Overcoming Common Lighting Challenges Tips

"Light makes photography. Embrace light. Admire it. Love it. But above all, know light. Know it for all you are worth, and you will know the key to photography." - George Eastman – Eastman Kodak founder

Harsh
- When the sun is high in the sky
- Light creates strong shadows and bright highlights

Golden Hour
- Shortly after sunrise or before sunset
- Light is soft, warm, and directional, casting long, soft shadows

Blue Hour
- Just before sunrise or just after sunset
- Light is cool and soft, with a predominantly blue hue

Overcast/Diffused Light
- Light on cloudy days when the sun is behind clouds
- Clouds act as a giant diffuser, creating soft, even light with minimal shadows

Handout Ideas – Side 1

Harsh light, typically found during midday when the sun is high in the sky, creates strong shadows and bright highlights. It's characterized by high contrast and sharp shadow lines.

Why it's good (Potential):
- Dramatic and bold: Harsh light can emphasize textures, create strong silhouettes, and add drama to a photograph.
- High contrast: This can be used creatively to simplify a scene and draw attention to specific elements.
- Good for graphic/abstract compositions: The defined lines and contrast work well for abstract or graphic images.

How to control it:
- Use a diffuser: A diffuser (like a softbox or even a thin white sheet) will soften the light, reducing the harshness of shadows.
- Use a reflector: A reflector can bounce light back into the shadows, reducing contrast and adding fill light.
- Shoot in the shade: Moving your subject to a shaded area will eliminate direct sunlight, creating a softer, more even light.
- Change your angle: Experiment with different shooting angles. Backlighting or side-lighting can create interesting effects even with harsh light.
- Shoot for silhouette: Embrace the harsh light and position your subject in front of the light source to create a strong silhouette.
- Shoot in black and white: Harsh light can look fantastic in black and white, emphasizing shapes and textures.
- Utilize Lens Flares: Intentionally allowing the sun to hit the lens can create artistic lens flares if that is the desired effect.

Golden hour is the period shortly after sunrise or before sunset when the sun is low in the sky. The light is soft, warm, and directional, casting long, soft shadows. About 45 minutes in CT.

Why it's good (Potential):
- Warm and flattering: The warm color temperature is often considered very pleasing and flattering to skin tones.
- Soft light: The low angle of the sun creates soft, diffused light that is gentle on subjects.
- Long shadows: These add depth and dimension to photographs.
- Beautiful skies: The sky often displays vibrant colors during golden hour.

How to control it:
- Time it right: Be prepared to shoot during the specific window of golden hour, which can be quite short.
- Use a reflector (optional): A reflector can help bounce warm light back onto your subject for even more glow.
- Adjust white balance (if necessary): Your camera might try to neutralize the warm tones. You can adjust the white balance to "shade" or "cloudy" to retain the warmth, or shoot in RAW and adjust later.
- Embrace the flares: If shooting into the sun, you can create beautiful lens flares by allowing the sun to partially enter the frame.
- Scout location ahead of time: Knowing where the sun will be positioned will allow you to maximize your time during the golden hour.

Handout Ideas – Side 2

Blue hour is the period just before sunrise or just after sunset when the sun is below the horizon, but there's still some indirect light. The light is cool and soft, with a predominantly blue hue.

Why it's good:
- Otherworldly and moody: Blue hour creates a calm, serene, and sometimes mysterious atmosphere.
- Soft, even light: The indirect light is very soft and flattering, with minimal shadows.
- Great for cityscapes: City lights start to pop against the deep blue sky, creating a beautiful contrast.
- Complements artificial light: The cool tones of blue hour contrast nicely with the warmer tones of artificial lights.

How to control it:
- Use a tripod: Longer exposures are often required due to the low light levels.
- Adjust white balance: To emphasize the blue tones, you can set your white balance to "tungsten" or "fluorescent" which may further bring out the blues.
- Shoot in RAW: This allows for greater flexibility in adjusting the white balance and exposure during post-processing.
- Include artificial light sources: Streetlights, building lights, and other artificial light sources can add points of interest and warmth to your blue hour photos.
- Use a Graduated Neutral Density (GND) filter: If you have a bright sky and dark foreground, a GND filter can help balance the exposure.

Overcast light occurs on cloudy days when the sun is hidden behind clouds. The clouds act as a giant diffuser, creating soft, even light with minimal shadows.

Why it's good:
- Soft and flattering: The diffused light is very gentle and flattering on subjects, minimizing harsh shadows and highlights.
- Even lighting: The light is consistent and evenly distributed, making it easy to expose for.
- Great for portraits: The soft light wraps around the subject, creating a pleasing and gentle look.
- Saturated colors: Colors can appear more saturated on overcast days because there's less glare.

How to control it:
- Use a reflector (optional): A reflector can add a subtle highlight to your subject, even on an overcast day.
- Add a pop of color: Introducing a brightly colored object can add visual interest to an otherwise muted scene.
- Focus on textures and details: The soft light is perfect for capturing fine details and textures.
- Shoot in RAW: Allows for greater flexibility to control brightness and contrast in post-processing.
- Utilize a Polarizer: It can remove some of the glare from surfaces and can help saturate colors.
- Increase ISO slightly: Depending on the amount of cloud cover, you might need to raise your ISO a bit to allow for a faster shutter speed.

Lighting Challenge Activities

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What to Notice
- Are shadows changing?
- Is it more three-dimensional?
- What is the mood of the photo?

Black absorbs light

Black on Black
Learning: How to use light and shadows to add separation and dimensions in your photos.

White on White
Learning: Controlling highlights and subtle shadows to achieve detail and depth in bright scenes.

White reflects light

Harsh for drama

Black and White
Learning: How to use camera settings when dealing with high-contrast (very dark and very bright) elements.

Modifying Light
Learning: Emphasizes that lighting is not just about illumination, but also about control and artistry.

Diffused, reflected or colored

Overcoming Common Lighting Challenges
Hands On Activities

Camera Settings for the Activities

Black on Black	Manual
White on White	ISO – 800
Black and White	Aperture – f/5.6
	Shutter Speed – start at 1/200 sec

Learning: How to use light and shadows to add separation and dimensions in your photos.

Black on Black

Activity

- Take a shot with no lights.
- Light the background only and take a shot of the whole scene.
- Light the object only and take a shot of the whole scene.
- Take various photos with the light shining from different vantage points on the object.
- Compare the photos and see what looks the best.
- Move the object closer and further away from the background as you light the scene. What changes?

White on White Activities

Take a photo with the main light source in the box. Review the photo to see if everything blends together.

Take a photo when blocking (removing) most of the light from the background. Try the same thing in reverse by blocking most of the light from the foreground items.

Take a photo where the exposure is set for the background. Use a small light source to light only foreground items.

Expose for the foreground items. Use a light source to light the background, if needed. Take a photo.

Black and White Activities

Learning: How to use camera settings when dealing with high-contrast (very dark and very bright) elements.

Take a photo that is properly exposed for the black in the photo.

Then, take a photo that is properly exposed for the white in the photo.

Find camera settings that are between the two.

Again, expose for the whites in the photo, then use a small light source to light ONLY the black portions to better expose them.

Which worked best?

Which worked best?

Learning: How to use camera settings when dealing with high-contrast (very dark and very bright) elements.

Background: Black absorbs light & white reflects light

Subjects: Same color as background or contrasting colors

Color of Light: Yellow for warmth or blue for coolness to set the mood

Angle: Experiment using different light sources and angles on the subject.

- Light Style:
- Harsh and direct for dramatic effect
- Spot lighting for emphasis
- Reflected light to fill in shadows
- Diffused light for softness