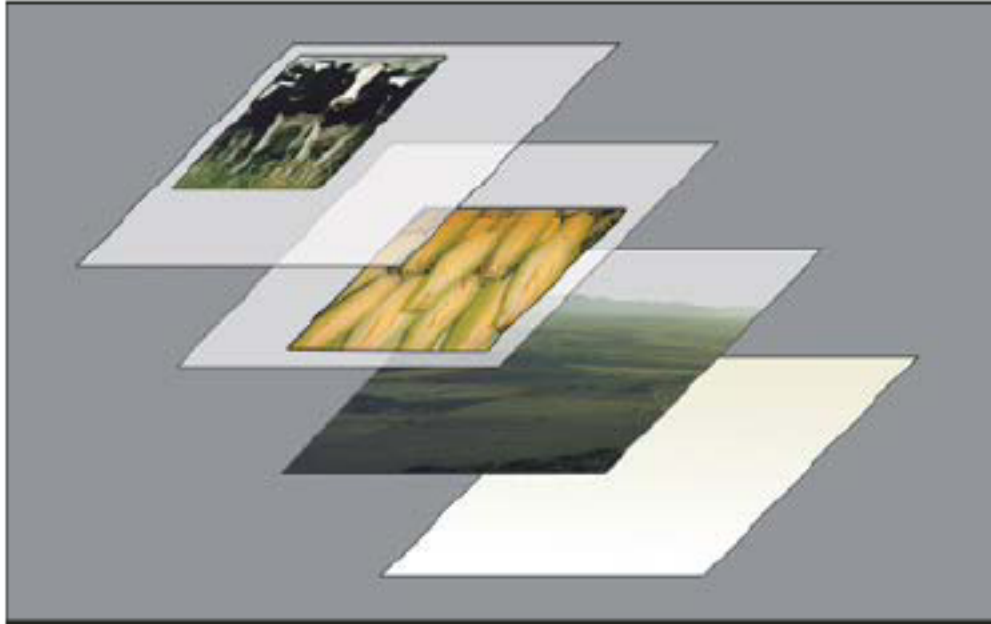


# Photoshop—Layers

With Alice Keeney

Photoshop layers are like sheets of stacked acetate. You can see through transparent areas of a layer to the layers below. You move a layer to position the content on the layer, like sliding a sheet of acetate in a stack. You can also change the opacity of a layer to make content partially transparent.



Transparent areas on a layer let you see layers below.

You use layers to perform tasks such as compositing multiple images, adding text to an image, or adding vector graphic shapes. You can apply a layer style to add a special effect such as a drop shadow or a glow.

## **Organizing layers**

A new image has a single layer. The number of additional layers, layer effects, and layer sets you can add to an image is limited only by your computer's memory. You work with layers in the Layers panel. *Layer groups* help you organize and manage layers. You can use groups to arrange your layers in a logical order and to reduce clutter in the Layers panel. You can nest groups within other groups. You can also use groups to apply attributes and masks to multiple layers simultaneously.



## **Layers for non-destructive editing**

Sometimes layers don't contain any apparent content. For example, an *adjustment* layer holds color or tonal adjustments that affect the layers below it. Rather than edit image pixels directly, you can edit an adjustment layer and leave the underlying pixels unchanged.

A special type of layer, called a *Smart Object*, contains one or more layers of content. You can transform (scale, skew, or reshape) a Smart Object without directly editing image pixels. Or, you can edit the Smart Object as a separate image even after placing it in a Photoshop image. Smart Objects can also contain smart filter effects, which allow you to apply filters non-destructively to images so that you can later tweak or remove the filter effect. See [Nondestructive editing](#).

## BASICS OF LAYERS

### Create a new layer or group

1. Do one of the following:
  - To create a new layer or group using default options, click the Create a New Layer button  or New Group button  in the Layers panel.
  - Choose Layer > New > Layer or choose Layer > New > Group.
  - Choose New Layer or New Group from the Layers panel menu.
  - Alt-click (Windows) or Option-click (Mac OS) the Create a New Layer button or New Group button in the Layers panel to display the New Layer dialog box and set layer options.
  - Ctrl-click (Windows) or Command-click (Mac OS) the Create a New Layer button or New Group button in the Layers panel to add a layer below the currently selected layer.

