This workshop has been constructed in order to familiarize you with an assortment of ways to use digital imaging in your children's classroom assignments. You will undoubtedly use some of what you learn here outside of the classroom setting, at least that is our hope.

To begin with it should be noted that we will be working on Mac computers, the majority of homes and business run PC's or "Window" operating systems. What we learn on the Mac computers easily translates to the PC world and when differences arise we will try our best to point them out.

First a brief discussion on what a digital image is. It is a file that computers software decodes and displays as an image. In the past Macs and PCs had their own types of file that were particular to their own operating systems. Nowadays a lot of the same type of files can be read by both platforms. Some types are GIFS, BMPS, JPEGS, and PICT files, to name a few. The two most popular formats for digital images on the Internet are JPEGS and GIFS. JPEGS are higher quality than GIF and in turn will be a larger file for the same picture. On the left is a jpeg on the right a gif.

Now lets turn our attention from what digital images are to how can we obtain them. We will look at three ways to obtain digital images.

1. You can take photographs that have already been developed and convert them into digital images by way of a scanner. This technique requires you to have a scanner.
2. A digital camera allows you take pictures and place them directly into your computer, bypassing the need for a scanner.
3. Lastly, the Internet is a wonderful source for images. I particularly like www.excite.com. I find that this search engine finds the best images in size and clarity compared to other search engines that I have used in the past.

Once these images are in the computer they can be manipulated and enhanced by running them through software. Some popular software titles are Adobe's Photoshop, Corel's Paint for Photos.

We will be using Adobe's Photo Deluxe. It is a very scaled down version of Adobe's Photoshop.

Exercise #1: Copying images off the Internet and unto a document.

Before we begin manipulating pictures with Adobe's photo deluxe lets get some pictures off the Internet and onto this document that you are reading now. We can jump back and forth from the Internet to this document. The first thing you will need to do is point your mouse to the upper right hand corner of this screen. There you will wind a blue W or the words "Microsoft Word". If you click on the blue W (or Microsoft Word") a drop down menu will appear, the first item on the menu reads "hide Microsoft Word" by clicking on it you will hide this document. You can get the document back by going to that same corner and clicking on "Microsoft Word." Try that now.

O.K., glad to see you made it back. We will go out into the Internet now but before we do I would like to explain something about obtaining images off the Internet. When we find the pictures that we want to use the computer can hold these images for us two different ways.

The first way is a temporary way in that the computer will place images onto a "clipboard". The computer will hold an image for you once you place it onto the clipboard until you shut the computer off or you replace that image with another image. Some versions of Widows will allow you to hold more than one item at a time on the clipboard; Macs will only allow you to hold one item at a time.

The second way a computer a computer will hold a picture for you is in a more permanent way. You can download the pictures to your hard drive or to a disk. These images will remain there until you delete them from wherever you store them even after you turn your computer off.

Lets now copy images from the internet and paste them onto this document.

Step 1: Hide this document as discussed on page 2.

Step 2: Double click the folder that you found this document in and double click on the Internet Explorer icon to get onto the Internet. Point your browser to www.excite.com.

Step 3: Click onto the word photos to limit your search to just photos.

Step 4: In the search box type in the word lion to search for images of lions, hit the return button on you keyboard to activate the search.

The page will change to show different images of lions. Click on the image you like the best.

Step 5: To "**copy**" the image onto your clipboard place you mouse over the image and hold the button of your mouse down, a drop down menu appear. Find the words **copy image** and let go of your mouse button. You have copied the image if the words copy image has flashed.

On a windows machine you will have to right click to get the same type of menu.

Step 6: Open up this document again and click your mouse at the end of this paragraph. You will notice that the cursor is blinking. Where the cursors blinks is where the picture will show up. To "**paste**" the picture find the command button on the keyboard. On a widows machine the button will read "command" on a Mac the button will have an apple on it. Press the command button as you simultaneously hold down the letter V. Your picture of a lion should appear.

Now finish the next five sentences by finding pictures to complete the thoughts: (remember to click at the end of each sentence so that the image will appear there)

This is a picture of a waterfall:

This is a picture of George Bush:

This is a picture of the Statue of Liberty:

This is a picture of a pyramid:

This is a picture of Hank Aaron:

Next we will place pictures from the Internet into our folder. The first thin we have to do is create a folder. We do this by going to our desktop. Hide this document as was discussed earlier from you desktop use the command apple N to create a new folder. It willl appear on your desktop as **Untiltled** folder. Rename the folder to read your name, this is were your pictures will be stored. (On a windows machine you can create a new folder by going to your desktop and right clicking then going to the word **new** and choosing the word folder from the menu.)

We are now ready to download images to our folders. We do this in a similar way as copying images onto our clipboard. We follow all the same steps as before but instead of going to the

words **copy image** we will go to the words "**download image to disk**". Lets go to the Internet and do a search for lion. This time instead of copying the image lets download the image to our folder.

Once we have chosen to download image to disk we must find our folder. A window will appear on your screen, click on the button that reads desktop to get a list of items on your desktop.

Find your folder on that list and double click on it. You will now save your picture in that folder.

Note that you can change the name of the image that you put into you folder before you hit the save button, this will allow you to keep better track of the your pictures.

Find picture of the following items and put them into your folder.

1. Jet Airplane
2. Octopus
3. Julia Roberts
4. Image of your Choice.