

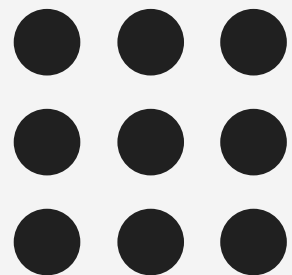
# TECHNICAL PHOTOGRAPHY

**ESSENTIALS: DAY 12**

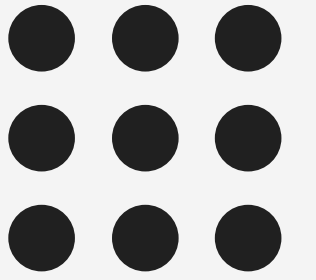


**DO NOW:**

find your partner,  
review your plans for  
tomorrow's photo shoot.



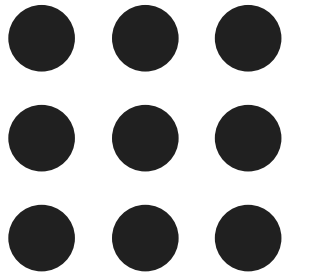
# OBJECTIVES:



You will practice using the exposure triangle to take technically sound photographs.

You will gain understanding of a variety of lighting techniques and find different types of light in a location.

# CAMERA MODES



**M** Manual **M**

**AV** Aperture Priority **A**

**Tv** Shutter Priority **S**

**P** Program **P**



# WHITE BALANCE

(WB) is the process of removing unrealistic color casts, so that objects which appear white in person are rendered white in your photo



AUTO  
camera sets white balance



DAYLIGHT  
camera adds warm tones



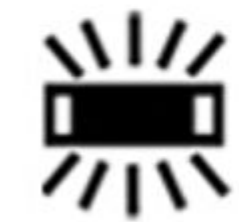
CLOUDY  
camera adds warm tones



SHADE  
camera adds warm tones



TUNGSTEN  
camera adds cool tones



FLUORESCENT  
camera adds warm (red) tones



FLASH  
camera adds warm tones



CUSTOM  
photographer sets white balance

# WHITE BALANCE



Tungsten



Flourescent



Daylight



Cloudy

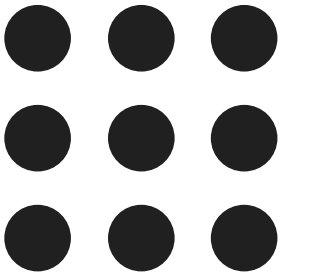


Shade



Auto White Balance

# ISO



••• 100 ••• 200 ••• 400 ••• 800 ••• 1600 ••• 3200 ••• 6400 •••



**LOW SENSITIVITY TO LIGHT**

**LIGHT SENSITIVITY**

**HIGH SENSITIVITY TO LIGHT**

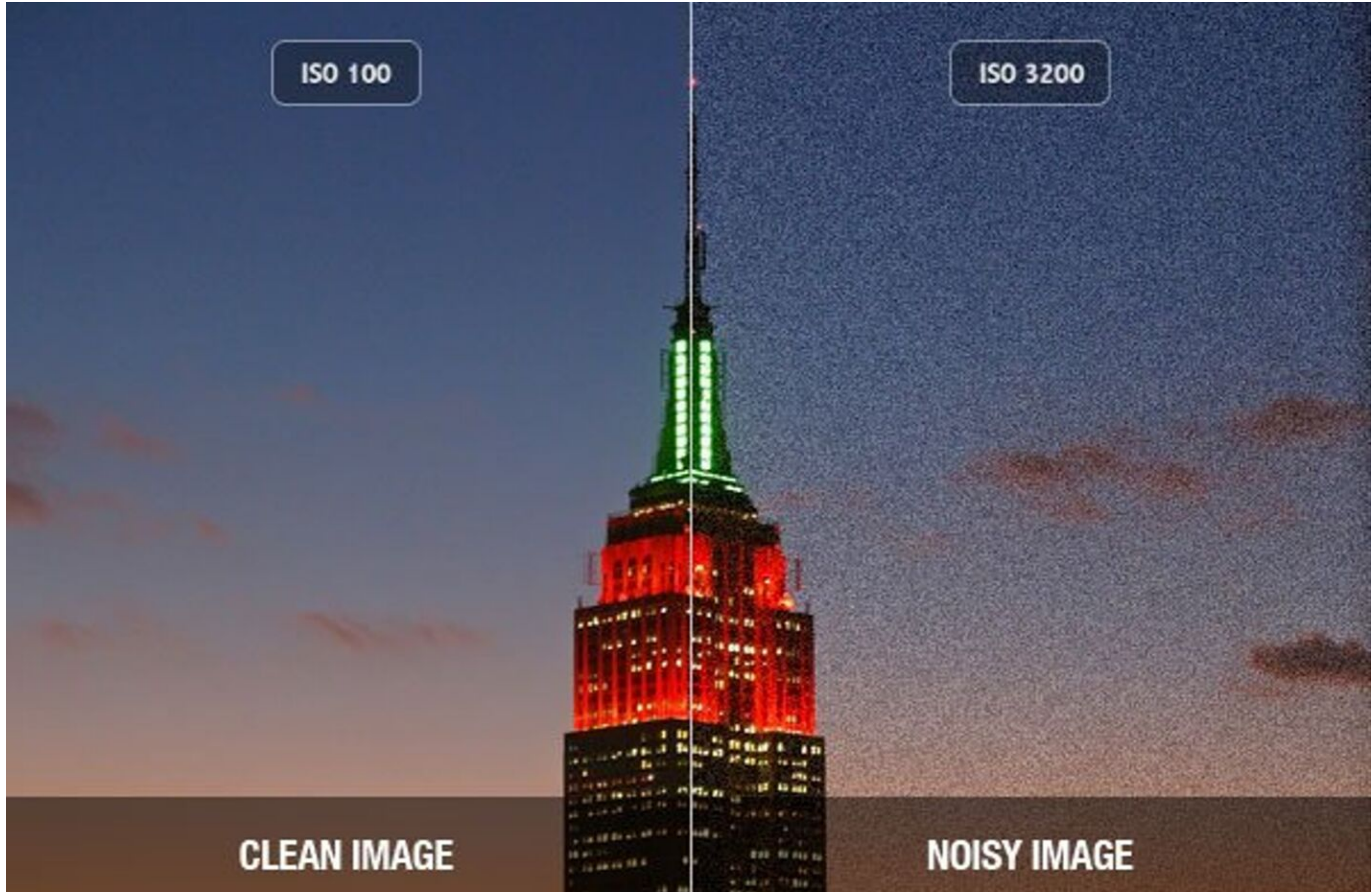
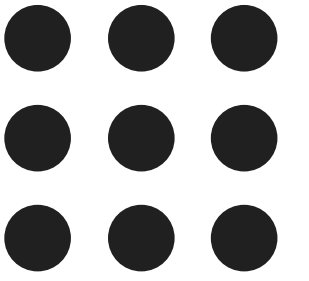
BLURRED MOTION | OUTDOORS | HIGH

