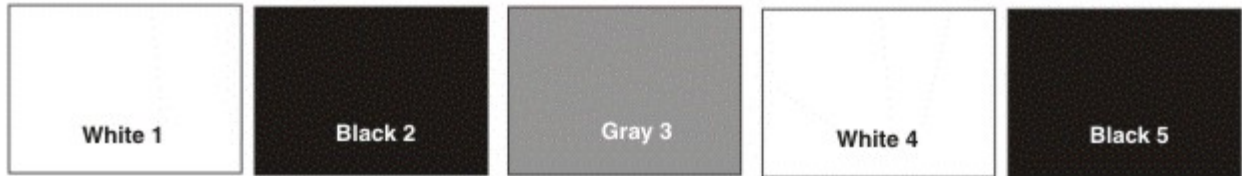


## Controlling Exposure- Camera meters and subject brightness

Use the target panels in class to make five exposures.



### Black, White and Gray are the building blocks of all photographs.

Our eyes and the camera capture a scene by processing the light reflected from objects that pass through a lens to the retina or film. Our eyes automatically compensate for variations in lighting, the camera needs to be controlled. Some cameras can work automatically, others need manual adjustment. We use a light meter to determine the proper settings. The camera is designed to work with “average” subjects and sometimes is fooled by subjects that are predominately light or dark.

### Put your camera in Black and White mode for this exercise.

This is a simple five frame exercise that can help determine if your camera is working correctly and also demonstrates the way your meter reacts to non average subjects. Move in close to the targets to fill the frame with only the appropriate color for each shot. Focus carefully, use a tripod to eliminate any camera movement. Record your exposures; the lens opening (f stop) and the shutter speed.

1) With first white target, adjust your camera settings to match the reading your meter indicates. Compose the frame to include the number 1 and the word White. Make one exposure.  $f$  \_\_\_\_\_  $1/$ \_\_\_\_\_ sec.

2) With the black target, change the settings to match your meter readings. It should be different from the white target. Compose the frame including the number 2 and the word black. Make the second exposure.  $f$  \_\_\_\_\_  $1/$ \_\_\_\_\_ sec.

3) With the gray target, change your settings to match the meter reading. This should be different from the Black & White exposures. Make your third exposure including the number 3 and the work Gray.  
 $f$  \_\_\_\_\_  $1/$ \_\_\_\_\_ sec.

4) DO NOT CHANGE your settings from the Gray #3 target. Move to the White #4 target and expose frame 4 including the word White and the number 4. Your meter tells you that you are over exposing.  
 $f$  \_\_\_\_\_  $1/$ \_\_\_\_\_ sec.

5) DO NOT CHANGE your settings from the Gray #3 target. Move back to the Black target and expose frame 5 including the word Black and the number 5. Your meter tells you that you are under exposing.  
 $f$  \_\_\_\_\_  $1/$ \_\_\_\_\_ sec.

Your results should look like this:



## Bracketing Exposure- Camera meters and subject brightness

Return to the White Black and Gray targets and shoot a series of bracketed exposures.

Bracketing is when you shoot both over and under the recommended exposure to get the best result.

First shoot the targets with the recommended exposure from your camera... auto mode and record the exposure as "N" for normal. Set the camera to manual mode and change the exposure to one stop brighter "N+1", repeat with two stops brighter "N+2". Make two more exposures of underexposure "N-1" and "N-2".

Do this with all three targets- Black, White and Gray.

Record your exposures

	aperture f/stop	shutter speed	
1 White Normal (N)			
2 White N+1			
3 White N+ 2			
4 White N-1			
5 White N-2			
6 Black Normal (N)			
7 Black N+1			
8 Black N+ 2			
9 Black N-1			
10Black N-2			
11Gray Normal (N)			
12Gray N+1			
13Gray N+ 2			
14Gray N-1			
15Gray N-2			

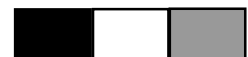
After all exposures are made- load your images into a new folder named "Exposure".

Rename the files to indicate their subject color and exposure: ("your initials"01whiteN.jpg) ("your initials"01whiteN+1.jpg) etc...

Make a contact sheet using Bridge to select your images, go to tools in the menu and select> Photoshop>Contact sheet II. Set the units to inches and size to \*8"X10" and resolution to 300.

Save the contact sheet image to your folder and print the image to hand in.

Continue the exercise out of class by shooting subjects that are Black on Black, Gray on Gray and White on White. They can be scenes "found" in the environment or subjects that you group together.



[Link to examples](#)

Shoot under a variety of light (see the Black White And gray examples) and bracket your exposures just as you did with the test targets in the studio. You will analyze and choose the best results in class.