

## EXERCISE

This exercise will cover basic correction techniques using the same Levels, Curves and Variations.

### Adjust contrast using Levels

One of the most common corrections you'll make is ensuring that an image has adequate contrast—a range of values that extend from dark to light. For this purpose, the Levels command is superior to using Brightness/Contrast because of the control it offers.

1. In Photoshop, choose File>Open and then open dragonfly.jpg. This image looks slightly gray and lacking in contrast because it does not have a wide range of values. The darkest black in the background is actually a shade of dark gray and the highlights in the dragonfly's wings are a shade of light gray.

2. Choose The Levels option in the Adjustments palette or choose Image>Adjustments>Levels.

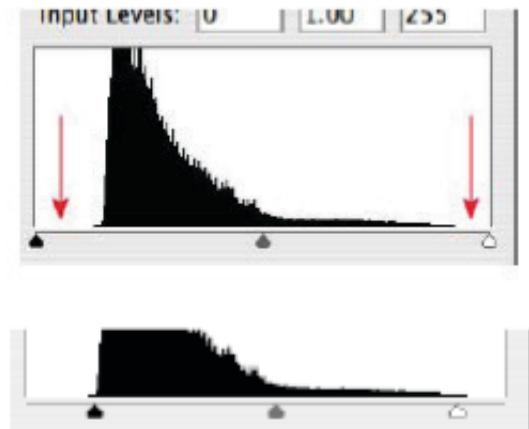
The chart in the dialog box is called a histogram and represents the image's dark, medium and light values from left to right. The fact that the histogram is tall at the left side indicates that the image has a lot of dark values. The histogram of an image with a lot of light values would be tall on the right side. There is no one proper shape for a histogram. However, a good image does have a wide range of values that extend from the darkest dark to the lightest light. This histogram shows that this image does not contain any extremely dark or extremely light pixels (in the picture to the right, note that there are no pixels by the red arrows). This is why the photo looks slightly gray, lacking in contrast.



3. Drag the black and white sliders under the histogram to match the following—

This tells Photoshop to expand the tonal range of the photo. The contrast should now look much better. This is one of most common and important adjustments you can make to an image.

4. Adjust the gray slider to the left or right until you get the desired result then click on OK. The gray slider adjusts the gamma (overall tonality) of the image.



## Adjust contrast using Curves

The Curves command functions similarly to Levels but with a different interface. In order to use this command to stretch values, the image must contain an area of pure black and pure white that you can easily click on. For images that do not have pure black or white, use Levels as shown previously.

1. Choose File>Open and then open butterfly.jpg.

Like the dragonfly, this image does not have a wide range of values and appears gray, lacking in contrast.



2. Choose the Curves Icon in the Adjustments palette or choose Image>Adjustments>Curves.

3. In the Curves dialog, click on the black eyedropper—

4. Click on the black area behind the leaves beneath the flower—This tells Photoshop to treat that color as pure black. This is known as setting the black point.



5. Click on the white eyedropper in the Curves dialog.

6. Click on one of the white spots in the butterfly's wings. This sets the white point.

7. If the image appears too dark, drag the middle of the curve upwards—Dragging a section of the curve upwards lightens the pixels represented by that section of the curve. Dragging downwards darkens the image. This is the same as adjusting an image's gamma.

8. Click on OK. The change is applied.

## Crush blacks and whites

Crushing blacks and whites refers to the process of darkening dark areas and lightening light areas in a gradual, controlled way. This enables you to create dramatic contrast effects without clipping dark or light areas (unless you want to).