USE INDOORS

SHARP ACTION | NIGHT TIME | LOW

# SENSITIVITY

# NOISE AND ISO

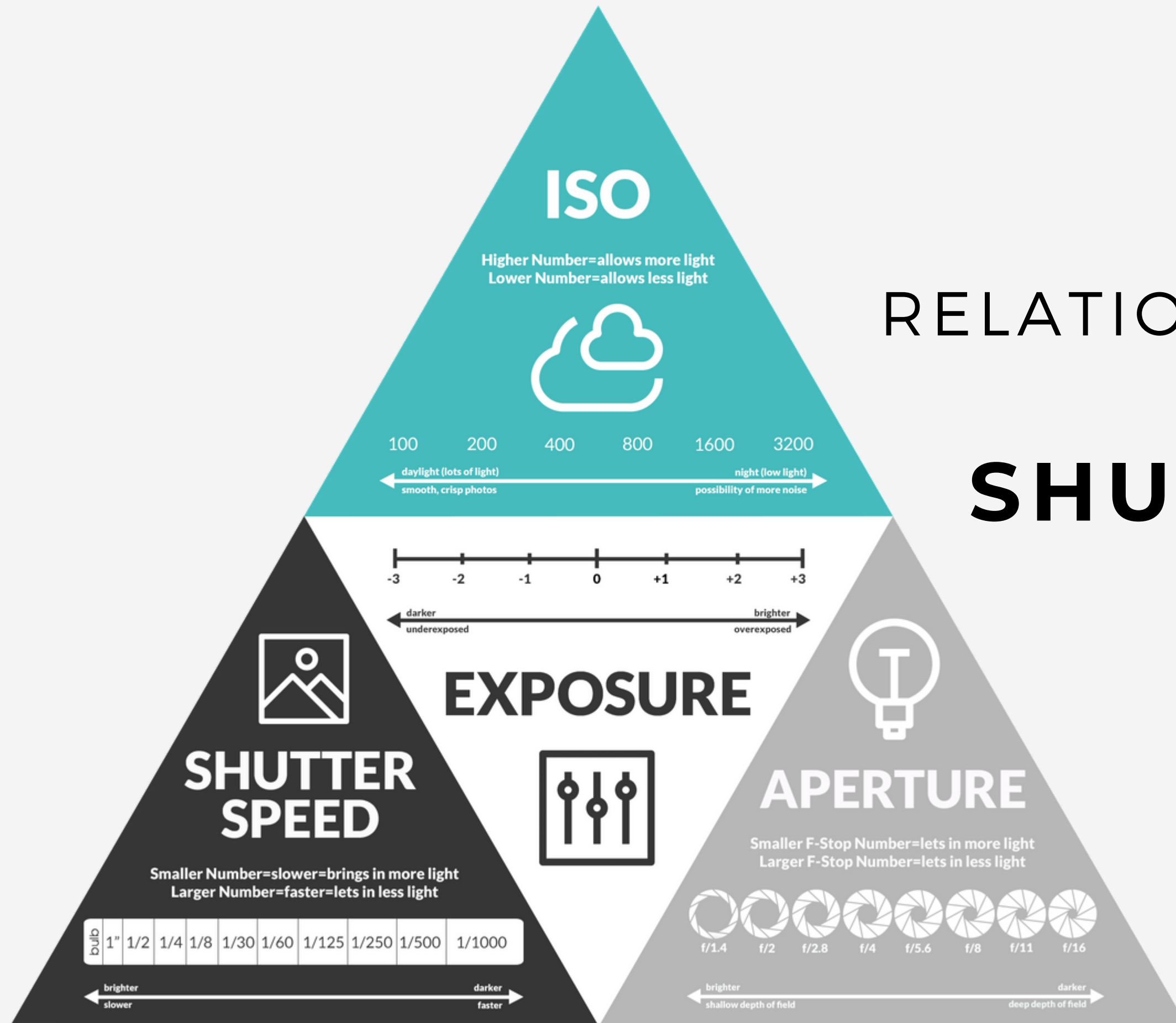


CLEAN IMAGE

NOISY IMAGE



# THE EXPOSURE TRIANGLE



RELATIONSHIP BETWEEN  
**ISO**  
**SHUTTER SPEED**  
**APERTURE**

# APERTURE

