

# Jennifer Allman | Session 3:

## Light

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**List of Required Supplies:** A camera (any camera including a phone will work), pen/pencil & paper

**Student Time Required:** 60 minutes

### Step-by-step Instructions:

- Read attached lesson
- Write down the different directions of light
- Write down the different types of light
- Take one photo of each direction of light with each type of light. For example – one photo using front natural light, one photo using front available light, one photo using front flash light, etc.
- [Use Rubric to grade student's participation](#)

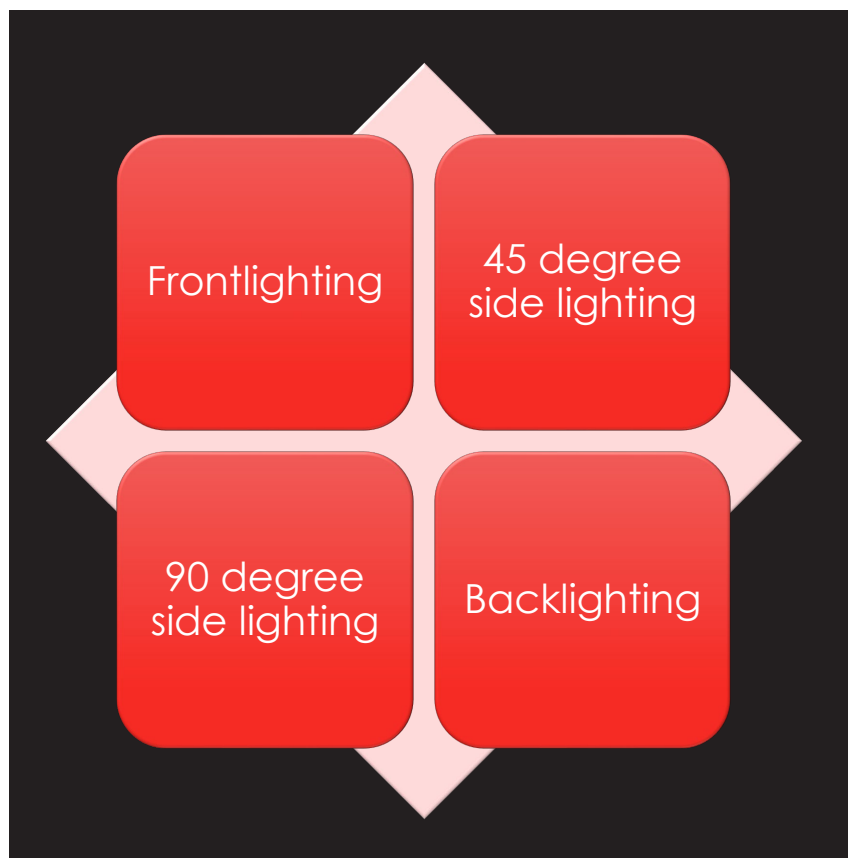
### Great Advice About Photography

*Amateur photographers worry about having the best equipment, professional photographers worry about money, but master photographers worry about light.*

## Basic Qualities of Light

- Intensity – the relative strength of light. This varies according to the output of the light source and the distance it is from your subject.
- Direction – when you just have one source, it is clearly defined. When you have multiple sources (studio lighting, or a flash) or the light is diffused (like on a cloudy day), the direction is less evident, or even absent.
- Color – light will vary in color depending on its source. Sunlight can vary by time of day and weather (clouds and shade can change the light). This is why white balance is crucial.

## 4 Basic Directions of Light



## Frontlighting

- Produces a shadowless image because all parts of the subject are hit directly with the light. (Occasionally this type of light does create visible shadows behind the object.)
- It is sometimes called flat lighting.
- The light is behind you, in front of your subject.

*Notice in the bottom picture there is a shadow due to the light being above the subject.*



