

SUMMING UP

WEEK 2:
CAMERA BASICS



MAKING SCIENCE AND ENGINEERING PICTURES

A PRACTICAL GUIDE TO PRESENTING YOUR WORK

Using the Right Tools

- Camera, macro lens, tripod with quick release.
- Use software to control exposure settings for ISO, aperture, shutter speed.

Exposure

- Set ISO at lowest possible (higher setting is more light sensitive).
- Set aperture at highest possible setting (f/32).
- Manually adjust shutter speed to match 0 on exposure readout.

Aperture

- This opening determines depth of field, i.e. what's in focus.
- Aperture written f/setting number.
- The larger the number, the smaller the aperture and more in focus (greater depth of field).
- Smaller opening delivers less light to sensor, so shutter must be open longer.

Composition

- Be aware of negative space and shadows.
- Simplify a busy image.
- Try two or more of the same object to contrast orientation, scale or color.

Backgrounds

- Watch for seams and horizons, use a sheet of paper or container to remove seams.
- Narrow the depth of field to soften edges or distracting backgrounds.

Point of View

- Distance, angle (and resulting shadow) effect the final image.
- Can provide context for size or location, or convey dimensionality.

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Resource: Making Science and Engineering Pictures: A Practical Guide to Presenting Your Work
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