PBS NewsHour Student Reporting Labs Tutorial Assessment: White Balancing KEY

White Balancing is the process of adjusting your camera so the colors in your image are as true as possible in a setting. Our eyes naturally adjust so that white remains white, but our cameras do not have that automatic ability.

The color temperature scale in degrees Kelvin ranges from lower heat-red to very high heat-blue. Look at the examples based on the heat produced by different light sources and notice the difference between outdoor and indoor sources.

Explain the reasons behind the statements below:

You should white balance a camera every time you change lighting conditions. The light conditions will vary for each setting and so you will need to make sure that your camera is white balanced so that the colors will be true.

The automatic white balance setting on a camera is rarely your best option to get the truest colors. When you manually white balance your camera you won’t have to worry that the camera will continually shift to attempt to get white balanced. You can be more specific with your manual white balancing, while the camera’s automatic white balance takes the room’s average.

Using the preset white balance setting on your camera can be tricky. Presets for indoor/outdoor settings can make the color look too orange or too blue depending on the preset. It’s better to just manually white balance.

Place a number beside each step in white balancing in the correct order:

__2__ Find something white and hold it up in front of the camera.
__3__ Manually set the white balance on your camera.
__1__ Set up the lighting for your location.
__4__ Zoom in all the way in with your camera on a white object so that white fills the entire screen on your camera.
Apply your knowledge of the color temperature scale to white balancing:

Which has a higher color temperature, a cloudy day or a candle, and why? The cloudy day because its light source, the sun, produces much more light than a single candle— even on a cloudy day.

Why will locations with outdoor lighting automatically have higher color temperatures than a location being shot indoors? Because of the sun. It produces a much higher color temperature than anything that you could have indoors.

Why do we have to white balance every time there is a change in the light setting? Because if we don’t our images may come out looking too blue or too orange. Further, if we shoot a story and don’t adjust for white balance then our film may look different from shot to shot.

**Bonus:**

List three objects you can easily find and use to do a white balance:

1.) A white sheet of paper

2.) A white shirt

3.) A white napkin