

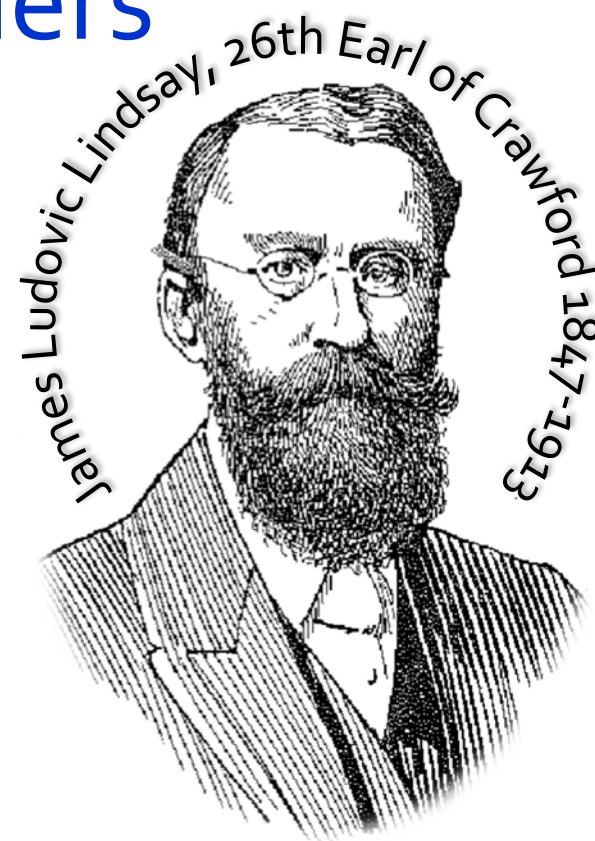


The Royal Philatelic Society London

Crawford Seminar

Digital Philately for Beginners

Wednesday 12th October 2016





Digital Philately for Beginners

Welcome and Introduction

Frank Walton

Digital Philately for Beginners

10.30 am	Tea, coffee and biscuits	
11 am	Welcome and opening remarks	Frank Walton
11.10 am	Scanning philatelic material	Mark Bailey
	Demonstration	Mark Copley
	Hands-on practical session	All participants
12 noon	Making enlarged, detailed images	Mark Copley
12.30 pm	Lunch break	
	Optional: Lunch at the King's Head – pre-book the food	
1.30 pm	Different colour standards	Mark Bailey
1.35 pm	Preparation of physical display sheets	Mark Copley
	Hands-on practical session	All participants
3 pm	Refreshment break	
3.15 pm	Producing digital exhibits	Mark Copley
3.45 pm	Preparing slideshow presentations	Mark Bailey
4.15 pm	Wrap-up session, with Questions & Answers	All participants
4.30 pm	Closing remarks	Mark Bailey

Digital Philately for Beginners

Scanning Philatelic Material



Digital Philately for Beginners

Scanning Philatelic Material



Scanning Philatelic Material



Placing the items for scanning.

Some programs prompt you to place the item for scanning, others do not.

Place items face down on the printer or scanner surface.

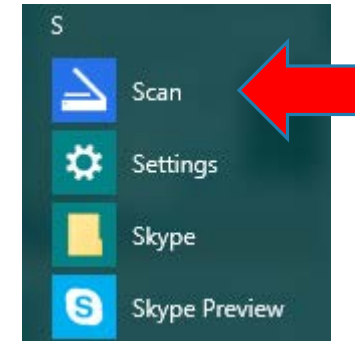
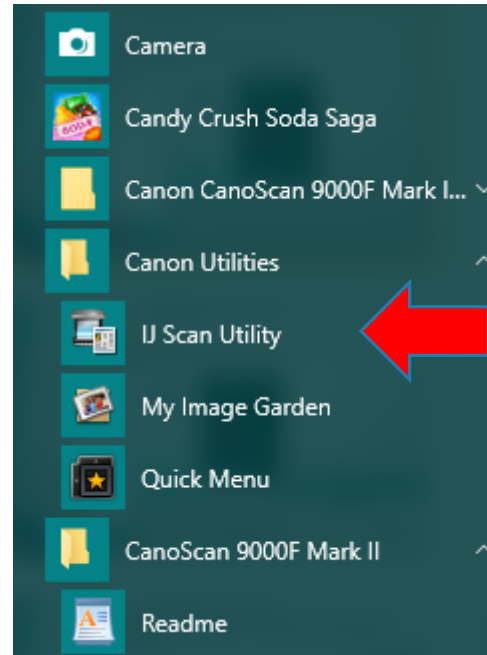
Align within the arrows or grids on the device.

Close the lid if there is one.

Provide a contrasting background for the item, by placing a sheet of suitably coloured card or paper on top of the item being scanned, as most scanners have a white lining to the scanner lid which does not provide good contrast for stamps.

Digital Philately for Beginners

Scanning Philatelic Material



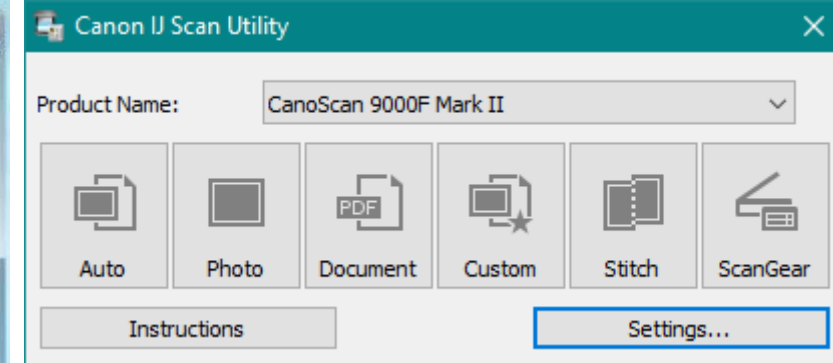
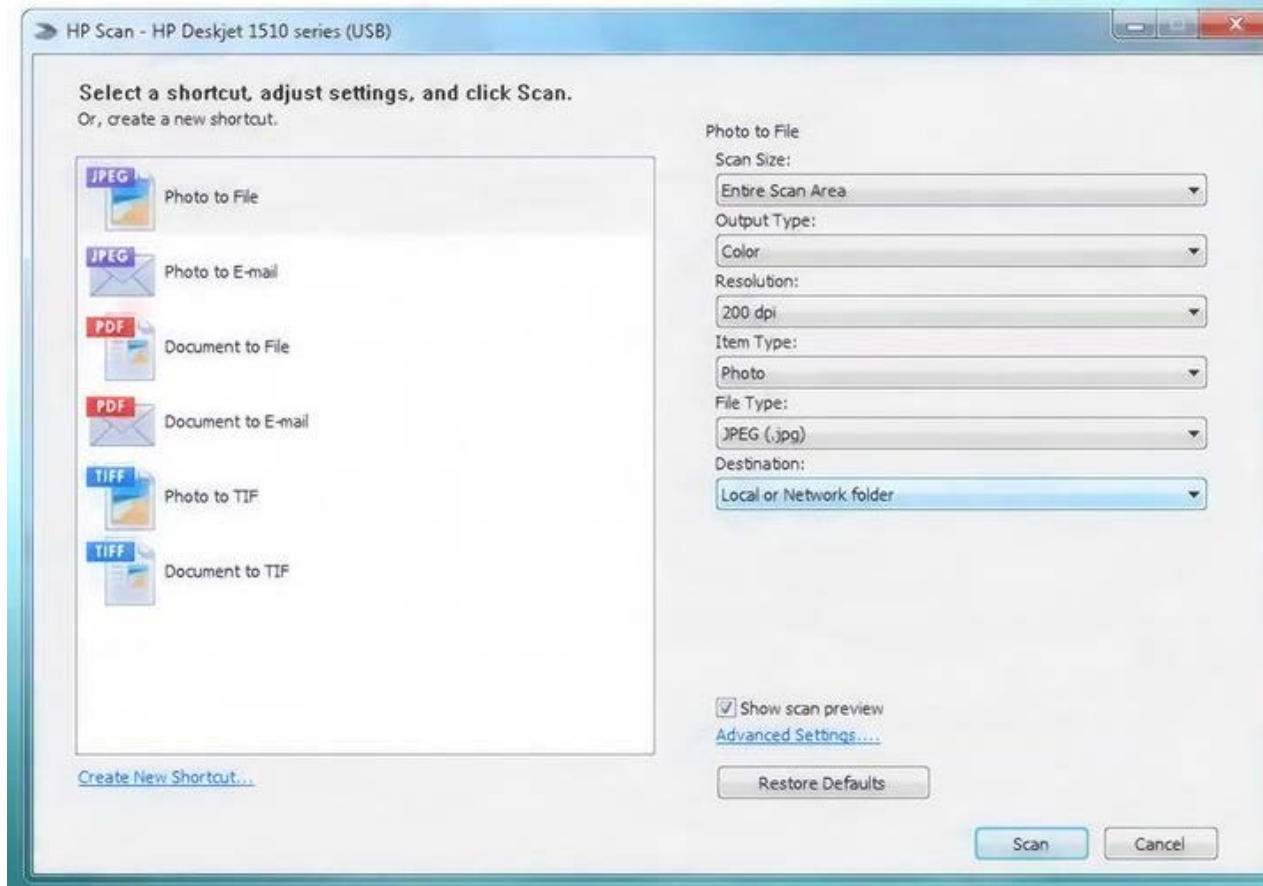
Navigate to the scanning program's location.

In Windows, click on the Start button to bring up available programs and applications.

If you have one, you can click on the scanner icon.

Digital Philately for Beginners

Scanning Philatelic Material



To run the scanning program, having found it, it can be activated and opened usually by double clicking on the program's name or by pressing the scan button on your printer or scanner.

Scanning Philatelic Material

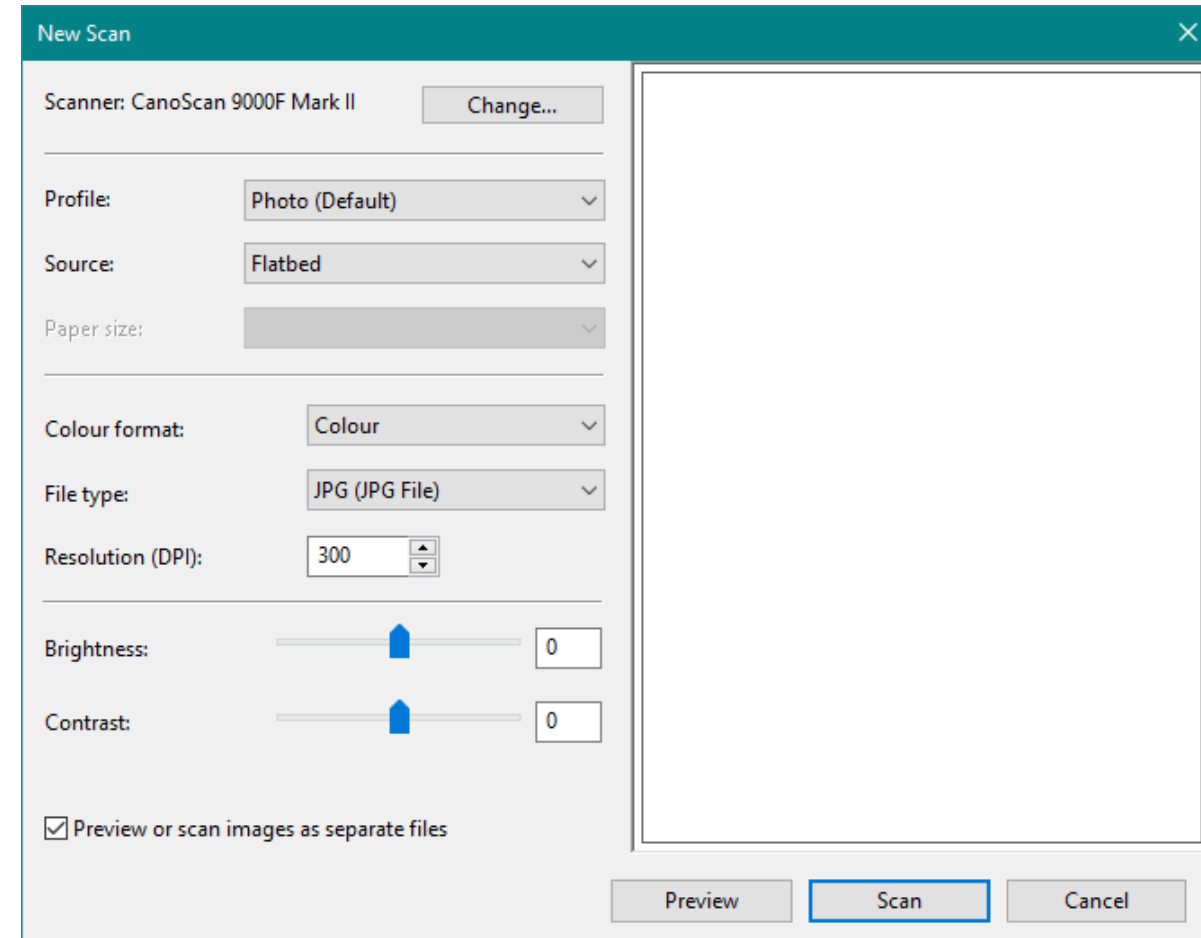
For Windows computers, a basic built in utility is called Windows Fax and Scan and it can be found by using the Search bar in the Start menu.