2. Set layer options, and click OK:

Name

Specifies a name for the layer or group.

Use Previous Layer to Create Clipping Mask

This option is not available for groups. (See [Mask layers with clipping masks.](#))

Color

Assigns a color to the layer or group in the Layers panel.

Mode

Specifies a blending mode for the layer or group. (See [About blending modes.](#))

Opacity

Specifies an opacity level for the layer or group.

Fill With Mode-Neutral Color

Fills the layer with a preset, neutral color.

Note: To add currently selected layers to a new group, choose Layer > Group Layers, or Shift-click the New Group button at the bottom of the Layers Panel.

### Create a new layer with effects from another layer

1. Select the existing layer in the Layers panel.
2. Drag the layer to the Create a New Layer button at the bottom of the Layers panel. The newly created layer contains all the effects of the existing one.


### Convert a selection into a new layer

1. Make a selection.
  2. Do one of the following:
    - Choose Layer > New > Layer Via Copy to copy the selection into a new layer.
    - Choose Layer > New > Layer Via Cut to cut the selection and paste it into a new layer.
- Note: You must rasterize Smart Objects or shape layers to enable these commands.


You can duplicate layers within an image or into another or a new image.

### Duplicate a layer or group within an image

1. Select a layer or group in the Layers panel.
2. Do one of the following:

- Drag the layer or group to the Create a New Layer button .
- Choose Duplicate Layer or Duplicate Group from the Layers menu or the Layers panel menu. Enter a name for the layer or group, and click OK.

### Duplicate a layer or group between images




1. Open the source and destination images.
2. From the Layers panel of the source image, select one or more layers or a layer group.
3. Do one of the following:
  - Drag the layer or group from the Layers panel to the destination image.
  - Select the Move tool , and drag from the source image to the destination image. The duplicate layer or group appears above the active layer in the Layers panel of the destination image. Shift-drag to move the image content to the same location it occupied in the source image (if the source and destination images have the same pixel dimensions) or to the center of the document window (if the source and destination images have different pixel dimensions).
  - Choose Duplicate Layer or Duplicate Group from the Layers menu or the Layers panel menu. Choose the destination document from the Document pop-up menu, and click OK.
  - Choose Select > All to select all the pixels on the layer, and choose Edit > Copy. Then choose Edit > Paste in the destination image. (This method copies only pixels, excluding layer properties such as blending mode.)

### Create a new document from a layer or group

1. Select a layer or group from the Layers panel.
2. Choose Duplicate Layer or Duplicate Group from the Layers menu or the Layers panel menu.
3. Choose New from the Document pop-up menu, and click OK.

### Show or hide a layer, group, or style

Do one of the following in the Layers panel:

- Click the eye icon  next to a layer, group, or layer effect to hide its content in the document window. Click in the column again to redisplay the content. To view the eye icon for styles and effects, click the Reveal Effects In panel icon .
- Choose Show Layers or Hide Layers from the Layers menu.
- Alt-click (Windows) or Option-click (Mac OS) an eye icon  to display only the contents of that layer or group. Photoshop remembers the visibility states of all layers before hiding them. If you don't change the visibility of any other layer, Alt-clicking (Windows) or Option-clicking (Mac OS) the same eye icon restores the original visibility settings.
- Drag through the eye column to change the visibility of multiple items in the Layers panel.

Note: Only visible layers are printed.

### Specify opacity for a layer or group

A layer's opacity determines to what degree it obscures or reveals the layer beneath it. A layer with 1% opacity appears nearly transparent, whereas one with 100% opacity appears completely opaque.

Note: You cannot change the opacity of a background layer or a locked layer. You can, however, convert a background layer into a regular layer, which does support transparency. See [Convert background and layers](#).

1. Select a layer or group in the Layers panel.
2. Do one of the following:
  - o In the Layers panel, enter a value in the Opacity text box or drag the Opacity pop-up slider.
  - o Choose Layer > Layer Style > Blending Options. Enter a value in the Opacity text box or drag the Opacity pop-up slider.
  - o Type a number indicating the percentage of opacity.

