

Image File Management

Renaming your files: It's important to have a system for organizing and keeping track of your image files. Once you've uploaded them to a computer, put all the files for a particular activity or experiment into a single folder with a distinguishing name. For example, the folder name for the present activity would logically be Activity C-2. In addition, rename all the files in the folder in such a way as to:

- a. identify them with the activity or experiment,
- b. index them with consecutive numbers,
- c. identify the person or group who took them.

For example, if the group *Noname* took photos for Activity C-2, the filenames would have the form `c2_###_noname`. For `###`, one would substitute consecutive numbers for the photos in the order taken. For numbers from 1 to 9, include a leading 0 in order to make it a 2-digit number. This makes it easy to sort files by the index number on a computer.

A free program for renaming files is Bulk Rename Utility. You can search for it online, download, and install it to your computer. Here's how to use the program. (The instructions may be written for an earlier version of the program than you have.)

1. Open the program and navigate in the file window to files that you want to rename.

The one part of the original filename that you may want to keep is the index number, since this is what distinguishes one file from another. An exception to this would be if you had 2 files from the same experiment having the same name but in different directories. In that case, you'd have to assign at least one of the files a new index. We'll assume for now that you're keeping the index numbers. There may be a number of 0's preceding the non-zero digit(s). It's important to keep a fixed number of digits, including leading 0's, as this is needed for file sorting.

Let's suppose you have files named consecutively from `abc00001.jpg` to `abc00012.jpg`. The plan will be to keep 2 digits of the index, replace the leading characters "abc00" with an identifier for the experiment, and add a suffix for the initials of the experimenters. For example, if the group was called *Noname* and the experiment was C2, the filenames would be `C2_01_noname.jpg` to `C2_12_noname.jpg`. Note that underscores were added to visually separate the 3 parts of the filename. Here's how to create these filenames in the BRU.

2. In the Removals (5) box, type 5 to remove the leading characters abc00.
3. In the Additions (6) box, type C2_ to add the experiment identifier. Notice that in the filename listing, the New Name of the selected file is shown. The file hasn't actually been renamed yet. This is simply a preview to show you what you would get.
4. Still in Additions (6), type _noname for the suffix.
5. That should be all that's needed. If the New Name is what you wanted, click on the Rename button to commit the change.
6. In order to rename all the files in the directory the same way, you can select them by clicking on the first file that you want to rename, scrolling down, and then hold the Shift key while

clicking on the last file that you want to rename. Then click Rename to rename all of them. If you just want to rename several selected files, hold down the Ctrl key while clicking on each file that you want to rename. Then click on Rename.

Synching files with your data record

Synching files with your data record is the process by which you match up your files with the rows in your data table. This should be easy if you have a file for each row and if your file indices increase in the order in which you took the photos. If, however, you neglected to record a photo or if you deleted a photo and neglected to cross it out in your data record, then you'll have more work. Use the process below.

First, see if you have the same number of files as data rows. If so, that's a good sign, but it doesn't necessarily mean that you're home free. It's possible, for example, that you recorded a row for a file that you deleted and you also forgot to record a row for an existing file. Therefore, examine each photo in turn and match it with the characteristic(s) that you recorded in the Comments column in your Data Record. For each match, record the filename in the corresponding column. For successive rows, you need record only the filename index number, since the prefixes and suffixes are identical. If you're unable to match any of the files with rows or vice versa, then write FNF (File Not Found) beside such rows and list orphaned files at the bottom of the data record. Label them ORPHANED.

Add the filenames to your data page: Once your files have been renamed, you'll need to match them with the row entries on your data page. Examine each file in turn and verify the row in your data page that describes the image in the file. Then write the filename in the Filename column of your data page. In order to save time, write the complete filename only once at the beginning of the column. Then just write the index for subsequent rows. It's important to verify each file individually, because you may have overlooked recording some of your photos or you may have forgotten to mark through a photo that you deleted.

Backup your files: Another important thing to do is have a backup of your files. Once you upload them to a computer, they will be in two places: the computer and the memory card. At this point, provide the memory card (with renamed files) to the teacher to create a backup for you on another computer. When this is done, you may delete the files on the memory card.