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ADVANCED PHOTOSHOP ELEMENTS

TEACHUCOMP, INC.º

...it's all about you

ADVANCED PHOTOSHOP ELEMENTS

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INTRODUCTION AND OVERVIEW

Welcome to TeachUcomp, Inc.'s Advanced Photoshop Elements course. This class expands the student's abilities in using Adobe Photoshop Elements, one of the most popular image creation and editing software applications available. This class is designed to give a user with basic knowledge of Photoshop Elements the necessary skills to become a proficient user of the Elements application. To that end, it is also an excellent tutorial for those users who are already familiar with Elements, but want to "fill-in" the gaps in their knowledge of the program.

Adobe Photoshop Elements is an excellent program to learn, as the skills, terms, and techniques that you learn and master in this application can also be used throughout the rest of the Adobe applications. For example, after learning this application, you will find it easier to learn an application like Adobe Illustrator or Adobe PageMaker.

This class starts by introducing the student to the concept of layers in images. You then spend much time examining vector data in images, starting with text and then moving into drawn objects and shapes. The course then shows you how to use advanced tools for image enhancement. Finally, you then examine saving, printing and sharing options in Photoshop Elements.

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CHAPTER 12-LAYERS

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12.1- About Layers and the Layers Panel:

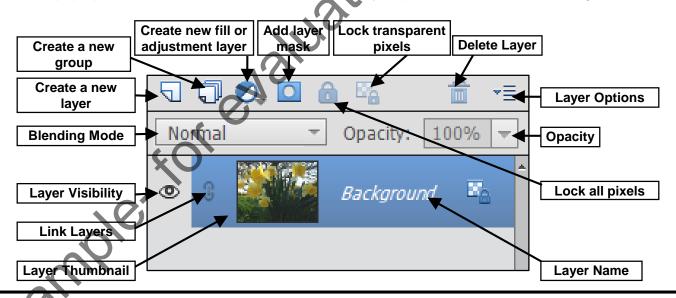
In Elements, all the items you add and manipulate are stored in layers. A layer is like a transparent sheet on which content is placed and edited. Where there is no content in a layer, it is transparent, allowing you to see through it to the content below.

You can stack several layers on top of one another to separate the individual elements of a larger image file. This way, you can manipulate the contents of a single layer without disturbing the content of the other layers. In this chapter, you will examine how to create and edit layers and their contents to produce various effects in your image files. Understanding and using layers is one of the most critical aspects of being an effective Photoshop Elements user.

Whenever you create a new image file in Elements that has a white or colored background, the bottommost layer is called the background layer. An image file can only have one background layer at most. You cannot change the placement of the background layer in the layer stack, its opacity, or its blending mode. However, you can convert this layer into a normal layer, which is shown in a separate lesson.

If you create a new image with a transparent background, then the image file does not have a background layer. The bottommost layer is not constrained in the way that the standard background layer is. So, you can move its position in the layer stack, change its opacity, and even change its blending mode.

You use the "Layers" panel to manage your layers in the selected image file. You can display the "Layers" panel if it isn't displayed by selecting "Window| Layers" from the Menu Bar. In the Layers panel, you will see the various layers in the current image file shown in a list. As with the other panels you have seen, this panel has an options button in the upper-right corner you can click to view the options for the panel in a pop-up menu. Take a moment to examine the Layers panel's features before using it.



12.2-Layer Types:

You can create many different types of layers in Elements. An image layer, often simply called a "layer," is the most basic type of layer. You can create layers using images themselves or you can create a blank layer and then place an image onto it.

Adjustment layers are layers used to correct contrast and color in an underlying image. When you create an adjustment layer, you make changes to that layer without permanently affecting the original pixels. Adjustment layers create a layer *mask* that lays on top of the layer. This allows you to apply the

12.2- Layer Types- (cont'd.):

adjustment to the layers below it or even blend two layers together. To create an adjustment layer, click the "Create new fill or adjustment layer" button the Layers panel. Choose your preferred adjustment from the drop-down menu, make your changes in the panel that appears, and then close the panel when finished. You can also add a layer mask directly to a layer by clicking the "Add layer mask" button.

Fill layers let you add a layer with a solid color, pattern or gradient. Creating a fill layer also creates a layer mask, just like an adjustment layer does. To create a fill layer, click the "Create new fill or adjustment layer" button the Layers panel. Choose a solid color, gradient, or pattern from the drop-down menu, make your changes, and click the "OK" button.

Shape layers are layers where you have created a vector-based shape. To create a shape layer, select any of the shape tools, which will be discussed later, in the Toolbox and then click and drag within the image file to draw a shape. If you have a blank image layer selected, then the shape will be placed into the layer. If not, a new shape layer will be created automatically.

Type layers are created by adding type, or text, to your image. Type will be discussed in greater detail in the next chapter, but adding type is quite easy. Click into an image after selecting a type tool and start to type. If you have a blank image layer selected, the text will appear in the layer. If not, then when you click the "Commit" button that appears, you will create a new type layer.

12.3- Creating New Layers:

You can easily create layers in Elements. Many commands automatically create layers from selections when you use them. You can also create blank layers and then add content to them. To create a new blank layer, click the "Create a new layer" button in the Layers panel or select "Layer| New| Layer..." from the Menu Bar.

If you choose the former option, it instantly creates a new layer with a default name in the Layers panel. If you choose the latter option, it launches the "New Layer" dialog box. In this dialog box, type the name for the new layer into the "Name:" text box. If you check the "Use Previous Layer to Create a Clipping Mask" checkbox, you will create a "Clipping Group," in which a group of layers is constrained to the boundaries of a base layer. Clipping groups will be discussed in upcoming lessons.