← **SHALLOW** • • • *DEPTH OF FIELD* • • • **DEEP** →



**F/1.4**



**F/2.0**



**F/2.8**



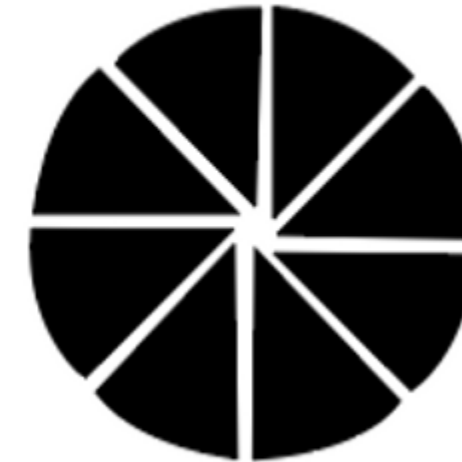
**F/4.0**



**F/8.0**



**F/16**



**F/22**

# DEPTH OF FIELD



f2



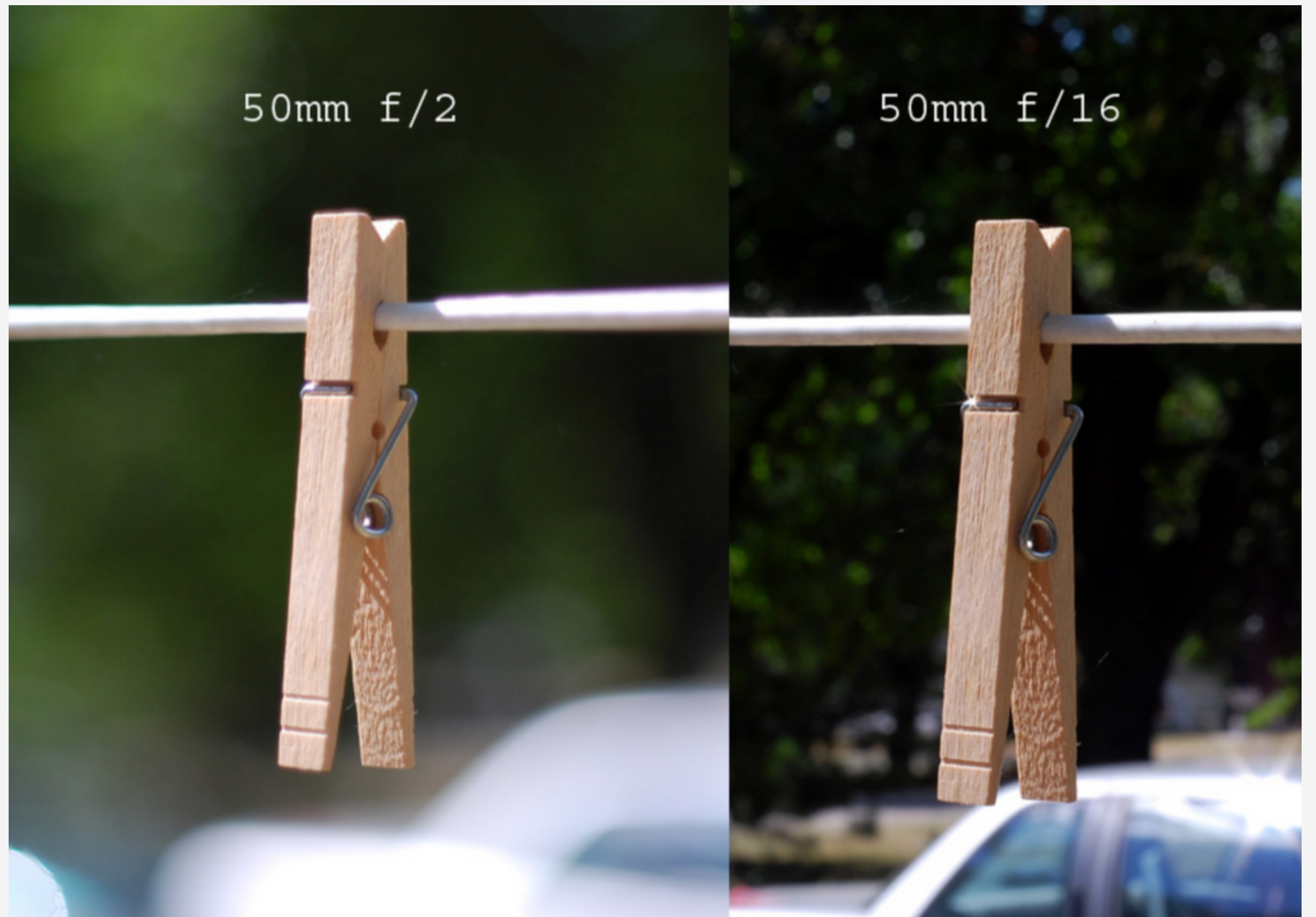
f22



