

LIGHTING TABLETOP

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QUALITIES OF LIGHT

There are 6 qualities of light.

The first 3 QUALITIES OF LIGHT can be measured. They can also be manipulated after a photograph is taken. You make decisions about these 3 qualities when you take a picture, but you have an opportunity to fine-tune them later.

1. BRIGHTNESS

The brightness of a light can be controlled by the type of light, by its wattage, and by its distance from the subject.



Brightness is measured in candlefeet.

2. CONTRAST

Contrast is measured by the ratio of the highlights and shadows in a photograph. The greater the ratio, the higher the light contrast. A smaller ratio lowers the light contrast.



Shot w/one light
from the side

Shot w/fill card
about 12" away

Shot w/fill card
about 6" away

3. COLOR

Color is measured by degrees Kelvin. 2800-3400 K is a very warm red to yellow light. Household tungsten (incandescent) bulbs fall into this temperature range. 5000-6500+ K is a cooler bluish light. Daylight and studio strobes fall into this category.



Color negative films and most transparency films are balanced for daylight (5000-5500 K). Most manufacturers make a transparency film balanced for tungsten (about 3200 K).

You can use daylight film with tungsten light if you use a color correction on the camera or lights.

Higher end digital cameras have white balance settings (daylight, shade, overcast, tungsten, florescent, etc.), and they also allow you to set a custom white balance for a specific light source.

The second 3 QUALITIES OF LIGHT cannot be measured. You make decisions carefully about these 3 when you take the picture because they cannot be manipulated later.

4. SPECULAR

A specular light is an uninterrupted beam of light. It is small in size in relation to the subject. Specular light is hard light and casts hard shadows.



5. DIFFUSE

Diffuse light is opposite of specular light. Interrupting the specular beam of light with any translucent material creates diffuse light.

This light is larger than a specular light source.

The light is also softer and casts more open shadows.



6. DIRECTION



The direction of the light is very important because it shapes the subject and gives it form and dimension.

The direction of the light should be chosen to best show the subject.



If the subject has texture, side lighting will enhance that texture. If you want to minimize the texture, a more frontal light is required.

You have to decide where you want the highlight to fall.





The direction of the light illuminates the subject (positive area of your composition). It also casts a shadow (negative area of your composition).

Analyze the positive and negative areas to make sure they work together. If they do not, try changing the direction of the light so the subject and its shadow are in harmony.



TIPS

1. KEEP IT SIMPLE

It helps to have a vision in mind, but it isn't necessary. Maybe all you know in the beginning is that you have this glass or a flower that you want to photograph. At some point you have to ask yourself, "How do I want this to look in the end?"

Start off with one or three objects. Things work better in odd numbers. Arrange them the way you want. If I work with one object, I try to use the rule of thirds to position it, or I might put it dead center, but use the horizon line on a third. If I work with three objects, I usually try to get a triangular thing going. Anyway, use your compositional skills to get the set the way you want. Keep in mind that this may change as you work the light around the set.

I work in a darkened room so that my light is all that is falling on the still life. Start with one light. It may be all you will need. Experiment with the qualities of light. Do you want high or low contrast? Do you want specular or diffuse light? Do you want

to emphasize or de-emphasize details? Move the light around. Watch the play of light and shadows. If you are working digital, shoot some preliminary shots to see what you actually get in 2 dimensions.

2. THERE ARE NO RULES

Once you have established a main light source, decide if you want the deep shadows, or if you want to fill the shadows with some light. When I want to fill, I try white cards or aluminum foil first. If that doesn't give me what I like, I bring in a second light. This light is used to open up the shadows. If it casts its own shadow, it's too powerful.

A background light may be needed if you want to separate the subject from the background. In the end, the lighting is right if it produces a good photograph; hopefully, the one you had in mind.

3. BE PATIENT

This process could take less than an hour, or it could take days. Sometimes the solution eludes me. I just need to step back and think or not think for a while. I find if I give it enough time, something comes to me eventually. Sometimes if I really like the subject matter, I may shoot it several different ways just to see what I can do with it. Many times my original idea doesn't photograph as well as I had hoped, but the images I get by experimenting and pushing myself to keep at it usually produces some interesting results.

4. DIGITAL = FREE POLAROID S

I still like to shoot slides, so I use the digital camera as a testing ground for the slides I take. If something looks good digitally, I bring out my traditional camera to shoot the slides. However, I don't rely on the settings on my digital camera for exposing the slides. I still meter and bracket, and hope I get a good one.