



Digital Photography

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DigitalEve Japan
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Today's Workshop

- Behind the lens
- Photography secrets
- Photo safari
- Camera to computer
- Editing images
- Sharing your photos
- Homework!

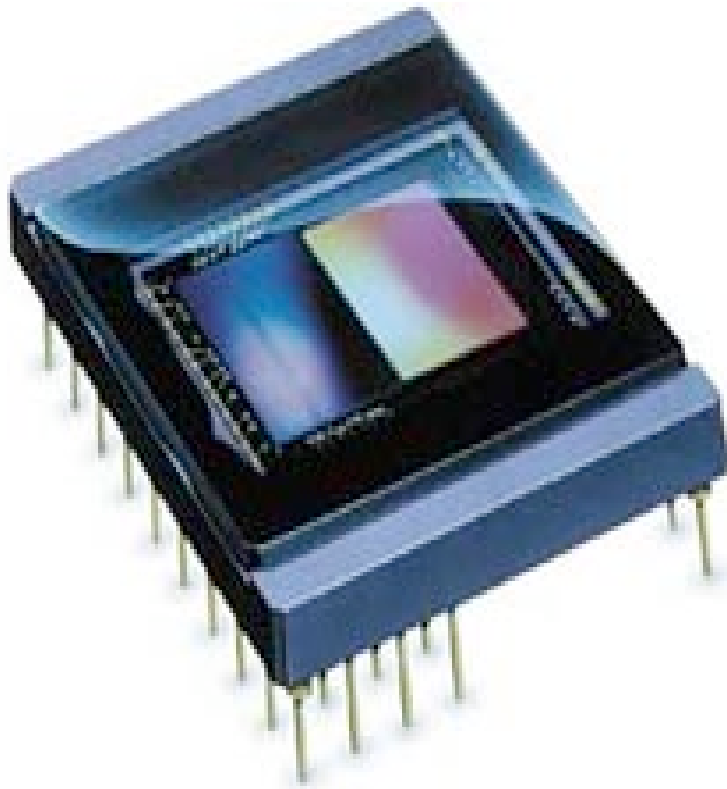




Behind the Lens

Technical basics to help you
understand your camera

CCD & Megapixels



- CCD (charge coupled device) is an array of picture elements (pixels) on a chip.
- A megapixel is a million pixels. $211 \text{ 万} = 2.1 \text{ megapixels}$
- The more pixels, the better the resolution of your photos.

Storage Media

- Storage media is digital film.
- Memory stick, SD, Compact Flash, Smart Media
- Many sizes (4 - 256 MB); bigger sizes hold more images.



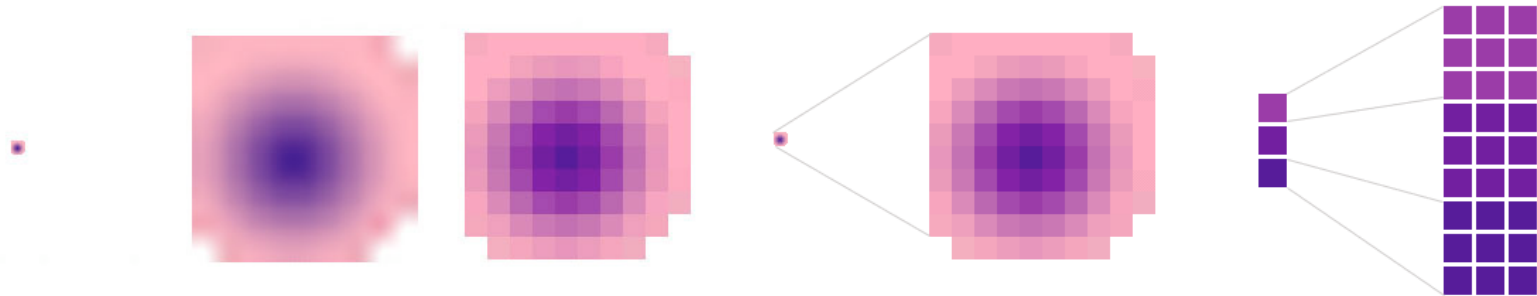
Connectors

- Connectors allow your camera and computer to communicate.
- Main connectors:
 - USB
 - Serial
 - Bluetooth





Optical Zoom vs. Digital Zoom



- Optical zoom uses lenses just like a film camera
 - Smooth, crisp, accurate image
- Digital zoom turns each pixel into many pixels
 - Blocky, grainy, pixelated image



Buying: What do I need?