In Windows Fax and Scan, at the bottom of the left pane, click **Scan**.

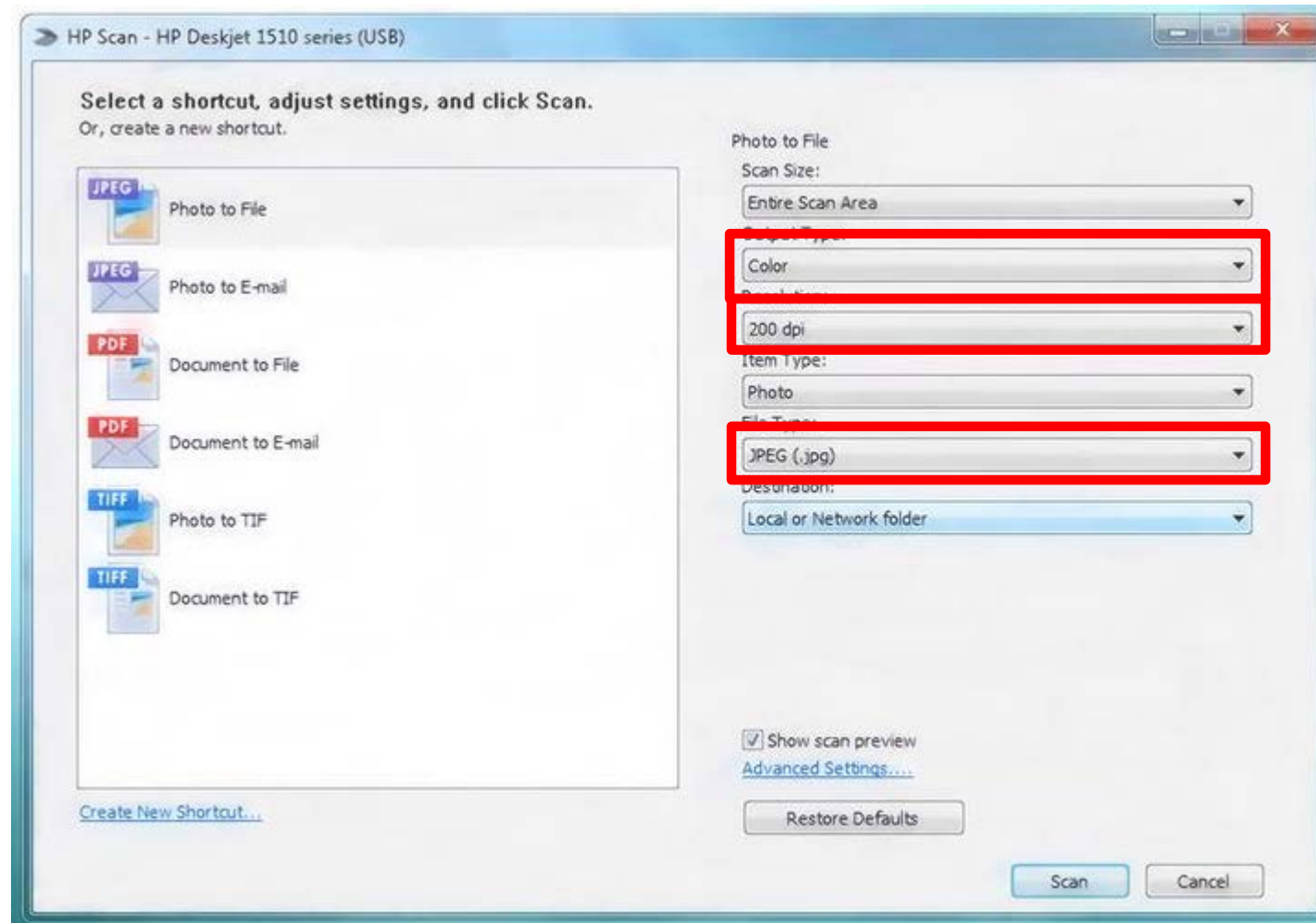
On the toolbar, click **New Scan**.

Choose the scan settings you want to use, and you're ready to scan.

For more help with scanning, click the **Help** button on the toolbar.



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Scan Settings

Digital Philately for Beginners

Settings (Photo Scan)

Auto Scan
Photo Scan
Document Scan
Custom Scan
Scan and Stitch
ScanGear

Scan Options

Select Source: Photo

Color Mode: Color

Paper Size: Auto scan

Resolution: 600 dpi

Image Processing Settings

☒ Sharpen outline

Save Settings

File Name: IMG

Data Format: JPEG/Exif

Save in: Scans

☐ Check scan results

Application Settings

☒ Open with an application: Windows Explorer

☐ Send to an application: Preview

☐ Send to a folder: None

☐ Attach to e-mail: Microsoft Outlook

☐ Do not start any application

More Functions

Instructions Defaults OK

New Scan

Scanner: CanoScan 9000F Mark II Change...

Profile: Photo (Default)

Source: Flatbed

Paper size:

Colour format: Colour

File type: JPG (JPG File)

Resolution (DPI): 300

Brightness: 0

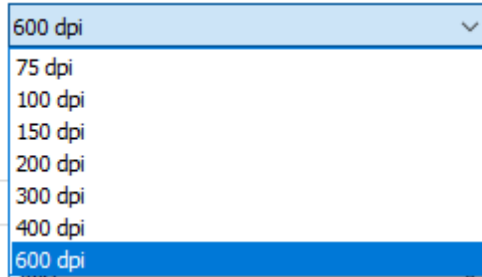
Contrast: 0

☒ Preview or scan images as separate files

Scan Settings

Scan Settings

Choose your
scanning preferences



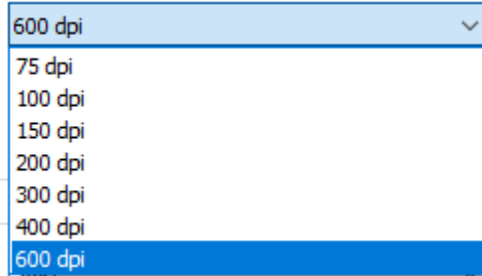
600 dpi
75 dpi
100 dpi
150 dpi
200 dpi
300 dpi
400 dpi
600 dpi

Resolution
(Number of Dots Per Inch)

Digital Philately for Beginners

Scan Settings

Choose your
scanning preferences



Resolution
(Number of Dots Per Inch)

Resolution determines the sharpness of the image and amount of detail.

A higher resolution will make the details of the picture more noticeable, and to make a sharper image, you should increase the resolution.

Note though that this will also increase the size of the image, and dramatically increase the size of the file. You may not be able to send it as an email attachment without making it smaller.

Resolution is a measure of pixel density, usually measured in dots per inch (dpi).

Images on websites often have a resolution of 72 dpi. This means that a 1-inch square contains a grid of pixels that is 72 pixels wide by 72 pixels high. $72 \times 72 = 5184$ pixels per square inch.

High quality printed images in books and magazines have a higher resolution than computer screens.

Printed images often use either 300 dpi or even 600 dpi.

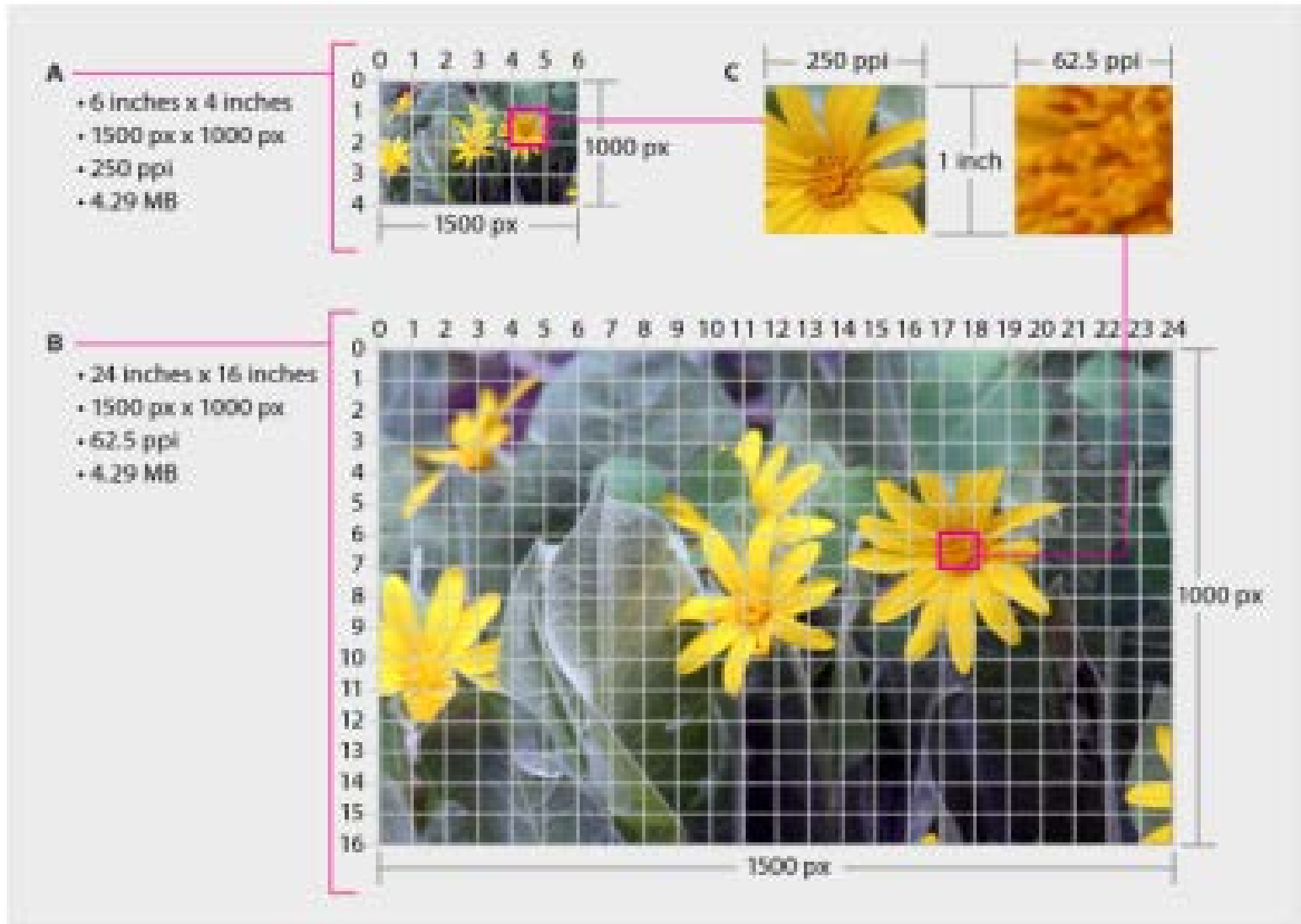
As a minimum for philatelic material use 300 dpi.

