

Education Night

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Macro & Close-up Photography

“It is not the grand scenic, but the details that comprise the scenic. It is not the wide scope of nature, but the intricate texture of nature itself. It is not the overview, but the closer view.”

-John Shaw (Closeups in Nature)

Micro

vs

Macro

vs

Close-up

Micro



*Micro = at least 1:2
relationship to
sensor or film*

Larger than life size

Photo by Martin Amm

<http://photo.net/photos/MartinAmm>

Macro

Macro = 1:1 relationship to sensor or film



Close-up

Close-up = getting close to the subject
A VERY general term!



Close-up photography has two main challenges:

- Movement
- Shallow Depth of Field

Use a high shutter speed to limit movement



1/950th @ f/5.0 6mm (28mm)

Nikon P7000

Use a small aperture to gain depth of field



4.0 sec @ f/32 w/flash 200mm (300mm)

Nikon D60 & Tamron 70-200

Tools of the trade:

- Macro Lens
- Ring Flash
- Close-up Filters
- Bellows / Focus Rail
- Extension Ring/Tube
- Reversal Ring

Macro (Micro) Lens



Nikon 60mm f/2.8 About \$500

Macro Ring Flash



Sigma TTL Ring Flash About \$350

Close-up Filters



3 Piece Kit +1, +2, +4 About \$65

Bellows for DSLR



About \$80

Focus Rail



About \$60

Extension Ring



Nikon PK-13A Auto Extension Ring About \$99

Reversing Ring



Nikon BR-2A Reversing Ring About \$40

Accessory Chart

	Macro lens	Bellows extension	Extension tubes	Close-up lenses	Reversing ring
Price	Highest	2nd highest	Middle	2nd lowest	Lowest
How portable?	Least	2nd least	Very	Very	Very
Effect on optical quality?	No effect, generally excellent	No effect	No effect	Can degrade image	No effect
Specific to camera brand?	Yes	Yes (requires adapter)	Yes	No (needs to fit filter ring)	Yes
Camera type?	SLR or compact with close focus	SLR only	SLR only	Any camera with filter-ring	SLR only

Other Tools

- Tripod
- Ball Head



Other Tools

- 5 in 1 Reflectors
- Clamp



Other Tools

- Flash
- Diffuser



Other Tools

- Polarizing Filter
- Teleconverter



What if I don't have a
DSLR??

Use the Close-up Mode!

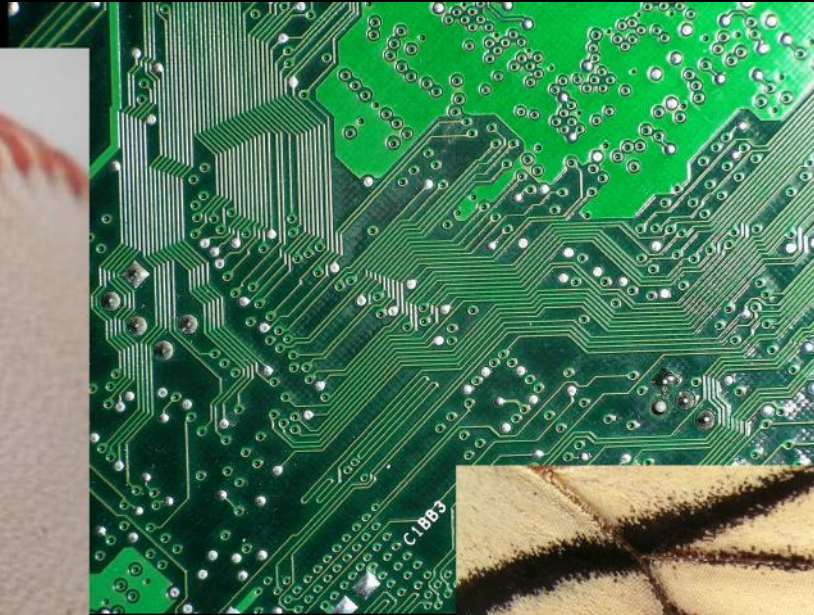




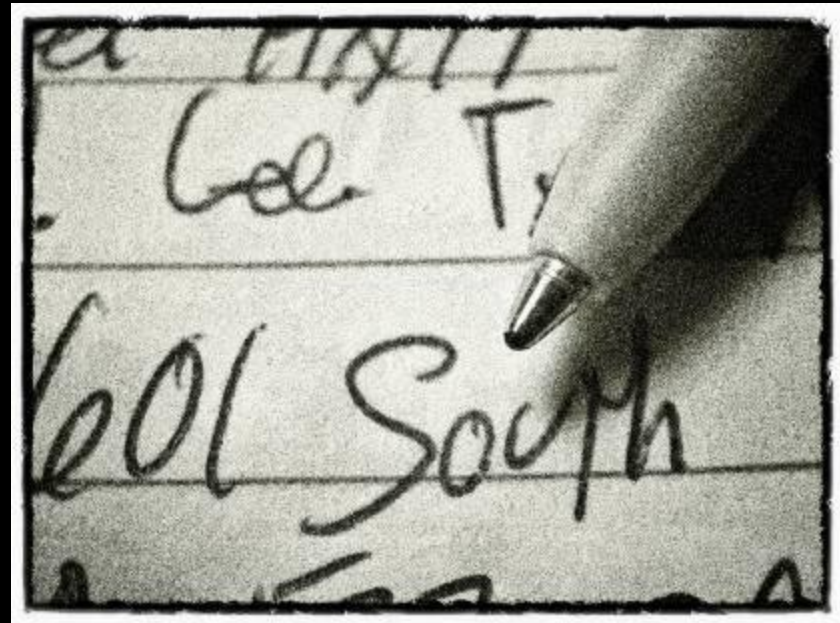
Camera selects:

Shutter Speed and **Aperture** to manage *Depth of Field* and *Close Focus*

All taken with a Point & Shoot



Use a Loupe as a Macro Lens!



All taken with the iPhone



Questions ?????

Thank You!!