■ Basics

- ☐ Price range: 25,000 - 120,000
- ☐ Resolution: 1 - 5 megapixels
- ☐ Storage media type
- ☐ Connector type & cable
- ☐ Battery/power supply
- ☐ Size/weight
- ☐ Controls/interface

■ Extras

- ☐ Zoom/macro
- ☐ "Mode" features
- ☐ Self timer
- ☐ Flash controls
- ☐ Viewfinder type
- ☐ Movie
- ☐ Audio
- ☐ Software



Photography Secrets

Framing & Lighting



Framing: Fill the Frame





Framing: Edge Clutter





Framing: Consider the Angles





Framing: Rule of Thirds



Framing: Grouping People

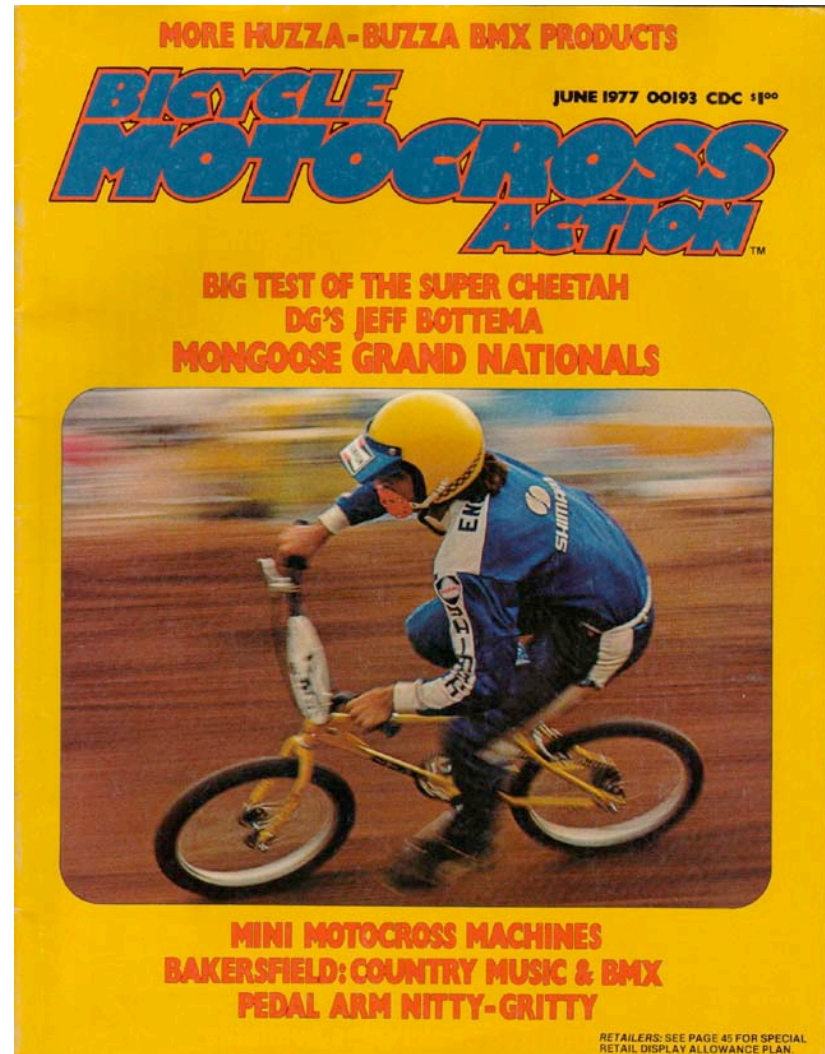




Framing: Grouping People



Framing: Action



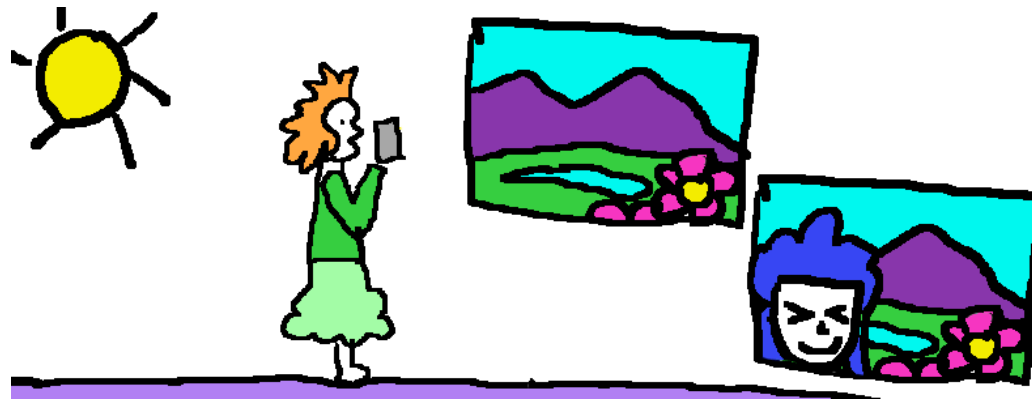


Framing: Portraits





Lighting: Use Available Light

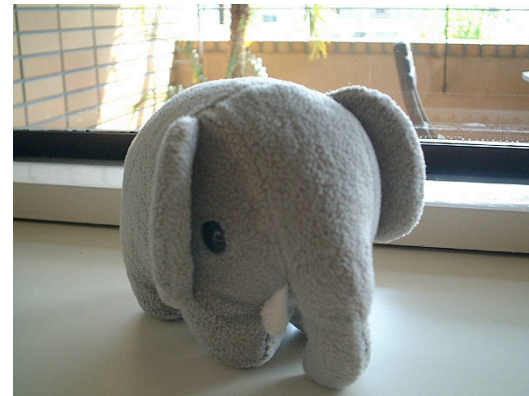


- Early morning & late afternoon sun
- Sun over your shoulder for landscapes
- Background and subject equally lit