Some scanners support higher resolutions such as 600 dpi or up to 2400 dpi.

Digital Philately for Beginners

Although a digital image contains a specific amount of image data, it doesn't have a specific physical output size or resolution. As you change the resolution of an image, its physical dimensions change, and as you change the width or height of an image, its resolution changes.

Two images (A and B) with the same image data and file size but different image size and resolution; C shows that a higher resolution means better quality.





100%

400%

Resolution: 100 DPI
153 x 142 pixels
= 21,726 pixels

Size: 17.0 KB (17,491 bytes)
Size on disk: 20.0 KB (20,480 bytes)



Resolution: 600 DPI
912 x 857 pixels
= 781,584 pixels

Size: 252 KB (258,254 bytes)
Size on disk: 256 KB (262,144 bytes)

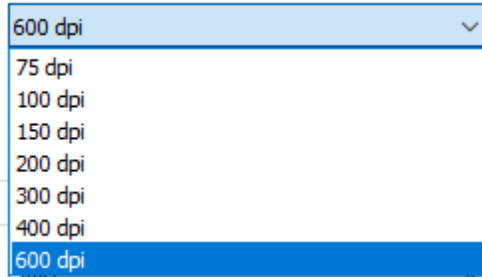
100%

400%

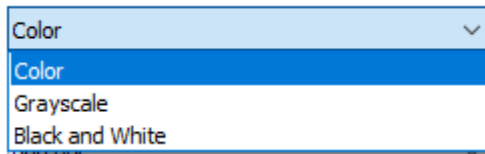


Scan Settings

Choose your
scanning preferences



Resolution
(Number of Dots Per Inch)



Output Type
(Colour Mode or Format)

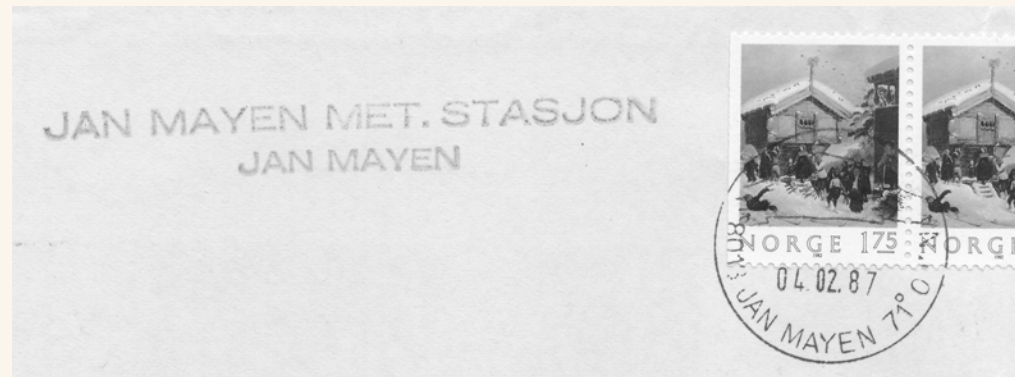
You will typically have the choice of scanning in colour, black and white, or grayscale.

Digital Philately for Beginners

Output Type
(Colour Mode or Format)

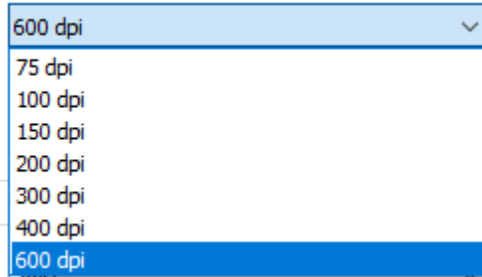


Color	▼
Color	
Grayscale	
Black and White	

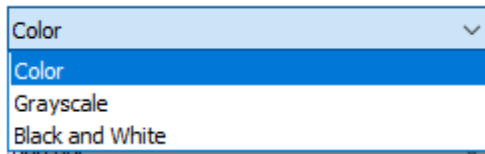


Scan Settings

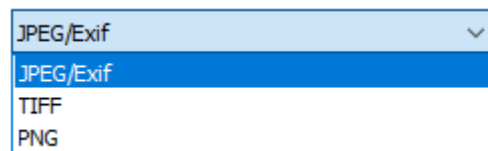
Choose your
scanning preferences



Resolution
(Number of Dots Per Inch)



Output Type
(Colour Mode or Format)



Output File Type

You can also choose the digital file format in which you want to save your picture (usually JPG or JPEG, TIFF or PNG, but also perhaps GIF and Exif).

Digital Philately for Beginners

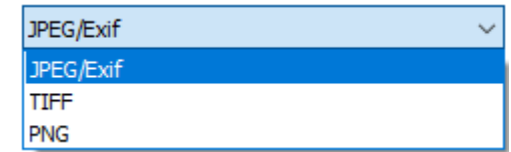
JPG files, also known as **JPEG** files, are a common file format for digital images. When JPG files are saved, they use a "lossy" compression (lossy meaning "with losses to quality"). This causes some image quality to be lost when the image data is compressed and saved, and this quality can never be recovered. File compression methods for most other file formats are lossless, and lossless means "fully recoverable". JPEG stands for Joint Photographic Experts Group, the committee that created the file type. JPEG is a standardised image compression mechanism. JPEG is designed for compressing either full colour (24 bit) or greyscale digital images of "natural" (real-world) scenes. It works well on photographs, naturalistic artwork, and similar material; not so well on lettering, simple cartoons, or black and white line drawings (files become very large).

As JPEG is "lossy", the image you get out of decompression isn't quite identical to what you originally put in. The algorithm achieves much of its compression by exploiting known limitations of the human eye, notably the fact that small colour details aren't perceived as well as small details of light-and-dark.

A lot of people are put off by the term "lossy compression", but when it comes to representing real-world scenes, no digital image format can retain all the information that impinges on the human eye. By comparison with the real-world scene, JPEG loses far less information than another file format, GIF (Graphics Interchange Format).

A useful property of JPEG is that the degree of lossiness can be varied by adjusting compression parameters. This means that the image maker can trade off file size against output image quality.

Output File Type



For good-quality, full-colour source images, the default quality setting (Q 75) is very often the best choice. Try Q 75 first; if you see defects, then go up.

Except for experimental purposes, never go above about Q 95; using Q 100 will produce a file two or three times as large as Q 95, but of hardly any better quality.

If you want a very small file (e.g. for preview or indexing purposes) and are prepared to tolerate large defects, a Q setting in the range of 5 to 10 is about right. A setting of Q 2 or so may be amusing as "op art".

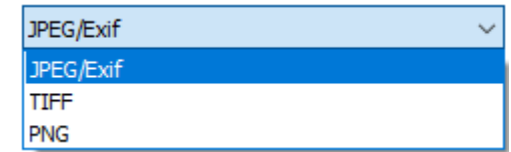
Digital Philately for Beginners

The Graphics Interchange Format (**GIF**) was developed in 1987 at the request of CompuServe, who needed a platform independent image format that was suitable for transfer across slow computer connections. It is a compressed (lossless) format, using something known as LZW compression that was invented by Abraham Lempel, Jacob Ziv, and Terry Welch. It is an 8 bit format, which means the maximum number of colours supported by the format is 256. This makes it unsuitable for high quality images.

In 1995 Unisys, who created the GIF format, announced that they would be enforcing the patent on the LZW compression technique used for GIF. Thus commercial developers that include the GIF encoding or decoding algorithms have to pay a license fee to CompuServe. This does not concern users of GIFs or non-commercial developers. However, a number of people got together and created a completely patent-free graphics format called **PNG** (pronounced "ping"), the Portable Network Graphics format. PNG is superior to GIF in that it has better compression. PNG supports palette-based images (with millions of colours), greyscale images, and full-colour non-palette-based images. PNG was designed for transferring images on the Internet, not for professional-quality print graphics, and therefore does not support non-RGB colour standards such as CMYK.

Exchangeable image file format (**Exif**) is a standard that specifies the formats for images, sound, and ancillary tags used by digital cameras (including smartphones), scanners and other systems handling image and sound files recorded by digital cameras. The specification adds specific metadata tags to JPEG for compressed image files and TIFF for uncompressed image files.

Output File Type



TIFF (Tag Image File Format) is a common format for exchanging raster graphics (bitmap) images between application programs, including those used for scanner images. A TIFF file can be identified as a file with a ".tiff" or ".tif" file name suffix. The TIFF format was developed in 1986 by an industry committee chaired by the Aldus Corporation (now part of Adobe Software). Microsoft and Hewlett-Packard were among the contributors to the format. TIFF files can be in any of several classes, including greyscale, colour palette, or RGB full colour.

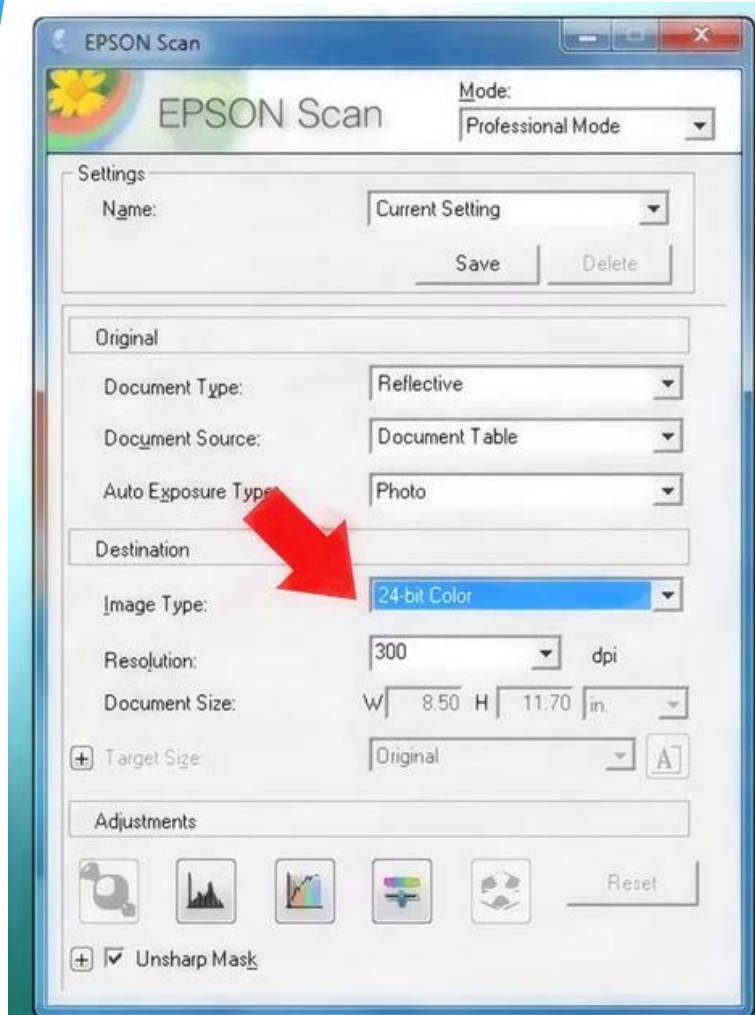
Metadata

Image files usually also contain metadata. Metadata means 'data about data' and provides information about the image; this may include:

