

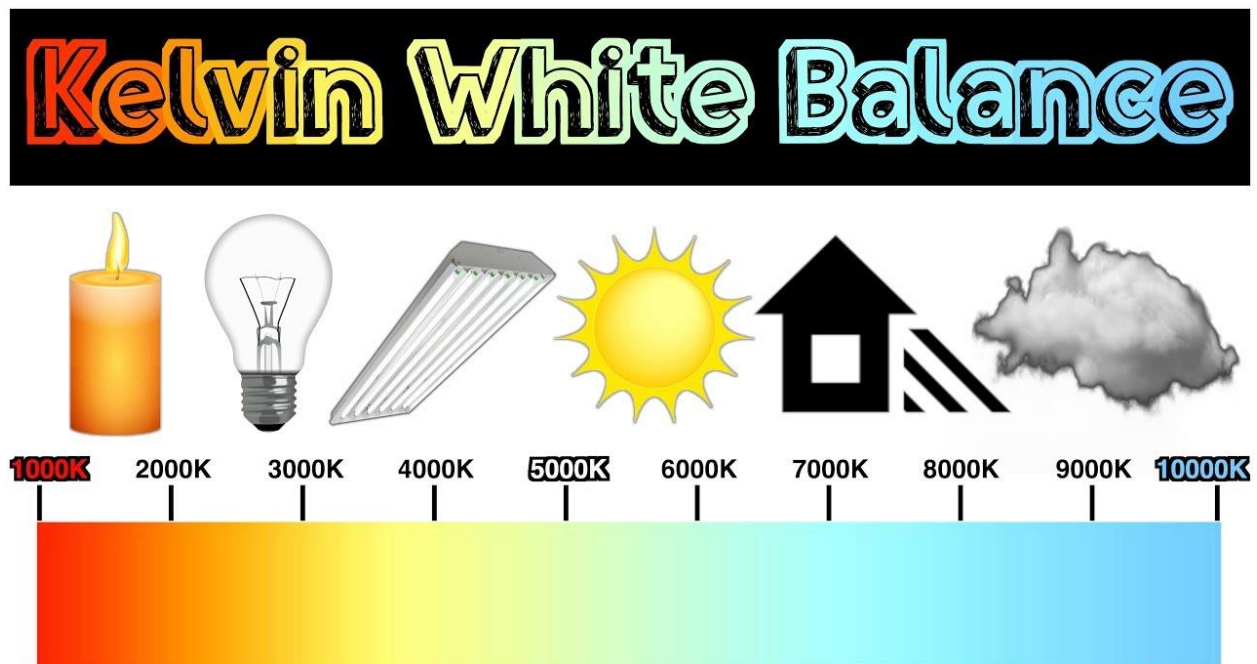
White Balance

Project

Are your digital photos orange? Does the skin of some of your subjects look the wrong colour? This project will teach you how to get accurate colour when you are shooting with a digital SLR.

First, let's understand that light is measured in kelvins (the Scottish scientist who developed the measurement was named William Thomas, or Lord Kelvin) What you need to know is that the scale goes from roughly 0 degrees to 10,000 degrees. The higher the temperature, the cooler, or bluer, the light appears. This might seem opposite of what it should be— but think of a piece of steel being heated up; it turns red first, and when it gets really hot, it turns blue, and then finally, white hot!

Look at the chart below:



This is why when you shoot in a room lit by candles, the light appears very orange. As a photographer, you need to understand that you can either set the correct white balance in your camera, or correct it later in Photoshop. If you are only shooting jpeg's, especially with unchanging lighting conditions, it is better to set the white balance in the camera.

Even cheap cameras have the ability to change their white balance. Effectively, if you set your camera white balance to the tungsten bulb setting, you are telling the camera to add blue to each pixel to counteract the overabundance of orange.

Probably the best thing to do is use the custom white balance feature. This requires that you have the camera take a picture of a known neutral grey or white object.

The camera then balances subsequent images to correct for the Kelvin imbalance.