To apply a color-coding to the new layer that appears in the Layers panel to help you organize your layers, select a color from the "Color" drop-down. Then set the desired blending mode for the layer by using the "Mode" drop-down. Then use the "Opacity" drop-down slider to set the layer's opacity percentage level.

If you selected a color mode from the "Mode" drop-down that lets you fill the layer with a color-mode-neutral color and want to do that, check the "Fill with (color mode)-neutral color (name of color)" checkbox, where (color mode) is the name of the color mode and (name of color) is the name of the color used to fill the layer. To create the layer when finished, click the "OK" button to add the layer to the Layers panel.

12.4-Converting a Background Layer:

To convert the "Background" layer of an image into a normal layer, select the "Background" layer in the Layers panel, first. Then select "Layer| New| Layer from Background..." from the Menu Bar to open the "New Layer" dialog box. Use the dialog box to name the layer and set any additional layer options for it, just as you would when creating a new blank layer. Then click the "OK" button. Conversely, to convert a normal layer into a background layer, select the layer to set as the background layer in the Layers panel. Then select "Layer| New| Background from Layer..." to convert the selected layer into a background layer.

12.5- Selecting Layers:

To perform almost any task on a layer, you must first select it. You can click a layer in the Layers panel to select it. After selecting a layer, changes you make will only affect the selected layer, protecting the content of the other layers. However, this can also be a source of aggravation for new users. If you are trying to change to an image and find the changes are not being applied, check to make sure you have the correct layer selected! This is easy to forget when learning how to use layers. Be sure to double-check your layer selection before making a change in a layered image file.

12.6- Hiding and Showing Layers:

You can also hide or show layers or layer groups in a layered image file. To change the visibility of a layer or layer group, click the "eye" icon at the left end of the layer or layer group to toggle its visibility on or off. Alternatively, if you only want to view a single selected layer, you can hold down the "Alt" key on your keyboard and then click the "eye" icon of the layer or layer group to view. All the other layers will have their visibility turned off! This can be helpful when you want to concentrate on working with a specific layer's content without the distraction of the content on the other layers. To make the hidden layers visible again, hold down the "Alt" key on your keyboard and then click the "eye" icon again.

12.7- Duplicating Layers:

You can also quickly duplicate a layer to create another copy of the content in the same image or within a different image file. Be aware that if you duplicate the layer in an image file that has a different pixel resolution, the layer's content may appear a different size than you intended. To create a duplicate layer, click and drag the layer in the Layers panel and drop it on top of the "Create a new layer" button in the Layers panel. Another way to perform this same function is to select "Layer| Duplicate Layer..." from the Menu Bar to open the "Duplicate Layer" dialog box. Type a name for the duplicate layer into the "As" text box and then use the "Document" drop-down to select into which of the opened image files you want to copy the duplicate layer. Click the "OK" button to duplicate the selected layer in the Layers panel.

12.8- Stacking Layers and Ordering Layers:

You can change the order of the layers in an image. When using layers, the newest layers are stacked on top of the older layers by default. When a layer is stacked on another, the content of the layer on top supersedes the content of the layer below. You can easily change the order of layers in a stack by clicking and dragging the layers up or down within the Layers panel. The bottommost layers are shown at the bottom of the Layers panel, increasing in order through the stack, up to the topmost layer.

12.9- Linking Layers:

You can link layers to move their content together. Also, when you perform activities like copying and pasting layers, the linked layers will be treated as if they were a single layer. To link layers, select the layers to link in the Layers panel and then click the "Link Layers" button next to one of the layer's names in the Layers panel. You can also click the same button to un-link layers that were previously linked.

12.10- Grouping Layers:

Grouping layers in Photoshop Elements lets you better organize related layers into groups. You can expand and collapse the layers in the group to help you organize multiple layers that contain related content within the Layers panel.

To create a new layer group above the currently selected layer or layer group in the Layers panel, click the "Create a new group" button in the toolbar at the top of the Layers panel. The layer group will be added above the active layer or layer group. To rename the layer group, double-click the layer group name in the Layers panel or select "Layer| Rename Group…" from the Menu Bar when the layer group is selected in the Layers panel. Then type a name for the layer group and press the "Enter" key on your keyboard or click the layer group icon to set the new name.

To add layers to a layer group, click and drag a layer onto the layer group name in the Layers panel. Alternatively, you can select existing layers within the layers panel and then either click the "Create a group" button in the toolbar at the top of the Layers panel or select "Layer| Group Layers" from the Menu Bar to create a new group from the selected layers.

Layers in a layer group appear indented under the layer group icon in the Layers panel. After adding layers to a layer group, you can click the arrow shown to the left of the panel group icon in the Layers panel to both collapse and expand the layers in the group.

To remove a layer from a layer group, click and drag the layer within the layer group above the layer group icon in the Layers panel and then release it. You can also select the layer group icon in the Layers panel and select "Layer Ungroup Layers" from the Menu Bar to ungroup all the layers in the layer group.

When you delete a layer group, you can either delete only the group or both the group and its layers. To do this, click the layer group icon to select it and then click the "Delete layer" button in the Layers panel or select "Layer| Delete Group" from the Menu Bar. In the confirmation dialog box that appears, you can click the "Group and Contents" button to delete the group and its contents. You can click the "Group Only" button, instead, to only delete the layer group but leave its contents intact. You can click the "Cancel" button to cancel the deletion of the layer group.