- filename
- file format e.g. JPEG, GIF or PNG
- dimensions
- resolution i.e. dots per inch
- colour depth i.e. amount of bits available
- time and date the image was last changed

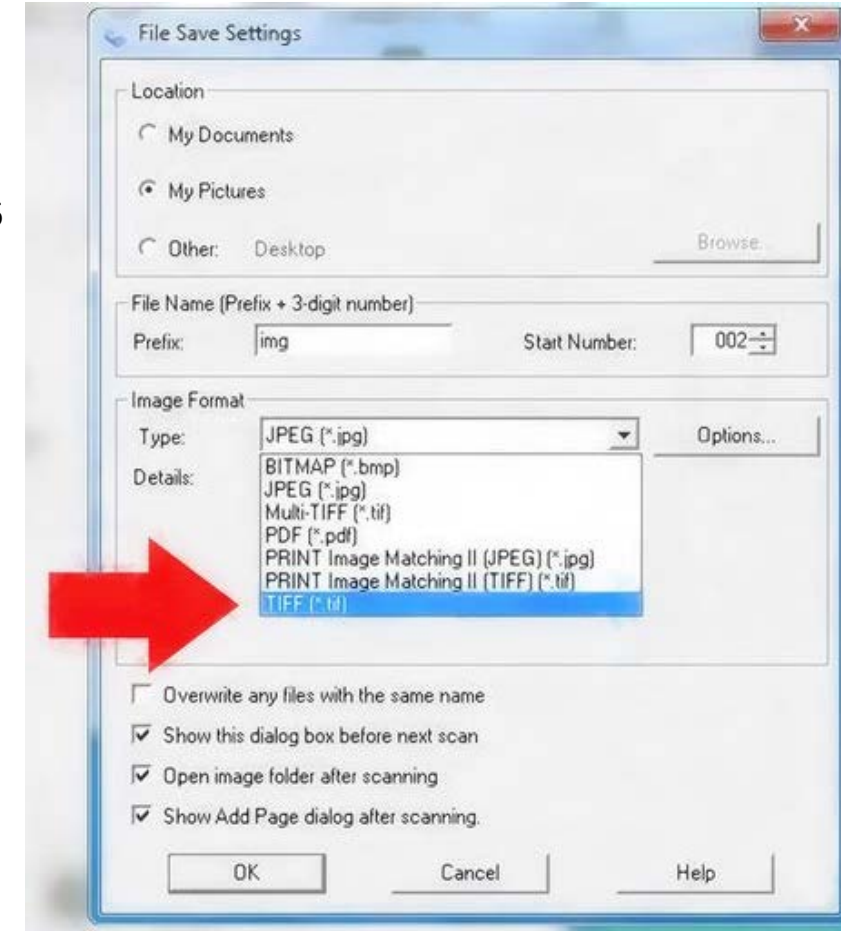
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Output File Type

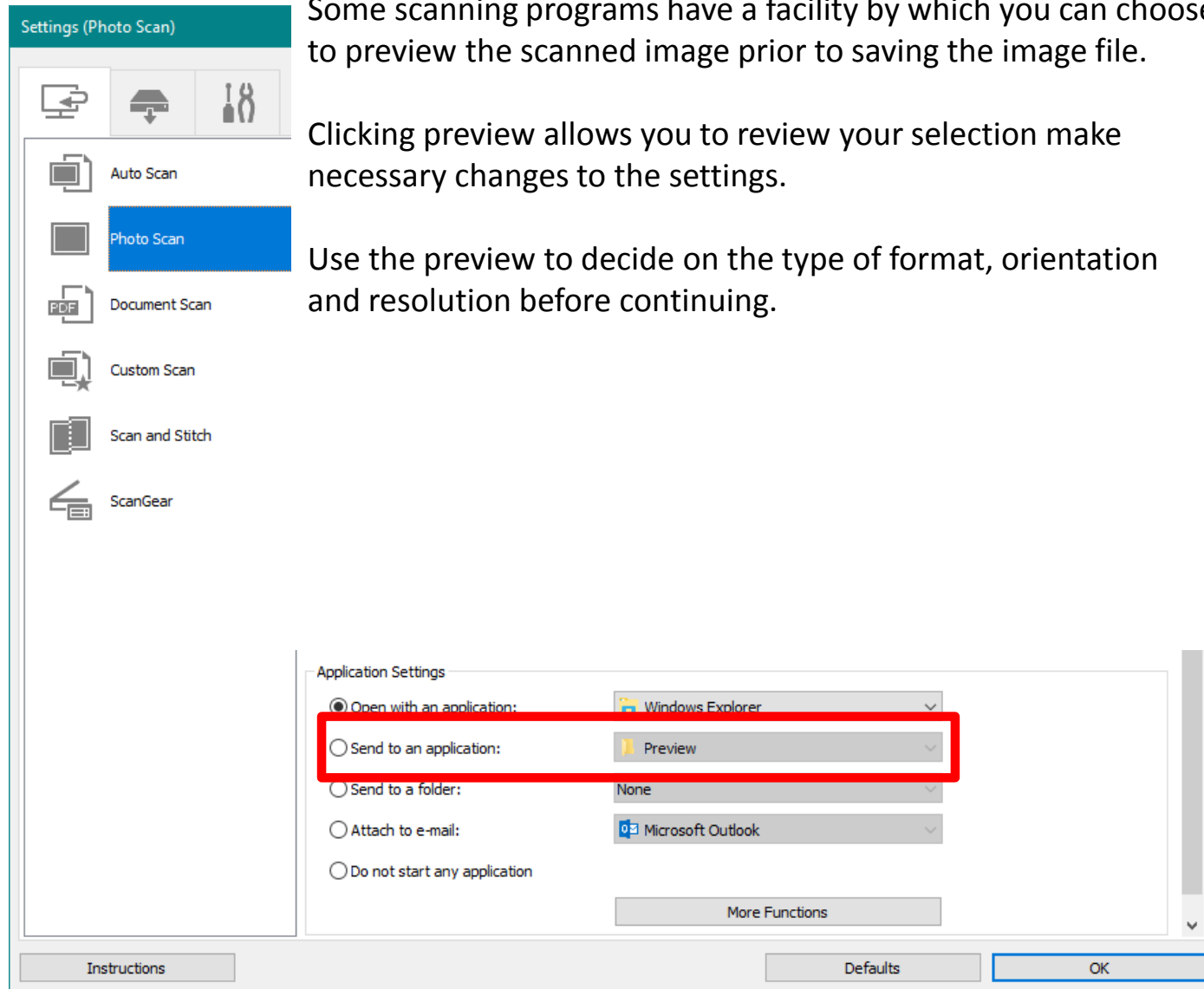


JPG or JPEG and TIFF support 24 bit colour images. The range of unsigned integers that can be represented in 24 bits is 0 to 16,777,215, so such image files can have up to 16,777,216 possible colours per pixel.

In the list of options, you will sometimes have the option to scan in 24 bit. This is the best choice for quality scans and you should take it whenever you can.



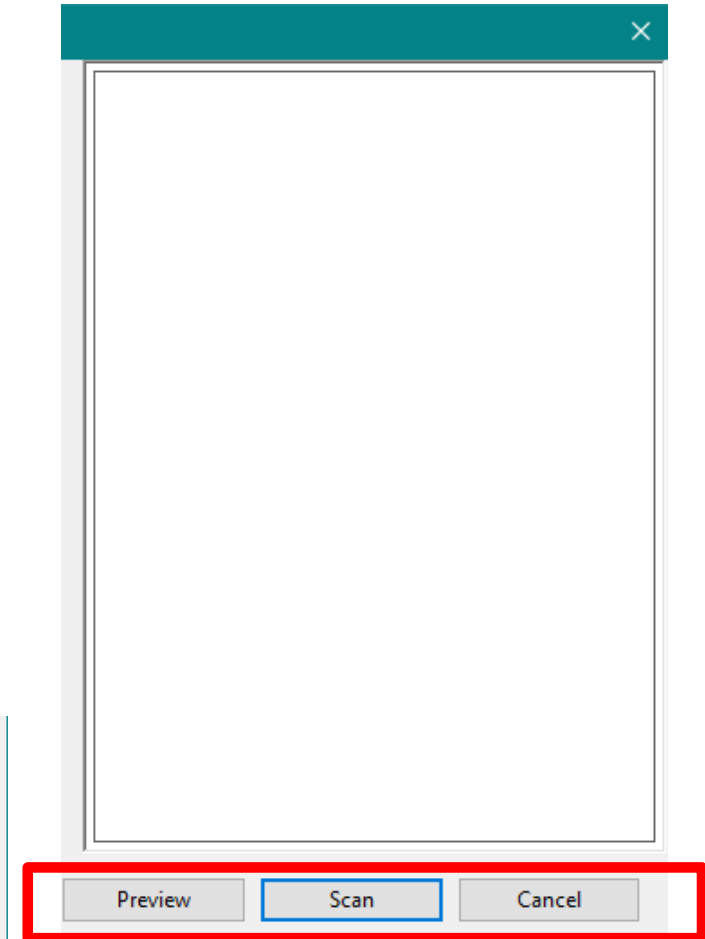
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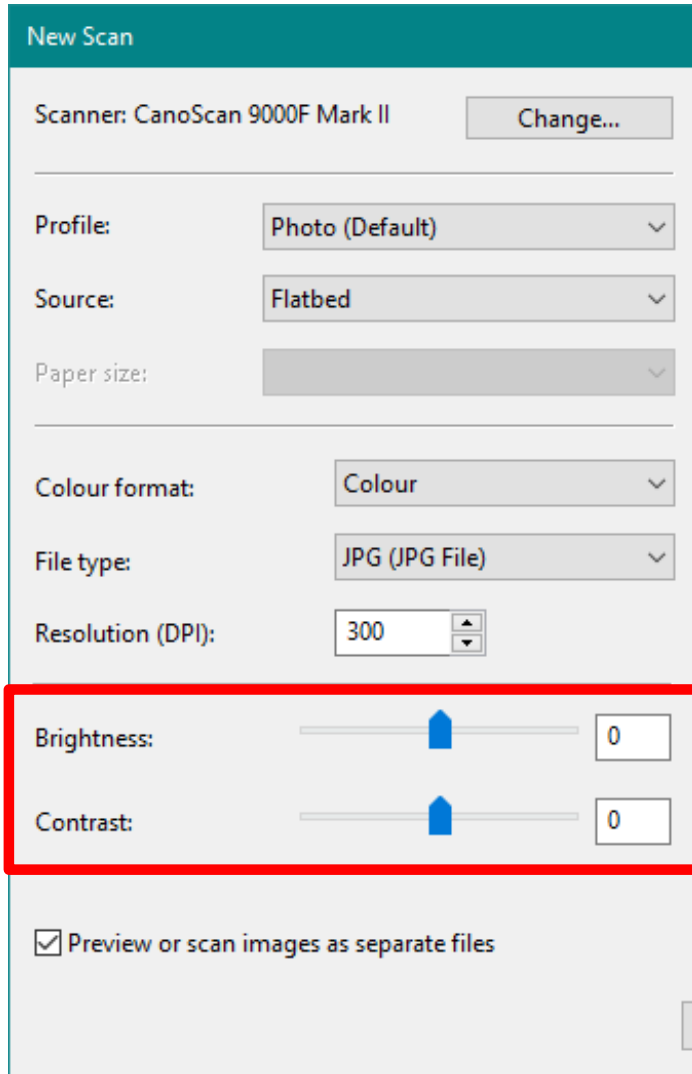
Some scanning programs have a facility by which you can choose to preview the scanned image prior to saving the image file.

