

**LEBANON CAMERA CLUB**

# Holiday Photography

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# Holiday Photography

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## Motivation

- Lots of opportunities for photography on the holidays
  - Especially Thanksgiving, Christmas, and New Year
- Conditions can be tricky
  - Impromptu snapshots lead to composition mistakes
  - Indoor lighting can be dim, but light sources can be bright
    - Exposure is challenging
    - Christmas lights get overexposed very easily
  - Lots of light sources → difficult white balance
    - Proper white balance = colors are correct
  - Cell phone automatic modes may struggle in complex cases
    - Most people rely on fully automatic operation
    - There are benefits to using manual controls

# Holiday Photography

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## Composition

- Arrangement of elements in a scene
  - Elements
    - Line → visual path that enables the eye to move within the piece
    - Shape → areas defined by edges within the piece
    - Color → hues with their various values and intensities
    - Texture → surface qualities which translate into tactile illusions
    - Value → shading used to emphasize form
    - Form → 3-D length, width, or depth
    - Space → space taken up by (positive) or in between (negative) objects
  - Does it reinforce the subject matter or theme?
- Topics
  - Common mistakes
  - Guidelines for better composition

# Holiday Photography

## Composition

- Common mistakes
  - Poorly placed background object

Note: Photographers often place their full attention on the subject → try to get in the habit of checking the background for distracting elements.



# Holiday Photography

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## Composition

- Common mistakes
  - Poorly placed background object
  - Cutting off the subject

Note: It is common to want to get in close to your subject → take note of the edges of the frame, and if possible take another shot after taking a step or two back



# Holiday Photography

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## Composition

- Common mistakes
  - Poorly placed background object
  - Cutting off the subject
  - Subject too small

Note: Not too much of an issue for indoor holiday photography, but think about the subject of the photo and make sure it is prominent.



# Holiday Photography

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## Composition

- Common mistakes
  - Poorly placed background object
  - Cutting off the subject
  - Subject too small
  - Distracting background

Note: There can be lots of distractions in holiday shots due to decorations → if you want to reduce their prominence try using a lower *f*-stop to blur them.



# Holiday Photography

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## Composition

- Common mistakes

- Poorly placed background object
- Cutting off the subject
- Subject too small
- Distracting background
- Color/brightness too similar

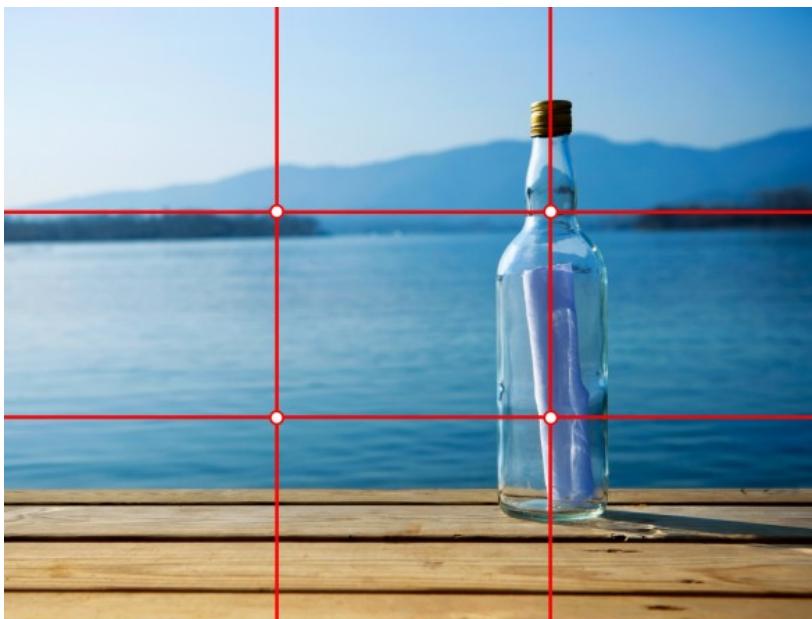
Note: Your subject may 'disappear' if it is too similar to the background → decreasing the brightness of the background can help to emphasize the subject.



# Holiday Photography

## Composition

- Guidelines
  - Rule of Thirds → place subject(s) 1/3 from the edge of the frame

