Converting Digital Color Images to B&W

- When to shoot and Compostion
- Grayscale and Desaturation
- Channels Mixer
- Lab Color and Lightness Channel
- Look for inspiration

  http://www.smashingmagazine.com/2008/06/09/beautiful-black-and-white-photography/

What to look for when taking the image.

When to Shoot

- Many digital photographers actually prefer to shoot images for Black and White in low contrast situations. So an dark or overcast day can be a great time to shoot out door shots.
- Ironically these are the days that those who shoot only in color sit at home complaining about the 'poor light'. So next time you find yourself with a dark and gloomy day – shoot some black and white shots.
- High ISO

Composition

- Most of the general tips on how to compose or frame a good shot apply just as well to black and white photography as they do when shooting in color – however the main obvious difference is that you're unable to use color to lead the eye into or around your shot.
- This means you need to train yourself to look at shapes, tones and textures in your frame as points of interest. Pay particularly attention to shadows and highlights which will become a feature of your shot.

http://www.digital-photography-school.com/5-black-and-white-photography-tips

Phoenix http://www.aviary.com/tools

- Duplicate original layer and name the new layer ‘Desaturation’
  - renaming layers is even more important for this online editor to keep track of the layers purpose
  - Creating a copy of the original image allows you to try another technique if the current one didn’t work out
  - Image > Desaturation or Hue/Saturation
- Duplicate color layer and name the new layer ‘Level”
  - Image > Levels (I used levels instead of contrast since it allows for editing the midtones)
  - Move the sliders till you get more changes then you need and that will give you the opportunity to control that layer later with the alfa tool in the layers pallette (Phoenix opacity control)
- The blend mode in the layers pallette contains overlay and multiply
  - Adding another layer for the multiply gains another change to manipulate the image
  - Adding a overlay layer that is painted an aged color can give you a sepia (see http://www.aviary.com/thread?tid=543 for more detail)

Photoshop: More Controlled Desaturation

- This technique is particularly elegant because it allows you to apply any of the entire spectrum of color filters just by dragging the hue slider. This allows one to quickly assess which of the many combinations of color filters work best, without necessarily having one in mind when starting. It takes a little longer to setup than the channel mixer, but is actually faster to use once in place.
- Open the image in Photoshop and create two separate "Hue/Saturation Adjustment Layers" by following the menus: Layers > New Adjustment Layer > Hue/Saturation...
- On the top adjustment layer (Saturation), set the blending mode to "Color" and set the saturation to its minimum of "-100," shown below.
- On the bottom adjustment layer, change the "Hue" slider to apply any of the entire spectrum of color filters. This is the main control for adjusting the look from this technique.
- The saturation slider can also be adjusted in this layer, but this time it fine-tunes the magnitude of the filter effect for a given hue.

http://www.cambridgeincolour.com/tutorials/color-black-white.htm

Photoshop: Using Channels and Channel Mixer

- Filters are named after the hue of the color which they pass, not the color they block.
  http://www.cambridgeincolour.com/tutorials/color-black-white.htm
- *Take your pictures in color, as usual*. Be especially careful not to let highlight detail get overexposed. Do not blow out a channel! This is even more important for images that get converted to black and white, as you'll want significant detail in the light grays of your final image, and you don't want to limit any channel's ability to help you in that regard.
  http://bythom.com/bandw.htm
- Channel Mixer: *Image > Adjustments > Channel Mixer* in Adobe Photoshop. Be sure to first click on the lower left tick box entitled "Monochrome" for black and white conversion.
- You can get a feel for the distribution of color by first setting each of the color channels to 100% individually.
- The sum of the red, green, and blue percentages need to equal 100% in order to maintain roughly constant brightness, although overall brightness can also be adjusted by using the "Constant" slider at the bottom. If the aim is to mimic the luminosity perceived by the human eye, set: red=30%, green=59% and blue=11%.
- http://www.cambridgeincolour.com/tutorials/color-black-white.htm

Photoshop: Lab Color and Lightness Channel

- Using the lightness channel in lab mode is quick and easy because it converts based on the luminosity value from each pixel's RGB combination. Please see "Understanding Histograms: Luminosity and Color" for further reading on this topic.
- First convert the image into the LAB color space by clicking on Image > Mode > Lab Color in Photoshop.
- View the "Lightness" channel by clicking on it (as shown to the left) in the channel window. If not already open, the channel window can be accessed by clicking on Window > Channels.
- Delete both the "a" and "b" channels to leave only the lightness channel ("a" and "b" refer the red-green and blue-yellow shift, or "chrominance").
- Note that the lightness channel may subsequently require significant levels adjustments as it may not utilize the entire tonal range of the histogram.

http://www.cambridgeincolour.com/tutorials/color-black-white.htm