So you want to buy a digital camera...

What are you going to do with it? If you're looking for a "trophy", I suggest that you go to the camera store and buy the biggest, shiniest camera that you can find, make sure that it looks really cool, and then go home, find a place on your "trophy" shelf and put it there. 'Cause if you're looking for a trophy, you're in the wrong place. Turn the page of this PDF and read something else.

If you really want to know some important things to look for in your camera, then read on.

There are four basic types of digital cameras that we may be interested in. There are ultra compacts, compacts, SLR like, and Digital SLRs.

What features do you want in a digital camera? Are you planning for graduations, kids sports events, spring concerts? Or are you going on a cruise, and you want something small and light to put in your pocket or purse? You might want to look at a compact or ultra compact.

If you're striving for more, and bigger and better pictures, you might want to look at an SLR like camera, or even a digital SLR.

Here are some things that you should know. Digital cameras have come down in price, so price shouldn't be an obstacle to getting the perfect camera for your needs.

For prices, comparisons and very good reviews on all of the digital cameras that have come out in the past 10 years see <www.dpreview.com>.

They began reviewing digital cameras with the Kodak DCS460 in March of 1995. It was a 6.2 mega pixel behemoth that cost $12, 000.00. If you find any on eBay, be wary. Its only use now is as a paperweight. The camera body without a lens weighed nearly 4 pounds. It was slow and you could only shoot one frame at a time. Newspaper photographers who needed to make their color deadlines for the front pages of their papers used it.

Since 1995 until now, dpreview has reviewed over 800 cameras, both large and small. You can decide which kind you want by looking at cameras on display at any camera retailer, or large discount store. I'm not going to tell you where to shop. But what I will tell you is some very useful info about the features that you might need.

Shutter lag!

I don't suppose that you've heard that term. I didn't know what it meant until I took my new D100 a few years ago, and tried to photograph basketball. I stood under the basket aiming at the basket and waited for the players to make a lay-up or dunk the ball. I kept pressing the shutter when I saw the action, but all I saw in the review screen was the torso of the basketball player and NEVER any signs of the basketball. I was sure that I "got the action", but I never did. "Oh, that's what they mean by shutter lag", I complained to myself. Digital cameras need time to "wake up" when they've been asleep. And since they are "battery eaters" they go to sleep often. Camera manufacturers also refer to this as "start up time" shutter response" or "shot to shot" times.

The bottom line is this. When you press the shutter on your digital camera, and you expect that you will "catch" the moment that you see in the final photograph, you may be unpleasantly surprised. If stopping action (like at a child's tball game or your significant other's softball game) is important, you need to find a camera with no shutter lag or a very short shutter lag. To stop action, you need to be able to push the shutter and have the camera instantly respond. Price isn't the # 1 issue as far as shutter lag. As I said earlier, I had a Nikon D100, a "prosumer" level camera, and it has awful shutter lag.

Remember, shutter lag IS an issue if you want/need to stop action. There have been improvements in this area in compact to prosumer digital cameras. Try out the camera at the camera counter or store before you buy if you want to avoid this problem.

"Frames per second"

Now that you've heard enough of shutter lag, we will throw in a new one. Remember what I said about missing the peak action at a basketball game? Well part of the problem is not enough frames per second. If you want to photograph "action" like basketball, or even stock car racing, you need a camera that can shoot 3 frames per second or better. The sports photographers have cameras that will take 5 to 8 frames per second. You may not need that much speed, but if you want to show the action of the swinging of junior's bat, you'll need a camera that shoots that fast. If you're camera only shoots one frame per second, you better hope that junior swings like your great aunt Mabel, so you can see the action.

"Aperture"

Okay, you want to use your new nifty camera to take great candid photos of your grandchild in their school play. It's going to be on a dark stage, in a dark room. Now what do you do? How do you capture with image without blinding the kids on stage? You want to have a camera with a wide enough "**f-stop**" in order to let more light onto the photo sensor without ruining the look of the scene with your flash. Besides, the flash units that come on top of most digital cameras is not sufficient to light anything beyond a few feet in front of the camera. Photography is about capturing light. A "Wider" f-stop lets in more light. A "smaller" f-stop doesn't let in as much light. Aperture refers to the size of the opening in the lens that determines the amount of light falling on the sensor in the digital camera. To stop action, and to get exposures in less than perfect light, you need to get a camera with a "wide" maximum aperture opening. How do you find the aperture on the camera? If you look at many cameras, you will find some confusing numbers on the front of the lens. Picking one camera at random, I see 2.8-4.9 on the front of the lens of a camera on the dpreview.com website. Now what does that mean? It means that at the wide-angle lens setting, you will get a wide aperture reading of f 2.8. This is pretty good. This means that you can use your camera in available light and still get some pretty decent photographs. The other number is 4.9. This means that at the "longest' lens setting (this brings subjects visually "closer" to the camera, you will get an aperture of 4.9. This is still pretty decent. But the drawback is this. If you are far away from your subject, your camera will probably turn the flash unit on, and even though you thought that you had things mastered as far as light and available light, you don't.

If you really need to stop action, and take those photos of the kid's sports, you probably want to look at the SLR like, or an SLR camera.

We covered just 3 important aspects of digital cameras. I have some sad news for you. We are out of room, and can't cover any more aspects. But you should have a bit of knowledge now that may help you make your buying decision. And if you are still really confused, come to the next digital photo boot camp. We were scheduled for November, but no one signed up so we cancelled it.

Boot camps are a great way to learn in an atmosphere where we are all at the same level.

Take care, good luck in your camera search.

If you're camera only shoots one frame per second, you better hope that junior swings like your great aunt Mabel, so you can see the action.