The basic fibers of both kinds of paper products are identical. What sets the buffered apart is that it contains an additional 3% Calcium carbonate buffer (alkaline reserve) to neutralize acidic compounds that are absorbed from the material being protected, dust, the air. Unbuffered does not contain this additional alkalinity. Alkalinity (pH above 7.0) can be harmful for some materials such as albumen and some other historic processes, color photos, blueprints. If in doubt it is better to be cautious and use unbuffered. Examples can be collections of mixed materials where segregation by chemistry is unfeasible. The Image Permanence Institute has numerous publications available for download at <https://www.imagepermanenceinstitute.org/resources/publications>.

Q: Please repeat what goes into buffered and unbuffered. Thank you

See above.

Q: i think you answered this, but what is the importance of buffered vs unbuffered

See above.

Q: don’t forget blueprints

See above.

Q: Could you please clarify whether all (or just color) photographs should be stored in unbuffered enclosures?

The problem with metal slide boxes is that they can rust, particularly if scratched. If they are in good condition with no rust... I would say that they are ok. If not replace with unbuffered slide boxes such as those at <http://www.gaylord.com/adblock.asp?abid=765> or similar from other vendors. Alternatively polypropylene slide sheets in a binder <http://www.gaylord.com/adblock.asp?abid=7098> that won’t let dust or hanging in a cabinet. Important are storing in a cooler/dryer environment to slow down aging process.

Q: My mother had tons of slides stored in metal slide boxes. They seem to be doing fine, but is metal okay?

Photocopiers use toner like laser printers, same basic technology. It is generally quite stable but could transfer if stored in extreme heat/under pressure. Also can stick to PVC like that used in 3 ring binders, e.g. those with the clear cover to slide a sheet into.

Q: Will the photocopy ink be OK long term?
The only wrong papers are cheap acidic ones. Use the Abby pH Pen to test, <http://www.gaylord.com/adblock.asp?abid=1655>. There used to be a guide to permanent papers but is out-of-date and hasn’t been updated. View at <http://cool.conservation-us.org/byorg/abbey/napp/>.

Q: In laser printer papers, how do we avoid the "wrong" papers? Is there something to look for on reams of paper that tell us it's the "right" paper?

There are a great many formulations and brands for this, and it is an area outside my expertise. The Image Permanence Institute has a good guide that explains the concepts and what to look for at <https://www.imagepermanenceinstitute.org/webfm_send/313>.

Q: What inkjet inks do you recommend for printing photographs?

They are completely different processes. See link in previous response.

Q: is there a difference between archival needs of digitally printed photos vs those printed in darkrooms?

It depends on how they are used. If they are looked at often I would use the “proper” plastic enclosures to reduce the mechanical wear and tear caused by removing and putting back in. If they are not used often/at all, placing in a paper envelope ok, but make sure to use unbuffered if color or early photo process.

Q: Is it better to put photographs in paper enclosures or plastic enclosures especially older photographs?

I would treat RC papers like fiber-based papers, but differentiate between color/black & white in terms of buffered or non-buffered.

Q: To clarify: You would have to identify that paper is fiber and not plastic? i.e. photo lab contact sheets for b/w images often printed on RC papers. These would go in unbuffered storage like color?

Treat like normal black and white silver gelatin prints but remember they can break. Gaylord has some at <http://www.gaylord.com/adblock.asp?abid=958>. For more support cut a piece of archival (buffered ok) folder stock.

Q: Best specifications for glass negatives?

No, they will be of questionable quality. Purchase polypropylene or mylar sleeves instead.

Q: Can the old "overhead" clear slides be used for photo storage? Have a ton of these sitting around and don't know what to do with them now that everything is digital.
You can, but the color of the material and texture will impact how the image looks and feels. To me it would depend on how it is being used.

Q: can you print photograph on acid free card stock or is it better to use photo paper.

Yes, but make sure to use the appropriate folders or hangers for sleeves.

Q: can you store photos in a filing cabinet.

Mirroring is storing identical sets (copies) of files on two or more drives. Often done with larger servers it can also be done using external hard drives and many kinds of backup software. Good basic explanation at <http://en.wikipedia.org/wiki/Disk_mirroring>.

Q: Can you elaborate about mirror backup.

Nice idea but would be more concerned about format obsolescence, i.e. what is this thing. Data needs to be managed and migrated to be preserved. Servers are the best way to do that. For a fun explanation watch the two videos in the center column at <http://researchguides.library.syr.edu/content.php?pid=34915&sid=735451>, the Team Digital Preservation ones are good too.

Q: What is your opinion on M-Disc for archiving digital data?

CDs and DVDs are not considered methods of archival storage. See above comment about format obsolescence. I would copy to an external hard drive, preferably mirrored, or a server. Make sure you have directory structure that makes sense and metadata (database or spreadsheet) to identify the images.

Q: In your presentation, you mentioned DVD/CD as a method of archival storage, but what is the best way to store those DVDs and CDs: DVD/CD albums, plastic cases, etc? And does it make a difference if they are stored vertically or horizontally?

Digital images on hard drives servers, prints/negatives in the appropriate “plastic” or paper enclosures.