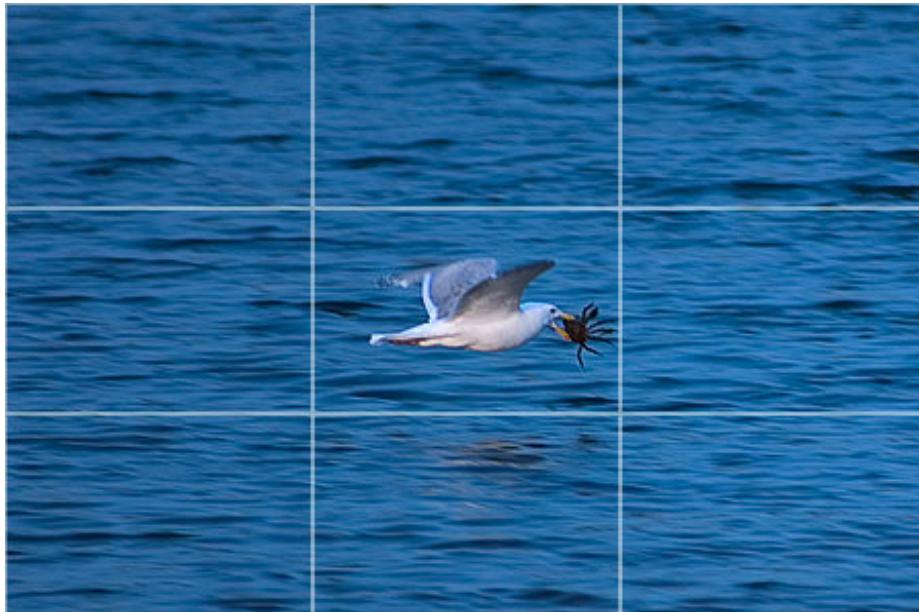


red lines are 1/3 from the edge, places where lines meet are called 'power points'

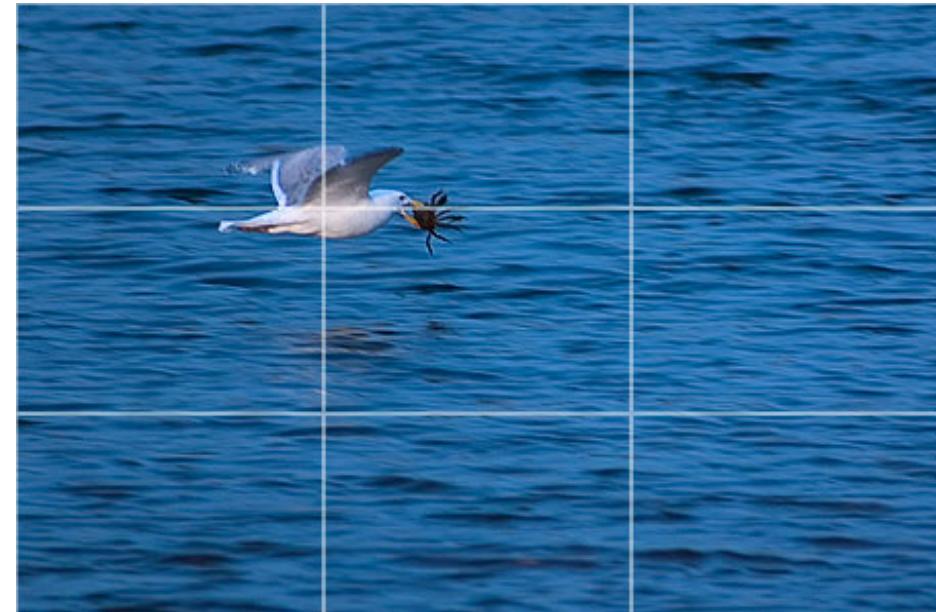
# Holiday Photography

## Composition

- Guidelines
  - Rule of Thirds → place objects 1/3 from the edge of the frame



centered composition



bird on power point adds visual interest

Note: It is common to center the subject in the frame, but the composition can be more dynamic when the Rule of Thirds is used.

# Holiday Photography

## Composition

- Guidelines
  - Rule of Thirds → place objects 1/3 from the edge of the frame
  - Lead room → extra space in direction the subject is looking/moving



subject seems to be running out of the frame



lead room gives subject room to move/look

Note: Lead room is very important for moving subjects, but it is also important for subjects that are looking or facing the edge of the image.