12.11- Color-Coding Layers:

When creating a new layer within the "New Layer" dialog box, you have the option of using the "Color" drop-down to assign a color tag to the layer that appears in the Layers panel. This lets you organize layers using a color-coding system you create. For example, you could color all the adjustment layers using the "Red" color so you can easily spot adjustment layers in the Layers panel.

However, after creating the layer, you may want to change the color of a layer or remove its color-coding. To do this, right-click the layer to color-code within the Layers panel. You can then click the color-coding to apply to the layer from the choices shown at the bottom of the pop-up menu. You can select the "No Color" choice to remove color-coding from the layer you right-clicked.

12.42- Moving Layer Content with the Move Tool:

To use the "Move Tool" in the Toolbox to move layer content, click the "Move Tool" in the Toolbox and ensure you have the correct layer within which you want to move content selected in the Layers panel. Then place the "Move Tool" over the content in the layer to move and click and drag with your mouse.

12.13- Locking Pixels in Layers:

You can also fully or partially lock a layer to protect its contents. When you lock layers, a "lock" icon will display to the right of the layer name in the Layers panel. The "lock" icon will appear with a small pixel image next to it when only the transparent pixels within an image are locked and it will appear as a single, larger lock icon when all pixels within the layer are fully locked.

To lock pixels in a layer, first select the desired layer in the Layers panel. Then select what kind of a lock you want to place on the pixels in the layer. To lock all the pixels in the layer, click the "Lock all pixels" button in the toolbar at the top of the Layers panel. To lock only the transparent pixels within a layer, click the "Lock transparent pixels" button in the toolbar at the top of the Layers panel. To unlock the locked pixels within a layer, click the same "Lock" button that you originally used to lock the pixels in the layer once again.

12.14- Renaming Layers and Deleting Layers:

You can easily rename a layer you have created. To rename a layer, double-click the name of the layer to rename within the Layers panel. Then type a new name for the layer into the layer name text box shown for the layer in the Layers panel and press the "Enter" key on your keyboard to set the new name.

To delete a layer you have created, select the layer to delete within the Layers panel and then click the "Delete layer" button, which looks like a "trash can" icon, in the upper-right corner of the Layers panel. Note that you cannot delete layers that have all of the pixels locked within the Layers panel unless you first remove the associated pixel lock from the layer by selecting it and then clicking the "Lock all pixels" button again to remove the lock from the layer.

After you click the "Delete layer" button, you will need to confirm that you want to delete the selected layers in a pop-up message box that appears. Click "Yes" to delete the layers or "No" to cancel. If you do not want to be prompted by the dialog box, you can simply click and drag the layer to delete from the Layers panel onto the "Trash Can" icon to delete the layers without triggering a prompt. Also note that the "History" panel can undo mistakes that can occur if you delete the wrong layer by accident.

12.15- Merging Layers and Flattening Layers:

When you add layers to an Elements file, you keep increasing the file size. You can then use the "Merging" and "Flattening" features of Elements to reduce the number of layers and the overall file size. You can merge several selected layers together to create a single image element. To merge layers, select the layers that you wish to merge in the Layers panel and then select "Layer Merge Layers" from the Menu Bar.

To merge all visible layers in the Layers panel, first show or hide all of the layers, as needed, in the Layers panel. Then select "Layer| Merge Visible" from the Menu Bar. You can also merge only linked layers together. To do this, select one of the linked layers and choose "Layer| Merge Linked" from the Menu Bar.

In contrast to merging, flattening an image file merges all visible layers into the "Background" layer. This will greatly reduce the file size. When you flatten an image, you discard all hidden layers from the image file and fill-in any remaining transparent areas with the color white. This is usually the **last** step performed when working with an image file, after performing all of the necessary editing within the individual layers. To flatten an image, select "Layer| Flatten Image" from the Menu Bar.

12.16- Layer Styles:

Layer styles let you apply various effects to a layer's content. It should be noted that layer styles can only be applied to entire layers and not to the individual elements within a layer. In addition, layer styles are dynamically linked to the contents of the layer. In other words, if you move the contents of the layers, the appearance of the layer style is also updated.

To apply a layer style, select the layer to which you want to apply a layer style within the Layers panel. Then switch to the "Styles" panel by choosing "Window| Styles" from the Menu Bar. If using the "Basic Workspace," you can also open this panel by clicking the "Styles" button towards the right end of the Taskbar. Use the "Select a type" drop-down at the top of this panel to select a category of layer styles to show within this panel. Click a layer style to apply from the choices shown within the panel to apply it.

Another way to apply a layer style is to select the layer to which you want to apply a layer style within the "Layers" panel. Then select "Layer | Layer Style | Style Settings..." from the Menu Bar to open the "Style Settings" dialog box. You can check the styles you want to apply and adjust the settings for each style within the sections shown in this dialog box. Then press "Enter" on your keyboard or click the "OK" button to apply the layer style.

When you apply a layer style to a selected layer, an "fx" icon appears to the right of the layer's name in the Layers panel to indicate that the layer has a style applied. You can double-click the "fx" icon to view and change the individual settings of the layer style within the "Style Settings" dialog box that appears, if needed. Then click the "OK" button or press the "Enter" key on your keyboard to apply the changed settings.

To delete a selected layer's layer style, choose "Layer Style| Clear Layer Style" from the Menu Bar. To copy and paste a layer style onto other layers, select the layer with the layer style to copy and select "Layer Style| Copy Layer Style" from the Menu Bar. Then select the layer onto which you want to paste the layer style and choose "Layer| Layer Style| Paste Layer Style" from the Menu Bar.

