

**Types of Cameras:**

DSLR - Digital Single Lens Reflex. Image goes through the lens, reflects off a mirror and you see the actual picture in your view finder.

CDC - Compact Digital Camera – Also known as a digicam

CRAPOLA – The French word for Camera Phones.

**Plus/Minus**

DSLR

- + Multiple lenses
- + Better picture quality
- + Better light control
- + Faster
- + More control over picture
- + More durable
- Heavy
- More expensive
- Can be more complicated
- Go through batteries like a Sumo through a dessert table
- Overkill for basic web work

CDC

- + Lightweight
- + Compact
- + Longer lasting batteries
- + Most are inexpensive
- + Point and shoot
- + Great for web work or eBay pictures
- Limited picture quality
- Limited quality zoom
- Limited light control
- Easier to damage

**CDC Features** - Things to look for when purchasing a CDC.

1. **Lens** It does not matter what features and bells & whistles the camera has, without a quality lens, the pictures will not be very good. **The best: Nikkor, (Carl) Zeiss, Schneider.** A minimum of 3x optical zoom, higher being better and a true wind angle of no higher the 35mm. If you think you will want to shoot close-ups, look for a camera that has a close-up setting, usually around 15-18”.
2. **Megapixels** (explain a pixel) If you are just doing web work then anything above 3 megapixels will do fine. If you are going to print pictures, look for a camera with 8 megapixels or higher.

3. **Zoom:** Optical vs. Digital – Optical is a true zoom and will not compromise the quality of the photo. A 5 megapixel photo using an optical zoom is still 5 megapixels. Digital zoom enlarges and crops what you are shooting and thus decreases the number of pixels which decreases the image quality.
4. **Storage:** The main two storage cards these days are the Compact Flash which has the highest capacity and the fastest response and the SD (Secure Digital) which is quickly becoming the market standard. Sony has its own called a memory stick (can you say BETA video format?), and there are mini and micro SC cards as well. Most cameras these days have integrated Flash memory which is around usually around 25-35 Megs. Get a 1 Meg or higher and I would suggest a spare as well.
5. **ISO:** This is the speed rating for light and should go as low as 64 and up to 1600 or higher. The lower ISO allows the lens to be open a long time to let in lots of light for shooting in darker situations. The higher speeds help to capture movement without blurring because of its quick responds.
6. **Stabilization:** Optical or mechanical. Not a must have but very nice. Does eat up the batteries though.
7. **Exposure Controls:** Auto fill and red-eye reduction. Programmed scene modes and exposure compensation.
8. **Display:** 3" or higher.
9. **Nice to Have:** USB 2 and/or Firewire interface. JPEG, TIFF and RAW formats.
10. **Video:** Most cameras will shoot video 640x480.
11. **Batteries:** This is the weakest point of digital cameras and can be the most costly.
  - Alkaline:** 30-40 pictures
  - Oxy-Alkaline Non-Rechargeable:** 85-170
  - Li-Lon Rechargeable (Lithium-Ion):** 120-550 (\$40.00 1 pack + Rapid Charger)
  - Ni-MH (nickel-metal hydride) Rechargeable:** 230-400 (\$18.00 4+Rapid Charger)
  - Lithium Non-Rechargeable:** 300-500
12. **Case:** Belt back with room for extra batteries and extra card.
13. Small Beanbag or zip lock bag for adding sand/dirt
14. Lens Cloth
15. Most cameras have a two stage shutter button. When you push it down half way, the camera locks the focus and the exposure, and then when you push it all the way down it takes the picture immediately.

### To The Woods!

For Scouting, outdoors is the place to be and using your digital camera is a great way to help remember those times and share them with others.

1. The more cameras on the trip the better. **TAKE AS ANY PICTURES FROM AS MANY ANGLES AS YOU CAN. THEY COST YOU NOTHING!**
2. **Temperature:** Cold slows down camera, shortens battery life, can cause moisture inside camera, warm to cold fogs lens.
3. **Lighting: (Use Flashlight to demonstrate).**
  - Light sensor in camera reads the brightest source it sees. Bright background can cause the closer subject to be too dark to see. Reverse can be true as well.
  - Sun: Friend and Foe. Natural sunlight brings out color, helps your camera use a higher ISO setting, and helps give you better depth of field. It can also wash out

your picture, cause sun spots, shadows, reflections and create face shadows among other problems.

- Flash: Obvious for dark situations but is very important on back-lit pictures or those where a shadow is being cast over the person or object being photographed. This is called filling. Using your flash for filling will usually make the picture sharper because to ISO is faster.
- 4. **Nature:** Nature can help make some of the best pictures you will ever take. By using fog, misty mornings, sunsets, sunrise (my favorite) rain and wind, you can add motion, focus, such as a flower in the mist or fog, glow of a wave in the sunset and so much more.
- 5. **Snow:** Snow is one of the hardest situations to photograph in. The reflection from snow is blinding and can easily overpower a subject. It tends cause the camera to read colors differently and sucks the color away. If it is snowing DO NOT USE A FLASH! All you will get are millions of tiny white spots all over your picture. And as stated before, the temperature and moisture can be a real problem. Having said that, some winter scenes are breathtaking.
- 6. **Water:** Moving water blurs to create motion and a longer exposure time can create a beautiful silky mist. The contrast between sharp, in focus rocks and softer, blurred water can be dramatic. You need to take your time, set up the shot, and be sure your camera is very steady.

**Photo Storage:** Hard Drive, CD, DVD, Print, and the Web