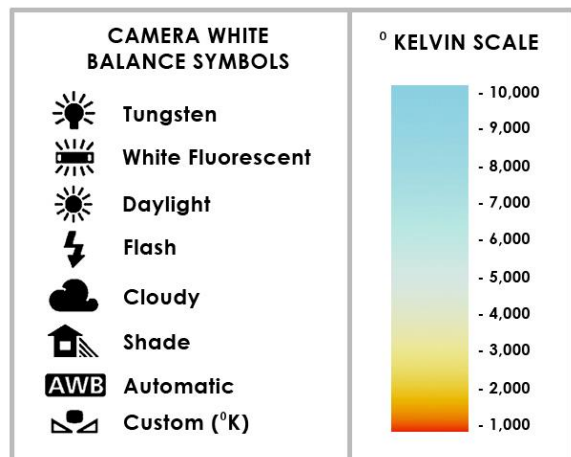
Assignment

You may work a partner

PART 1:

You will be taking 4 photos

You will not move your object—**You will only change the White Balance setting**



Set as follows, the guide for symbols is to the side, they'll appear as so in your camera:

1. White Fluorescent
2. Shade
3. Daylight
4. Tungsten
5. Manuel Custom Light Balance

For 5 Set the white balance to “Preset” (Nikon Cameras) and hold down the “WB”

button OR go into settings. When it begins to flash “pre”, take a photo of a white sheet of paper until the display flashes “good”. Now take a properly metered and exposed photo. Note that this feature is different on the lower end Nikon cameras; you will need to research how to set it. Feel free to reference the users’ manuals on the Clancy website. You can check out Ms. Gruys camera guide as well.

Afterwards put all these five pictures together in a collage or list (either on Word, Photoshop, GoogleSlides/powerpoint, etc). Underneath each photo list the white balance you used.

THEN **Answer these questions in the document/ppt:**

1. What colour, or hue, is the **White Fluorescent** photo? Why is it this colour?
2. What colour, or hue, is the **Shade** photo? Why is it this colour?
3. What colour or hue is the **Daylight** Photo?
4. What is the predominant colour, or hue, of the photo with the white balance set to **Tungsten**? Why?

5. For the pre-set photo, how close to the actual white balance of the situation did the photo turn out to be?
6. What are some advantages to using the custom white balance feature on the camera vs. correction in Photoshop?
7. Are there times when you would purposely use the incorrect white balance?

PART 2:

Now that you've played around with the white balance settings, try the pre-set vs manual mode and choose another subject or object.

1. Use **auto** white balance to take a photo.
2. Then pre-set your white balance to custom with a white piece of paper.

Once you've done this upload your pictures to the same document/powerpoint/etc as **part one** and answer these questions:

1. Was there much difference between 'auto' and your 'custom white balance'.
2. Which option do you prefer and makes your photo look better? Why? Will you use it in the future?

PART 3:

Now that you've played around with **white balance** and feel you have a good understanding of it based on the questions, intentionally find **three different subjects** and **take three creative photos** using different white balances settings of your choice. *Get creative with this!*

Add them to your document/powerpoint and label what white balance you used and why after.

Afterwards submit the assignment 😊

<p>Part 1 Submit 5 different photos</p> <p>Answered questions with integrity and thought</p>	<p><i>Fails to meet expectations</i></p>	<p><i>Approaches expectations</i></p>	<p><i>Meets expectations</i></p>	<p><i>Exceeds expectations</i></p>
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/5				
Part 2 Two photos of white vs auto. Explain the difference and what you'll use.	<i>Fails to meet expectations</i>	<i>Approaches expectations</i>	<i>Meets expectations</i>	<i>Exceeds expectations</i>
/2				
Part 3 Photos are creative Clearly demonstrate understanding of white balance	<i>Fails to meet expectations</i>	<i>Approaches expectations</i>	<i>Meets expectations</i>	<i>Exceeds expectations</i>
8				

Out of 15