# DEPTH OF FIELD BOKEH

In photography, bokeh (boh-kay) is the aesthetic quality of the blur produced in the out-of-focus parts of an image produced by a lens.

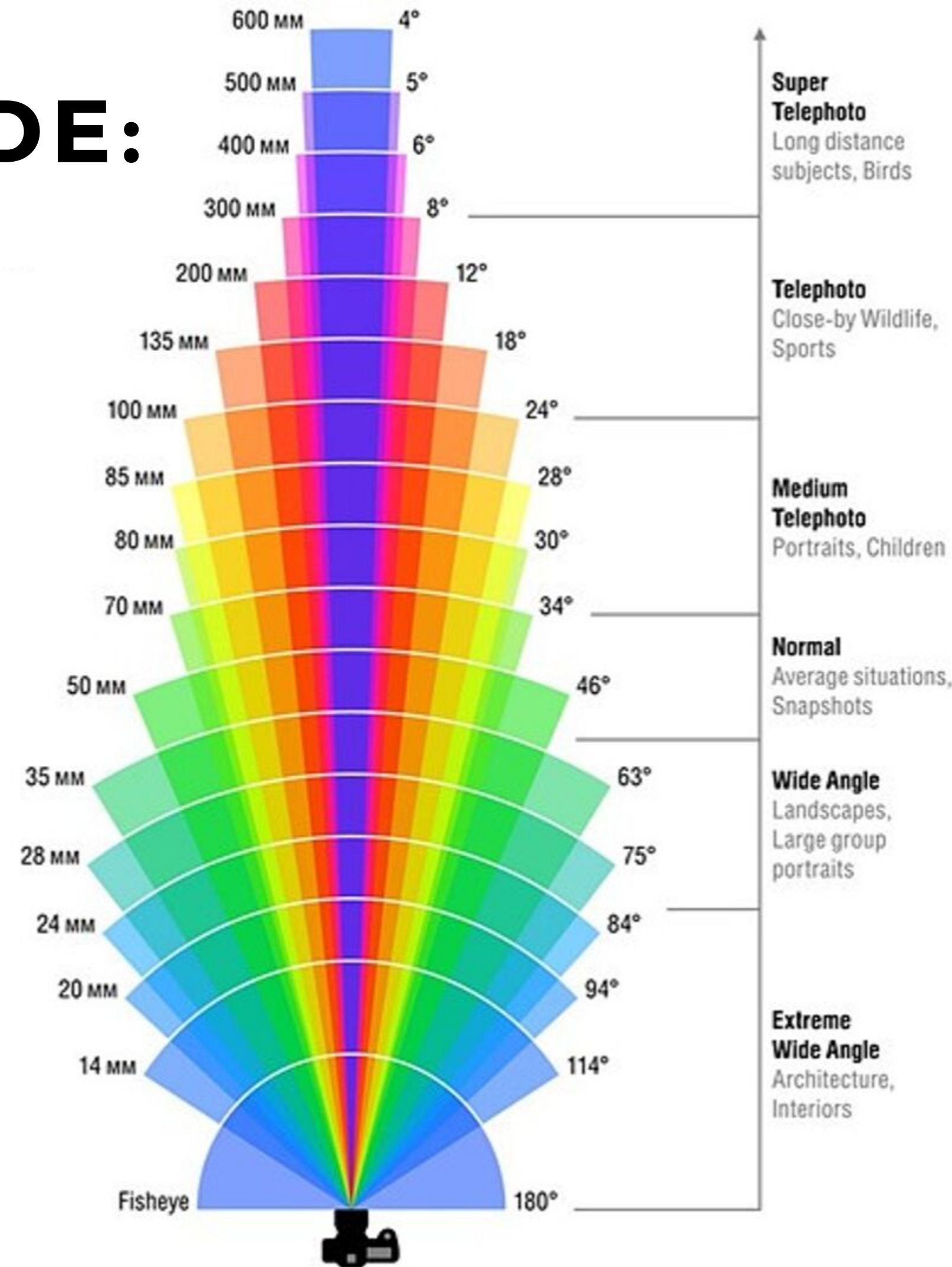
Bokeh has been defined as "the way the lens renders out-of-focus points of light".