Note: To view blending options for a text layer, choose Layer > Layer Style > Blending Options, or choose Blending Options from the Add A Layer Style icon *fx* at the bottom of the Layers panel menu.

## UNDERSTANDING LAYERS

This post on **Understanding Layers in Photoshop** has been submitted by Jodi Friedman of [MCP Actions](http://www.mcpactions.com). MCP Actions offers customized one on one photoshop training, photoshop actions, and photo editing for photographers. To see more Photoshop tips and tutorials visit her blog at <http://www.mcpactions.com/blog>.

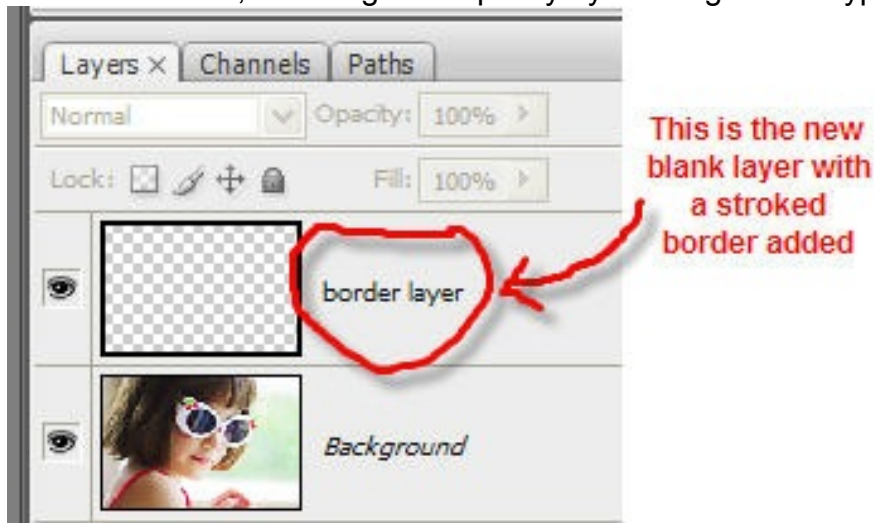
One of the most important keys to learning and mastering photoshop is using layers. Why work on layers at all?

- They do not destroy your original photo.
- You are working on top of or on copies of that photo.
- You will have more control.
- You can use blending modes to change the way layers interact.
- You can change the opacity of any effects.
- You will have or can add layer masks so that you can work selectively on your photo with any adjustments you make.

There are a number of types of layers that I will discuss today.

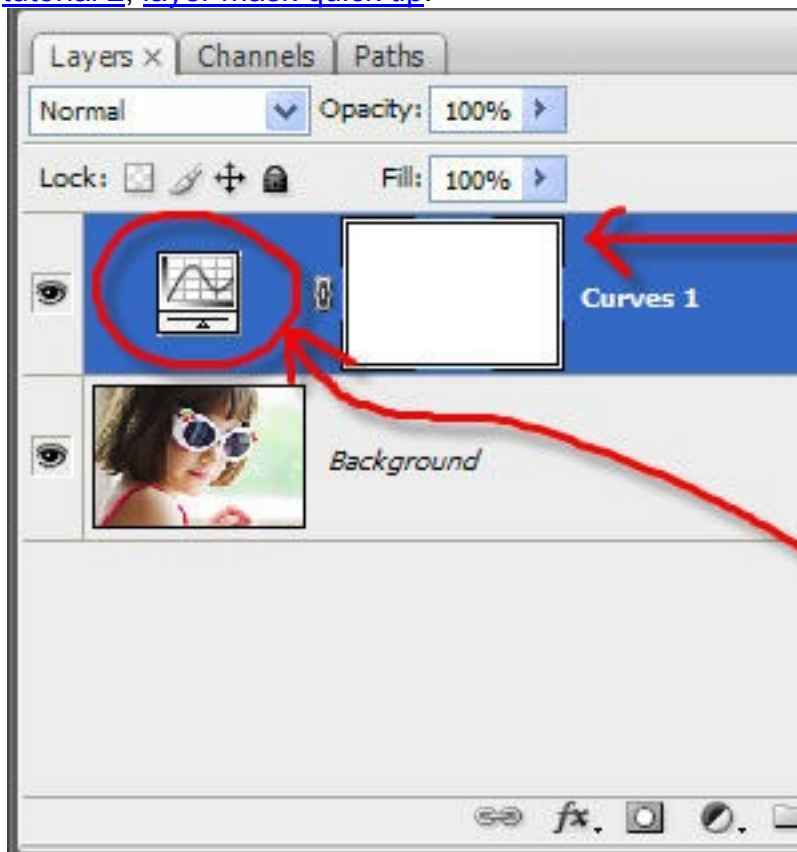
### New Layer:

(SHIFT, CTRL or CMD, and “N”) or under LAYER – NEW LAYER: This will create a blank transparent layer. This is useful when you want to add or change something on a photo and pixels are not needed. For example, adding a border. If you make a new blank layer, and then add a border by doing SELECT – ALL. Then EDIT – STROKE. You can turn the layer on or off by toggling the eye ball, add a layer style such as a bevel or emboss, or change the opacity by working on this type of layer.



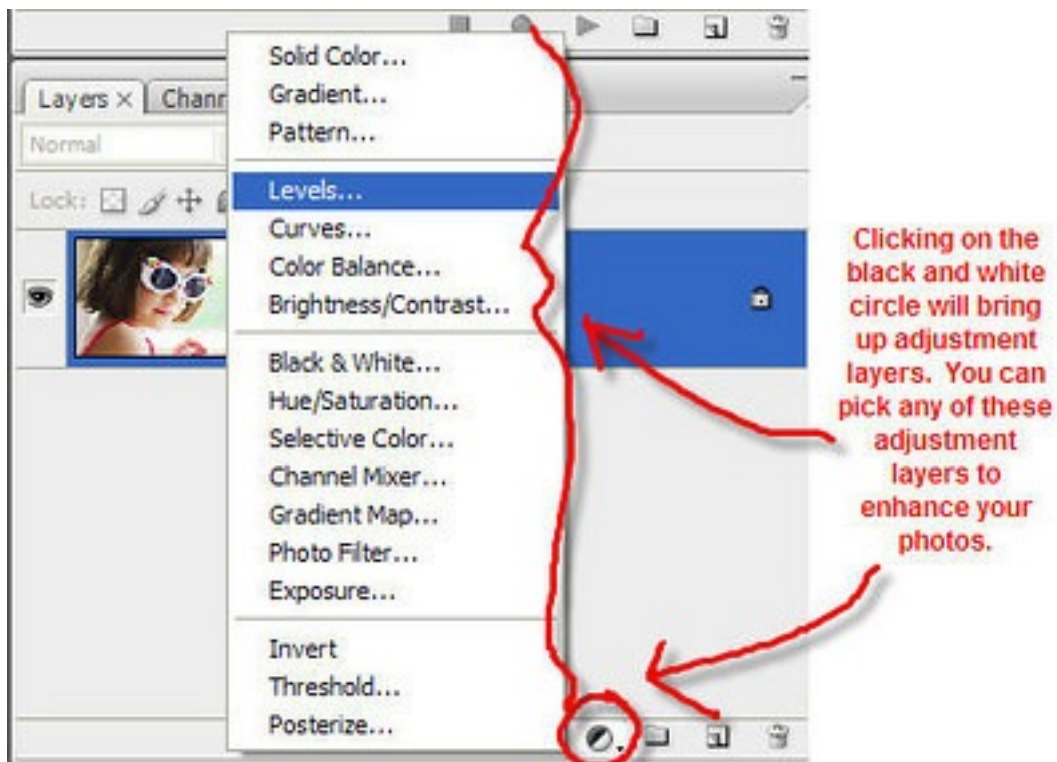
## Adjustment Layer:

Using the black and white circle in the layers palette or going under LAYER – NEW ADJUSTMENT LAYER – and then whichever adjustment you want: This will create a transparent layer where you can make direct changes to your photograph without effecting your original in any way. This is how I edit every photo. Any levels, curves, hue/saturation layer, channel mixer layer, etc that I do, I use an adjustment layer. Why? The way adjustment layers work is you make the changes on a transparent layer. They change the appearance of pixels underneath without actually touching or destroying anything. So they are NON-DESTRUCTIVE. Another BIG reason to use adjustment layers is that you can go back and edit these layers even after you are onto new layers, by double clicking the adjustment layer icon of any layer. You can stack these layers and they accumulate. They do not cover each other up. They work together. And most importantly, they have layer masks. Layer masks allow you to selectively effect a photo. Here are three links to tutorials on layer masking: [layer masking tutorial 1](#), [layer mask tutorial 2](#), [layer mask quick tip](#).