To hide the display of all layer styles in an image, select "Layer Layer Style Hide All Effects" from the Menu Bar. To reveal any hidden styles, select "Layer Layer Style Show All Effects" from the Menu Bar. To scale a layer style, select "Layer Layer Style Scale Effects" from the Menu Bar, enter a value between 1 and 1,000 percent, and then click the "OK" button.



12.17- Adjustment Layers and Fill Layers:

Superficially, adjustment layers and fill layers have many of the same options normal layers have. They have many of the same opacity and blending mode settings available to them. However, adjustment layers let you apply a layer over an image element to experiment with color and tonal adjustments in the underlying layers within an image. Keeping the adjustment in a separate layer lets you apply adjustments without permanently altering the pixels in the underlying layers within an image. By default, an adjustment layer will affect all of the layers below it within the image. This allows you to correct multiple layers with a single adjustment layer, rather than having to individually adjust each layer.

While adjustment layers let you apply photographic enhancements, fill layers simply let you fill a layer with a solid color, pattern, or gradient. To create a new adjustment layer or new fill layer, click the "Create New Fill or Adjustment Layer" button in the toolbar at the top of the Layers panel and then choose the layer type you want to create from the drop-down menu that appears.

Alternatively, you could also select "Layer| New Adjustment Layer" or "Layer| New Fill Layer" from the Menu Bar, and then select the type of adjustment layer or fill layer you want to create from the side menu that appears. The following list shows the effects of applying the various types of fill layers and adjustment layers in Photoshop Elements.

Layer Property:	Effect:
Solid Color	Lets you select a solid fill color to apply to the layer.
Gradient	Lets you select or create a gradient to apply to the layer.
Pattern	Lets you select or create a pattern to apply to the layer.
Levels	Lets you adjust the tonal values in an image.
Brightness/Contrast	Lets you set values for the image brightness and contrast to lighten or darken the image.
Hue/Saturation	Let you select which colors to edit, and specify new values for the Hue, Saturation, and Lightness settings.
Gradient Map	Allows you to select a gradient and set the gradient options that map pixels to the color in the selected gradient.
Photo Filter	Allows you to apply different photographic filters to an image that adjust the color balance and color temperature.
Invert	Inverts the colors within an image, based on the brightness values, to create a photographic negative.
Threshold	Allows you to set a threshold level for the image to render the image in monochrome with no gray so you can locate the lightest and

Posterize

number of colors.

darkest areas in the image.

Allows you to apply a flat, poster-like effect to an image by reducing

the number of brightness levels in the image, thus reducing the

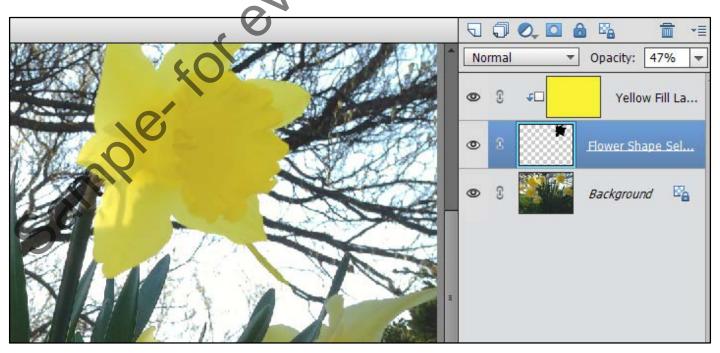
12.18- Creating Clipping Groups:

A clipping group is a grouped set of two or more layers in which the content within the bottom layer acts as a mask for the content in the layers above it. For example, you may have a base (bottom) layer which contains a shape, a layer above that which contains an image, and a layer above that which contains text. If you define the layers as a clipping group, you can then have the image and text appear only within the area defined by the underlying shape. In essence, the bottom layer will "clip" the content of the layers above it. The top layers also take on the opacity settings of the bottom layer.

It is important to note that only layers that are adjacent to one another within the Layers panel can be included in a clipping group. The order of the layers within the Layers panel is also very important. In a clipping group, the name of the base layer is underlined, and the thumbnail for the overlying layer appears indented. The top layers will also show the clipping group icon, which is a picture of a layer with a small bent arrow pointing downward.

To create a clipping group, place the layers into the appropriate order using the Layers panel. You can only create a clipping group between two adjacent layers at a time. Select the top layer in the group within the Layers panel. Then select "Layer| Create Clipping Mask" from the Menu Bar to create a clipping group between the selected layer and the layer below it. To add more layers to the clipping group, select either the layer above the current clipping group or the bottom layer of the existing clipping group, and then select "Layer| Create Clipping Mask" from the Menu Bar again to add either the layer above or below the clipping group. However, remember that the content of the bottommost layer acts as the clipping mask for all of the layers above it, so be sure you have that layer as the bottommost layer within the group.

To undo a clipping group by releasing the top layers from the bottom layer, select the layer directly above the bottommost layer within a clipping group and then select "Layer| Release Clipping Mask" from the Menu Bar. This dissolves the entire clipping group created by the layers in the Layers panel. To only remove the topmost layer in a multi-layer clipping group, instead, select the topmost layer in the clipping group. Then choose "Layer| Release Clipping Mask" from the Menu Bar. After selecting this command from the Menu Bar, any layers above, and including, the selected layer will be released from the clipping group.



12.19- Layer Masks:

When you add an adjustment layer or a fill layer to an image, note that the layers are added along with a linked "layer mask." The layer mask appears to the right of the fill or adjustment layer within the Layers panel. A "chain link" icon appears between the layer and the layer mask to let you know that they are linked together.