# Holiday Photography

## Composition

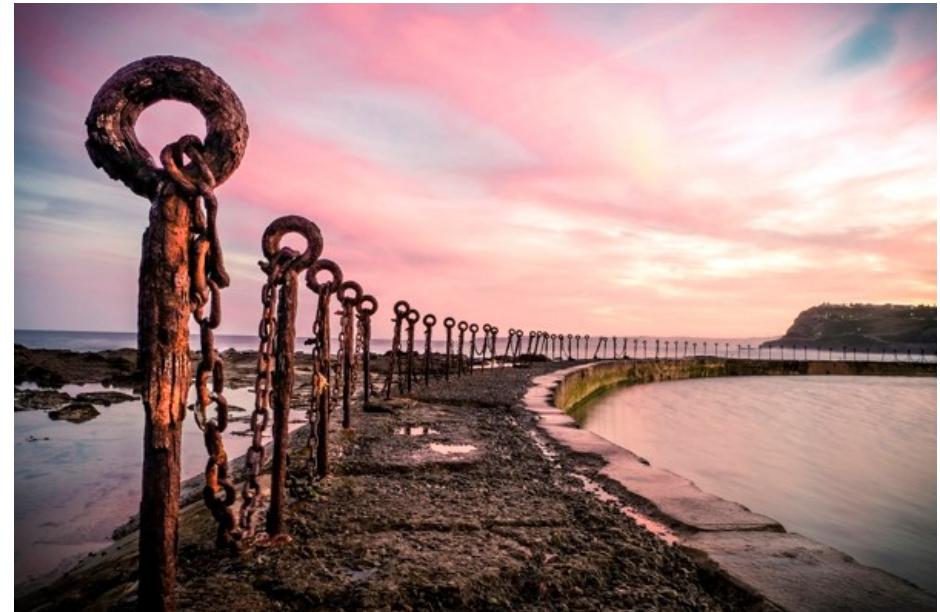
- Guidelines

- Rule of Thirds → place objects 1/3 from the edge of the frame
- Lead room → extra space in direction the subject is looking/moving
- Leading lines → lines (or groups of objects) that guide the eye



road lines guide your eye through the image

Note: Leading lines control how the viewer's eye moves through the image, essentially 'narrating' the visual journey through the photograph.



many identical objects can form leading lines

# Holiday Photography

## Exposure

Note: Cell phone cameras tend to expose for the shadows, which can lead to highlights being 'blown out' (pure white with no texture, very common with white clouds).

- Goal: capture the proper amount of light
  - Dark areas should be dark but not underexposed
  - Bright areas should be bright but not overexposed
    - May not be possible when light sources are in the frame
    - Overexposure is worse because it cannot be fixed in an image editor



underexposed (land too dark)



overexposed (clouds too bright)

# Holiday Photography

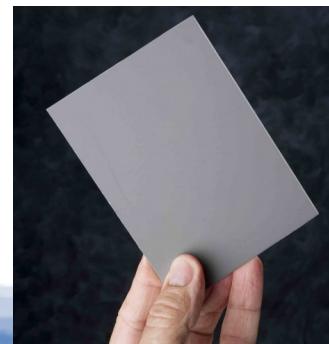
## Exposure

Note: Cell phone cameras tend to expose for the shadows, which can lead to highlights being 'blown out' (pure white with no texture, very common with white clouds).

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  - Dark areas should be dark but not underexposed
  - Bright areas should be bright but not overexposed
    - May not be possible when light sources are in the frame
    - Overexposure is worse because it cannot be fixed in an image editor
- Metering
  - The way the camera measures the light in the scene
  - Cameras meter in 'reflective' mode
    - Measure light reflecting off objects in the scene
    - Meters 'expect' an 18% gray reflectance to calculate light in scene

Note: 18% gray is also known as 'middle gray', and many image elements are close to middle gray → grass, green leaves, and a saturated blue sky. Indoor white walls are much brighter, and metering on them will result in a dark image.

gray card

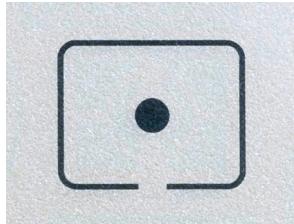


# Holiday Photography

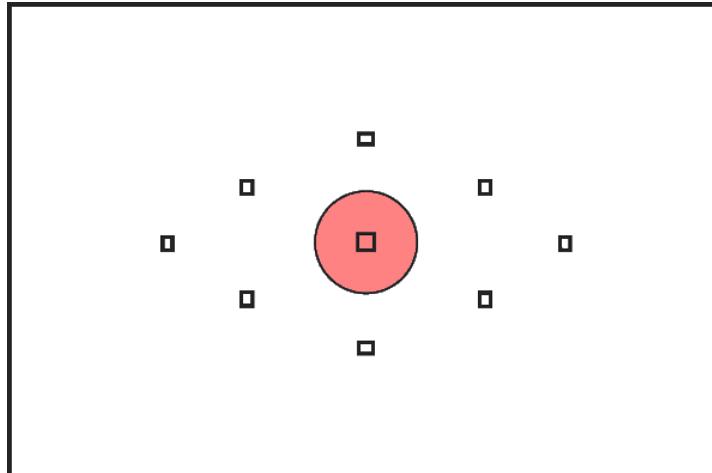
## Exposure

### • Metering

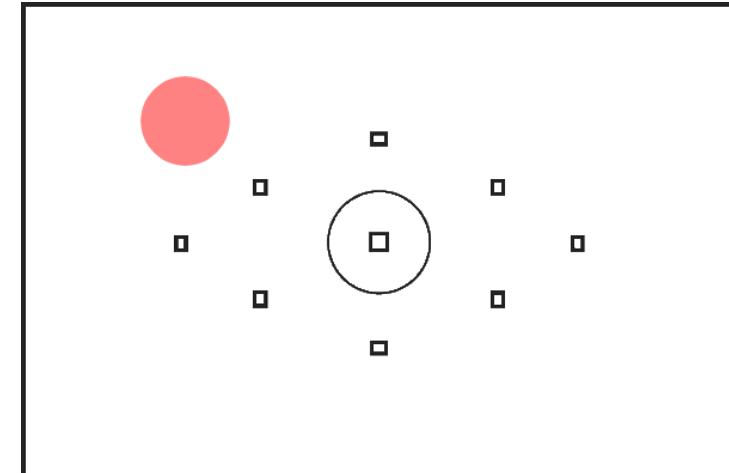
- The way the camera measures the light in the scene
- Modes
  - Spot → light is measured in a small area (may be moveable)



spot metering  
symbol (may look  
different on some  
cameras)



fixed spot in center of frame



flexible spot → may be restricted  
to certain points (DSLR) or  
moved to any location in the  
frame (mirrorless)