- Rooms are never as well-lit as you think--our eyes and the camera see light differently

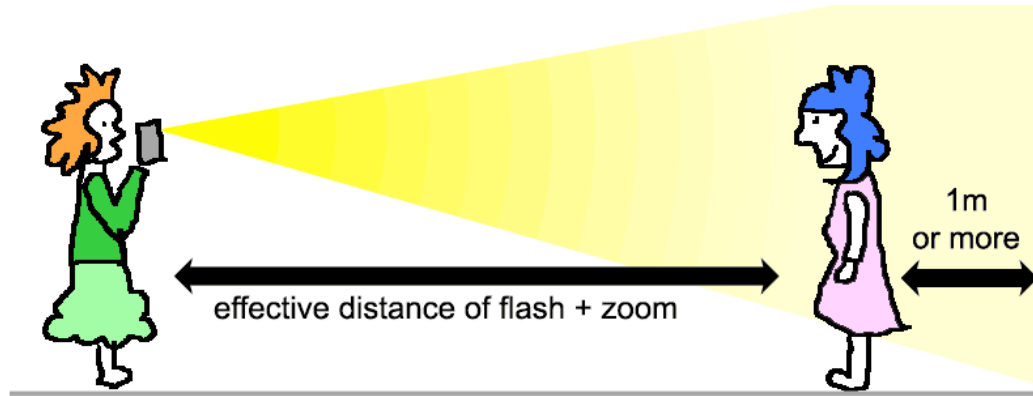


Lighting: When to Flash

- Low light: rooms, evening
- Backlight: background is too bright
- Freeze action



Lighting: Avoid Shadows



- Stand the subject 1 meter away from walls
- Keep the flash away from the subject
 - Stand farther away and zoom in

Lighting: Avoid Reflections



- Don't flash when photographing things inside display cases or through windows
- Look for your own reflection in the frame
- Put the lens against the glass
- Stand at an angle to the shiny surface



Photo Safari

- Portrait
- Landscape
- Close-up
- Action shot

A decorative graphic on the left side of the slide consists of a grid of pink squares of varying shades, some of which are partially obscured by a solid dark red rectangle. The text 'Camera to Computer' is written in white on the dark red rectangle.