# ANGLE OF VIEW GUIDE:

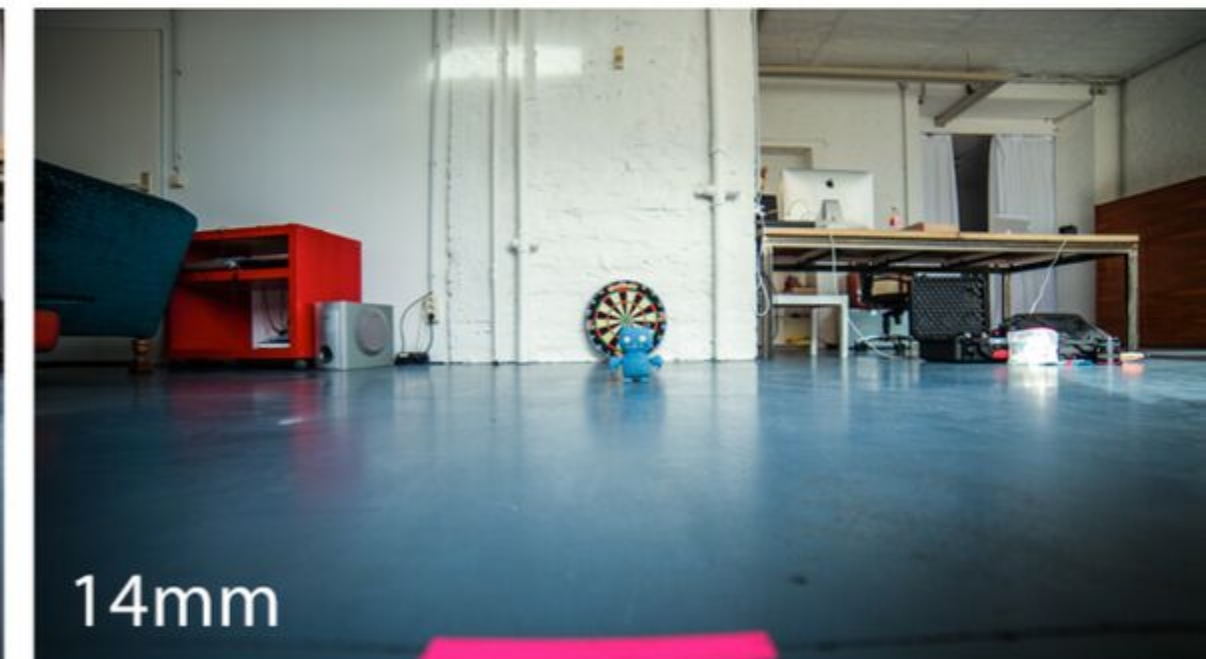
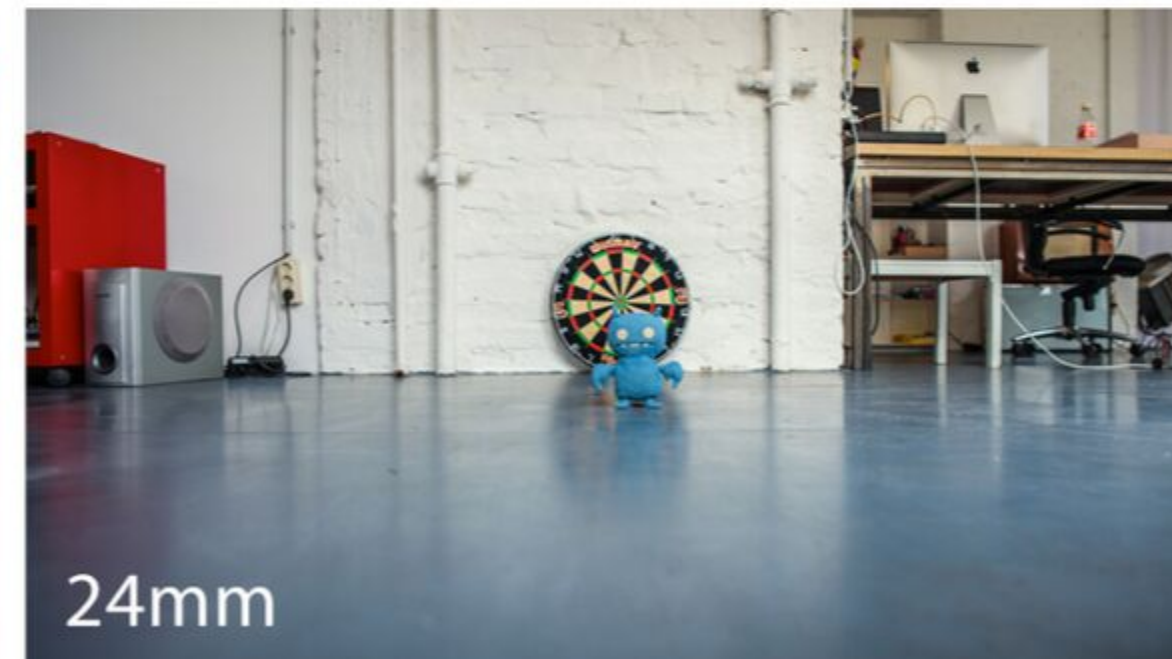
# FOCAL LENGTH

The distance between the center of a lens or curved mirror and its focus.  
Measured in MM



# FOCAL LENGTH

Olaf von Voss



Same background and camera position using different focal lengths.  
**HOW DOES FOCAL LENGTH EFFECT DEPTH OF FIELD?**