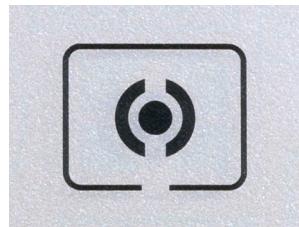
Note: DSLR cameras have a separate metering sensor, while mirrorless cameras (and cell phones) meter off the main sensor.

# Holiday Photography

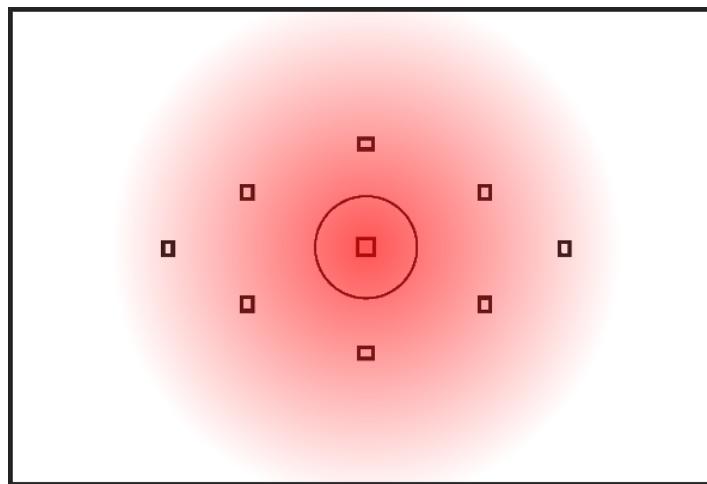
## Exposure

- **Metering**

- The way the camera measures the light in the scene
- Modes
  - Spot → light is measured in a small area (may be moveable)
  - Center weighted → a larger area centered in the frame is used



center weighted  
metering symbol  
(may look different  
on some cameras)



center weighted zone gets  
more weight when metering

Note: The main subject is often placed in the center of the frame, so center weighted metering can make sense (assuming the subject is close to middle gray).

# Holiday Photography

## Exposure

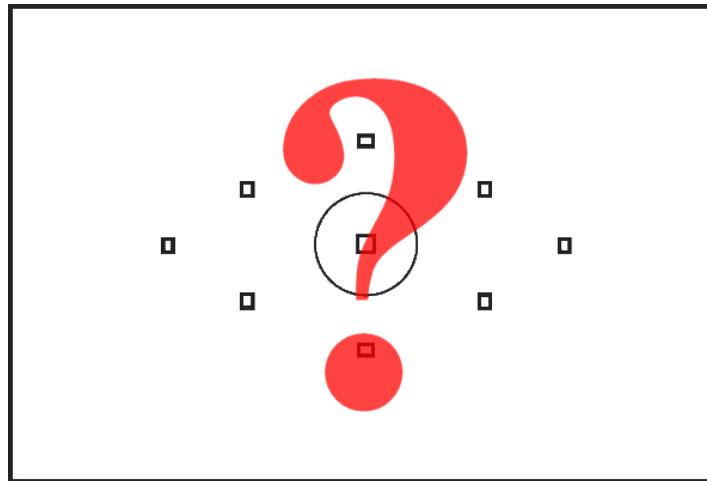
### • Metering

- The way the camera measures the light in the scene
- Modes
  - Spot → light is measured in a small area (may be moveable)
  - Center weighted → a larger area centered in the frame is used
  - Matrix → the entire frame is evaluated, using an algorithm



matrix metering symbol (may look different on some cameras)

Note: Matrix metering is also known as Evaluative, Segment, ESP, or Multi-Pattern → each manufacturer has a different name for it.



matrix metering algorithms are a trade secret

# Holiday Photography

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## Exposure

- Metering
  - The way the camera measures the light in the scene
  - Modes
    - Spot → light is measured in a small area (may be moveable)
    - Center weighted → a larger area centered in the frame is used
    - Matrix → the entire frame is evaluated, using an algorithm
  - Changing modes
    - DSLR & mirrorless camera → menu option
    - Cell phone → may not be an option, or available in manual settings

Note: If a cell phone has a fixed metering mode it is probably using matrix metering.

# Holiday Photography

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## Exposure

Note: Exposure compensation is set in 'stops', where one stop is twice (+) or half (-) the amount of exposure → most digital cameras can adjust in 1/3 stop increments.