Clicking preview allows you to review your selection make necessary changes to the settings.

Use the preview to decide on the type of format, orientation and resolution before continuing.



Digital Philately for Beginners



If your scanning program has options for adjusting the levels and saturation before scanning, it is better to take that option.

Levels and saturation settings change the colours, the darkness, and brightness in an image, which for instance can help with a faded picture.

Adjusting these within a photo editing program later can damage the image and lose a lot of the detail.



Digital Philately for Beginners



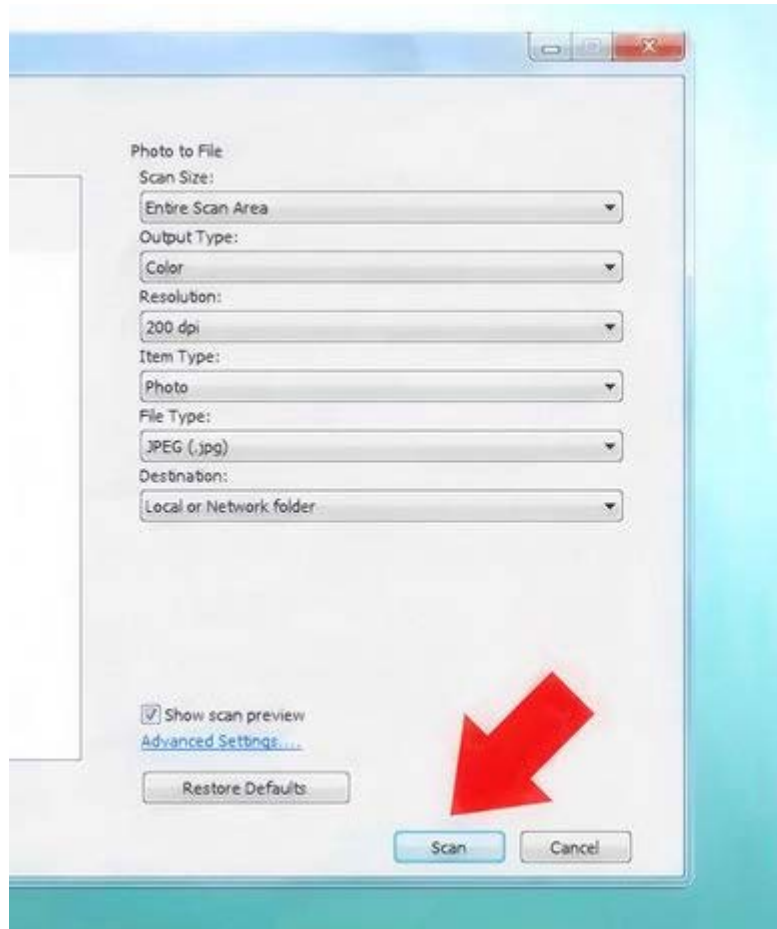
Take your time to get the images orientated and aligned properly in the scanner.

Do not rotate the scanned images in the scanning program.

When you turn the images in the scanning program's preview window (or even rotate them afterwards in a photo editor), you can lose some image quality.

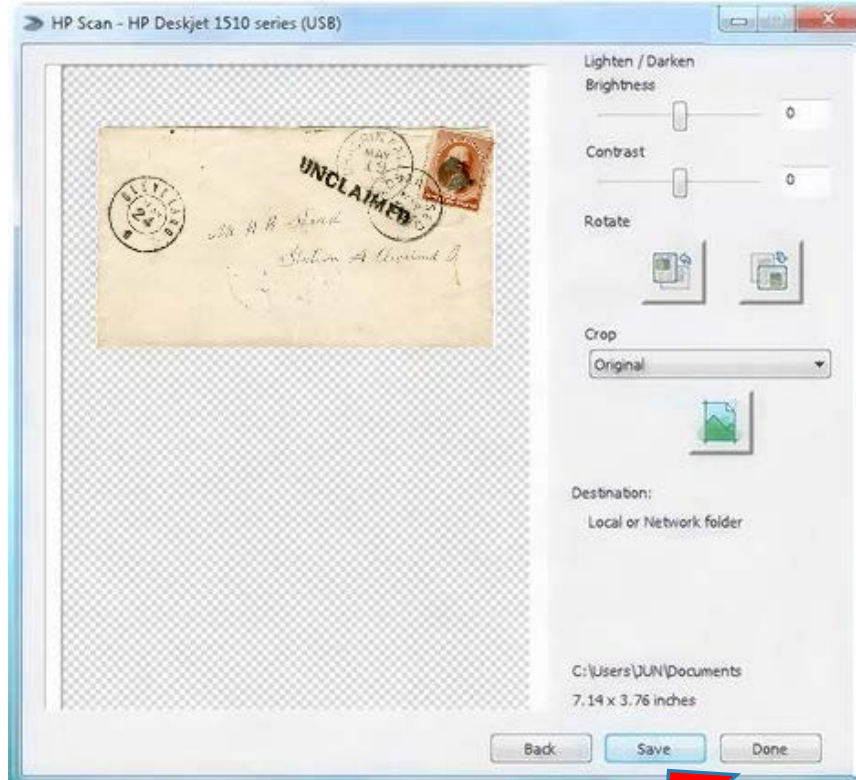
Scan them in the correct orientation to begin with and you'll help preserve the quality of your image.

Digital Philately for Beginners



Once you have chosen the settings you want in the preview, click "Finish" or "Scan" to continue and complete the process. Which word is used will depend on your program, and another one altogether may even be used.

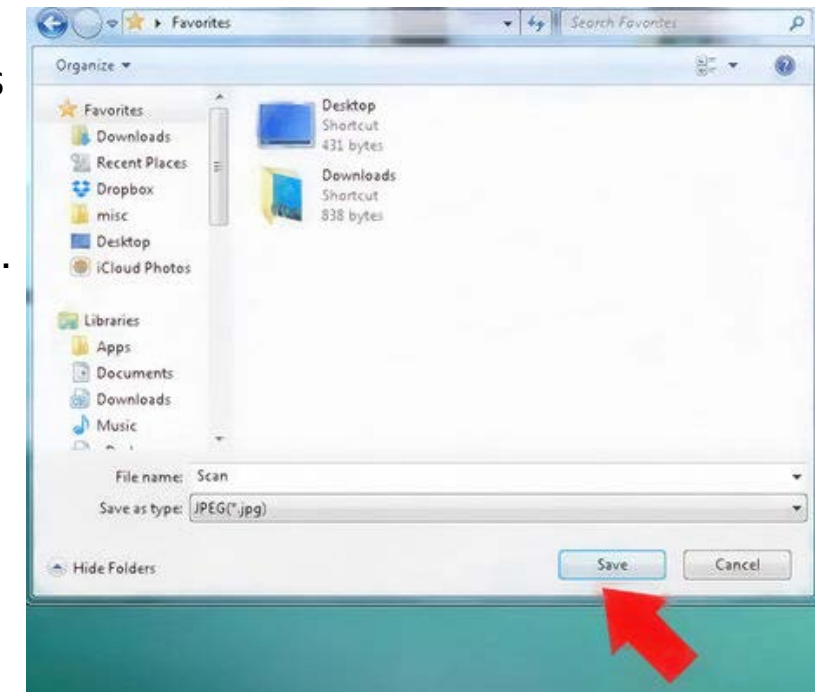
Digital Philately for Beginners



Use the program to guide you through the process. The program normally will show you step-by-step how to save pictures from a scanner to the computer or web site.

Some programs will automatically save your images to a cache within the program itself, but for most programs you will need to save the images somewhere on your computer or upload them directly to the internet. Look for the save button, or use the save prompt when it comes up.

It is best to give the files meaningful names and save them in a folder for subsequent retrieval.



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If you intend to use the images on the internet, use web-friendly names. Your web files will be viewed by numerous users who use a wide variety of operating systems (Mac, PC, and Linux for instance) and devices (desktops, tablets, and smartphones are some examples). Therefore, it is essential to play it safe and avoid certain characters.

Do not use any of these common characters/symbols:

# pound or hash	< left angle bracket	\$ dollar sign	+ plus sign
% percent	> right angle bracket	! exclamation mark	` backtick
& ampersand	* asterisk	' single quotes	pipe
{ left bracket	? question mark	" double quotes	= equal sign
} right bracket	/ forward slash	: colon	
blank spaces	\ back slash	@ at sign	

Also, keep these rules in mind.

- Don't start or end a filename with a space, full stop, hyphen, or underline.
- Keep filenames to a reasonable length and be sure they are under 31 characters.
- Most operating systems are case sensitive; always use lowercase.
- Avoid using spaces and underscores; use a hyphen instead.

Plustek - Walk up scanner at No. 41 Devonshire Place

- Scan up to 600 dpi JPGs, TIFFs and PDFs
- Up to A3 size
- Saves to USB stick
- Good for medium-sized, modern books, stamps, and postal history items
- Good for where you have a few scans
- Black lid lining, useful for contrast
- Located in the Small Library for Members' to use for free.



“Any advice on
photography vs
scanning for
collection items?”

Digital Philately for Beginners

Alternative to using a Scanner – Digital Photography



Resolution: “72 DPI”
1191 x 779 pixels
File size: 1.2 MBytes
40%

Camera	
Camera maker	SAMSUNG
Camera model	GT-I8160
F-stop	f/2.7
Exposure time	1/9 sec.
ISO speed	ISO-200
Exposure bias	0 step
Focal length	4 mm
Max aperture	2.87
Metering mode	Centre Weighted Average
Subject distance	
Flash mode	No flash
Flash energy	
35mm focal length	



Alternative to using a Scanner – Digital Photography

Using a camera to capture images of stamps and items of postal history generally gives limited, low-quality results. Several things contribute to the poor results:

Lighting

A camera relies on reflecting light to the lens. You either get limited ambient light or harsh flash, hot spots on the item, glare on glossy surfaces, basically inconsistent and unpredictable lighting.

Aspect

The camera is rarely at the perfect top-down angle while the scanner positions the item perfectly flat and at the proper angle.

Focus

The camera shot is often out of focus from trying to frame the item and getting too close.

Quality

Overall, the image quality is superior on the scanner. Zoom in on a camera photograph and the same page captured with a scanner and see which holds up better. Cameras do a great job at portraits and scenery, but not such a good job with documents, covers and stamps.

Cropping

You have to crop your item as best you can with the camera and you may still get more table top around the item than you want. The scanner cropping is superior.

File Size

The scanner's file size is less than half that of the camera photo, yet the scanner has better image quality.