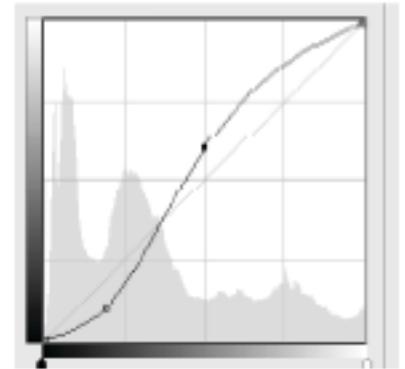
1. In Photoshop choose File>Open and then open truck.jpg

2. Choose Image>Adjustments>Curves.



3. Change the curve into a gentle “S” shape as follows—

When creating the curve, pay particular attention to the hood of the truck. Do not lighten the light areas so dramatically that the truck hood becomes completely white losing detail as in the example below left. The example on the right is better because there is still detail in the hood.



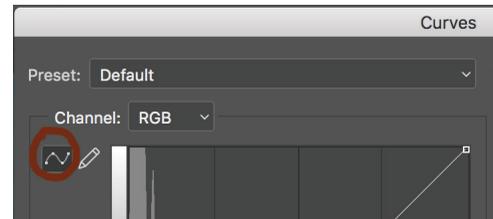
4. Click on OK.

When adjusting contrast be sure not to create unintentional highlight shapes, especially when making dramatic contrast changes. Note the adjustments made to the original image at left. In the middle photo, the contrast adjustment has created white blotchy shapes on the subject’s nose and cheek (circled in red). In general, it is better to retain gradual transitions from light to dark areas as in the image at the right.

### Balancing exposure

An important part of photography is controlling exposure—the amount of light admitted into the camera. Setting exposure is particularly difficult when the subject matter varies widely in brightness. In the landscape below, for example, the difference between the bright mountains in the background and the shadowed area in the foreground is so great that both areas cannot be properly exposed (left). The image has good contrast and has a wide range of pixels from dark to light. The problem is that the foreground is underexposed. In the image on the right, the Curves command was used to make the image’s dark values lighter, revealing detail in the foreground and creating a more balanced exposure.

1. Choose File>Open and then open mountainroad.jpg.
2. Choose Image>Adjustments>Curves.
3. Click on the Curve Icon:

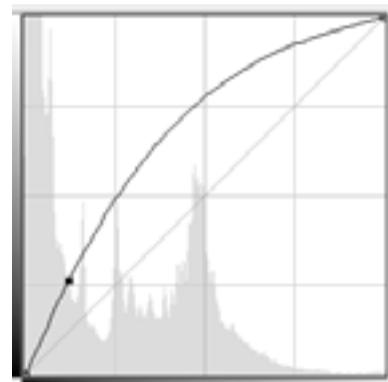


3. Click in the dark area at the bottom of the photo.

The corresponding value in the curve will be circled each time you click. By remembering this value, you know which part of the curve needs to be made lighter.

4. Drag the curve upward to match the following—

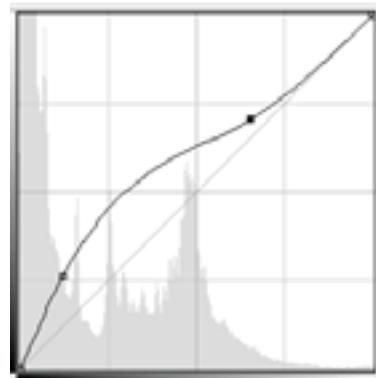
This lightens the dark pixels in the image. The effect is most pronounced in the foreground in which the road and other details at the bottom of the photo are easier to see. There is a problem, however.



Lightening the dark areas causes the entire image to become brighter. The light areas in the image need to be made darker to restore balance to the image.

5. Drag the top section of the curve downwards to make light pixels darker—

The exposure of the image is now more evenly balanced.



## Use Color Balance

In this section, we'll explore how to use the Color Balance command to tint an image.

1. In Photoshop choose File>Open and then open robot.jpg

2. Choose Image>Adjustments>Color Balance.

First, we'll make the image cooler.

3. Set Color Levels to -71, 0, +76.

This corrects toward Cyan and toward Blue. The image is now cooler. Instead of clicking on OK now, we'll try a warm correction.