A layer mask determines where the content within the linked layer should appear. A layer mask acts in much the same way a clipping group works, by forcing the content of the linked layer into a selected area within the layer mask. Photoshop Elements lets you add and delete layer masks to and from selected layers to choose where the effects or elements within the associated layer appear.

Layer masks restrict a linked layer to only displaying in areas selected **before** the layer mask is applied. Therefore, when applying a fill layer or an adjustment layer to an image, the easiest way to choose where the fill effect or adjustment effect is applied is to select the area to which you want to apply the fill effect or adjustment before creating the fill layer or adjustment layer. However, you can also edit the layer mask after it is applied to change the area of application for the linked layer.

To select the area to which a fill layer or adjustment layer will be applied, use the selection tools to select the desired area within the image. Then select the desired fill layer or adjustment layer to apply while the selection is active. The fill layer or adjustment layer will then only be applied to the selected area in a layer mask. If you examine the linked layer mask for the fill or adjustment layer, you can see the area within which the linked layer effect is shown appears white. Areas where the linked effect is not shown appear black. You can use your painting tools to edit the layer mask to change the areas of effect.

To edit a layer mask using the painting tools, select your desired painting tool, like the "Brush Tool," in the Toolbox. Then decide which color to use for the brush. If you select "White," you will paint the areas where you **want** the linked layer's effect to appear. If you select "Black," you will paint the areas where you **do not want** the linked layer's effect to appear. After choosing your desired color, click the layer mask that you want to paint within the Layers panel to select it. Then click and drag with your painting tool to add or remove areas of effect within the layer mask.

You can also use the ability to make selections, as well as add and remove layer masks, to change the layer masks. This can be useful for adding shapes to an existing layer mask, for example. First, create the selections to add to the existing layer mask.

For example, you could use the "Custom Shape Tool" to add an easily selectable shape within a new layer and then use the "Magic Wand Tool" to select the shape in the new layer. Then delete the layer that contains the shape from the image. With the new selection you made active onscreen, right-click the existing layer mask in the Layers panel and then choose the "Add Mask to Selection" command to add the content in the existing layer mask to your existing selection. At that point, you should have the new areas to which you want to apply a new layer mask selected within the image.

Once you have the areas to which you want to apply a new layer mask selected, you must simply delete the existing layer mask and apply a new layer mask. To do this, select the layer mask thumbnail to delete in the Layers panel. Then select "Layer | Layer Mask | Delete" from the Menu Bar to delete the layer mask. To then apply a new layer mask, which will only appear within the currently selected areas onscreen, click the "Add layer mask" button in the toolbar at the top of the Layers panel. You can repeat this process, as needed, to edit layer masks by using the selection tools.

You can also disable layer masks to hide their display. To do this, select the layer mask to disable and then choose "Layer Layer Mask| Disable" from the Menu Bar. To enable its display again, choose "Layer Mask| Enable" from the Menu Bar. Alternatively, hold down the "Shift" key and click a layer mask in the Layers panel to both disable and enable a layer mask.

ABOUT LAYERS AND THE LAYERS PANEL:

- 1. All content within an image is stored in layers in Photoshop Elements.
- 2. Where there is no content in a layer, it is transparent.
- 3. You can stack several layers on top of one another to separate the individual elements of an image file.
- 4. When you create a new image file in Elements that has a white or colored background, the bottommost layer is called the background layer.
- 5. An image file can only have one background layer at most.
- 6. You cannot change the placement of the background layer in the layer stack, its opacity, or its blending mode. However, you can convert this layer into a normal layer.
- 7. When you create a new image with a transparent background, it does not have a background layer.
- 8. To open and close the Layers panel, select "Window| Layers" from the Menu Bar.

LAYER TYPES:

- 1. An image layer, often called simply a "layer," is the most basic type of layer. You can create layers using images themselves or you can create a blank layer and then place an image onto it.
- 2. Adjustment layers are layers used to correct contrast and color in an underlying image. Adjustment layers create a layer mask that lays on top of the layer.
- 3. To create a new adjustment layer, click the "Create new fill or adjustment layer" button in the toolbar at the top of the Layers panel.
- 4. Choose your preferred adjustment from the drop-down menu and make your changes in the panel that appears.
- 5. Close the panel when finished.
- 6. To add a layer mask directly to a selected layer, click the "Add Layer Mask" icon.
- 7. Fill layers let you add a layer with a solid color, pattern or gradient. Creating a fill layer also creates a layer mask, like an adjustment layer does.
- 8. To create a fill layer, click the "Create new fill or adjustment layer" icon the Layers panel.
- 9. Choose a solid color, gradient, or pattern from the drop-down menu, make your changes, and click the "OK" button.
- 10. Shape layers are layers where you have created a vector-based shape.
- **11. To create a shape layer,** select any of the shape tools in the Toolbox and then click and drag within the image file to draw a shape.
- 12. If you have a blank image layer selected, then the shape will be placed into the layer. If not, a new shape layer will be created automatically.
- 13. Type layers are created by adding type, or text, to your image.
- **14. To create a type layer,** click into an image after selecting a type tool from the Toolbox and start to type.
- 15. If you have a blank image layer selected, the text will appear in the layer. If not, then when you click the "Commit" button that appears, you will create a new type layer.