Digital Philately for Beginners

Alternative to using a Scanner – Digital Photography



Enlargement from scan, resolution: 96 DPI
scaled to 30%



Scan, resolution: 600 DPI



Photograph, resolution: 72 DPI

scaled to 20%

Digital Philately for Beginners

Alternative to using a Scanner – Digital Photography



Scanning Philatelic Material

Demonstration

Mark Copley

Hands-on practical session

All participants

- Scanning stamps and/or covers
- Crop within preview as required
- Scan at different resolutions (300 dpi or higher)
- Save scanned images to a folder for later use
- Use meaningful names for the image files

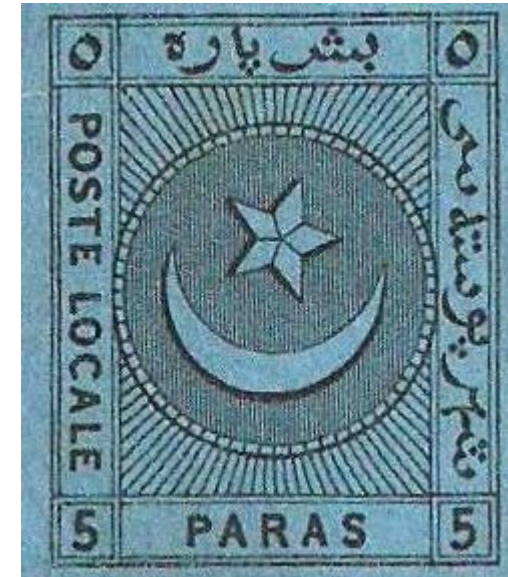
Making Large, Detailed Images



Making Large, Detailed Images

Start with your 'Master' image

- Start with High Resolution scans or images



Istanbul *Liannos et cie* Private City Post
1865 5 paras blue imperforate

Making Large, Detailed Images

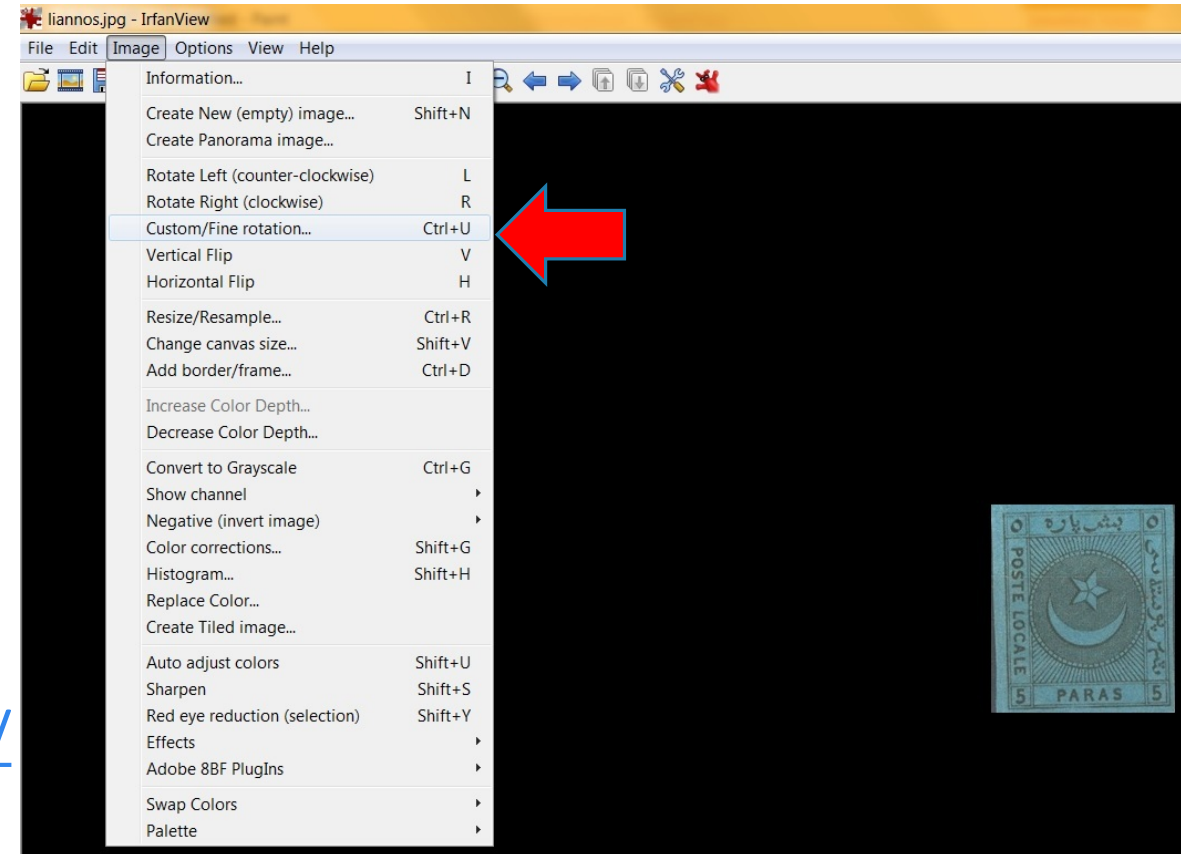
Start with your 'Master' image

- Start with High Resolution scans or images
- If required, rotate the image

Free graphics software:

<http://www.irfanview.com/>

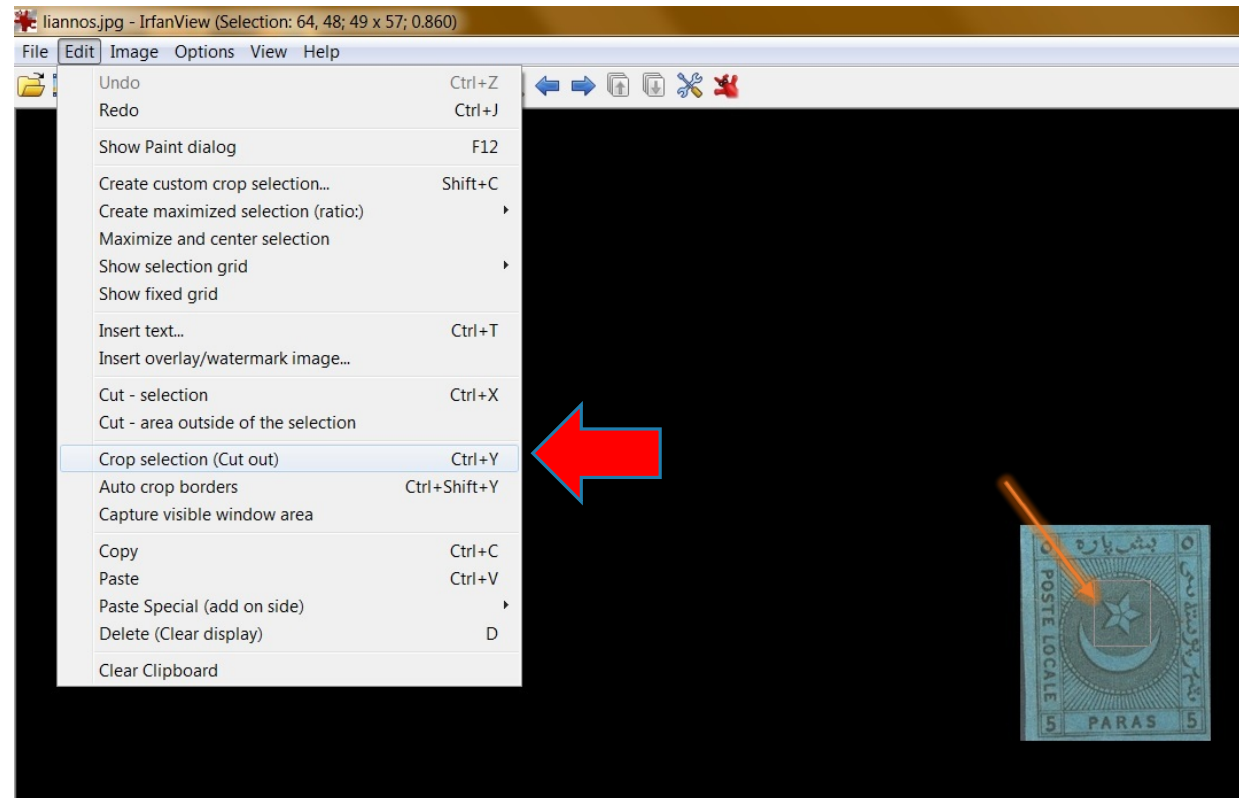
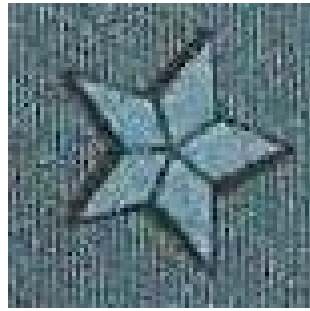
<http://download.cnet.com/IrfanView/>



Making Large, Detailed Images

Start with your 'Master' image

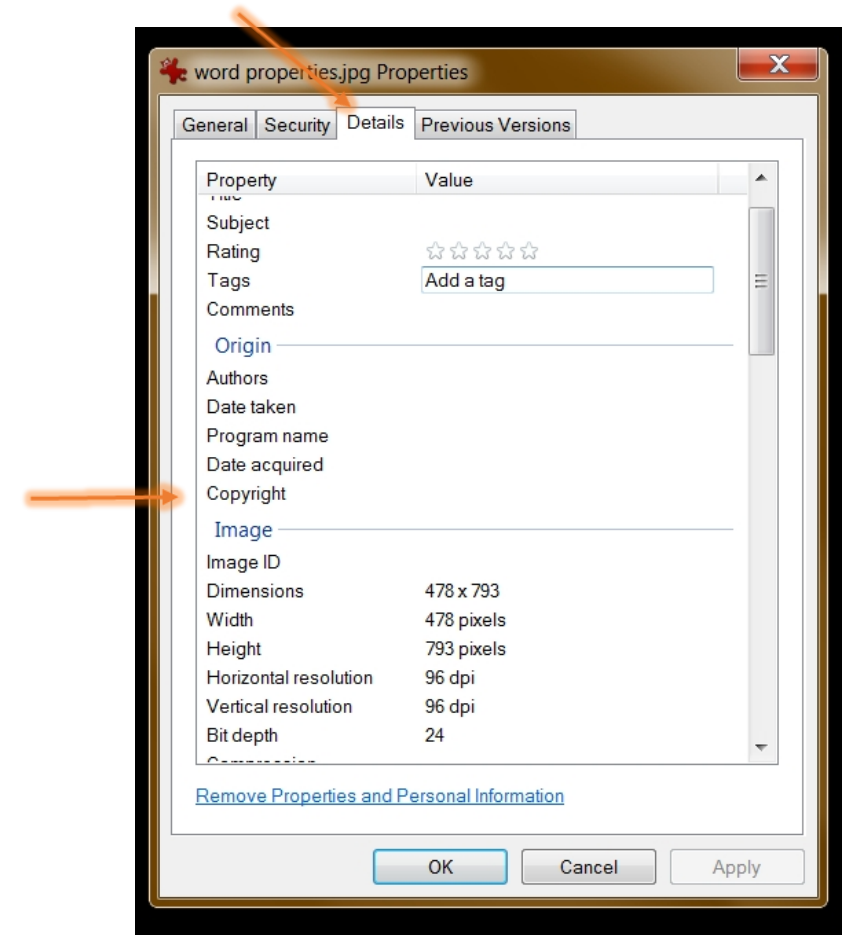
- Start with High Resolution scans or images
- If required, rotate the image
- Crop the image



Making Large, Detailed Images

Start with your 'Master' image

- Start with High Resolution scans or images
- If required, rotate the image
- Crop the image
- Amend the Property details (Metadata)
Right click the image file > Properties



Making Large, Detailed Images

Start with your 'Master' image

- Start with High Resolution scans or images
- If required, rotate the image
- Crop the image
- Amend the Property details (Metadata)
Right click the image file > Properties
- Save your edited image

