



MACRO WORKSHOP

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What is macro photography

Macrophotography is close-up photography, usually of very small subjects. Classically a macrophotograph is one in which the size of the subject on the negative is greater than life size.

However in modern use it refers to a finished photograph of a subject at greater than life size.^[1] The ratio of the subject size on the film plane (or image sensor plane) to the actual subject size is known as the **reproduction ratio**.

Likewise, a **macro lens** is classically one lens capable of reproduction ratios greater than 1:1, although it now refers to any lens with a large reproduction ratio, despite rarely exceeding 1:1.

Ways of taking macro images

- “Close up” filters



- Extension tubes/bellows



- Reverse mount a standard lens using special coupling device



- “Macro” lens



Macro- problems and solution

- Shake and vibration
 - Use tripod or other support
 - Avoid shutter speeds between 1/15 and ¼
 - Use mirror lock
 - Use higher ISO/shutter speed
 - Use shielding if in field (e.g. flowers)
- Limited depth of field
 - Focus on key aspect of subject (e.g. eye)
 - Keep object properly aligned with plane of lens
 - Keep aperture between f11 and f22
 - Use stacking software
- Loss of light at sensor
 - Use appropriate lenses
 - Use fixed light, diffuse fill in flash or light box
- Loss of quality
 - Use best kit that you can afford ideally designed for macro work

Now it's your turn