- **Exposure compensation (EC)**
  - Manually adjusting the exposure
    - Used to obtain proper exposure when the metering is inaccurate
    - Photographer sets a + amount (increase) or – amount (decrease) offset
  - Many photographers use EC to avoid overexposing highlights
    - I generally shoot with -0.7 stop EC (1/3 stop = 0.3, 2/3 stop = 0.7)
    - Cell phone users may use -1 to -1.3 stops EC to prevent overexposure
  - How to set
    - DSLR or mirrorless camera → may be a dedicated knob
    - DSLR or mirrorless camera → may be set by button + control wheel
    - DSLR or mirrorless camera → may be a menu item
    - Cell phone → in manual settings mode (on my cell phone)

# Holiday Photography

## Exposure

- Relative illumination (subject vs. background distance)
  - Light intensity changes based on distance → Inv. Square Law
    - Falls off as the square of the distance → 2x farther =  $\frac{1}{4}$  of the light
    - Move light closer to subject → larger relative distance to background
    - Or, move light and subject away from background

Example: wall is 4 ft behind subject, subject is 4ft from light → wall is 8 ft from light, so  $\frac{1}{4}$  of the light on wall



light closer to subject → relative distance to wall is larger so wall is darker

Note: A Christmas tree is fairly well lit on its own. If a person is close to the tree then an on-camera light or flash can wash out the tree.



light farther away → not as much relative distance so background is lighter

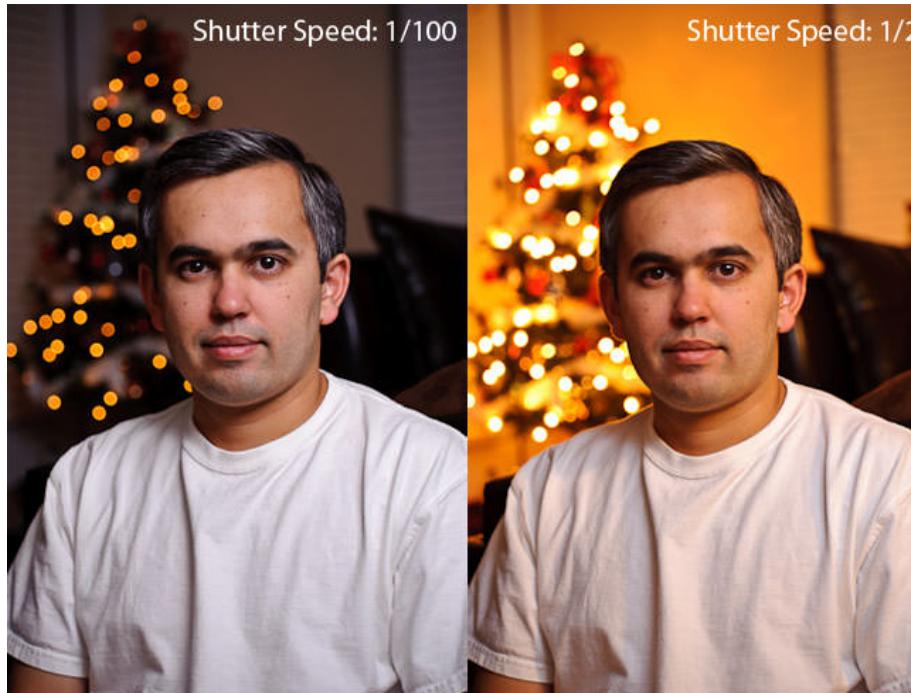
Example: wall is 4 ft behind subject, subject is 10 ft from light → wall is 14 ft from light, so  $\sim\frac{1}{2}$  of the light on wall

© creativelive.com

# Holiday Photography

## Exposure

- Relative illumination (shutter speed)
  - Shutter speed affects lighting
    - Slow shutter speed can increase brightness of background



© photographylife.com

fast shutter speed minimizes background  
light → requires more subject light

slow shutter speed accumulates background  
light → requires less subject light

# Holiday Photography

## Exposure

- High dynamic range (HDR)
  - Multiple shots taken at different exposures combined
    - Good for high contrast situations → can help with Christmas lights
    - May look artificial at times, depending on how shots are combined