Here is a layer mask. This mask can be used to apply the adjustment layer selectively (so in this case we would be able to have the curves adjustment effect part of the photo, but not all of it, if desired.)

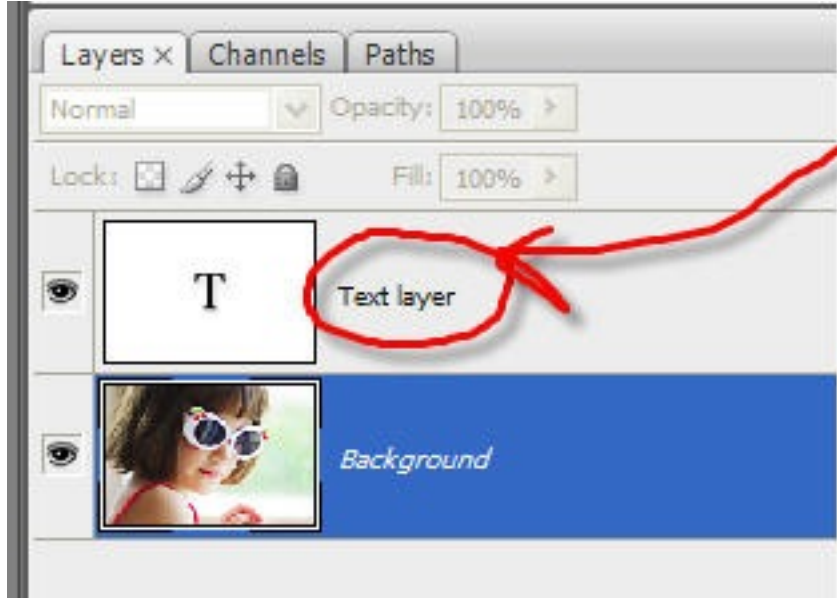
Here is the adjustment layer. This example shows a curves adjustment layer.



Clicking on the black and white circle will bring up adjustment layers. You can pick any of these adjustment layers to enhance your photos.

**Text Layer:**

Press letter “T” on your keyboard or the “T” symbol in the tool bar to bring up the text tool. When you do this, it automatically puts your text on a new text layer. You can adjust the font, color, size, and shape of the text. This works similarly to an adjustment layer in that you can go back and edit it even after doing other layers, as long as you do not flatten.

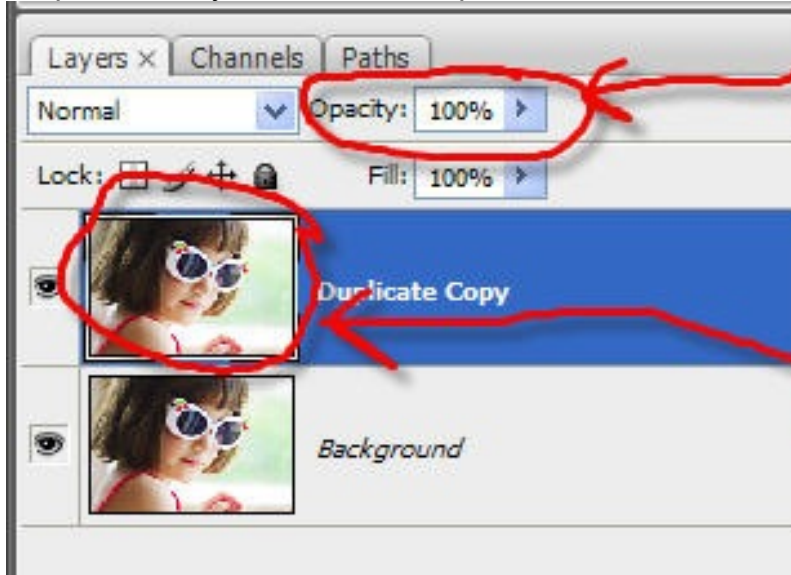


This is a text layer. Color, font, size and direction can all be changed. This layer works on top of whatever is below it. If you have a duplicate layer on top of it, it will be hidden underneath it.

