



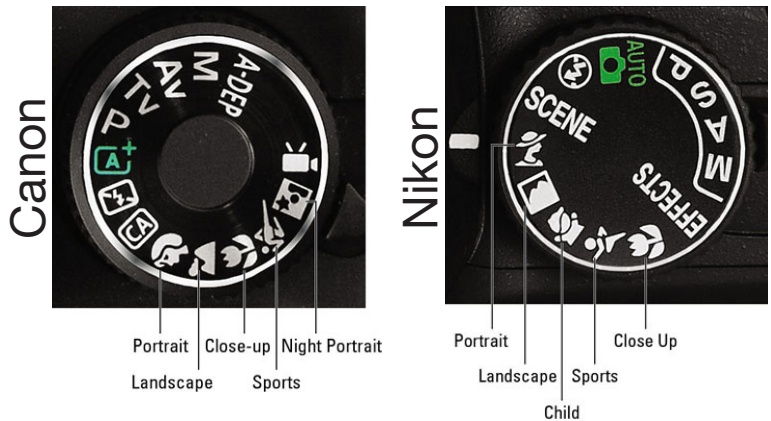
Camera Modes

Targets

1. Students will create images demonstrating an understanding of Auto Scene Modes and Creative Zone Modes found on most digital cameras in three different lighting conditions.
2. Students will use Adobe Bridge and PhotoShop to edit images to include correct terms and data for each image they take.
3. Students will print images to demonstrate their understanding of the process of printing in classroom.

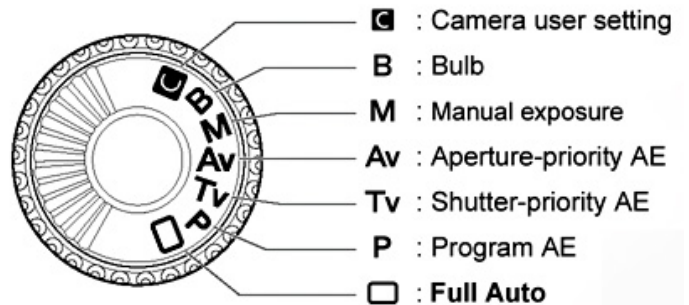
Auto Modes

In the Auto Modes the camera selects all functions of the camera. These are the most basic functions because the photographer has no decisions to make after choosing the mode.



Creative Modes

In the Creative Modes the camera and the photographer may select some or all of the camera functions. These are considered more advanced functions because the photographer has some to total control of camera functions (except for Full Auto).



Fill in the following boxes Creative Modes Chart using the following terms:

Camera Controlled

Photographer Controlled

| Mode | Shutter Speed | Aperture |
|----------------------------|---------------|----------|
| P (programmed auto) | | |
| S (shutter-priority auto) | | |
| A (aperture-priority auto) | | |
| M (manual) | | |

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Match the definition to the mode on the dial. Note: not all makes have all modes

| Creative Zone | | |
|---------------|--------|--|
| Symbol | Symbol | Symbol |
| | | In this mode the user completely controls all camera functions. |
| | | This mode enables user the manual control of the aperture (<i>f</i> /stop), and shutter speed is calculated by the camera for proper exposure (given an ISO sensitivity). |
| | | This mode enables user the manual control of the shutter speed, and aperture is calculated by the camera for proper exposure (given an ISO sensitivity). |
| | | The aperture is set to yield the desired depth of field: one points at the nearest object that one wants to be in focus, half-presses the shutter, then points at the farthest object that one wants to be in focus, half-presses the shutter, at which point the camera sets both focus and aperture so that both objects are in focus. One then reframes the scene and fully depresses the shutter to take the photo. Unlike other modes, this also sets focus, and requires two separate metering/focus stages. |
| | | This mode enables camera to calculate exposure based on set parameters. Allows some exposure adjustments. |
| | | In this mode the shutter remains open for as long as the shutter release button (or shutter release cable or remote) remains depressed. |



