Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Exploration: Flash Photography**

**Objective**

Using a dedicated flash, experiment with taking images using direct and indirect flash.

**Materials / resources**

* Digital SLR capable of TTL flash metering
* Dedicated external flash with adjustable head
* Slideshow: Flash Photography
* 3x5 index card with rubber band
* one white facial tissue and a small piece of transparent tape

**Procedure**

Find a partially lit location. This could be a classroom with the lights turned off, a dimly lit hallway or a gymnasium with some of the lights turned off. Choose a subject to photograph. This could be an object that can be easily moved around or a person. Keep notes during each of these shots so you can identify the various lighting techniques when reviewing the images afterwards.

*First shot:*

Shoot your subject with available light. Put your camera in Program mode, full frame metering, with an ISO of about 200 with an indoor subject about 10 feet away from the camera. The exposure will be a fairly slow shutter speed with the aperture as wide open as possible. This shot will demonstrate how difficult it is to shoot handheld in low light, indoor situations. Adjust the camera-to-subject distance until a well exposed photo is achieved using the on board metering.

*First shot (b):*

If your camera has a popup flash, shoot the same shot again. This shot will demonstrate the low power that popup flashes have.

*Second shot:*

Place the external flash on the hotshoe, lock it in place and turn it on. Make sure the flash is in TTL mode. Shoot a photo of your subject. This shot will be a well lit scene which demonstrates that the external flash has much better power than the popup.

*Second shot (b):*

Shoot the same shot with the camera in vertical and horizontal mode. Examine how the location of the shadow created by the flash changes. Typically, vertical portrait shots taken with the hotshoe-mounted flash pointed straight at the subject produce ugly shadows to the side of the subject.

*Third shot:*

Turn the head of the flash so it points toward the ceiling. Shoot both the vertical and horizontal shots again, adjusting the flash head to point at the ceiling in each orientation. This shot should demonstrate that bouncing the flash off the ceiling creates even broadly lit scenes.

*Fourth shot:*

Repeat the bounce lighting shots by pointing at a nearby wall. This will create even, broadly lit side lighting.

*Fifth shot:*

Experiment with that side-bounce lighting. Vary how close the photographer is to the wall you are bouncing the light off of, as well as how close the subject is to the wall.

*Sixth shot:*

With the flash head pointed at the ceiling, use the rubber band to secure the index card to the flash, creating a combination bound off the ceiling and the index card. Take a photograph of your subject with this configuration.

*Seventh shot:*

Remove the index card. Return the flash head to straight ahead. Place the facial tissue over the head of the flash and use the small piece of tape to keep it in place. Take a photo of your subject in this configuration. This image should demonstrate the quality of light you get when the flash’s light is diffused.

**Differentiation:**

Extension 1:

Reshoot these shots using the camera’s or flash’s exposure compensation features. The sixth and seventh shots may require some bit of + compensation to achieve a decent exposure.

Extension 2:

Examine what happens when the ISO is increased. As the ISO gets closer to one where available light could be shot with the same exposure settings, the background of the image will begin to show up, instead of a spotlight effect where it is completely blacked out. This can be used to great effect when shooting environmental portraits. In effect, the flash ends up filling in the shadows of your subject while keeping the background exposure.

**Conclusion**

Download the images from the camera. Collect examples for each of the seven required shots. Write a brief description of each photograph in the “Description” metadata.

Write a brief analysis of your collection of images:

* Which images have the most pleasing lighting?
* Which configuration would be the best solution when shooting a portrait with a single flash?
* Which configuration would you use for different coverage such academics, sports, student life in school or student life out of school?