

GCSE Photography

Unit One—Light.



THE AMOUNT OF LIGHT. The human eye can adjust to the difference in light levels, as you move from an exterior to an interior location or vice versa, or if the light level changes outside or inside. Although camera technology is wonderful, it isn't as good as the human eye, so it must make a "conscious" adjustment to the amount of light. That adjustment relates to exposure; and a digital camera's

auto-exposure function will make the adjustment and set the three parts of the exposure formula—ISO, aperture and shutter speed—or you can select them manually. This is a very good skill to acquire because the auto-exposure function is not always accurate under certain situations.



THE COLOUR OF LIGHT. Light consists of various colours, as you can see when light passes through a prism. The Kelvin scale measures the light in terms of whether it trends towards the orange or blue end of the scale. It's difficult for your eyes and mind to distinguish the various levels of blue or orange as accurately as your camera will, meaning

the colour in your digital photos may look different than you thought they would. For example, on a typical day, the light starts as quite orange at sunrise, progresses through various shades of blue, depending on cloud cover, and then becomes orange again at sunset; in fact, so orange, it becomes red. Indoor lighting or street lamps, signage lights, etc. will trend toward orange, but it won't be visible to you.

GCSE Photography

Unit One—Light.



THE DIRECTION OF LIGHT Although light always travels in a straight line, most light rays bounce off various surfaces within any setting, causing a multiplicity of light sources. A shiny or highly reflective surface bounces the light at the same angle it hits that surface. A less-reflective surface will diffuse the light, so the incoming rays are scattered in all directions. Taking the time to discern the directions of light within a scene or on a subject before you start taking pictures is one of the important differences between a beginner photographer and a more accomplished, creative image maker.



THE INTENSITY OF LIGHT

The intensity of the light source is directly related to the direction and the surfaces from which it is reflected. A strong, narrowly cast light, such as the sun or a flash, is considered hard light and will create intense shadows. This is often an important creative element when establishing a balance of contrast in a photo: the bright areas balanced with the dark shadows. Soft light is diffused light. Again, the light rays are reflected off a dull surface in all directions. That is why a cloudy day is often a better day for many types of photos, including outdoors portraits, because there are no harsh shadows, but nice, soft even light.