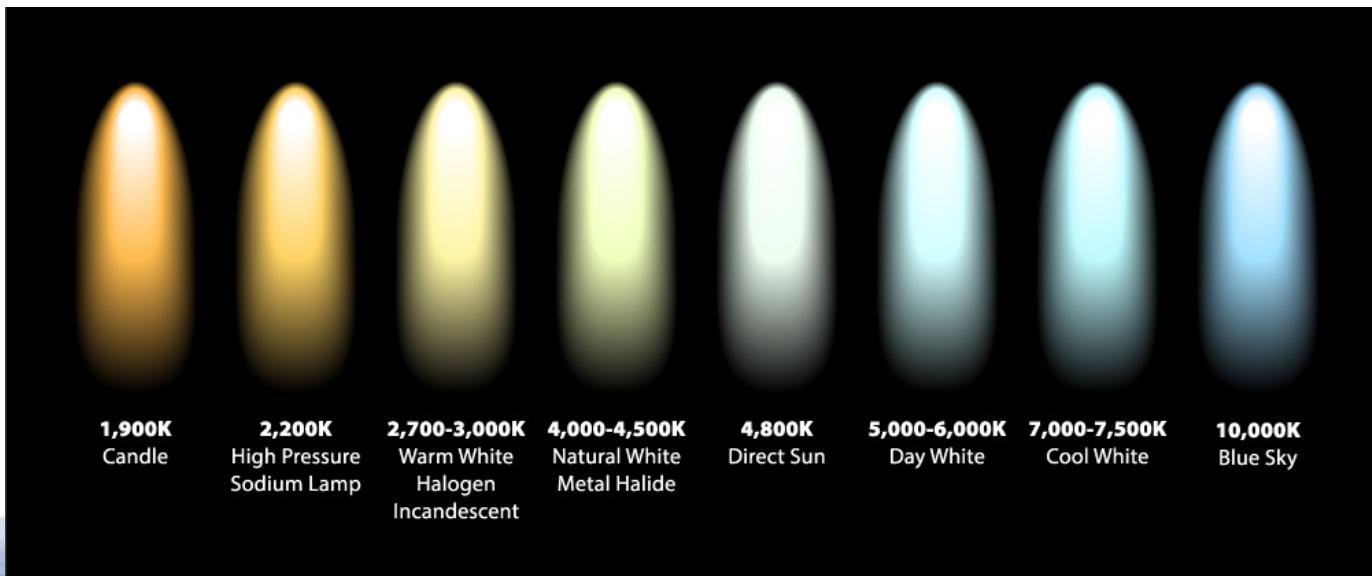
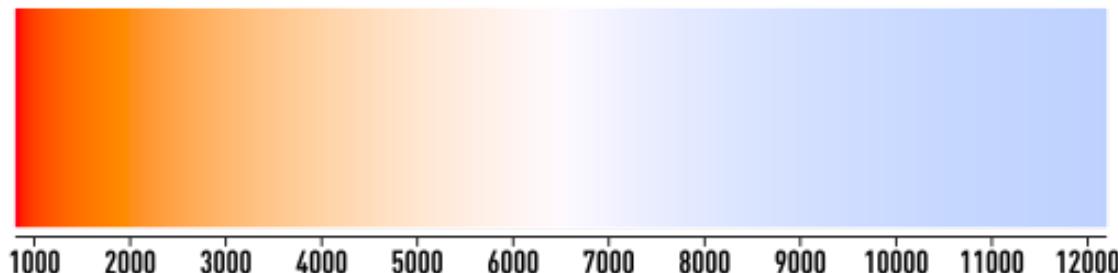


overcooked HDR does not look natural, but can be used as an effect

# Holiday Photography

## White balance

- Color balance appropriate for light source
  - Light sources have different 'color temperatures'
  - Measured on a red-blue scale in degrees Kelvin



# Holiday Photography

## White balance

Note: Kelvin WB → enter the Kelvin value of the light source.  
Custom WB → camera determines the WB by sensing  
the light reflected from a gray card (or white paper).

- Color balance appropriate for light source
  - Light sources have different 'color temperatures'
    - Measured on a red-blue scale in degrees Kelvin
    - Color temperature affects how the camera renders colors



the correct white balance setting  
is daylight, and we can see the  
effects of using the wrong white  
balance setting in the camera  
(however, it is possible to use the  
'wrong' white balance as an effect)