CREATING NEW LAYERS:

- 1. To create a new blank layer, click the "Create a new layer" button in the Layers panel or select "Layer New Layer..." from the Menu Bar.
- If you choose the former option, it instantly creates a new layer with a default name in the Layers panel.
- **3.** If you choose the latter option, it launches the "New Layer" dialog box.
- 4. In this dialog box, type the name for the new layer into the "Name:" text box.
- 5. If you check the "Use Previous Layer to Create a Clipping Mask" checkbox, you will create a "Clipping Group," in which a group of layers is constrained to the boundaries of a base layer.
- 6. To apply a color-coding to the new layer that appears in the Layers panel to help you organize your layers, select a color from the "Color" drop-down.
- 7. Set the desired blending mode for the layer by using the "Mode" drop-down.
- 8. Use the "Opacity" drop-down slider to set the layer's opacity percentage level.
- 9. If you selected a color mode from the "Mode" drop-down that lets you fill the layer with a color-mode-neutral color and want to do that, check the "Fill with (color mode)-neutral color (name of color)" checkbox, where (color mode) is the name of the color mode and (name of color) is the name of the color used to fill the layer.
- 10. To create the layer when finished, click the "OK" button to add the layer to the Layers panel.

CONVERTING A BACKGROUND LAYER:

- 1. To convert the "Background" layer of an image into a normal layer, select the "Background" layer in the Layers panel.
- 2. Select "Layer| New| Layer from Background..." from the Menu Bar.
- 3. In the "New Layer" dialog box, name the layer and set the additional layer options you want.
- 4. Click the "OK" button.
- **5. To convert a normal layer into a background layer**, select the layer to set as the background layer in the Layers panel.
- 6. Select "Layer| New| Background from Layer..." to convert the selected layer into a background layer.

SELECTING LAYERS:

1. To select a layer, click the layer within the Layers panel you want to select.

HIDING AND SHOWING LAYERS:

- 1. To toggle a selected layer or layer group's visibility on or off, click the "eye" icon at the left end of the layer or layer group.
- 2. To hide all other layers except for the layer upon which you click, hold down the "Alt" key on your keyboard, and then click the "eye" icon of the layer you want to view. All the other layers will have their visibility turned off.
- **3.** To restore the visibility of the other layers again, hold down the "Alt" key on your keyboard and then click the same layer's "eye" icon again.

DUPLICATING LAYERS:

- 1. To create a duplicate layer, click and drag the layer in the Layers panel and drop it on top of the "Create a new layer" button in the Layers panel.
- Alternatively, select "Layer| Duplicate Layer..." from the Menu Bar to open the "Duplicate Layer" dialog box.
- 3. Type a name for the duplicate layer into the "As" text box and then use the "Document" drop-down to select into which of the opened image files you want to copy the duplicate layer.
- 4. Click the "OK" button to duplicate the selected layer in the Layers panel.

STACKING LAYERS AND ORDERING LAYERS:

- 1. By default, newer layers are stacked on top of the older layers.
- 2. To change the order of layers in a stack, click and drag the layers up or down within the Layers panel.
- 3. The bottommost layers are shown at the bottom of the Layers panel, increasing in order through the stack, up to the topmost layer.

LINKING LAYERS:

- 1. **To link layers**, select the layers to link in the Layers panel and then click the "Link Layers" button next to one of the layer's names in the Layers panel.
- 2. To unlink a linked layer, click the "Link" icon again for the layer you want to unlink from the others.

GROUPING LAYERS:

- 1. To create a new layer group above the currently selected layer or layer group in the Layers panel, click the "Create a new group" button in the toolbar at the top of the Layers panel.
- **2. To rename the layer group**, double-click the layer group name in the Layers panel or select "Layer Rename Group..." from the Menu Bar when the layer group is selected in the Layers panel.
- 3. Then type a name for the layer group and press the "Enter" key on your keyboard or click the layer group icon to set the new name.
- 4. To add layers to a layer group, click and drag a layer onto the layer group name in the Layers panel.
- 5. Alternatively, to create a new group from selected layers, select existing layers within the layers panel and then either click the "Create a group" button in the toolbar at the top of the Layers panel or select "Layer Group Layers" from the Menu Bar.
- 6. Layers in a layer group appear indented under the layer group icon in the Layers panel.
- 7. To both collapse and expand the layers in the group after adding layers to a layer group, click the arrow shown to the left of the panel group icon in the Layers panel.
- **8.** To remove a layer from a layer group, click and drag the layer within the layer group above the layer group icon in the Layers panel and then release it.
- 9. To ungroup all the layers in a layer group, select the layer group icon in the Layers panel and select "Layer| Ungroup Layers" from the Menu Bar. (cont'd.)

GROUPING LAYERS- (CONT'D.):

- **10. To delete a layer group or both the group and its layers**, click the layer group icon to select it and then click the "Delete layer" button in the Layers panel or select "Layer| Delete Group" from the Menu Bar to open a confirmation dialog box with three button choices.
- 11. To delete the group and its contents, click the "Group and Contents" button.
- 12. To only delete the layer group but leave its contents intact, click the "Group Only" button, instead.
- **13. To cancel the deletion of the layer group**, click the "Cancel" button.

COLOR-CODING LAYERS:

- 1. To assign a color tag to the layer that appears in the Layers panel if creating a new layer in the "New Layer" dialog box, use the "Color" drop-down to select a color choice.
- 2. To change the color of a layer or remove its color-coding after creating the layer, right-click the layer to color-code within the Layers panel.
- 3. Then click the color-coding to apply to the layer from the choices shown at the bottom of the pop-up menu.
- 4. To remove color-coding from the layer you right-clicked, select the "No Color" choice.

MOVING LAYER CONTENT WITH THE MOVE TOOL

- 1. Select the layer from the Layers panel that contains the content you want to move.
- 2. Click the "Move Tool" button in the Toolbox
- 3. Click and drag the content of the layer with your mouse to move it in the layer.