Camera to Computer

Downloading the images



Download

- Connect the camera & turn on
- Launch the software that came with your camera or use another program to move the pictures from your camera to the computer



Editing images

Editing Software

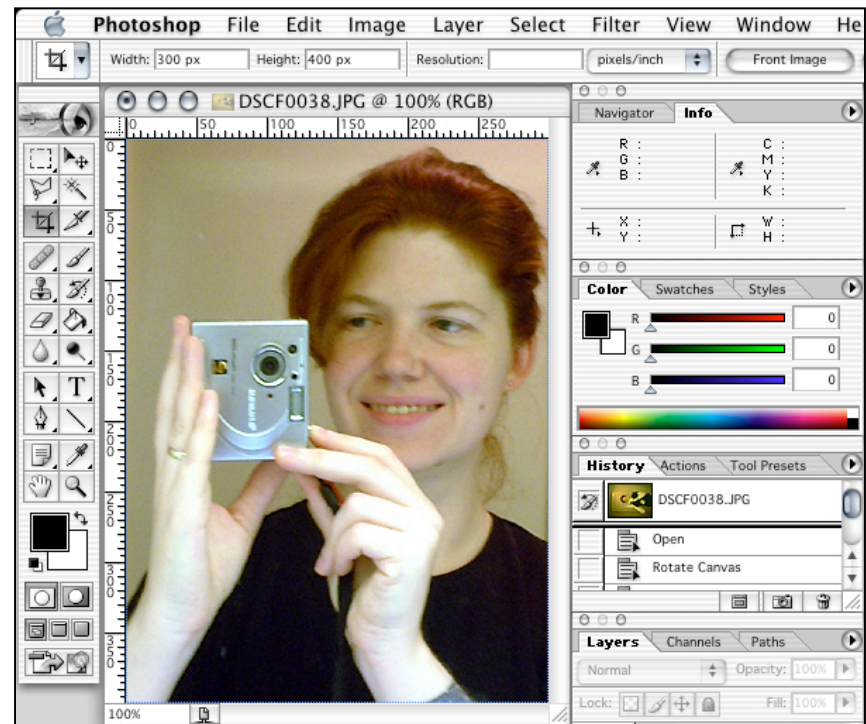
Work big, then resize

Image size vs file size

File formats

Editing Software

- Photoshop (Full or Elements)
- Paint Shop Pro
- Your Camera's Software





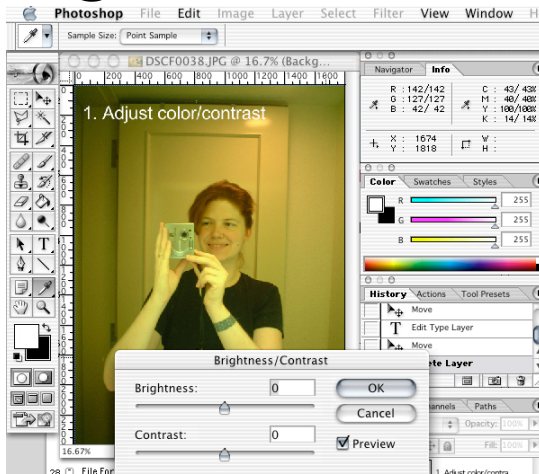
Work Big then Resize



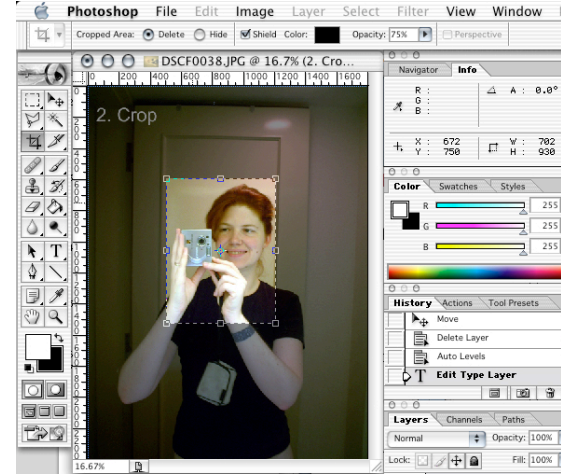
- More pixels to choose from means your image editing program can make better choices
- Take photos at maximum resolution
- Resize at the end...

