

Digital Answer Man: **Digital Cameras and Images**

In today's column, Jim Barry aka "Digital Answer Man" of the Consumer Electronics Association (CEA) explains how the world of photography is changing as digital cameras and digital images become more and more widespread ...

1) What are digital cameras and digital images?

Digital cameras represent the new generation of photography. A digital camera captures pictures electronically and stores them as computer code. Digital cameras are becoming increasingly popular. Americans are now buying more digital cameras than film cameras.

2) How does a digital camera work?

Digital cameras can look like a film camera, although most have a screen for framing and reviewing your pictures, in addition to a lens and shutter.

The major difference is that a digital camera has a built in memory or removable memory card (or both) that records the picture and stores images as electronic files.

3) What are pixels?

Pixels are picture elements. Basically, the more pixels the better the picture. You'll see digital cameras advertised with "megapixels." Mega means million, so a two megapixel camera can produce pictures with two million pixel resolution which is comparable to a snapshot. If you want to enlarge your pictures you'll need three, four or more megapixels.

4) Are digital cameras better than traditional cameras?

Each has advantages and limitations. We all know how inexpensive and easy to use film cameras are and how good the pictures can be. But digital camera prices are falling rapidly and save money by eliminating the cost of film developing.

With digital, you only print the pictures you want to show and keep. Since you can review the pictures on the camera's screen, you can delete a bad shot and reshoot it immediately.

Digital cameras also let you send a picture almost instantly to someone anywhere in the world on the Internet or change the image in the computer (crop the picture, eliminate redeye or add a different background.)

5) Do digital cameras have a zooming feature?

Some digital models offer virtually all the features once found only on film cameras. Virtually all now offer a simple digital zoom while newer models feature optical as well as digital

zooms. A digital zoom manipulates the pixels (picture elements) electronically rather than optically.

6) What about printing digital images and photos?

You can print digital pictures using a computer printer or a separate printer that doesn't require a computer.

Either connect the camera itself to the computer or printer, or insert the camera's memory card into the computer or printer. Special photographic paper is readily available to print your snapshots.

7) What are the different kinds of digital cameras and what do they cost?

There are many choices in digital cameras, ranging from different degrees of optical zoom lenses to various sized LCD screens for viewing. A major factor affecting the quality and cost of digital cameras is the number of megapixels or the resolution it is capable of producing. The general rule of thumb is the higher the number of megapixels, the higher the cost.

And digital image taking does not have to be done only with a standalone camera. The latest trend in digital photography is cameras that are built right into your cell phone or even in a pen, which can take mini digital movies with sound as well.