LOCKING PIXELS IN A LAYER:

- 1. Select the layer from the Layers panel that contains the pixels you want to lock.
- 2. To lock all of the pixels in the layer to prevent all changes, click the "Lock all pixels" button in the toolbar at the top of the Layers panel.
- **3.** To only lock the transparent pixels in the layer, click the "Lock transparent pixels" button in the toolbar at the top of the Layers panel.
- **4.** To unlock the locked pixels within a layer, click the same "Lock" button that you originally used to lock the pixels in the layer once again

RENAMING LAYERS AND DELETING LAYERS:

- 1. To rename a layer, double-click the name of the layer to rename within the Layers panel.
- 2. Then type a new name for the layer into the layer name text box shown for the layer in the Layers panel and press the "Enter" key on your keyboard to set the new name.
- 3. To delete a layer you have created, select the layer to delete within the Layers panel and then click the "Delete layer" button, which looks like a "trash can" icon, in the upper-right corner of the Layers panel.
 (cont'd.)

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ACTIONS-LAYERS

RENAMING LAYERS AND DELETING LAYERS- (CONT'D.):

- 4. Note that you cannot delete layers that have all of the pixels locked within the Layers panel unless you first remove the associated pixel lock from the layer by selecting it and then clicking the "Lock all pixels" button again to remove the lock from the layer.
- 5. After you click the "Delete layer" button, you will need to confirm that you want to delete the selected layers by clicking either "Yes" to delete the layers or "No" to cancel in a pop-up message box that
- **6.** To delete layers without being prompted by the dialog box, click and drag the layer to delete from the Layers panel onto the "Trash Can" icon to delete the layers without triggering a prompt.
- 7. Note that the "History" panel can undo mistakes that can occur if you delete the wrong layer by accident.

MERGING LAYERS AND FLATTENING LAYERS:

- 1. To merge layers, select the layers that you wish to merge in the Layers panel and then select "Layer Merge Layers" from the Menu Bar.
- 2. To merge all visible layers in the Layers panel, first show or hide all of the layers, as needed, in the Layers panel.
- 3. Then select "Layer| Merge Visible" from the Menu Bar.
- **4. To merge only linked layers together**, select one of the linked layers and choose "Layer| Merge Linked" from the Menu Bar.
- 5. To flatten an image, select "Layer| Flatten Image" from the Menu Bar.

LAYER STYLES:

- 1. To apply a layer style, select the layer to which you want to apply a layer style within the Layers panel.
- 2. To open the "Styles" panel, select "Window| Styles" from the Menu Bar.
- 3. Alternatively, if using the "Basic Workspace," you can also open this panel by clicking the "Styles" button towards the right end of the Taskbar.
- 4. Use the "Select a type" drop-down at the top of this panel to select a category of layer styles to show within this panel.
- 5. Click a layer style to apply from the choices shown within the panel to apply it.
- **6. Alternatively, to apply a layer style**, select the layer to which you want to apply a layer style within the "Layers" panel.
- 7. Select "Layer Layer Style Settings..." from the Menu Bar to open the "Style Settings" dialog box.
- 8. Check the styles you want to apply and adjust the settings for each style within the sections shown in this dialog box.
- 9. Then press "Enter" on your keyboard or click the "OK" button to apply the layer style.
- **10. After applying a layer style to a selected layer**, an "fx" icon appears to the right of the layer's name in the Layers panel to indicate that the layer has a style applied.
- 11. To view and change the individual settings of a layer style within the "Style Settings" dialog box, double-click the "fx" icon.
- 12. Use this dialog box to edit the settings of an applied layer style and then click the "OK" button or press the "Enter" key on your keyboard to apply the changed settings. (cont'd.)

LAYER STYLES- (CONT'D.):

- **13. To delete a selected layer's layer style**, choose "Layer| Layer Style| Clear Layer Style" from the Menu Bar.
- **14. To copy and paste a layer style onto other layers**, select the layer with the layer style to copy and select "Layer Style| Copy Layer Style" from the Menu Bar.
- 15. Then select the layer onto which you want to paste the layer style and choose "Layer Style| Paste Layer Style" from the Menu Bar.
- **16. To hide the display of all layer styles in an image**, select "Layer Layer Style Hide All Effects" from the Menu Bar.
- 17. To reveal any hidden styles, select "Layer Layer Style| Show All Effects" from the Menu Bar.
- **18. To scale a layer style**, select "Layer| Layer Style| Scale Effects" from the Menu Bar, enter a value between 1 and 1,000 percent, and then click the "OK" button.

ADJUSTMENT LAYERS AND FILL LAYERS:

- 1. To create a new adjustment layer or new fill layer, click the "Create New Fill or Adjustment Layer" button in the toolbar at the top of the Layers panel and then choose the layer type you want to create from the drop-down menu that appears.
- 2. Alternatively, select "Layer| New Adjustment Layer" or "Layer| New Fill Layer" from the Menu Bar.
- 3. Then select the type of adjustment layer or fill layer you want to create from the side menu that appears.