**Duplicate Layer:**

(CTRL or CMD and “J”) or under LAYER – DUPLICATE LAYER: This will create a duplicate copy of whatever layer you are on. If you are on an adjustment layer, it will copy that layer and double the effect. If you are on the “Background” layer, it will copy that layer. Think of duplicate layers like a photocopy. These can be useful in certain situations. When you duplicate a pixel layer (such as the background), remember than it

will cover up anything under it, unless certain blending modes are used. As a result, I use these sparingly. Duplicate layers are most useful when I run a defog (which clarifies the photo), for sharpening, for working on skin such as wrinkles or acne, or when using the clone tool. Many of these adjustments (but not all) can be done on a New Layer versus Duplicate. If they can be done on a New Layer, that is preferable. For a tool like the patch tool, you will need the pixels there and will need a Duplicate Layer.



With any layer, other than the locked background layer, you can change the opacity to decrease or increase the effect to taste.

This is a duplicate copy. Note how it is like a photocopy of the original.

This concludes my “Understanding Layers” tutorial. I hope you learned a lot and that you start working more on layers and less on your original when editing in Photoshop.

Read more: <http://www.digital-photography-school.com/understanding-layers-in-photoshop#ixzz1FsRhyaHV>

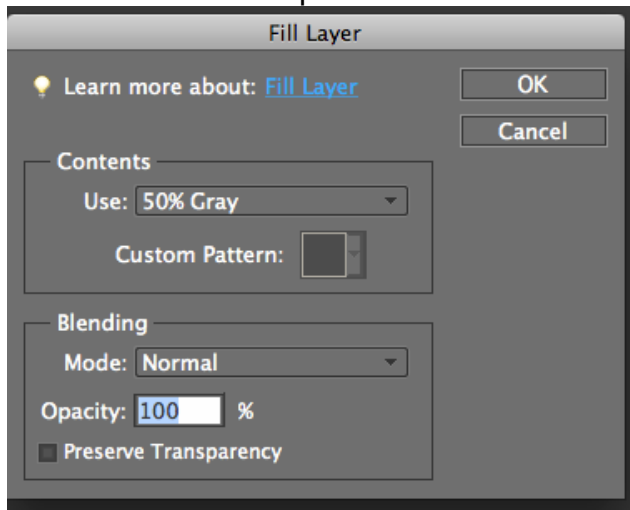
### **Dodging and Burning without Degrading the Quality of the Image:**

Open your image.

Create a new empty Layer.

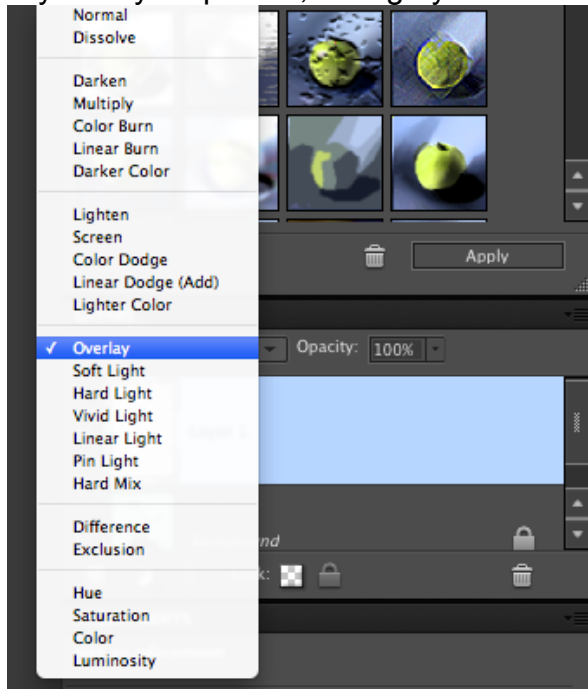
Go to Edit—Fill Layer.

