<u>**BEGINNING DIGITAL CAMERA CLASS**</u>
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Why buy a digital point-and-shoot camera?

Ease of use, great quality photos, no film to buy or develop, review photos before printing, make changes on photos, send in email.

What to buy?

Any major brand name will do. Avoid off-brand names. If possible visit a store and handle the camera before purchase. You'll want one that feels comfortable in your hands. Most newer digital point-and-shoot cameras start at 6 Megapixels and go up. The higher you go in MP size, the larger each picture's file size will be on your memory card.

- Each camera comes with its own software that helps with transferring and enhancing your photos.

- There is NO substitute for reading your manual! Then take lots of test photos under all lighting conditions and practice, practice, practice!!

- Purchase additional memory cards and batteries or a charger.

- I use an 10 MP camera and I have an 8GB memory card which holds about 1600 10 MP photos. That is equal to about 66 rolls of 24 shot film.

You basically **only need to know 5 things**:
- Basic camera settings
- How to TRANSFER your photos from your camera to your computer
- How to EMAIL your photos
- How to PRINT your photos
- How to ENHANCE your photos if needed

<u>**Basic Camera Settings**</u>

Take a look at your camera's menus. There are many different options. You will usually see some of the following settings:
- Intelligent/Auto – everything is automatic. Most of us will use this setting.
- Picture Size (MegaPixels)
- Picture Quality – higher versus lower resolution
- Flash settings – force flash on or off
- Aspect Ratio
- White Balance – auto or adjustable
- Digital Zoom – Always turn off
- Scene Modes – Here's a few:
    - Portrait - softens background, keeps subject in focus.
    - Landscape – both objects near and far stay in focus.
    - Macro - for close up pictures, difficult to get good focus w/o real steady hand.
    - Sports – avoids blur is fast action shots
    - Night – uses long exposure to allow more light into camera. Need a steady hand or tripod
    - Movie – shot video with your digital camera

What size memory card should I buy?

Most cameras come with either a small amount of built in memory or a memory card. You'll surely want to buy an additional memory card.

This table may give you an idea of the right size memory card for you:

Memory Card Capacity*					
Camera	File size*	2GB	4GB	8GB	16 GB
5 MP	1.5 MB	1200	2500	5100	10300
6 MP	1.7 MB	1100	2200	4400	8900
8 MP	2.3 MB	800	1650	3200	6650
10 MP	2.9 MB	650	1300	2600	5200
12 MP	3.4 MB	500	1000	2000	4300
VIDEO	5 Mbps (EP)	45	90	180	360

*average file size for a high resolution JPEG Source: Lexar Media

How to transfer your photos from the camera to your computer

You'll want to transfer photos from your camera to the Pictures Folder on your computer.
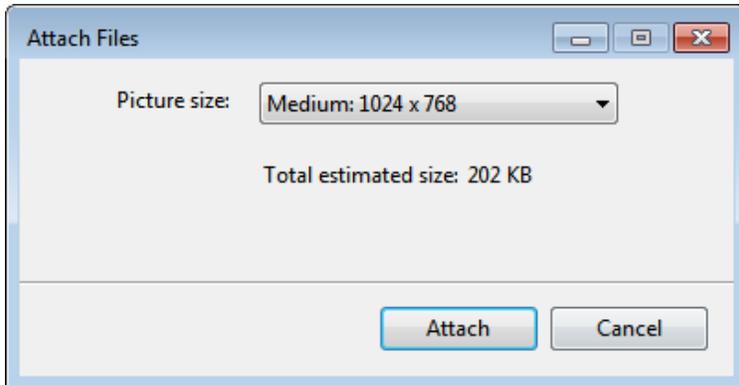
Transferring can be done two different ways:
1. Transfer to your computer via a USB cable (many new cameras don't offer this method)
   - Plug USB cable into your camera and your computer, and turn the camera on.
   - An *import picture/video menu will appear.* You may be prompted for the location to save your files and whether or not you would like to delete or keep them on the memory card. Just follow the steps.