Making Large, Detailed Images

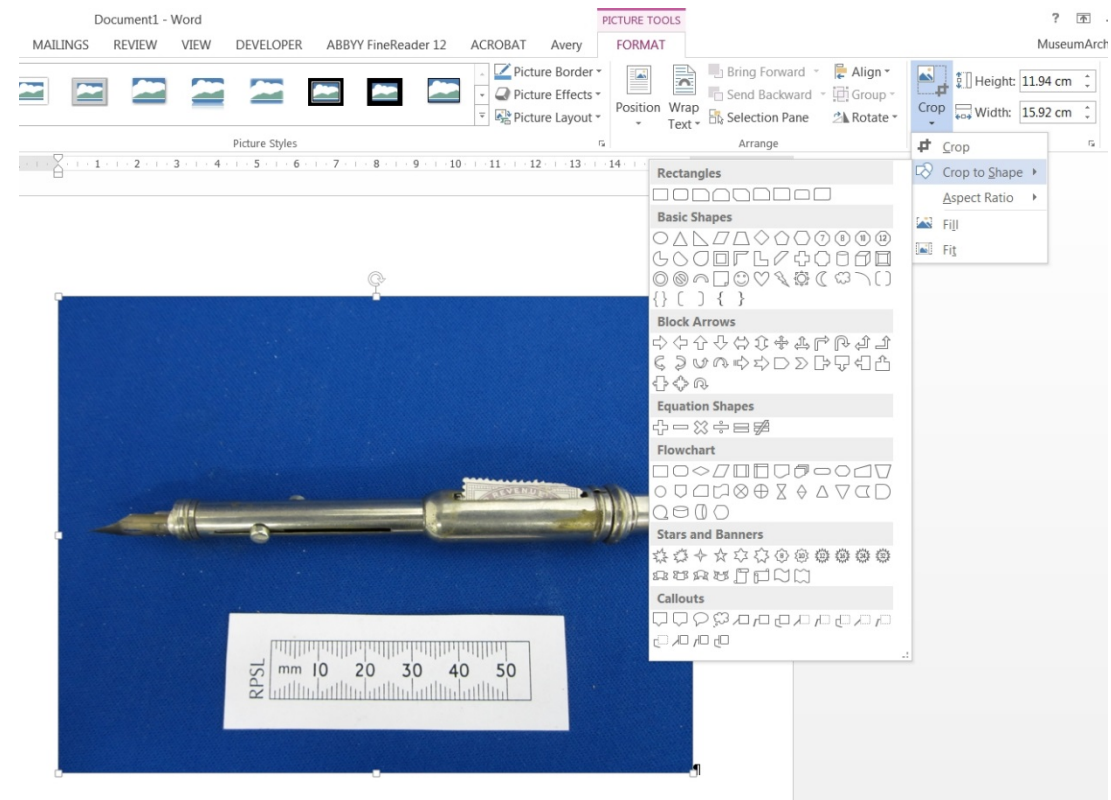
For Displays

- For enlarged detail on a sheet, crop a high resolution image rather than enlarge a low resolution image

Can use IrfanView or Microsoft Word

IrfanView: save the edited version with a new filename

N.B. Microsoft PowerPoint has the same functionality as Microsoft Word



Cropping an image in Word

Making Large, Detailed Images

For Websites

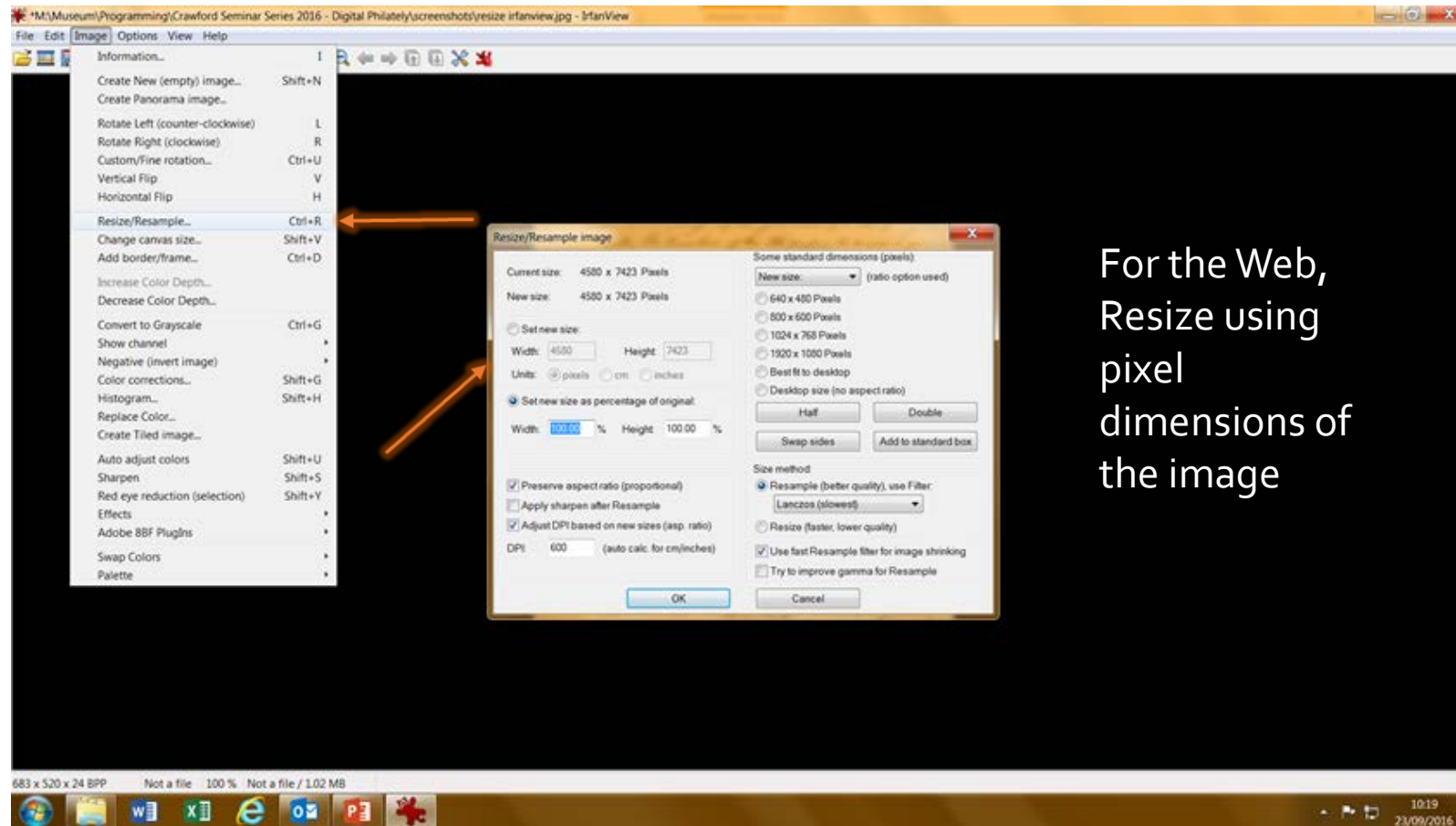
- Use JPG, PNG or GIF format for images
(can use IrfanView)

Initial scan:

pen-01.tiff

600 dpi

Making Large, Detailed Images



Making Large, Detailed Images

For Websites

- Use JPG, PNG or GIF format for images
(can use IrfanView)

Initial scan:

pen-01.tiff

3000 x1000 pixels

Web friendly image:

pen-01-web.jpg

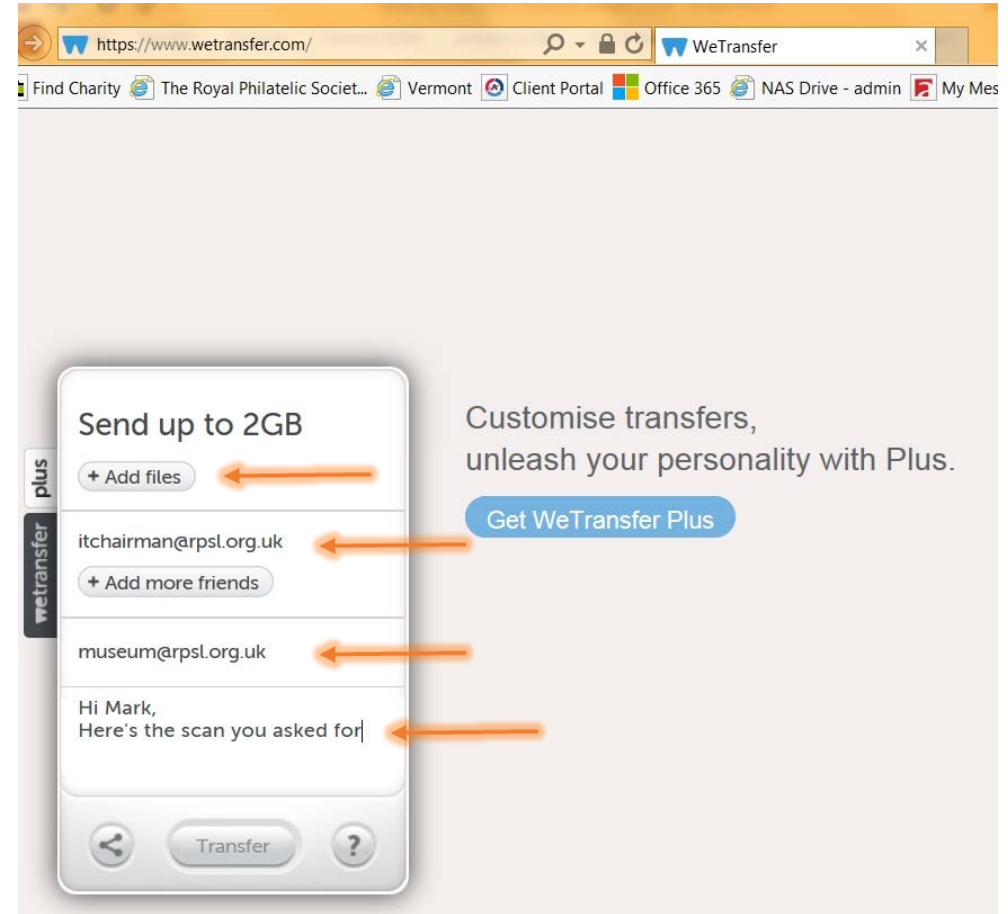
300 x 100 pixels

Line art: use GIFs

Making Large, Detailed Images

N.B. Emails

- Some email programs compress files
- Better to use wetransfer.com or zip the files



Resizing Images in Photoshop Elements

Change print dimensions and resolution without resampling

You might need to change the print dimensions and resolution if you are sending the image to a print shop that requires files to be at a specific resolution.


If you are printing directly from Photoshop Elements, you don't have to perform this procedure. Instead, you can choose a size in the Print dialog box and Photoshop Elements applies the appropriate image resolution.

Note: To change only the print dimensions or the resolution, and adjust the total number of pixels in the image proportionately, you must resample the image.