A New Window will open.



Choose 50% Gray. Click OK.

In your layers palette, change your blend mode to OVERLAY.



Your image will reappear.

Select your Brush tool. Make sure you foreground and background are set to black and white.

To darken an area of your image, have black set as your foreground color. Paint over the area you would like to darken. To lessen the intensity, change the opacity of your brush in your options bar. To lighten an area of your image, change your foreground color to white. Again, to lessen or increase the intensity of the effect, alter the opacity of the brush in the options bar.

### Specify a blending mode for a layer or group

A layer's blending mode determines how its pixels blend with underlying pixels in the image. You can create a variety of special effects using blending modes.

By default, the blending mode of a layer group is Pass Through, which means that the group has no blending properties of its own. When you choose a different blending mode for a group, you effectively change the order in which the image components are put together. All of the layers in the group are put together first. The composite group is then treated as a single image and blended with the rest of the image using the selected blending mode. Thus, if you choose a blending mode other than Pass Through for the group, none of the adjustment layers or layer blending modes inside the group will apply to layers outside the group.

Note: There is no Clear blending mode for layers. In addition, the Color Dodge, Color Burn, Darken, Lighten, Difference, and Exclusion modes are unavailable for Lab images. Layer blending modes available for 32-bit files are Normal, Dissolve, Darken, Multiply, Linear Dodge (Add), Color Darken, Lighten, Color Lighten, Difference, Hue, Saturation, Color, and Luminosity.

1. Select a layer or group from the Layers panel.
2. Choose a blending mode:



- From the Layers panel, choose an option from the Blend Mode pop-up menu.
- Choose Layer > Layer Style > Blending Options, and then choose an option from the Blend Mode pop-up menu.

For a video on using blending modes, see [www.adobe.com/go/vid0012](http://www.adobe.com/go/vid0012).

### About adjustment and fill layers

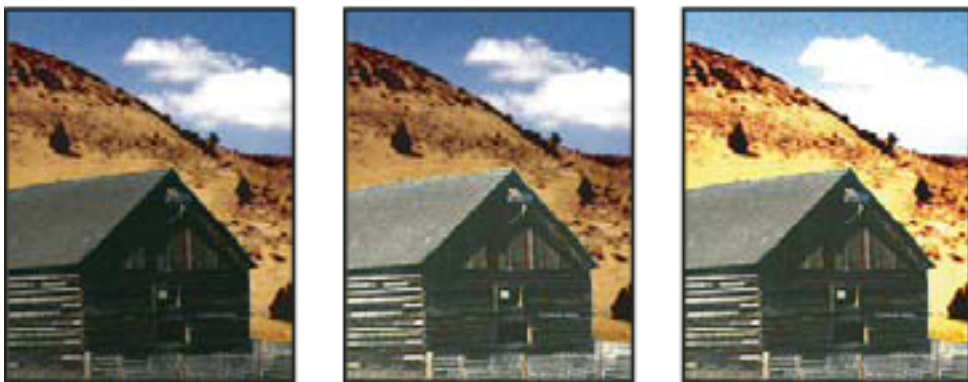
An adjustment layer applies color and tonal adjustments to your image without permanently changing pixel values. For example, rather than making a Levels or Curves adjustment directly to your image, you can create a Levels or Curves adjustment layer. The color and tonal adjustments are stored in the adjustment layer and apply to all the layers below it; you can correct multiple layers by making a single adjustment, rather than adjusting each layer separately. You can discard your changes and restore the original image at any time.

Fill layers let you fill a layer with a solid color, a gradient, or a pattern. Unlike adjustment layers, fill layers do not affect the layers underneath them.


Adjustment layers provide the following advantages:

- Nondestructive edits. You can try different settings and re-edit the adjustment layer at any time. You can also reduce the effect of the adjustment by lowering the opacity of the layer.
- Selective editing. Paint on the adjustment layer's image mask to apply an adjustment to part of an image. Later you can control which parts of the image are adjusted by re-editing the layer mask. You can vary the adjustment by painting on the mask with different tones of gray.
- Ability to apply adjustments to multiple images. Copy and paste adjustment layers between images to apply the same color and tonal adjustments.