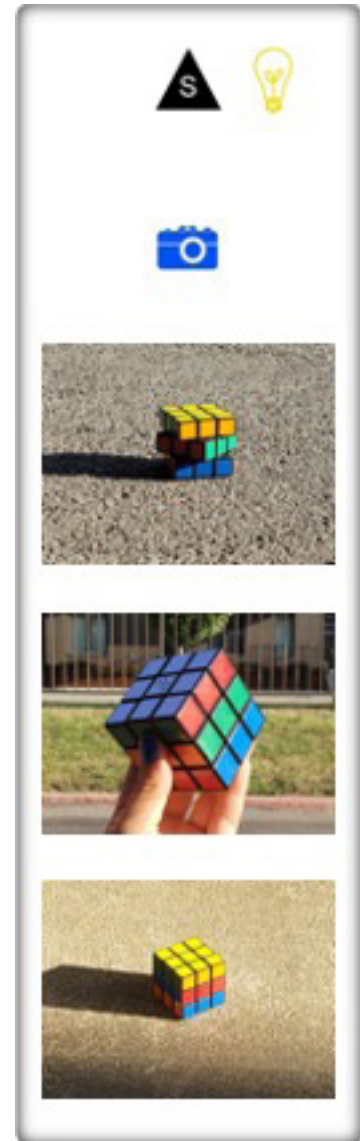
## 45 Degree Side

- Considered by most to be best portrait lighting.
- Produces a nice interplay of light and shadows.
- Brings out subtle textures & depth in your subject, without being overwhelming.
- To the side in between you and your subject.



## 90 Degree Side

- Dramatic lighting that emphasizes the contrast between light and dark
- Shadows tend to be long and powerful, producing a lot of texture.
- The light is to the side of your subject.



## Backlighting

- Can produce a theatrical effect.
- If the light is very strong and low and you expose for the light, your subject will become a black silhouette.
- If you compromise your exposure, you can produce details in the subject while still having the subject stand out against the lighter background.
- If the light is higher, you can produce a halo effect at the top of your subject.
- The light is behind you subject.





## Types of Light

- Natural light – the light we find outside, with nothing added to it.
- Available light – the light we find already in a scene (excluding outdoor sunlight). Fireplace light, light from a window, and candles are examples. No artificial light is added.
- Flash – the light we use to supplement the above types of light when we find them insufficient.



## Natural Light

- Natural light can make for some of the most vibrant and beautifully textured photos in an array of shades.
- You don't need anything besides yourself and your camera.



This photo uses 90 degree side light. Notice how the shadow is almost going completely to the side.



This photo uses backlighting. Notice how the shadows are coming to the front, and parts of the image are silhouetted.



This photo is using front light. Notice how it creates shadows, but the shadows are just behind the leaves.



This photo uses 45 degree side light. Notice how the shadow is going to the side and away from the front.

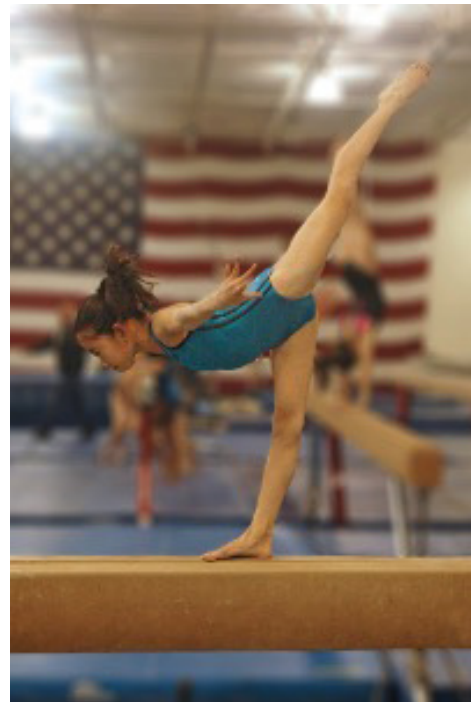


## Available Light

- Available light can be dramatic or soft, depending on the light. It tends to give a sense of realism.
- Additional equipment is not needed.



This photo is using 45 degree side light. The subject was placed so that light from a window could be used.



This photo is using front light as the main source of light, but there is light coming from above and behind the subject.



This photo is using front light. Notice how we do not see any shadows.

## Available Light



This photo is using backlight. Notice how the subject is silhouetted.



This photo is using 45 degree side light. Notice how the shadows are below and to the side of the subject.



This photo is using 90 degree side light, however it actually has two 90 degree side light sources.

## Flash

- Most cameras have a built-in flash, however higher powered flashes can be purchased and attached to your camera if that option is available for your camera.
- Can be a great tool for adding additional light to a subject.
- A slow shutter speed could produce a blurred image in your photo, depending on your subject. A flash can actually help freeze the motion. It depends on what you are photographing.



Without a flash, this image would have been a lot darker, and there would have been more of blur. As soon as a flash hits something, the camera sees the brighter light and records it.



## Flash



Without a flash. Using available light.



Using a flash brightens the background and adds light to the subject.



In the shade, a flash helps even out skin tones and reduce shadows.