auto    Kelvin    custom

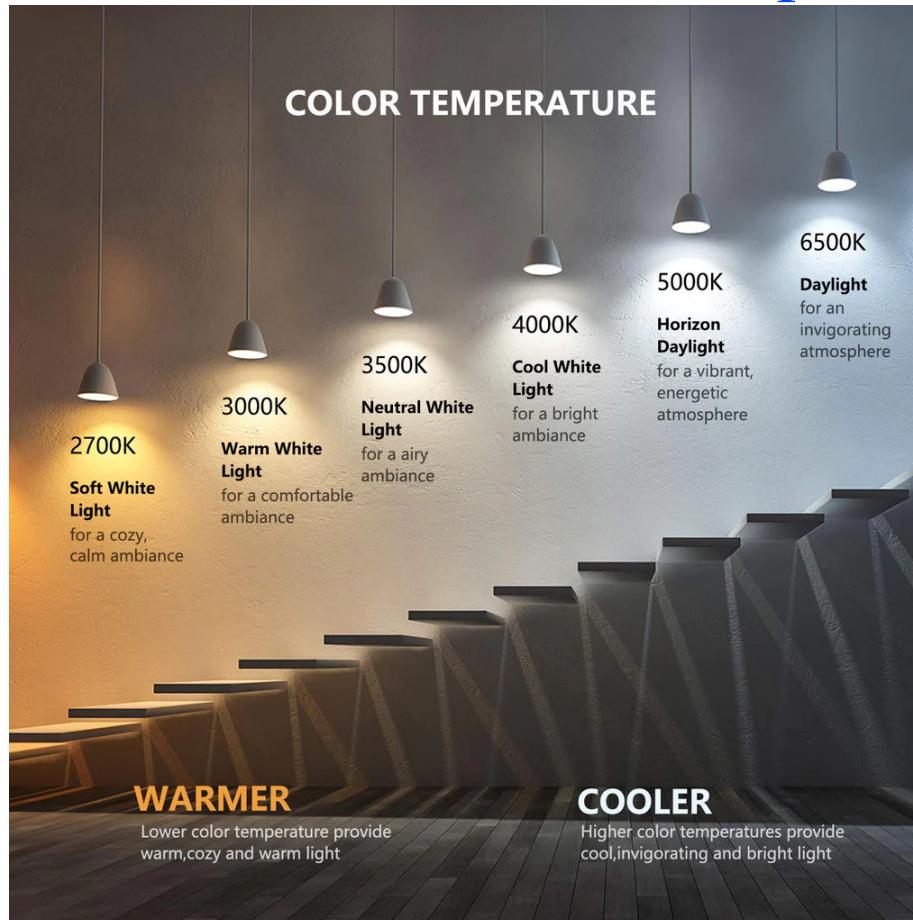


# Holiday Photography

## White balance

- Indoor white balance
  - May be mixed → choose the closest option for main subject

Note: Cell phone white balance can be selected in manual mode (if available).



living room/bedroom

kitchen/bathroom

home office

# Holiday Photography

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## White balance

- Indoor white balance
  - May be mixed → have to choose the closest option
  - Christmas lights, candles, etc. may affect auto white balance

# Holiday Photography

## White balance

- Indoor white balance

- May be mixed → have to choose the closest option
- Christmas lights, candles, etc. may affect auto white balance
- Flash can dominate the lighting, making white balance easier
  - Some people find flash to be 'too artificial', and prone to 'red eye'
  - Bouncing the flash off the ceiling can make it look more natural



direct flash → harsh, creates shadow

bounce flash → softer, no shadow, no red eye

Note: Not all cell phones have a flash option, but it is becoming more common. Cell phone flash cannot be bounced, but it might be able to trigger another flash.

note the brighter background because the relative distances are more similar → light is bouncing off the ceiling to subject and wall

© Neil van Niekerk

# Holiday Photography

## Cell phone

- Manual mode
  - Menu item in camera mode can change to manual mode

A = automatic mode → camera controls all settings

gear symbol = settings → set up various camera parameters

Note: These are instructions for my Motorola E5 Android cell phone (introduced in 2018). Cell phones may be very different in their features and operation.



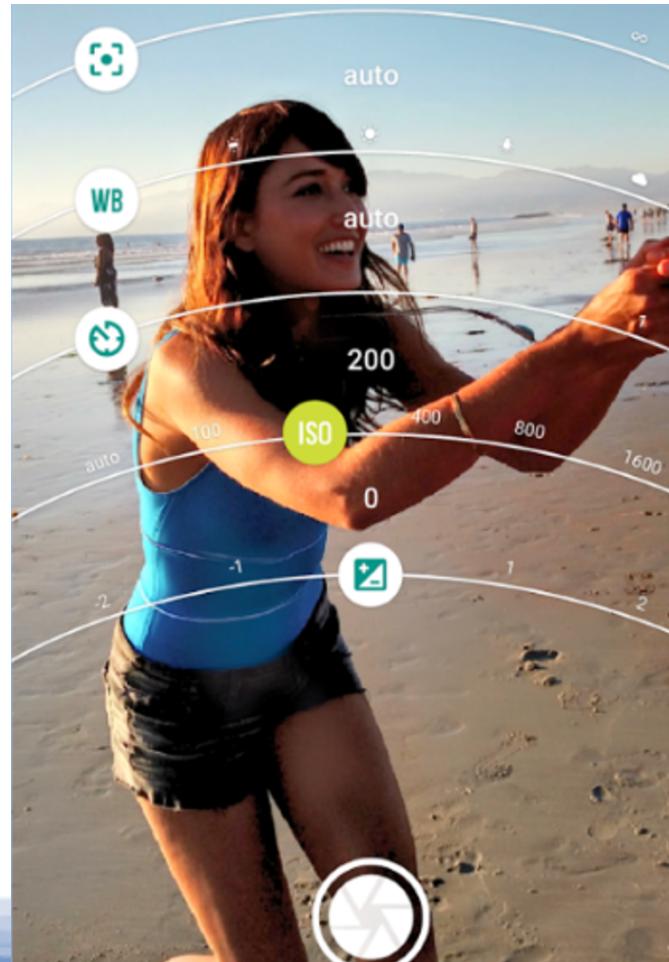
pressing on the A symbol opens a menu where you can select M = manual mode