Adjustment layers have many of the same characteristics as other layers. You can adjust their opacity and blending mode, and you can group them to apply the adjustment to specific layers. Likewise, you can turn their visibility on and off to apply or preview the effect.




Original (left); adjustment layer applied to barn only (center), which brings out detail in the barn; and adjustment layer applied to entire image (right), which lightens the entire image and pixelates the clouds

 Because adjustment layers contain adjustment data rather than pixels, they increase file size far less than standard pixel layers. If you are working with an unusually large file, however, you may want to reduce file size by merging adjustment layers into pixel layers.

## Create an adjustment layer

For information on specific adjustment layer options, see [Color and tonal adjustments](#).

Do one of the following:


- Click an adjustment icon or select an adjustment preset in the Adjustments panel.
- Click the New Adjustment Layer button  at the bottom of the Layers panel, and choose an adjustment layer type.
- Choose Layer > New Adjustment Layer, and choose an option. Name the layer, set layer options, and click OK.



To confine the effects of an adjustment layer to specific image layers, select the image layers, choose Layer > New > Group From Layers, and change the Mode from Pass Through to any other blending mode. Then place the adjustment layer at the top of the layer group.

## Create a fill layer

❖ Do one of the following:

- Choose Layer > New Fill Layer, and choose an option. Name the layer, set layer options, and click OK.
- Click the New Adjustment Layer button  at the bottom of the Layers panel, and choose a fill layer type.

Solid Color

Fills the adjustment layer with the current foreground color. Use the Color Picker to select a different a fill color.

Gradient

Click the gradient to display the Gradient Editor, or click the inverted arrow and choose a gradient from the pop-up panel. Set additional options if desired. Style specifies the shape of the gradient. Angle specifies the angle at which the gradient is applied. Scale changes the size of the gradient. Reverse flips the orientation of the gradient. Dither reduces banding by applying dithering to the gradient. Align With Layer uses the bounding box of the layer to calculate the gradient fill. You can drag in the image window to move the center of the gradient.

Pattern

Click the pattern, and choose a pattern from the pop-up panel. Click Scale, and enter a value or drag the slider. Click Snap To Origin to make the origin of the pattern the same as the origin of the document. Select Link With Layer if you want the pattern to move along with the layer as the layer moves. When Link With Layer is selected, you can drag in the image to position the pattern while the Pattern Fill dialog box is open.

## Merge Down versus Flattening an Image

Merge: Take two or more layers and make them into one layer. If you started with three layers and merged two, you would end up with two layers (the two merged layers become one and the unmerged layer would be the second).

Flatten: Take all layers and make them into one layer. If you started with three layers, you would end up with one layer.

The key to remember is either way you cannot unmerge/unflatten the layers once the file has been saved and closed. If the file is still open, you can use the Undo command to bring the layers back. If you save a file as a JPG, to post on the web or send through e-mail, the file will flatten. Many users will keep their files in PSD or TIF format to retain the layers (in case of future editing) and create a JPG **copy** when they need to send the image.

## **SELECTIONS-Taking Part of One Image to Another**

Once you have made a selection, you can do various things with it. First, lets bring one part of an image to another using the Quick Selection tool.

1. Click on the Quick Selection tool. Then start painting over the area you wish to select. If you start to select an area you hoped not to select, hold down your alt key and click on that area again. It should deselect.
2. Once you have your entire area selected, go to EDIT—copy, or hit CTRL+C.
3. Activate the image that you wish to copy your selection to. Go to EDIT—paste, or hit CTRL+V. A new layer should have been formed with your selection.
4. You will notice there is still a bounding box around your selection. If you click and drag on the corner of the box, you will be allowed to resize or transform your selection.
5. Once you like how your image looks, hit the enter/return button to accept the changes. You will now have two layers on your palette.
  - a. To import part of another image, simply repeat steps 1-5.
6. If you now have multiple layers on your palette, you can drag and drop them to change the order, and dictate which layer is on top of the other.