Digital Photography

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"A picture is worth a thousand words."
- quote from someone with a great idea

Introduction to the "aim and shoot" camera:
What's available in the digital world? Sony, Kodak, Epson, Canon, Olympus, etc..
Basic camera features that you should know. Resolution, zoom and flash settings.
Additional features for creativity and storage. Close-up, backlighting, slideshow, etc..
Camera extras. Memory cards (8MB to 1GB), extra batteries, tripod, filters, etc..

Quality: Know your Resolutions
Typical resolutions:
640x480- great for web only use.
800x600- OK for multi-purpose use with consideration to storage space.
1024x768- best overall for use with both web and small prints.
1472x1104- 1.6 megapixel overkill for web images, good for small prints.
1600x1200- ~2 megapixel quality
2000x1500- 3 megapixel quality
3000x2000- 6 megapixel quality

Megapixel: More pixels = better image detail and quality.
1mp- looks good on a computer screen, with limited features and prints good to 3 x 5 size.
2mp- pictures look good on a computer screen and provides quality prints up to 5 x 7 size.
3mp- quality camera with many advanced features and prints to 8 x 10 size.
4, 5, 6+mp- high-end camera with quality optics, many advanced features and prints to 11 x 14.

Simple shooting ideas:
▸ Mover closer to your subject! Use the zoom lens to get closer.
▸ Think composition. Try not to center your main subject. Apply the Rule of Thirds.
▸ Think vertical. Take "portrait" (vs. landscape) type photos for vertical-based subjects (people, trees, flowers, etc.).
▸ Working with lighting. The best quality photos are taken outdoors. If you have to take a photo indoors, remember that your flash is only good up to 10 feet distance.
▸ Photographing people. Once again, move closer to people when taking their photo. People doing activities make good photos. For portraits, "head and shoulder" shots are the best (crop the feet out).
▸ For creative photos, try photographing above or below your subject. Get on your hands and knees, typically not at "eye-level," for those award winning shots.

File Formats:
What is the difference between JPG & TIF?
How does compression work? Quality vs. file size

Removable Media Storage:
Compact Flash Type 1 and 2 (most common), Memory Stick (Sony),
 Smart Media (Fuji), SD/MMC (Toshiba, Panasonic)

Software Ideas:
Programs- Adobe Photoshop, Adobe Elements, JASC PaintShop Pro, IrfanView, Serif PhotoPlus
What fixes to apply? Cropping, resizing, adjusting the brightness and color, using special effects,
removing dust and scratches and cleaning up a background.

Options for Outputs:
Electronic presentations- inserting an image into PowerPoint. *(Lower quality resolution)*
Desktop Publishing- inserting an image into a newsletter, flyer or publication.
   (Medium to higher resolution needed.)
Printing- creating a nice looking color or black & white photograph for your home or office.
   (Medium to higher resolutions)

Digital Photography resources on the Internet:
http://reviews-zdnet.com.com/Digital_cameras/2001-6501_16-0.html   ZD Net Digital Cameras
http://www.dpreview.com/   Digital Camera Reviews with imaging tips, glossary and links
http://www.oznet.ksu.edu/edtech/How_To/HT-DigitalPhotography.htm   IET's EdTech site
http://www.kodak.com/US/en/digital/dlc/   Kodak's Digital Learning Center
http://www.shortcourses.com/   Digital photography On-line short courses
http://www.focus-online.com/   Web-based digital photo magazine
http://www.irfanview.com/   IrfanView, free image and thumbnail graphic software (~1Mb)
http://www.freeserifsoftware.com/ Serif PhotoPlus 5.5, free digital photo retouching tool (~7Mb)

Sony Cyber-Shot DSC-P8 digital camera:

CCD Sensor	3.2 million (mega) pixel camera
Cost	$280 to $360
Image Quality	Resolution modes:
	640 x 480 pixels to
	2,048 x 1,536 pixels
	(8x10 print quality)
Zoom	Optical 3X, Digital 2X
	(39mm to 117mm range)
Focus Range	Macro mode: 4" to 32"
	Normal mode: 32" to infinity
Built-in Flash	Range: 8" to 12'
	Modes: Auto flash, Forced flash, Flash off, and Slow synchronized
Memory	Sony Memory Stick (standard 16MB with camera, available to 500MB)
File Formats	JPG (still images), MPEG1 (video capture)