
UNIT 3: ISO AND LOW LIGHT PHOTOGRAPHY – TASK 2 HELP SHEET

Camera modes and settings for this task are not detailed in the task itself because these are skills you learnt in unit 2. Each unit flows on from the previous one, building skills as you go so it is one continual learning experience.

Let's recap:

In unit 1, you learnt that the first question you ask yourself is "What lens/focal length will work best in this situation?" and you choose the right lens for the task.

In unit 2, you learnt the second question that you ask yourself: "Is movement or depth of field my priority?" If movement, choose a shutter speed first (work in shutter priority mode) and go from there. If depth of field, choose an aperture setting (work in aperture priority mode) and go from there. If you did Exercise 5 in UNIT 2, you also learnt how to record your settings, switch to manual mode and fine tune your camera settings to get the best outcome possible.

By unit 3, it is assumed that you can pick up your camera, make the decisions (discussed above) and take an image that is correctly exposed. Practice is how you get better with this, so if you need to, take some time now, go back through unit 2 and re-do the exercises until you are feeling a little more confident in what you are doing.

To step through the task:

Find a landscape scene with a good range of shadows and highlights. Take an image at the correct exposure. (Write your settings down).

This is a landscape scene, so you are going to use a lens / focal length in the range of 18 to 50 would be a good choice depending on the actual scene. There is no movement in the scene, and you want as much of the scene to be in focus as possible, so depth of field is your priority. You are going to set your camera to APERTURE PRIORITY mode and choose an aperture setting of around f/16. Your camera will select a shutter speed to work with this. Use the same procedure you used in Exercise 5 in UNIT 2. Once you have taken your image, write down the shutter speed and aperture settings the camera used to take the shot. You can see these when you review your images on your camera or on your computer.

Now underexpose the scene by 1 stop and take a new image.

(Remember, 3 clicks per stop, so 3 clicks).

Underexpose by another 1 stop (3 clicks), and take a new image.

Now underexpose by another stop (3 clicks), and take a final image.

Set your camera to MANUAL MODE. Set your shutter speed and aperture to the settings you have written down. Adjust your shutter speed (turn your main dial) 3 clicks in one direction and

take another image. Now continue another 3 clicks in the same direction and take another image. Now once more, continue another 3 clicks in the same direction and take another image.

Return to your original settings, then overexpose by 1 stop (3 clicks) and take another image. Overexpose by another 1 stop (3 clicks), and take a new image. Now overexpose by another stop (3 clicks), and take a final image.

Set your shutter speed back to the setting you have written down. You have not changed your aperture setting, so it should still be the same. Adjust your shutter speed (turn your main dial) 3 clicks in the opposite direction to what you did before and take another image. Now continue another 3 clicks in the new direction and take another image. Now once more, continue another 3 clicks in the new direction and take another image. You should have 7 images in total.

You should have a total of 7 images – your correct exposure, plus 3 that are underexposed and 3 that are overexposed.

ANALYSIS

PART 1: Open the images in the RAW processor on your computer. **DO NOT ADJUST THEM AT THIS STAGE.** Analyse the histograms, and also take a close look at the effect under and over exposing has had on the highlights and the shadows in the different images. Record your findings.

Check the images on your computer and make notes to answer the question above.

PART 2: Use the RAW processor to try to rescue the over and under exposed images. You are trying to restore lost highlight and shadow detail. Could the images be saved? Which gave the better result? What are your conclusions?

Open the images in the RAW Processor and using the exposure slider, attempt to correct the exposure in the images to match the original image that you took at the correct exposure. You may not be able to fix all of the images. Write down what images you could fix, what images you could not fix, and what this tells you.

Resample and upload your best image, along with your findings.

Choose you best image. Save it as a .jpg file resampled to the correct size for upload with your assignment. Include your answers to part 1 and part 2 above in the “image story” box on your assignment sheet.