# FOCAL LENGTH

## Shallow DOF

Softer foreground and background focus

1

Wider Aperture

Longer Focal Length

2

Closer to Subject

3

## Long DOF

Foreground and background more sharp

1

Narrow Aperture

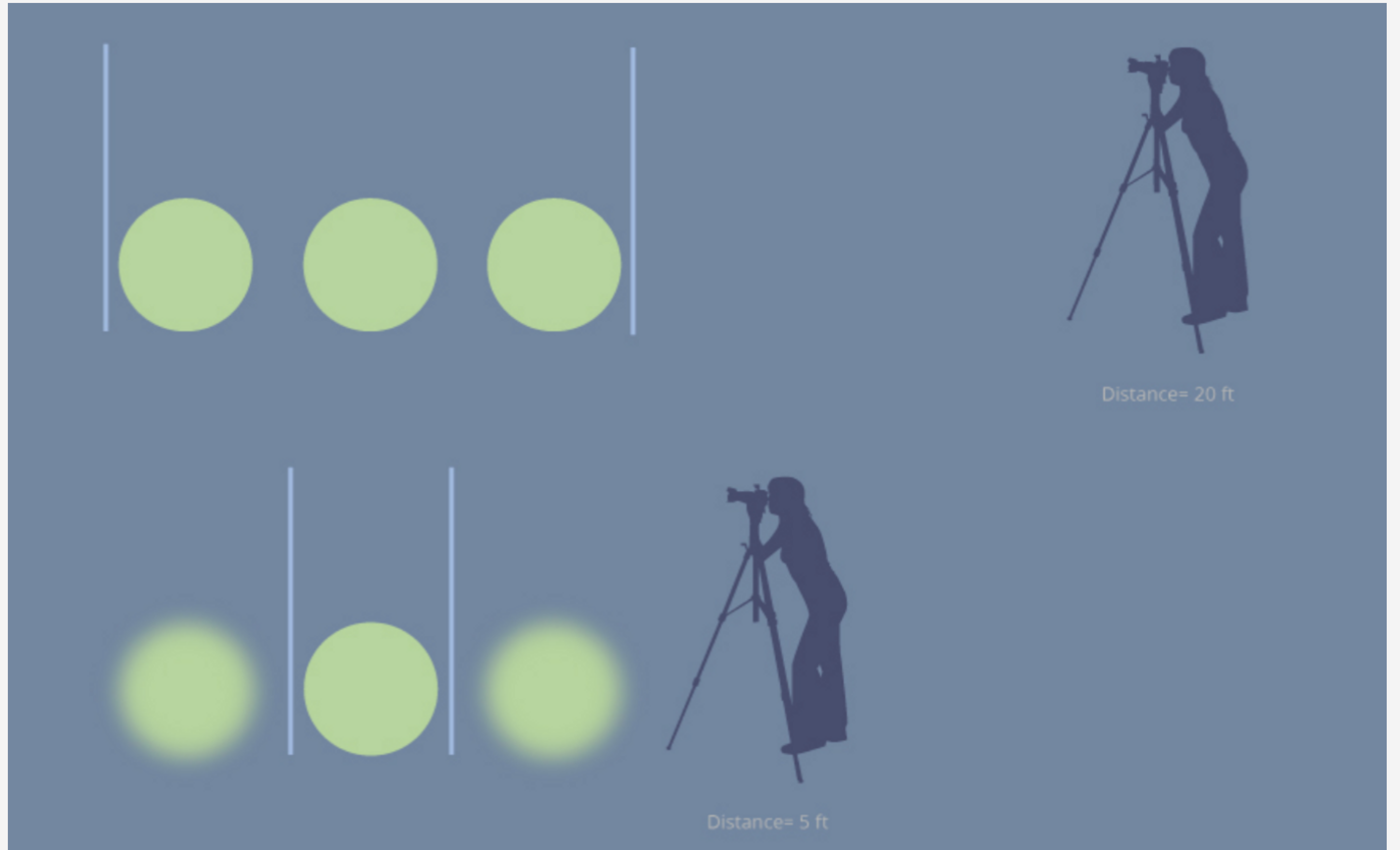
Shorter Focal Length

2

Further from Subject

3

# DISTANCE TO SUBJECT

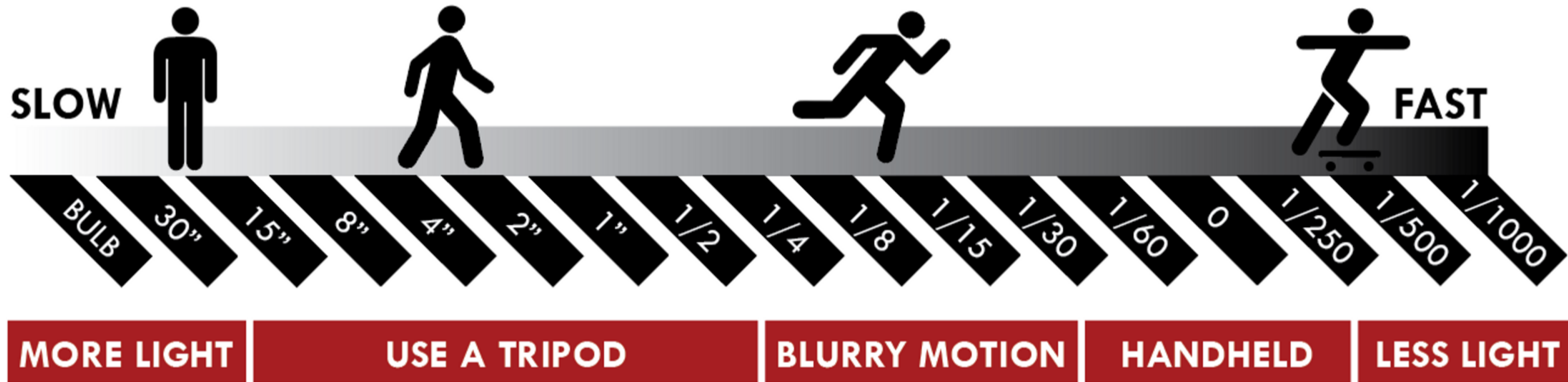




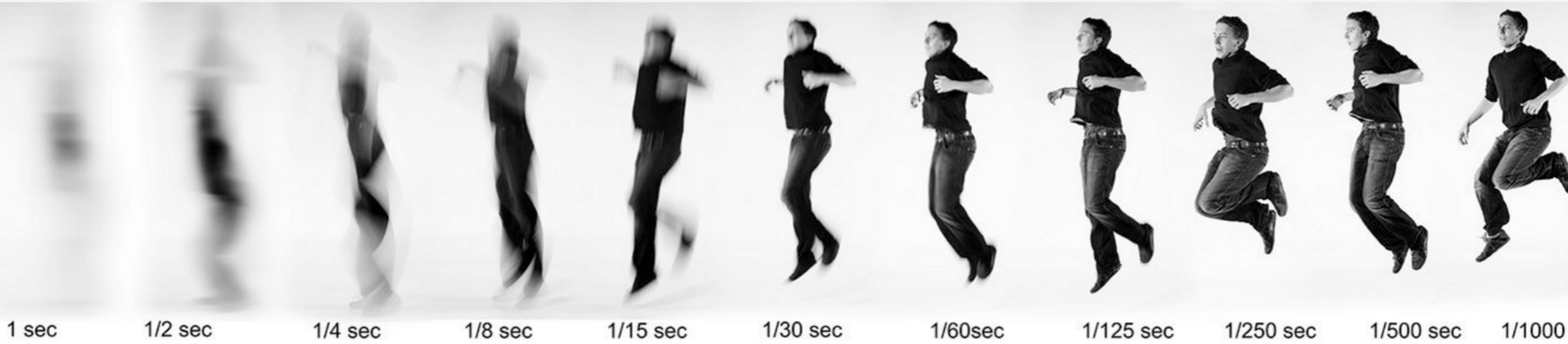
# DEPTH OF FIELD SIMULATOR

[LINK](#)

# SHUTTER SPEED



# SHUTTER SPEED



# SHUTTER SPEED

longer exposure to  
show movement



# SHUTTER SPEED

shorter exposure to  
freeze movement



# EXPOSURE



over exposed

shtr spd - 1/20  
f-stop - 1.8  
ISO - 800



evenly exposed

shtr spd - 1/20  
f-stop - 3.5  
ISO - 800



under exposed

shtr spd - 1/20  
f-stop - 6.3  
ISO - 800

# **ACTIVITY:**

## **COMPLETE CAMERA SIMULATOR WORKSHEET**

### **Camera Simulator:**

<http://www.canonoutsideofauto.ca/play/>

### **Photography Mapped:**

<http://photography-mapped.com/interact.html>

### **Lens Simulator: Understanding Focal Length**

<https://imaging.nikon.com/lineup/lens/simulator/>

# UNDERSTANDING LIGHT



The word photography comes from Greek roots and means "light writing" (photo = light) (graphy = writing)

Photographers are light artists.



# AMBIENT LIGHT

light that is already present in a scene,  
before any additional lighting is added

Assess the light at your location, whether it's windows, artificial light, or the sun. How can you use this light to enhance your subject?