CANON



NIKON

| Basic Mode | | |
|------------|--------|--|
| Symbol | Symbol | Symbol |
| | | This is useful for close-ups, or shooting flowers, insects and other small objects. |
| | | This mode will set your camera aperture to a large opening (low F-value) throwing background out of focus. The camera may recognize and focus on a human face. |
| | | This mode increase ISO and uses a faster shutter speed to capture action. It avoid motion blurring and usually a very large aperture opening (low F-value) to provide as much light as possible. |
| | | In this mode the camera calculates the aperture (<i>f</i> stop)/, shutter speed, ISO, flash and other settings to get the best picture possible. The camera is in control here. |
| | | Uses a small aperture to gain depth of field. |
| | | This mode uses flash to illuminate your subject, but this is balanced against the background lighting to produce a natural looking result. |
| | | A type of mode use to produce the best results when photographing moving subjects. This mode lets you frame and select the subject before you begin shooting the pictures. Once framed the camera will then track and focus on that moving subject enabling you to shoot faster with clearer images as a result. |
| | | Create video, moving images, with this mode. |



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Section 2

Camera Modes: Photo Assignment

You are to take photos using each of the major **Auto Scene Modes** and **Creative Zone Modes**. These will be taken in three types of lighting conditions; outside in full sun, outside in the shade and in a classroom. It is important for each location and subject to be photographed in exactly the same way; same objects and composition. Be sure to have something close, a few feet away and in the distance. Do not change the camera's location or angle.

Fill in the following chart for each location and image you take. You will need this information later.


Outside in Sun

Describe location in detail:

| | ISO | f/stop | Shutter Speed | Comments & Notes |
|----------------------------|-----|--------|---------------|------------------|
| Auto Scene Modes | | | | |
| Portrait | | | | |
| Landscape | | | | |
| Close-up | | | | |
| Sports | | | | |
| Night | | | | |
| Full Auto | | | | |
| Creative Zone Modes | | | | |
| Program | | | | |
| Shutter | | | | |
| Aperture | | | | |
| Manual | | | | |

When done taking all images, save all files to your thumb drive in a folder labeled "Modes Assignment." You should have at least 30 files.



Outside in shade

Describe location in detail:

| | ISO | f/stop | Shutter Speed | Comments & Notes |
|----------------------------|-----|--------|---------------|------------------|
| Auto Scene Modes | | | | |
| Portrait | | | | |
| Landscape | | | | |
| Close-up | | | | |
| Sports | | | | |
| Night | | | | |
| Full Auto | | | | |
| Creative Zone Modes | | | | |
| Program | | | | |
| Shutter | | | | |
| Aperture | | | | |
| Manual | | | | |

When done taking *all* images, save all files to your thumb drive in a folder labeled “Modes Assignment.” You should have at least 30 files.

Name: _____

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In Classroom (fluorescent lighting)

Describe location in detail:

| | ISO | f/stop | Shutter Speed | Comments & Notes |
|----------------------------|-----|--------|---------------|------------------|
| Auto Scene Modes | | | | |
| Portrait | | | | |
| Landscape | | | | |
| Close-up | | | | |
| Sports | | | | |
| Night | | | | |
| Full Auto | | | | |
| Creative Zone Modes | | | | |
| Program | | | | |
| Shutter | | | | |
| Aperture | | | | |
| Manual | | | | |

