

Materials in Practice

Studio photography

Check out the
video series here



Materials

- Camera
- Flash

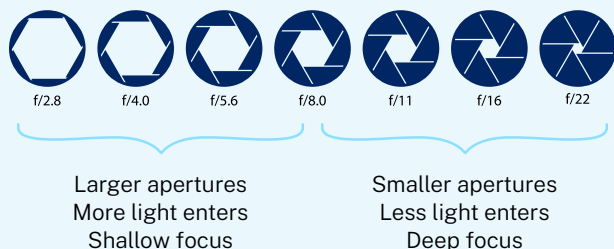
Optional

- Tripod
- Light stand(s)
- Constant lights
- Flash
- Power cords/batteries
- RGB lights
- Radio triggers

Techniques

When shooting in **manual**, it is helpful to take test shots and adjust the aperture, **ISO** and shutter speed until photos are adequately exposed. Adjusting and troubleshooting these settings will help you become more familiar with your camera and the effects of different lighting conditions.

- **Depth of field** – The range of focus in an image. A shallow depth of field (wide aperture) isolates the subject, while a wide depth of field (narrow aperture) keeps more elements in sharp focus. F-stops are aperture values that control how much light enters the camera through the lens. Each f-stop change either halves or doubles the amount of light reaching the sensor.



- **ISO** – determines the camera sensor's sensitivity to light. A lower ISO (100–200) is ideal for studio photography to maintain image quality and reduce noise, as studio lighting provides sufficient brightness.

- **Shutter speed** – regulates how long the camera sensor is exposed to light. In studio photography, a moderate shutter speed (for example, 1/125s–1/200s) is common to sync with flash while avoiding motion blur.

Single lighting

There are a few things to consider when shooting with a single lighting source. Using longer **focal lengths** usually results in more flattering effects on your subject.

Maintaining distance between the subject and the background will offer more scope for future editing.

'Rembrandt lighting' uses a carefully positioned single light source to illuminate a portrait subject; its most important characteristic is the dramatic shadows on the face. Use umbrella diffusers or a **soft box** to disperse light for even softer lighting effects. Position your light off to one side to deepen shadows.

Safety

- Prevent accidents by hanging coloured fabric on protruding equipment to draw attention to it.
- Secure cords where possible and identify any trip hazards.



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Processes

Studio set up

When setting up studio lighting, consider the effect you want to achieve — whether it's soft, even lighting for a flattering portrait, dramatic shadows for a moody look, or high contrast for a bold and dynamic image.



Setting up studio lights

Editing

Use **histogram analysis** to balance highlights, midtones and shadows. Adjust exposure, contrast, highlights and shadows for a well-balanced image. The histogram is a graph that displays the distribution of brightness levels, from shadows on the left side to midtones in the centre and highlights on the right.

Selective edits allow you to enhance subject features by selectively adjusting brightness, contrast and sharpness using masking tools.

Crop strategically to focus on the subject and remove distractions in your composition while maintaining proper **aspect ratios**.

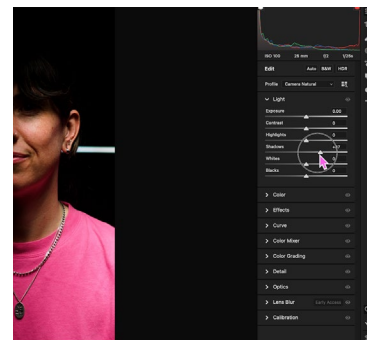
Apply subtle **vignettes** to draw attention to the subject and enhance the impact of the image.



Focal length between subject and camera

Exporting

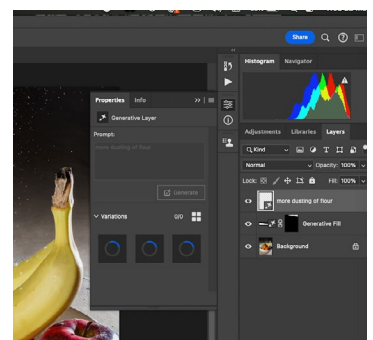
To export your edited photo, select **File > Export > Export as > select** your desired select size and format and hit Export.



Editing a portrait shot with Rembrandt lighting using the histogram

Top tips

- The numbering is reversed when it comes to f-stop values. The smaller the number the larger the aperture opening and the more light is allowed to enter the camera.
- **RAW** files offer greater flexibility for editing, while **JPEGs** appear more finished, straight from the camera.
- Save time by applying batch edits to photographs with similar exposure settings.



Making selections to edit with generative fill

Vocabulary list

Studio photography

Term	Definition
Aspect ratio	The proportional relationship between the width and height of an image. It is expressed as a ratio such as 3:2.
Focal length	The distance between a camera's lens and the image sensor when the subject is in focus. Short focal lengths capture a wider scene, while long focal lengths provide a zoomed-in view with a narrower field of view.
Histogram analysis	Involves examining the graphical representation of the tonal values in an image. By analysing the histogram, photographers can assess exposure, contrast and tonal balance, ensuring that details are not lost in overly dark or bright areas.
Hot shoe	A metal bracket on top of a camera that allows external accessories like flashes to be attached and communicate with the camera.
ISO	A setting that controls the camera sensor's sensitivity to light.
JPEG	JPEG is a common compressed image file format that balances quality and file size. JPEG files lose some detail due to compression but are widely used for sharing and printing because of their small size and broad compatibility.
Light diffuser	A device or material that softens and spreads light evenly, reducing harsh shadows and glare in photography.
Manual	A camera mode (often labelled as M) that gives the photographer full control over exposure settings, including aperture, shutter speed and ISO, rather than relying on automatic adjustments. This mode allows for precise creative control over the final image.
RAW	A file format that captures all image data from the camera sensor without compression or processing. RAW files retain maximum detail and allow for greater flexibility in post-processing but require special software to edit and convert into common formats like JPEG.
Soft box	A lighting accessory used in photography that diffuses artificial light, creating soft, even illumination. It reduces harsh shadows and is commonly used for portraits and product photography.
Shutter speed	The length of time the camera's sensor is exposed to light when taking a photo. A fast shutter speed (for example 1/1000s) freezes motion, while a slow shutter speed (for example 1/10s) allows light in for longer and can create motion blur.
Tripod	A three-legged stand that stabilises a camera, preventing shake and allowing for precise composition and long exposure shots.
Vignettes	A darkening or shading effect around the edges of an image.