Editing Process

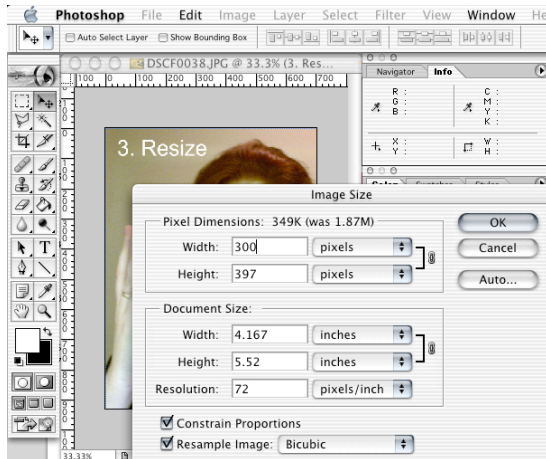
1.
Adjust
color



2.
Crop



3.
Resize

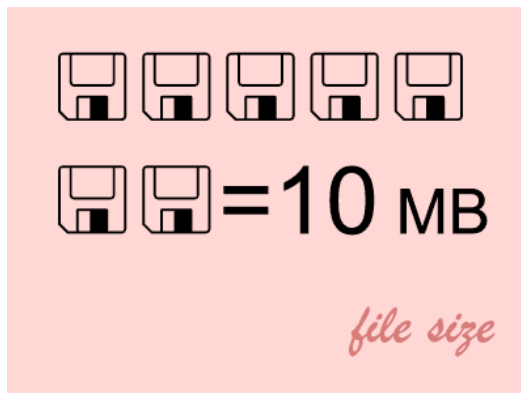


4.
Sharpen





Image Size & File Size



- Every image has an image size & a file size
- Image size is dimension in pixels, cm, inches
- Image size for placement & printing
- File size is measured in bytes, KB, MB
- File size for e-mailing & downloading



File Formats

■ JPG

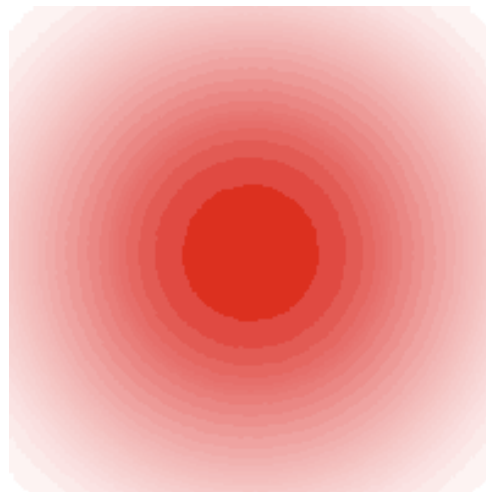
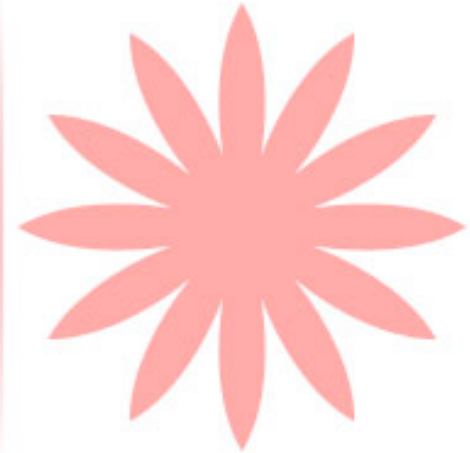
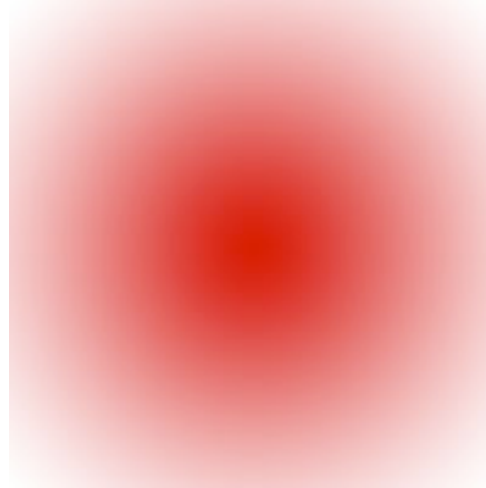
- compressed format for **photographs**
- works for Web