4. Set Color Levels to +67, 0 -27.

This corrects toward Red and toward Yellow. The image is now warmer.

5. Click on OK.



## Colorize an image

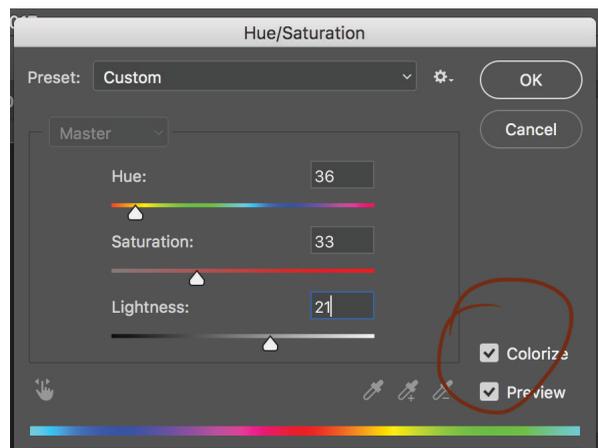
Colorizing changes the overall tonality of an image to a single color. Common uses include blue-toning or sepia-toning a photo.

1. Choose File>Open and then open flower.jpg.
2. Choose Image>Adjustments>Hue/Saturation.
3. Make sure that Colorize is checked. Type in the following numbers and then click on OK—

Hue 36

Saturation 33

Lightness +21

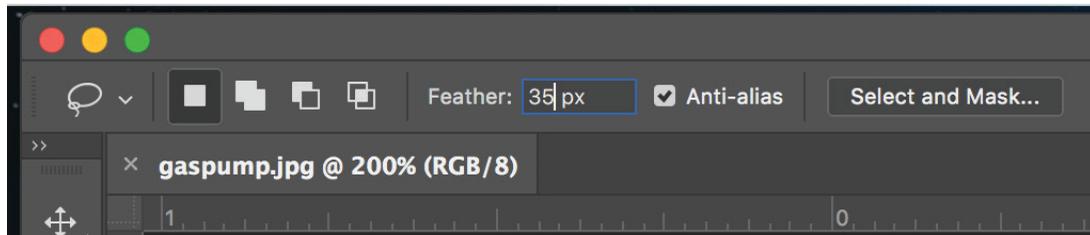


This creates a sepia-toned effect.



## Darken the edges of a photo to deemphasize them

1. Choose File>Open and then open gaspump.jpg
2. Choose the Lasso tool—
3. At the top of the screen set Feather to 35—



This will enable you to create a selection with a soft edge. The larger the feather, the softer the edge.

4. Using the lasso tool create a rough outline around the gas pump. The gas pump is now selected. The selection needs to be inverted in order to darken everything in the image except the gas pump.
5. Choose Select>Inverse.

The background is now selected.

6. Choose the Brightness Contrast icon in the Adjustments palette and change Brightness to -56. Then click on OK. Generally speaking, the idea is not to create a dramatic glowing effect as in this example, but to create a subtle change that does not look like an obvious effect.



## Deemphasize subject matter by blurring

1. Choose File>Open and then open eggs.jpg
2. Choose the Lasso tool—
3. At the top of the screen make sure Feather is set to 35—
4. Using the lasso tool create a rough outline around the diamond.
5. Choose Select>Inverse.  
The background is now selected.
6. Choose Filter>Blur>Gaussian Blur. Set Radius to 3 and then click on OK.

Two other popular blur effects are motion blur (Filter>Blur>Motion Blur) and Radial blur (Filter>Blur>Radial Blur).

Blurring a background is similar to using a camera's depth of field to direct a viewer's attention. There are several differences, however. When taking a photograph, depth of field changes according to a subject's distance from the camera. In Photoshop, however, anything can be made blurry no matter how distant it is from the camera. Further, Gaussian blur doesn't look the same as an out-of-focus camera. You won't get the beautiful blurry look—sometimes called bokeh—associated with out-of-focus areas and highlights.