# BACKLIGHT

**LIGHT SOURCE IS  
BEHIND  
THE SUBJECT**

used for environmental  
portraits



# BACKLIGHT

Martín Diaz Meave

**LIGHT SOURCE IS BEHIND  
THE SUBJECT**

creates a dramatic  
silhouette effect



# TOP LIGHT

**LIGHT SOURCE IS ABOVE THE  
SUBJECT**

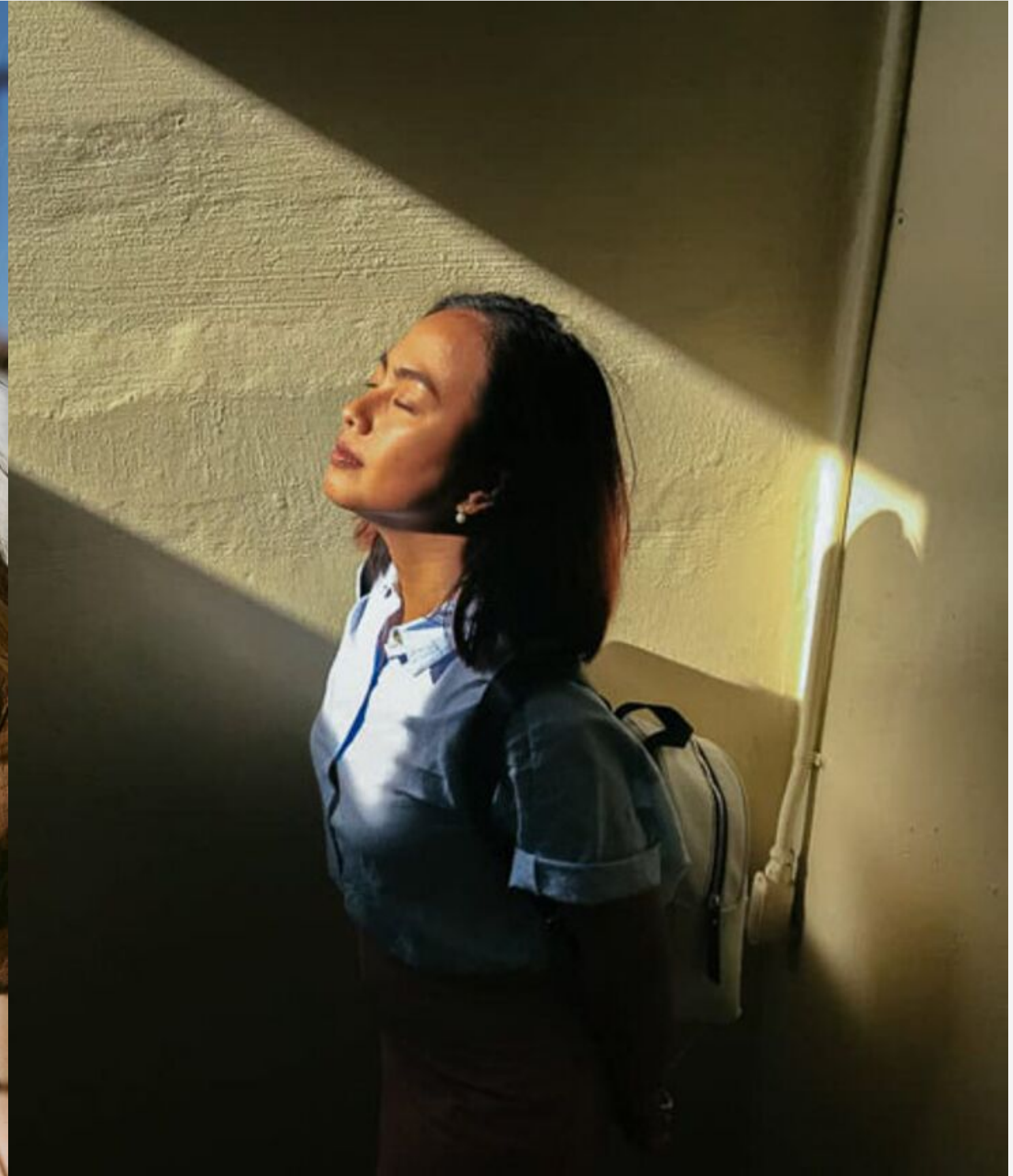
creates a dramatic moody effect



# HARSH LIGHT

**SUBJECT IS IN  
DIRECT LIGHT**

creates unique sharp  
angular shadows



# HARSH LIGHT

**SUBJECT IS IN  
DIRECT LIGHT**

creates unique sharp  
angular shadows



# DIFFUSED LIGHT

**SUBJECT IS FAR  
FROM LIGHT  
SOURCE, LIGHT IS  
SPREAD EVENLY  
CREATES A SOFT  
LOOK**



# SPLIT LIGHT

**SUBJECT NEXT  
TO LIGHT**

**HALF THE FACE IS  
LIT, HALF IS IN A  
SHADOW**





# SPLIT LIGHT

## SUBJECT NEXT TO LIGHT

half the face is lit,  
half is in a shadow



# SUNRISE/ SUNSET STORMY DAY

When you have a sky covered in dramatic clouds, keep an eye out for breaks in those that will allow sunset light to softly illuminate your subject. Walk around this light; shoot it from many angles. How does it illuminate your foreground? What happens to the parts of the image the warm glow does not hit? Do you prefer it when this light is strong and bright, or when it too is filtered by a light layer of clouds?



# GOLDEN HOUR

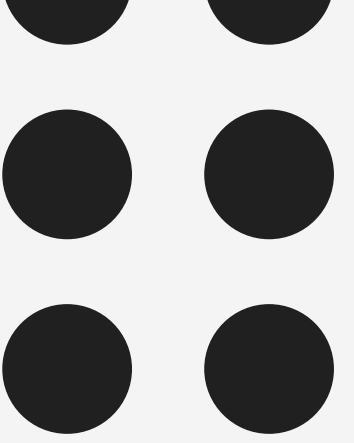
period of daytime an hour after sunrise and an hour before sunset, when the light is redder and softer than when the sun is higher in the sky



# GOLDEN HOUR



# ASSIGNMENT:



## HOMEWORK:

### **Location Scouting / Looking for Light**

Before the photo shoot tomorrow, visit your locations and look for good light. Visit other locations and make notes about lighting you find throughout our school.

