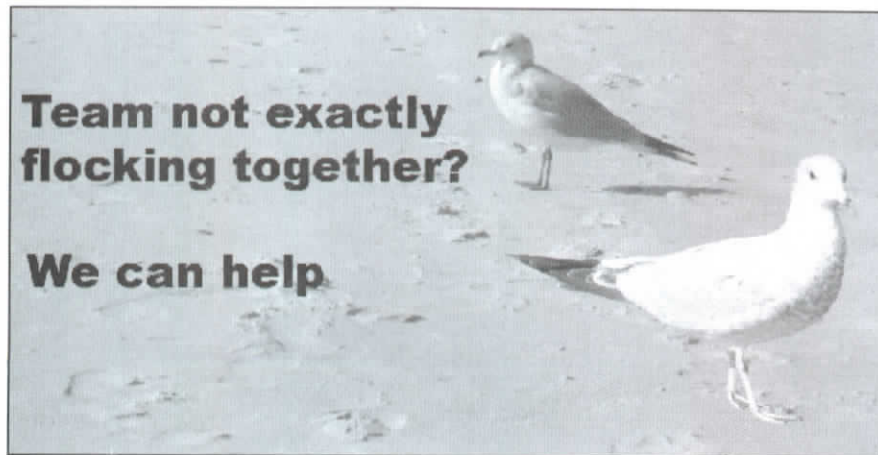


Exhibit 3-18: The text as it appears after Step 9



Exhibit 3-19: The text as it appears after Step 10

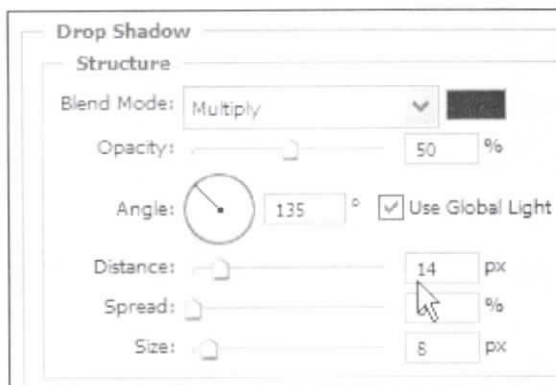


Exhibit 3-20: The drop-shadow settings to specify for Step 12



Exhibit 3-21: The completed image as it appears after Step 13

Review questions

- 1 How can you add a new layer that contains a copy of the current selection's pixels?
 - A Click the "Create a new layer" icon in the Layers palette.
 - B Press Alt and click the "Create a new layer" icon in the Layers palette.
 - C Press Ctrl and click the "Create a new layer" icon in the Layers palette.
 - D Choose Layer, New, Layer via Copy.
- 2 Which of the following is *not* true of the Background layer?
 - A You can drag it to another image.
 - B Each pixel must be a solid color.
 - C You can hide it from view when the image contains multiple layers.
 - D You can change its stacking order.
- 3 How can you arrange a layer so that its contents overlap the contents of all other layers? [Choose all that apply.]
 - A Drag the layer to the top of the Layers palette.
 - B Drag the layer to the bottom of the Layers palette.
 - C Choose Layer, Arrange, Bring to Front.
 - D Choose Layer, Arrange, Send to Back.
- 4 How can you select multiple layers in the Layers palette?
 - A Click the top layer you want to select, and from the Layers palette menu, choose Merge Down.
 - B Press Alt and click each layer you want to select in the Layers palette.
 - C Right-click each layer you want to select in the Layers palette.
 - D Press Ctrl and click each layer you want to select in the Layers palette.
- 5 How can you specify that the contents of several layers always move as a unit, without flattening the layers? [Choose all that apply.]
 - A Select each of the layers, and from the Layers palette menu, choose Merge Layers.
 - B Select each of the layers, and choose Layers, Smart Objects, Group into New Smart Object.
 - C Select each of the layers, and from the Layers palette menu, choose Link Layers.
 - D Select each of the layers, and click the Link layers button in the Layers palette.
- 6 What command allows you to perform a combination of resizing, rotating and distorting a layer or selection?

- 7 To make multiple lines of text wrap automatically within a rectangular border, you need to create:
- A Paragraph text.
 - B Point text.
 - C Wrap text.
 - D You can't wrap multiple lines of text automatically in Photoshop.
- 8 True or false: Double-clicking a text layer's "T" thumbnail switches to the Type tool and selects all of the text on that layer.
- 9 To make a layer's pixels appear semi-transparent, lower its _____.
- 10 How can you open the Layer Styles dialog box to add a layer style? [Choose all that apply.]
- A Press Alt and click the "Create a new layer" icon in the Layers palette.
 - B Choose Layer, Layer Style, and from the submenu that appears, choose the layer style you want to apply.
 - C In the Layers palette, click the "Add a layer style" icon and select the layer style you want to apply.
 - D In the Layers palette, select a style from the Blending mode list.
- 11 Which of the following statements about layer styles are true? [Choose all that apply.]
- A They are applied irreversibly to the layer's pixels.
 - B A layer style applied to a single layer can include both a drop shadow and a glow.
 - C You control their settings in the Layer Style dialog box.
 - D You can apply them to image layers, but not text layers.
- 12 How can you specify a color to appear in the visibility column for a particular layer in the Layers palette? [Choose all that apply.]
- A Select the layer. From the Layers palette menu, choose Layer Properties, and select a color from the Color list.
 - B Select the layer. Choose Layer, Layer Properties and select a color from the Color list.
 - C Select the layer. Choose Layer, Layer Style, Color Overlay, and click the swatch to select a color.
 - D Select the layer. Click the visibility column and select a color from the list that appears.