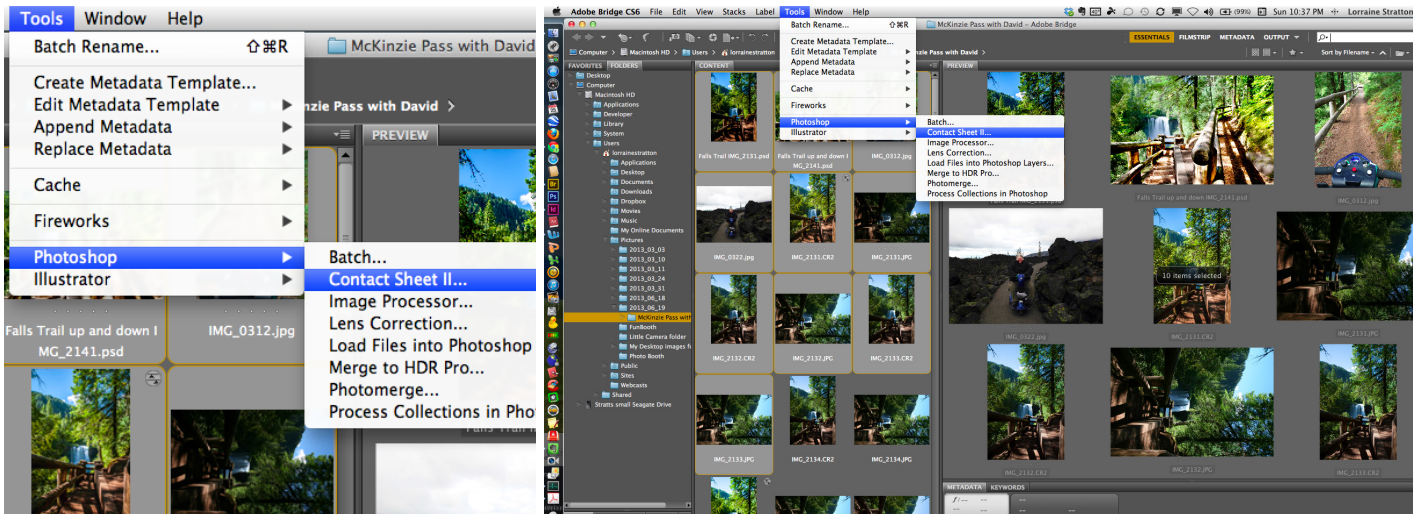
When done taking *all* images, save all files to your thumb drive in a folder labeled “Modes Assignment.” You should have at least 30 files.

Section 3

Digital Editing: PhotoShop Assignment

You are now to edit your photos using Bridge and PhotoShop (the full version).

1. First open Adobe Bridge to see all of your photos you saved on your flash drive. Using Bridge, confirm the exposure (ISO, shutter speed and f /stop you'll learn more about these later) and make sure you have filled out data correctly in previous tables.
2. Now double click on the image you want to use in Bridge and it should open in PhotoShop automatically.
3. In PhotoShop use the T (text box) type in the location (sunny, shade, classroom), mode and data you gathered for each image (ISO, f /stop and shutter speed) used when taking each photo onto the image. Merge your layers on each file (Layer>merge layers). Should look like this:
4. Save altered photo with new name. **Suggestion:** location (sunny, shade, classroom) + mode
5. Once you have completed and saved each file you are going to create three **contact sheets** all 10 photos for each location.
6. Leave PhotoShop open, but return to Bridge and select the 10 photos you typed data on to for one location.
7. Now in Bridge's menu bar, with your 10 photos selected, go to Tools > PhotoShop > Contact Sheet II. It should look like this (with 10 images selected):



8. When you release the mouse after clicking on Contact Sheet II, the program should take you back into PhotoShop. PhotoShop will then do all the work for you, so sit back and relax until it's done.
9. When PhotoShop is finished you should have a contact sheet with 10 photos. Now use text tool to label contact sheet with your name and location; sunny, shade, classroom) Save this contact sheet with your last name, first name and location (sunny, shade, classroom) on to your thumb drive.
10. Print out a copy of each of your three contact sheets. Staple printouts to this assignment sheet, answer reflection questions (next page) and turn in to period folder.

Name: _____

Period: _____ Date: _____

Section 4
Reflection

Answer the following questions remembering to use complete sentences:

1. What are the advantages of the Auto Modes?
2. What are the advantages of the Creative Modes?
3. What is the image editing program we use?
4. Explain which program on our computers is best to view multiple images.
5. Photos taken in sunlight looked best using which camera mode? Why do you think that?
6. Photos taken in outside shade looked best using which camera mode? Why do you think that?
7. Photos taken in the classroom under fluorescent lights looked best using which camera mode? Why do you think that?

Name: _____

Period: _____ Date: _____

8. Looking at your contact sheets how are the sunlight, outside shade and classroom fluorescent lighting colors the same/different?

| Light Conditions | How light looked same/different |
|----------------------|---------------------------------|
| Sunlight | |
| Outside Shade | |
| Classroom | |

9. Describe is your favorite photo you took for this assignment. Explain how it was taken and what you liked and disliked about it. Attach a printout of the photo to this packet.

10. How would you do this assignment different were you to do it again?

11. What is the unexpected thing you learned during this assignment?