■ GIF

- compressed format for **graphics**
- works on Web

■ TIF

- lossless format
- good for print, does not work on Web.





Sharing your Photos

Printing

E-mail

Web Albums

Printing



- Ink jet and laser prints
- DPE
 - Prints from media
 - Ofoto.com
- Photo kiosks
 - Bic Camera, Family Mart
 - 50 yen/print
 - Accepts many types of media

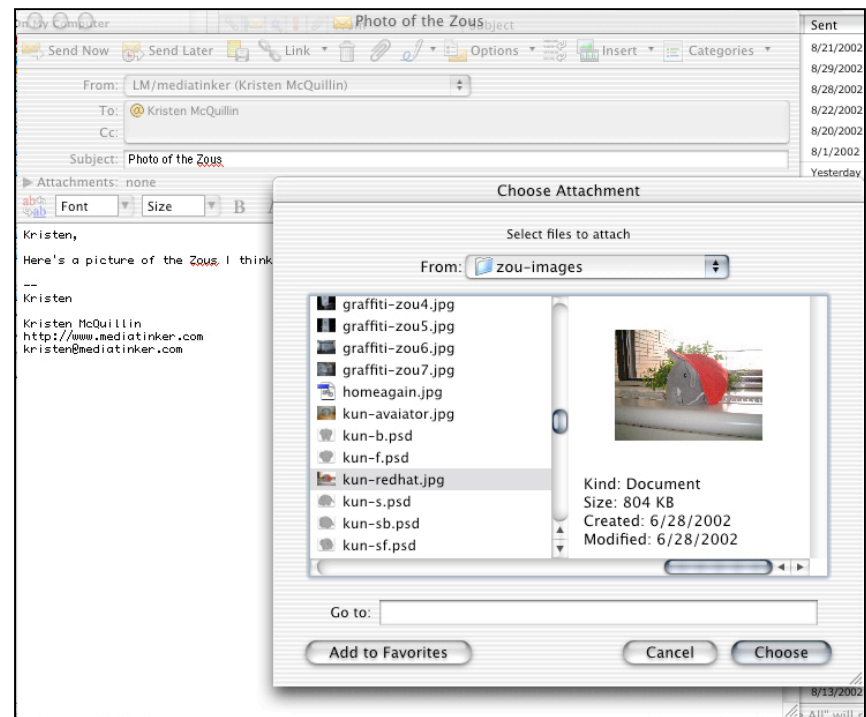
E-mail

■ Attaching to an e-mail

- Make the file size small as many mail accounts have a size limit
- Find “Attach” command; browse to file

■ Zipping multiple photos

- Combines several files into one and compresses them
- WinZip, Stuffit
- Recipient needs to have software to unzip the file



Web Albums



■ Software options

- ☐ Photoshop, iPhoto
- ☐ Online service
- ☐ Your camera's software

■ Hosting options

- ☐ Your ISP
- ☐ Free: Yahoo Photos, Picturatrail
- ☐ Fee: Mac.com, Fotoki

Homework!



- Select your favorite 3 images from today's photo safari
- Edit them to 400 x 300 pixels (or 300 x 400)
- Email to **kristen@mediatinker.com** by 9/30



DigitalEve Education

- Web Retreat. October 26-27, Saitama
- Computer Troubleshooting, November & December
- Two New CDs
 - Working with your Computer and Sound
 - Managing Websites with Dreamweaver