2. Transfer to your computer using a memory card reader.
   - Remove the memory card from your camera and insert it into the appropriate slot of your card reader.
   - If the auto transfer program in Windows does not start, browse to your memory card.
   - Select the photos you would like to transfer.
   - Right click and choose cut to delete them from your memory card or copy to leave them on the card.
   - Browse to the location on your computer you would like them to be stored. Right click and select paste.
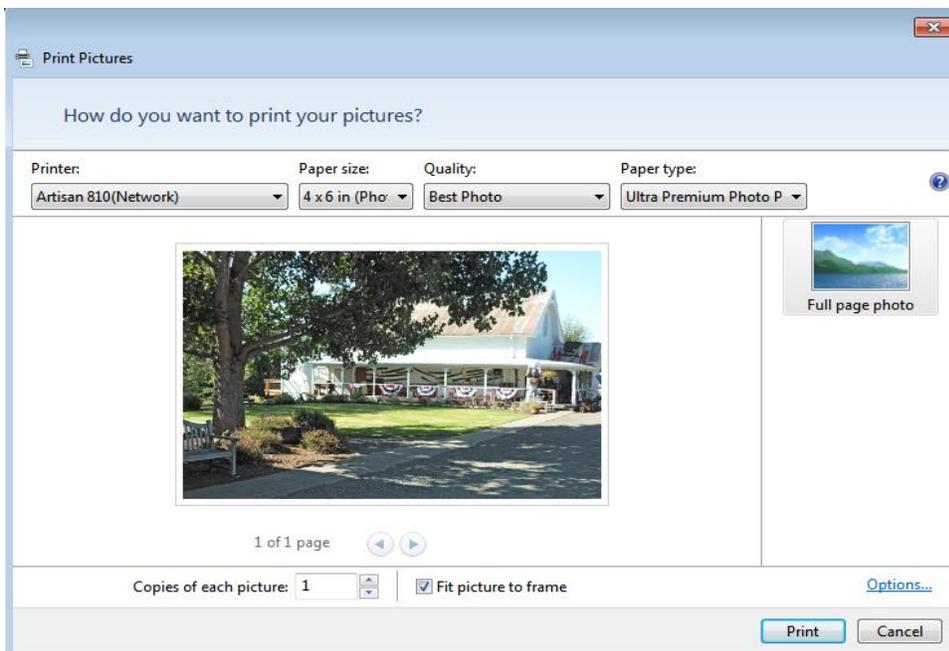
How to Email your photos

Normally, an 8 MP camera will produce a 2-3 MB file. However, when you send it from your Pictures Folder it can be reduced to roughly 30-200KB, going out much faster.

- Open the picture in either the Windows Picture Viewer or in Windows Photo Gallery.
- Click on **E-mail** in the Toolbar. In the newest version of Photo Gallery, click Create, then Email.
- A small window appears with the words **Attach Files.**
- In the *Picture size* bar, click the down arrow and choose the size you desire. Then click **Attach.**
- Your default email program will open with the picture in the attachment area. (please note this "downsizing" process does not work if you use Web Mail. You will need to downsize your photo using a different method.

How to print a photo

- Open the picture in either the Windows Picture Viewer or in Windows Photo Gallery.
- Click **Print** in the toolbar. In the newest version of Photo Gallery, click File, then Print.
- A print dialog box appears where you will make all of your choices for printing. Each person may have different choices depending on the printer.

The quality of your printed picture with depend on a number of factors. If you want them to turn out as if you took them to Wal-Mart be sure to use a quality glossy photo paper. Second, be sure your photos are of high resolution and have not been downsized. Here is a table with guidelines for printing (taken from urban75.org):

Quality vs file size
This guide shows you the kind of quality you can expect when you're printing out your photos.

Digital camera resolution vs print quality		Print Size							
Capture Resolution	Video Display	2x3"	4x5"/4x6"	5x7"	8x10"	11x14"	16x20"	20x30"
320x240	OK	Good	OK	Crap	Crap	Crap	Crap	Crap
640x480 0.3Megapixel	Good	Excellent	Good	Crap	Crap	Crap	Crap	Crap
800x600	Excellent	Photo Quality	Very Good	Reasonable	Crap	Crap	Crap	Crap
1024x768	Excellent	Photo Quality	Excellent	Good	OK	Crap	Crap	Crap
1280x960 1 MP	Excellent	Photo Quality	Photo Quality	Very Good	Good	Crap	Crap	Crap
1536x1180	Excellent	Photo Quality	Photo Quality	Excellent	Very Good	OK	Crap	Crap
1600x1200 2MP	Excellent	Photo Quality	Photo Quality	Photo Quality	Very Good	OK	OK	Crap
2048x1536 3 Megapixel	Excellent	Photo Quality	Photo Quality	Photo Quality	Excellent	Good	OK	OK
2240x1680 4 Megapixel	Excellent	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Very Good	Good	OK
2560x1920 5 Megapixel	Excellent	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Excellent	Very Good	Very Good
3032x2008 6 Megapixel	Excellent	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Excellent	Very Good
3072x2304 7 Megapixel	Excellent	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Excellent	Excellent
3264x2448 8 Megapixel	Excellent	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Excellent
10 Megapixel +	Excellent	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Photo Quality	Photo Quality