Q: Since you don't recommend CD's for archiving purposes, what method do you recommend for archiving personal photo collections which include physical and digital photos?


Q: Is laminating paper documents a good way to preserve them?
Depending on size of collection, I would either store vertically on shelves with supports to keep them upright. I’d also consider using Mylar or polyester sleeves for the complete albums especially if the artifacts are important, or boxes such as those sold by the vendors. Environment is also important, not to hot...

Q: Do you have any questions for archival storage of vinyl records?

I would use paperboard cartons because they can create problems with micro-climates (high humidity, moisture in case of flood... causing mold). If the plastic tubs are polypropylene they could be ok, but I would still be concerned about the micro-climate.

Q: Can you comment on using commercial plastic tubs and bins (Rubbermaid) for storing family papers and photos?

I do not have experience with these. Library of Congress did a study at <http://www.loc.gov/preservation/scientists/projects/zeolites.html>. Based on that and given a proper storage environment I would question the value.

Q: Could you touch on the proper use of zeolites and other scavengers?

Yes

Q: Are buffered enclosures safe for color magazine/journal articles printed within the last 10-15 years?

See Gaylord’s pamphlet at the bottom of <http://www.gaylord.com/page_manager_st_leftnav_no_ewe.asp?page_ID=503&LeftNav_ID=900>. That gives a good sense. Likewise, browse the catalogs of all the archival vendors. What you need will depend on the types of materials you have, how they are organized, and how they are used.

Q: What would be a basic list of materials and supplies needed to start archival storage? Sort of like "what's the minimum needed to set up a kitchen"!

I prefer the polypropylene or Mylar/polyester ones with acrylic adhesive.

Q: what kind of photo corners or strips?

Cool and dry environment, in boxes for easier handling and for protection during handling.

Q: Advice on preserving microfilm.

Acid-free buffered envelopes, folders, or appropriate “plastic” photo pages/sheets.

Q: How would you store stamp collection when they come on first issue cards?
With the exception of some photographs I tell users to have clean dried hands. Much more feel and control and less chance of damage with materials like brittle paper where the fibers can snag on the rough edge of the paper and cause tears.

Q: What's your stance on wearing gloves? :)

A colleague and I did a presentation on book repair basics for ALA/ALCTS and the slides and video can be downloaded at <http://surface.syr.edu/sul/67/>. Slides at top right with “download” link, video towards bottom. See also our in-house manual from Syracuse at <http://surface.syr.edu/pres_treatment/2>. See also <http://www.youtube.com/user/SULPreservation>.

Q: For a circulating collection, is there a good basic supply list that you would recommend? You mentioned Filmoplast for page repair, but suggestions for other types of repair would be helpful.

See above.

Q: What is the best glue to use to repair the spine of a book?

In the journal, or if removed in an archival file folder as part of a collection. The article might also be available digitally depending on journal and age, so may have different criteria for retention.

Q: what is the best way to keep the article published in a journal?

No.

Q: Is there any risk from slides or negatives being in direct contact with polypropylene or polyethylene sleeves over time?

Not that I am aware of, but contact your local historical society, library consortium, state library. They may have programs or a circuit rider that could come to you.

Q: Are any workshops held where we can bring "our stash" and work as a group with an expert? Sort of a scrapbooking session, only archival oriented instead.  scrapbooking.

Yes, but test first in an inconspicuous spot. It is not for all leathers, especially if severely deteriorated (red rot). It will also not make things “like new.” To apply get a soft brush and brush on evenly, and not too thickly.

Q: Is Cellugel an acceptable archival product?
Yes, good idea. Alternatively cut out the glue in strip carefully and tape the sleeve to the back board of the binder.

Q: We have a bunch of glue-in binders for pamphlets, and we tried to glue in acid-free plastic sleeves with open tops into them, and then put the pamphlets into the plastic sleeves. But the glue won’t adhere to the plastic. So we’ve been taping the plastic sleeves in with standard tape. Is this OK?

Depends on what your environment is where you live, and the types of environmental controls you have. If humidity is a problem, use a dehumidifier, preferably something you can connect with a drain. Likewise an air conditioner can help with humidity and heat. The “environment” section of NEDCC’s pamphlets page at <http://www.nedcc.org/free-resources/preservation-leaflets/overview> has some very useful suggestions.

Q: What type of equipment should we used to control relative humidity in a room with windows?

What is your collection development policy? What gets used, what doesn’t? Do you have finding aids? How important are originals? What about finances? All those things will impact the course of action. Contact your State Library. They may have services to help you make some of these decisions and then give you something to move forward on.

Q: It’s a broad question but if you are almost starting from scratch in a college collection of many kinds of things, how to decide what is most urgent to preserve—old clippings photos, slides, films, etc.?

No, there isn’t, but all the major vendors of archival products – Gaylord, Metal Edge, Hollinger Metal Edge, Inc, University Products, Archival Products, sell quality products to NARA, Library of Congress, and libraries, Museums, and other cultural organizations. Many have highly qualified preservation staff that won’t let them get away with anything either. ;-) Other factors will also play a role such as skill, especially if doing repairs...

Q: So many places advertise acid free products. Is there a rated list of companies who provide archival equipment that has been sort of vetted by NARA and other groups and organizations?