White Balance in Photography

Watch this video: https://www.youtube.com/watch?v=bjA0Zqs5KRY

White balance has to do with what **color** your camera perceives to be **white**. For example, have you ever taken pictures in a gym (or similar lighting) and found that everything seems to be a little yellow? Or have you ever taken pictures outside, perhaps when the sun starts to set, and found that things or people seem to look blue? This is an example of wrong white balance.

Finding the right white balance isn't really difficult, but it will take some trial and error before you find the right one. Of course, you could just set your camera to AWB (Auto White Balance) and be done with it, but sometimes...the camera just doesn't know what color white is!

So let's break it down a little. Essentially, finding the *right* white balance is all about finding the *right* color for white. There are a few settings on most DSLR cameras (and some compact cameras) for white balance. These are the settings on the Canon Rebels that I use in my classroom: AWB, Daylight, Shade, Cloudy, Tungsten, White Fluorescent, and Flash.







If you find the WB button on your camera, you should see each of these settings (again, for most DSLR cameras). When you scroll through each setting you may see it refer to a number followed by the letter K. For example, On the Daylight setting, mine says: (approx. 5200K). You see, each of these settings corresponds with a "Color Temperature" value (K). *However*, you don't really need to know what that value is, you just need to know what each setting will do.

So, let's talk about what they do and look at the examples. The names of each white balance setting give you a hint on when to use them, but let's take a look at how much they change a picture. When you use the outdoor settings (Daylight, Shade, and Cloudy) your camera will add yellow to the image. (Did you know that sunlight is actually slightly blue? That's why it's SO BRIGHT!)

When you use indoor settings (Tungsten or White fluorescent) your camera will add blue to the image. (This is because most artificial lights have a yellow tint to it.)

Refer to the above images for examples of these settings used in action! Below, I have given more specific examples on when to use each setting. The images, however, were all taken in the same lighting, Daylight.

AWB - the camera chooses the white balance (and you hope that it's right)

Daylight - to be used in FULL SUN

Shade - to be taken in shady areas, including enclosed areas outside (like a dugout)

Cloudy - to be used when the sun is hidden, but you are in a place that the sun would shine if it were out

Tungsten - to be used in extreme yellow lighting, perhaps your gym lights

White fluorescent - to be used in most indoor lighting situations

Once you practice and experience using your camera, you can get a better idea for when to use which white balance setting, but until then, I say: try them all! It won't hurt you to take a few extra pictures (that is the beautiful thing about taking pictures digitally, you almost never run out of room on those multi-gig cards!).

This Week's Photo Assignment

Take test shots in indoor lighting testing each of the white balance settings on your camera and see for yourself how much "white" can change. Then, take test shots outdoors testing each of the white balance settings on your camera.

This Week's Edublog Assignment

Write a post named "White Balance" describing what you learned about white balance in photography. Then post and label one indoor photo of each white balance setting and one outdoor photo of each white balance setting. Make sure you add their technical information.