CREATING CLIPPING GROUPS:

- 1. Place the layers into the appropriate order by using the Layers panel.
- 2. Note that you can only create a clipping group between two adjacent layers at a time.
- 3. To create a clipping group between two adjacent layers, select the top layer in the group within the Layers panel.
- 4. Select "Layer| Create Clipping Mask" from the Menu Bar to a create a clipping group between the selected layer and the layer below it.
- **5.** To add more layers to the clipping group, select either the layer above the current clipping group or the bottom layer of the existing clipping group, and then select "Layer| Create Clipping Mask" from the Menu Bar again to add either the layer above or below the clipping group.
- 6. Remember that the content of the bottommost layer acts as the clipping mask for all of the layers above it, so be sure that you have that layer as the bottommost layer within the group.
- 7. To undo a clipping group by releasing the top layers from the bottom layer, select the layer directly above the bottommost layer within a clipping group and then select "Layer| Release Clipping Mask" from the Menu Bar.
- 8. To only remove the topmost layer in a multi-layer clipping group, instead, select the topmost layer in the clipping group and then choose "Layer Release Clipping Mask" from the Menu Bar.
- 9. After selecting this command from the Menu Bar, any layers above, and including, the selected layer will be released from the clipping group.

USING LAYER MASKS:

- 1. To select the area to which a fill layer or adjustment layer will be applied, use the selection tools to select the desired area within the image.
- 2. To apply the fill layer or adjustment layer only to the selected area, select the desired fill layer or adjustment layer to apply while the selection is still active onscreen.
- 3. The fill layer or adjustment layer is only applied to the selected area in a layer mask.
- 4. If you examine the linked layer mask for the fill or adjustment layer, you can see the area within which the linked layer effect is shown appears white. Areas where the linked effect is not shown appear black.
- 5. To edit a layer mask by using the painting tools, select your desired painting tool in the Toolbox and, if needed, the Tool Option Bar.
- 6. Decide which color to use for the brush. If you select "White," you will paint the areas where you want the linked layer's effect to appear. If you select "Black," then you will paint the areas where you do not want the linked layer's effect to appear.
- 7. Click the layer mask that you want to paint within the Layers panel to select it.
- 8. Click and drag with your painting tool to add or remove areas of effect within the layer mask.
- 9. To change a layer mask by making selections and adding and removing layer masks, create the selections you want to add to an existing layer mask.
- **10. To add the content in the existing layer mask to your existing selection**, right-click the existing layer mask in the Layers panel and then choose the "Add Mask to Selection" command.
- 11. Select the layer mask thumbnail to delete within the Layers panel.
- 12. To delete the layer mask, select "Layer Layer Mask Delete" from the Menu Bar.
- **13. To apply a new layer mask that only appears within the currently selected areas onscreen**, click the "Add layer mask" button in the toolbar at the top of the Layers panel.
- 14. To edit layer masks by using the selection tools, repeat steps 9 through 13, as needed,..
- **15. To disable layer masks to hide their display**, select the layer mask to disable and then choose "Layer Mask| Disable" from the Menu Bar.
- 16. To enable its display again, choose "Layer Layer Mask Enable" from the Menu Bar.
- 17. Alternatively, to both disable and enable a layer mask, hold down the "Shift" key and click a layer mask in the Layers panel.

EXERCISES-Layers

Purpose:

1. To be able to use layers in an image file.

Exercises:

- 1. Open your Elements application.
- 2. Create a new document of whatever size your prefer with a white background.
- 3. Make sure that you can view the Layers panel.
- 4. Use the "Elliptical Marquee Tool" to make a marquee selection in the Background Layer.
- 5. Select a desired foreground color and press "Alt" + "Delete" on your keyboard to fill it with the foreground color choice.
- 6. Select "Layer| New| Layer..." from the Menu Bar.
- 7. Click "OK" to create the new layer.
- 8. Use the "Elliptical Marquee Tool" to make a marquee selection in the new layer. Try to slightly overlap your original selection.
- 9. Select a new foreground color and press "Alt" + "Delete" on your keyboard to fill it with the new foreground color choice.
- 10. Select "Layer| New| Layer..." from the Menu Bar.
- 11. Click "OK" to create the new layer.
- 12. Use the "Elliptical Marquee Tool" to make a marquee selection in the new layer. Try to slightly overlap your original selection.
- 13. Select a new foreground color and press "Alt" + "Delete" on your keyboard to fill it with the new foreground color choice.
- Click into the layer to deselect your selection.
- 15. In the Layers panel, click and drag the "Layer 1" layer (the first layer) above the "Layer 2" layer (the second layer) and release it. You will note that the content of the first layer is now visible over the content of the second layer in places where they overlap.
- 16. Click the "eye" icon at the left end of the "Background Layer" to hide it.
- 17. Click the "eye" icon at the left end of the "Background Layer" to show it.
- 18. Click the "Layer 2" layer in the Layers panel to select it.
- 19. Select the "Move Tool" from the Toolbox.
- 20. Click and drag the oval shape in "Layer 2" to a new location and release it.
- 21. Click the "Layer 1" layer in the Layers panel to select it.
- 22. Select "Layer Duplicate Layer..." from the Menu Bar.
- 23. Click "OK" in the "Duplicate Layer" dialog box.
- 24. Click and drag the "Layer 1 copy" layer from the Layers panel onto the "Delete layer" (trash can icon) button in the toolbar at the top of the Layers panel to delete the duplicate layer.
- 25. Select "Layer| Flatten Image" from the Menu Bar to flatten and rasterize the image.
- 26. Click the "Create a new layer" button in the Layers panel to create a new layer.
- 27. In the new layer, use the "Elliptical Marquee Tool" to make a selection that overlaps the original one.
- 28. Select a new foreground color, and then press "Alt" + "Delete" on your keyboard to fill-in the selection.
- 29. Select the new layer in the Layers panel and use the "Blending mode" drop-down in the upper-left corner of the panel to select a different layer blending mode. Experiment with this to familiarize yourself with the layer blending mode effects.
- 30. Close the image file. You can save your work if you wish, but it isn't required.