**Exposure Quiz - KEY** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Score: \_\_\_\_\_ / 45

*Part 1: Match the exposure aspect with the definition (1 pt each)*

|  |  |
| --- | --- |
| \_\_F\_\_\_ 1. Flash | a. the amount of light that enters through the camera’s eye |
| \_\_E\_\_\_ 2. ISO | b. the length of time that a camera allows light into the camera’s eye |
| \_\_D\_\_\_ 3. Exposure | c. how much of the viewfinder the camera uses to determine exposure |
| \_\_B\_\_\_ 4. Shutter Speed | d. a general term for the amount of light that reaches a camera’s lens |
| \_\_A\_\_\_ 5. Aperture | e. the camera’s sensitivity to light |
| \_\_C\_\_\_ 6. Metering | f. artificial light that gets added to a photo |
| \_\_G\_\_\_ 7. White Balance | g. natural adjustment a camera makes to adjust for different types of light sources |

*Part 2: For each measurement or setting icon, tell which exposure aspect is being measured and what the measurement means. (2 pt each)*

|  |  |
| --- | --- |
| 8. | Shutter speed. The shutter will close at a speed of 1/80th of a second. The motion in the photo should appear somewhat “stopped”. |
| 9. | Flash. The camera is set to automatically adjust for how much flash it thinks it needs. |
| 10. | ISO. This setting means that the environment is probably relatively dark BUT the photographer doesn’t want the photo to be too grainy. |
| 11. | Aperture. This is a relatively low aperture, which should create a larger depth of field (parts of the photo will not be in focus). |
| 12. | Metering. The camera is set to evaluate light based on the center of the photo, rather than the entire photo. |
| 13. | White balance. This is the tungsten setting, which means that the photo is being taken indoors under tungsten light bulbs. |
| 14. | Exposure. This exposure setting is right in the middle, so the photo will not be over- or under-exposed. |

*Short answer: Answer each of the following questions using 2-3 complete sentences. (3 pts each)*

15. One of the confusing things about aperture is the relationship between the size of the camera “eye” and the measurement. Explain this relationship.

The smaller the aperture number (1.8, 2.8, 4), the larger the opening of the camera eye. The larger the number (8, 11), the smaller the opening.

16. What does it mean to overexpose a picture? What effect does this have on a photo?

To overexpose a photo means that the camera intentionally adjusts to make a photo lighter than it typically would. It can create natural (or even unnatural) light areas of a photo.

17. Explain what it means to take photos in “Shutter Priority.” What does the camera decide for the photographer, and what settings does the photographer still need to manipulate on his own?

In Shutter Priority, the camera will automatically adjust Aperture to account for the settings that the photographer chooses for Shutter Speed. The photographer must also still choose White Balance and ISO.

18. Describe a scenario when a photographer might want to use a very high ISO and a scenario when a photographer might want to use a very low ISO.

High ISO: Gymnasium, darkened classroom, etc.

Low ISO: Bright, direct sunlight

19. Discuss the purpose of flash versus how flash is often used by amateur photographers.

Amateur photographers often use flash to lighten dark photos. However, flash should be used to minimize shadows or to add light in a specific direction. It shouldn’t be used for the sole purpose of making a photo in a dark room easier to see.

20. Most photographers shoot in center-weighted metering (which is also called multi-segment metering in some cameras). In what scenario might a photographer switch to a different metering setting?

If the center of the photo is disproportionately light or dark and the subject isn’t in the center, the photographer might want to switch to a different setting.

21. Imagine that you are using the manual setting of your camera to take a photo of a basketball game in a poorly-lit gymnasium. What measurements might you set for your camera? (1 pt each blank) (These are samples, but should be close to what students might choose)

Aperture: \_\_\_\_4\_\_\_\_\_\_\_\_ Metering: \_\_\_\_\_center\_\_\_\_\_\_\_

Shutter Speed: \_\_\_\_1/500\_\_\_\_\_\_\_\_ ISO: \_\_\_\_800\_\_\_\_\_\_\_\_

White Balance: \_\_\_\_tungsten\_\_\_\_\_\_\_\_ Flash: \_\_\_\_off\_\_\_\_\_\_\_\_