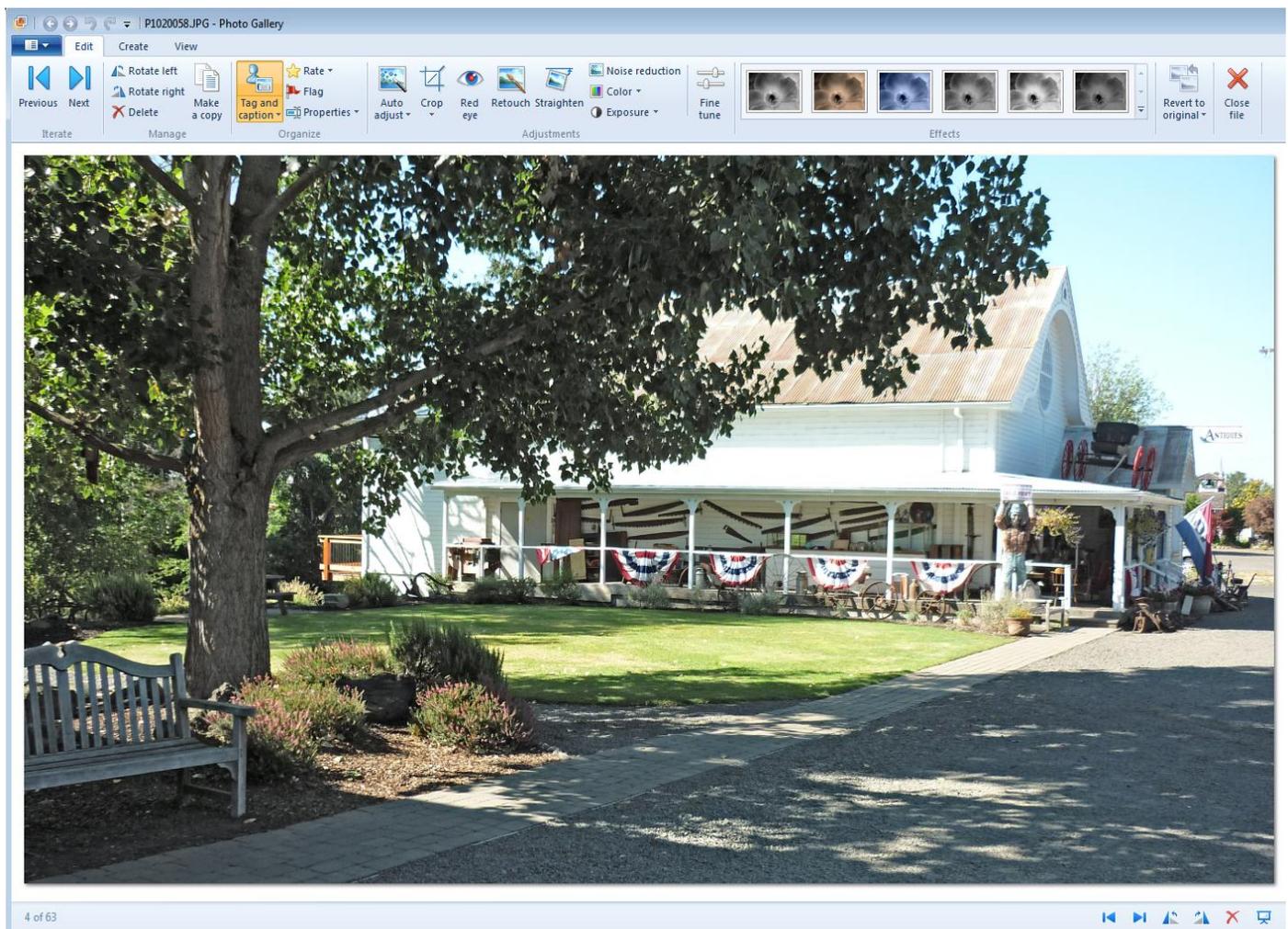|	
Crap	Horribly pixelated blocky mess, like something out of 1987
OK	Looks reasonable enough, but nowhere near photo quality
Good	Pretty good all round, with a fair bit of detail
Very Good	This will be fine for most uses, unless you get up reeeeal close
Excellent	As good as a photo for most purposes
Photo Quality	Woohoo! Fantastic quality print, full of detail and perfect for your picture frame or for your showing off your very best shots.

Enhancing your photos

From time to time you may want enhance your photo. RASCAL offers a class on Basic Photo Editing using Photoshop Elements. They are many free editing programs available including GIMP, Windows Photo Gallery, Picasa, etc.

With photo editors you can do a variety of things including, but not limited to:

- Red eye fix
- Exposure fix
- Crop and resize
- Removal of unwanted objects
- Blur and sharpen
- Color fix
- Rotate, resize, etc.

Here's a screen shot from Windows Photo Gallery:

ENJOY!