BLENDING MODES
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WHAT ARE THEY FOR?
Blending modes are most often used in conjunction with layers but can also be applied to tools that use brushes like the paint brush, clone stamp, healing brush, etc.. They are designed to alter the way two layers affect one another through more complex methods than the opacity slider can offer. Some blending modes exist to create special effects. Some are used to give us more control when using adjustment layers to correct photographs. Still others have very specific purposes that may or may not come up in your digital process.

HOW DO WE USE THEM?
There are too many specific uses for blending modes to list all of them here. In general, when looking for a specific blending effect, it is a good idea to click through a variety of blending modes to see which one gives you the desired visual effect. Remember that the opacity slider still works with blending modes so the answer to your problem may be a combination of a blending mode and the opacity slider.

Most blending modes have several uses. I have laid out the general idea behind their organization and given some specific uses for various blending modes. Keep in mind that this list is not exhaustive. It is only a guide to help familiarize you with the many creative possibilities that blending modes provide.

NORMAL	This isn't really a blending mode as much as it is no blending mode. In this mode the top layer is completely visible (at 100% opacity) with none of the lower layers affecting the way the pixels on the top layer look.
DISSOLVE	According to Adobe "the Dissolve blend mode randomly chooses colors between the current and underlying layer or object to create the blend effect. It's almost like creating noise with transparency." The purpose of this layer is to create a noisy blending of the two layers. It is most often used with graphics rather than photographic material.
DARKEN MULTIPLY COLOR BURN LINEAR BURN	This grouping creates a darkening effect between the layers. Multiply is the most commonly used of this group. Applied to a background copy above the original background it will add density to a light or overexposed image. It can also be useful when used with black paint to create shadows that show detail from the original image.
LIGHTEN SCREEN COLOR DODGE LINEAR DODGE	This grouping creates a lightening effect between the layers. Each mode here corresponds to the opposite effect in the previous grouping. Screen is the opposite of Multiply, etc.. By this token, a Screen blending mode applied to a background copy will lighten the image to compensate for a dark or underexposed image.

OVERLAY
HARD LIGHT
SOFT LIGHT
VIVID LIGHT
LINEAR LIGHT
PIN LIGHT
HARD MIX

Most of these modes increase contrast in various ways between the layers. Hard and Soft Light can be used with a paint brush on a layer filled with 50% gray as a burn and dodge technique. Black paint will darken the area while white paint lightens the area. Soft Light has a more subtle effect than Hard Light.

DIFFERENCE

The only practical use for this blending mode that I have found is to "register" two layers so they line up exactly. To see this effect, copy your background, set the blending mode to Difference and use the Move Tool to move your background copy around. If both layers are perfectly registered, the entire image will turn black. If they do not line up, colored edges will start to appear. In the unfortunate event that you need to register two layers, this blending mode can be very helpful but may also drive you crazy.

EXCLUSION

Works much like Difference but with a less dramatic effect. It also can be used to align layers but may also produce some useful special effects. Who knows?

HUE

Hue is most often used when adding color to a photographic image with a brush or a fill. It allows the photographic detail to show through and is less dramatic than using the Color blending mode. One might assume this mode is good for color correction adjustment layers but it is usually too subtle.

SATURATION

This mode is usually used with a Hue/Saturation adjustment layer which allows the intensity of the color to be affected without changing the hue or tonal value of the color.

COLOR

Color blending mode is Hue and Saturation blending modes combined. It can be used on an adjustment layer for making color adjustments without inadvertently changing contrast or density. It can also be used with the Paint Brush or Fill to color parts of an image while allowing tonal detail to show through.

LUMINOSITY

Can be used for many things but is most commonly used with an adjustment layer to affect density and contrast. Increases in contrast are generally accompanied by unwanted increases in color saturation. Using the Luminosity blending mode prevents the colors from changing as the contrast correction is made. For the same reasons, Luminosity is also used in sharpening.