# Holiday Photography

## Cell phone

- Manual mode
  - Menu item in camera mode can change to manual mode
  - Settings

focus  
white balance  
shutter speed  
ISO  
exposure compensation



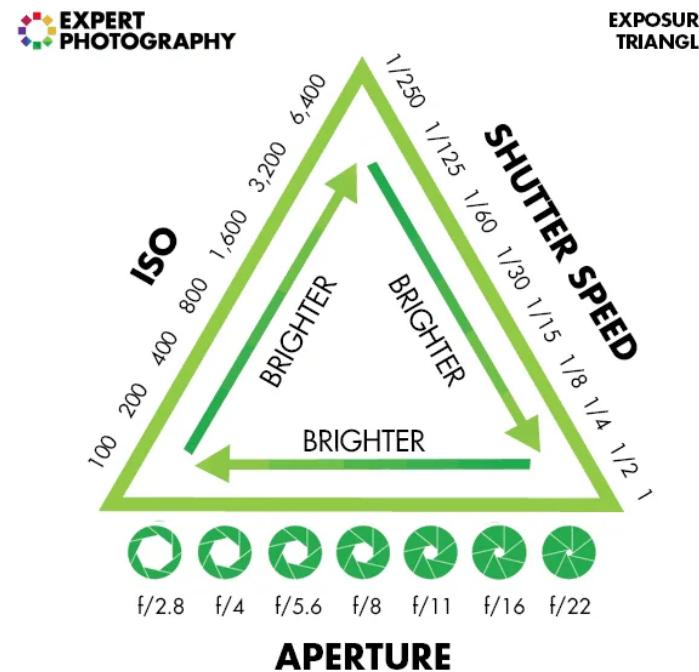
Note: ISO represents the sensor's sensitivity to light, also used for photographic film (used to be called ASA). ISO 200 is twice as sensitive to light as ISO 100. Higher sensitivity produces more noise.

Note: Manual settings may be lost when you close the camera app. There may be an option to make changes permanent in the Settings area of the app.

# Holiday Photography

## Exposure

- **Exposure triangle**
  - Variables → ISO, aperture, shutter speed
  - Exposure determined by selecting a value for each parameter



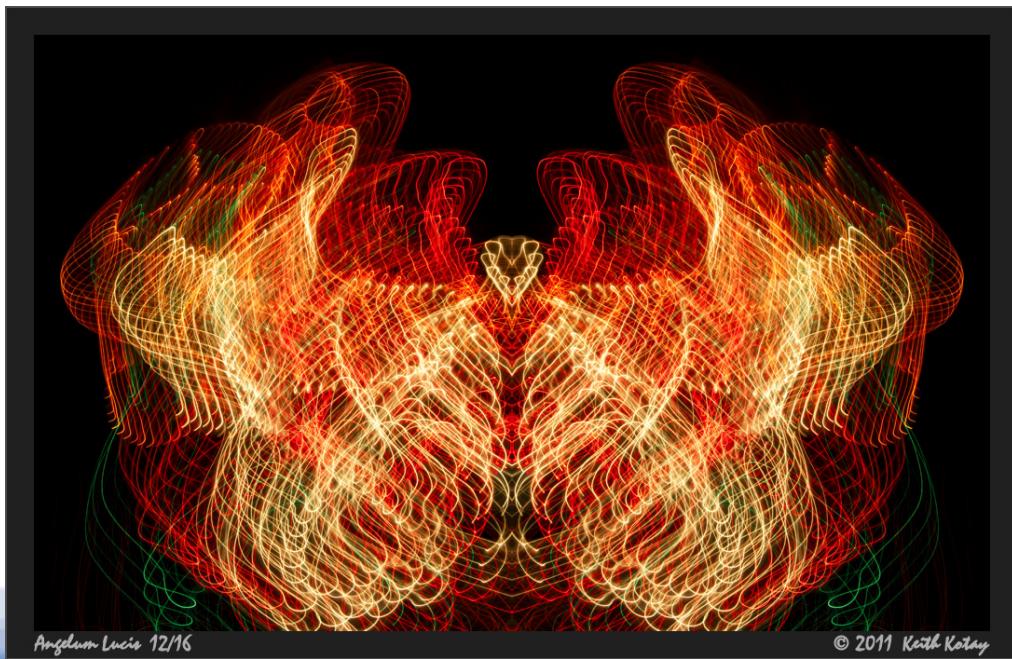
Many combinations of variables can produce the same exposure, but each variable has its own effect on the recorded image

Note: Cell phones usually have a fixed aperture unless they have multiple lenses, which is why there is no aperture setting in manual mode.

Exposure Parameters	More Higher Exposure Value	Less DOF (smaller f-number) Bigger Aperture	More Motion Longer Shutter Speed
	More ↑ Exposure Value ↓ Less	More Noise Higher ISO ↓ Lower Less Noise	Less DOF More DOF Smaller (bigger f-number) More Motion Less Motion

Lebanon Camera Club  
Introduction to Digital Photography Workshop  
2019

# Holiday Photography



# Holiday Photography

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