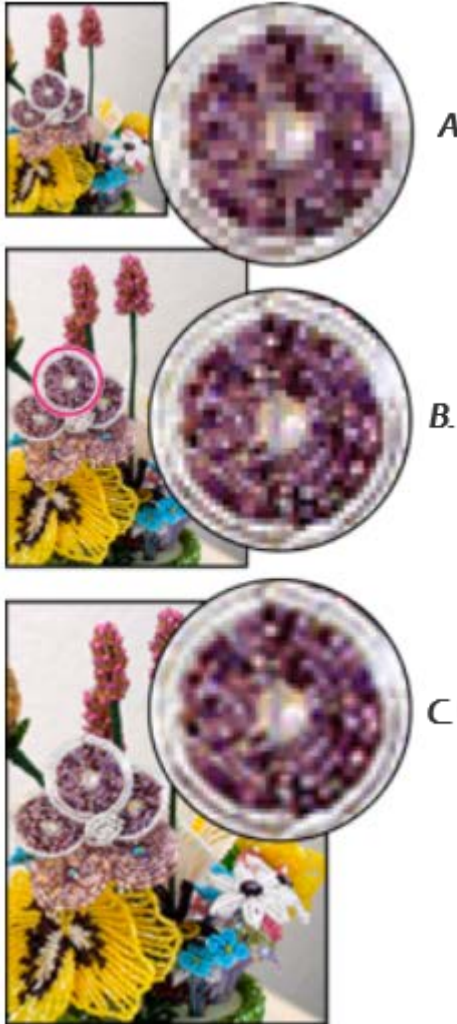
1. Choose Image > Resize > Image Size.
2. Make sure that Resample Image is deselected. If deselected, you can change the print dimensions and resolution without changing the total number of pixels in the image, but the image may not keep its current proportions.

Note: Resample Image must be selected in order to use the Constrain Proportions and Scale Style functions.

3. To maintain the current aspect ratio, select Constrain Proportions. This option automatically updates the width as you change the height, and vice versa.
4. Under Document Size, enter new values for the height and width. If desired, choose a new unit of measurement.
5. For Resolution, enter a new value. If desired, choose a new unit of measurement, and then click OK.

 To return to the original values displayed in the Image Size dialog box, use Alt (Option in Mac OS) + click Reset.

Resampling Images in Photoshop Elements



Resampling an image

A. Image downsampled B. Original image C. Image upsampled

Changing the pixel dimensions of an image is called resampling.

A. Resampling affects not only the size of an image on screen, but also its image quality and its printed output—either its printed dimensions or its image resolution.

B. Resampling can degrade image quality. When you “downsample”, decreasing the number of pixels in the image, information is removed from the image. When you “upsample”, or increase the number of pixels in your image, new pixels are added based on the colour values of existing pixels, and the image loses some detail and sharpness.

To avoid the need for “upsampling”, scan or create the image at the resolution required for your printer or output device.

If you want to preview the effects of changing pixel dimensions on screen or print proofs at different resolutions, resample a duplicate of your file.

💡 If you're preparing images for the web, it's useful to specify image size in terms of the pixel dimensions.

1. Choose Image > Resize > Image Size.
2. Select Resample Image, and choose an interpolation method:

Nearest Neighbor Fast, but less precise. This method is recommended for use with illustrations containing edges that are not anti-aliased, to preserve hard edges and produce a smaller file. However, this method can create jagged edges, which become apparent when distorting or scaling an image or performing multiple manipulations on a selection.

Bilinear Medium-quality.

Bicubic Slow, but more precise, resulting in the smoothest tonal gradations.

Bicubic Smoother Use when you're enlarging images.

Bicubic Sharper Use when you're reducing the size of an image. This method maintains the detail in a resampled image. It may, however, oversharpen some areas of an image. In this case, try using Bicubic.

3. To maintain the current aspect ratio, select Constrain Proportions. This option automatically updates the width as you change the height, and vice versa.
4. In Pixel Dimensions, enter values for Width and Height. To enter values as percentages of the current dimensions, choose Percent as the unit of measurement.

The new file size of the image appears next to Pixel Dimensions, with the old file size in parentheses.

5. Click OK to change the pixel dimensions and resample the image.

💡 For best results in producing a smaller image, downsample and apply the Unsharp Mask (Enhance > Unsharp Mask). To produce a larger image, rescan the image at a higher resolution.

Digital Philately for Beginners

10.30 am	Tea, coffee and biscuits	
11 am	Welcome and opening remarks	Frank Walton
11.10 am	Scanning philatelic material	Mark Bailey
	Demonstration	Mark Copley
	Hands-on practical session	All participants
12 noon	Making enlarged, detailed images	Mark Copley
12.30 pm	Lunch break	
	Optional: Lunch at the King's Head	
1.30 pm	Different colour standards	Mark Bailey
1.35 pm	Preparation of physical display sheets	Mark Copley
	Hands-on practical session	All participants
3 pm	Refreshment break	
3.15 pm	Producing digital exhibits	Mark Copley
3.45 pm	Preparing slideshow presentations	Mark Bailey
4.15 pm	Wrap-up session, with Questions & Answers	All participants
4.30 pm	Closing remarks	Mark Bailey

Different Colour Standards

RGB and CMYK Colour Modes

A Brief Introduction to this 'black art'

What is the Relevance?

- The technology for printing and for screen presentation is different.
- You should not expect colours that you see on a screen to be identical to what is printed.

You need to consider the main purpose of the document being created.

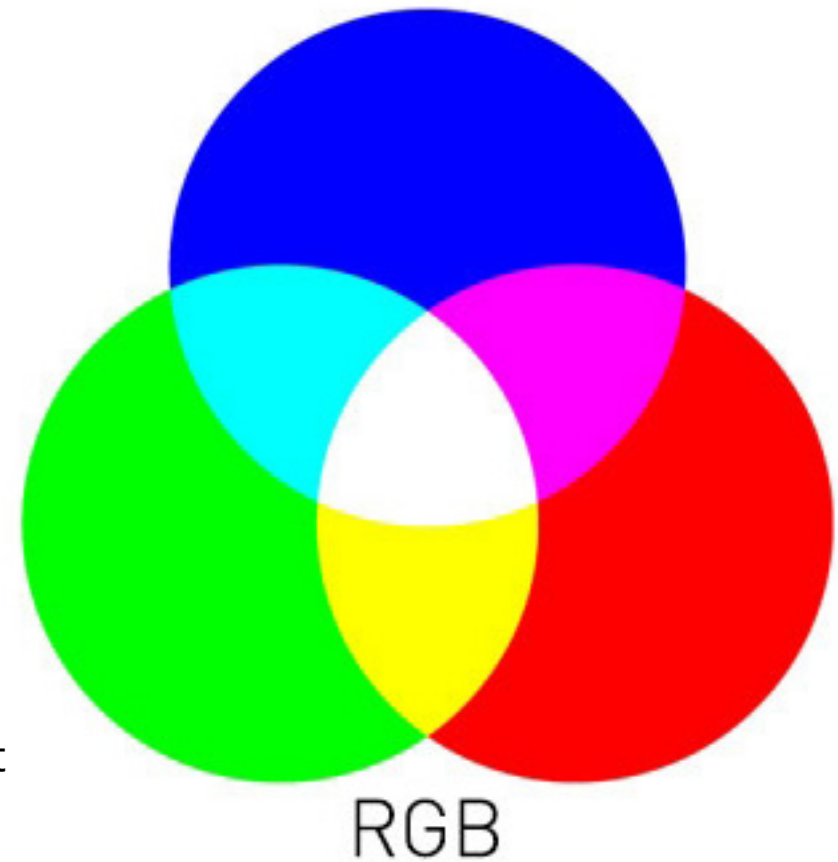
Digital Philately for Beginners

RGB Colour Mode

RGB is the colour scheme associated with electronic display screens such as cameras, TVs and computer monitors. RGB stands for three colours:

- R = Red
- G = Green
- B = Blue

RGB is an **additive** colour model. This means that these 3 colours are mixed together to create the range of colours that you can see on electronic devices (**black** is no light).



Digital Philately for Beginners

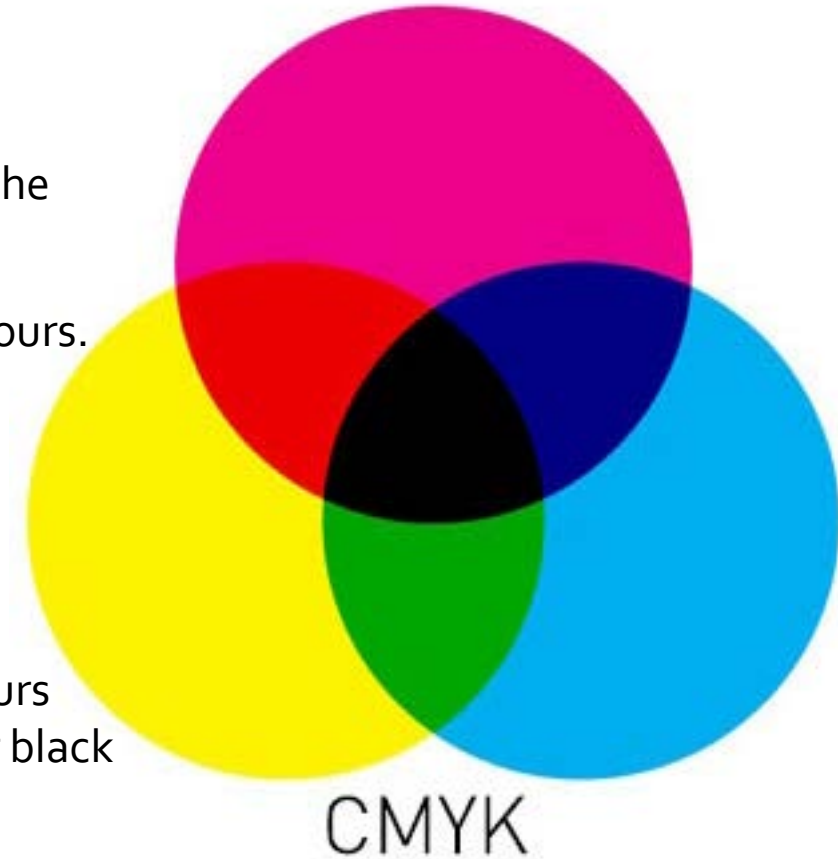
CMYK Colour Mode

CMYK is the colour scheme that is used by printers to create the many colours that end up on the page.

It is made up of four colours created from mixing the RGB colours.

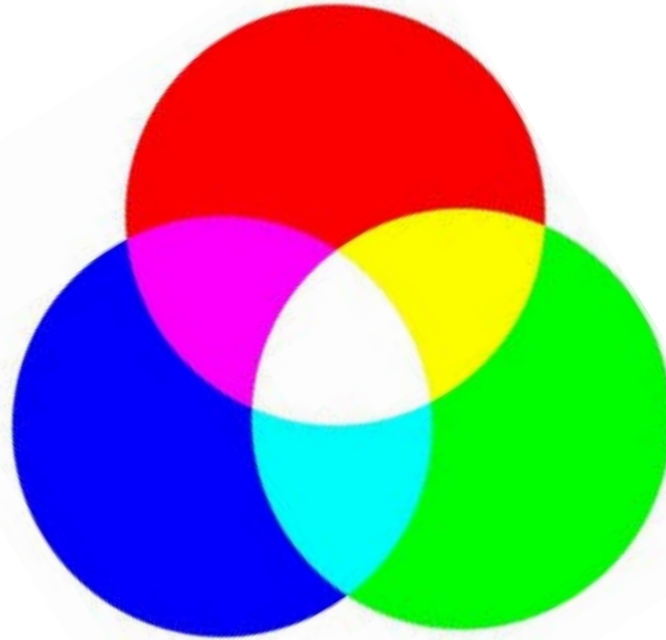
- C = Cyan is a mix of green (G) and blue (B),
- M = Magenta is a mix of red (R) and blue (B)
- Y = Yellow is a mix of red (R) and green (G).
- K = Black is added to the CMYK model as the 3 colours RGB cannot be mixed to create the colour black

The CMYK colour model is a **subtractive** model because it subtracts the brightness from white.

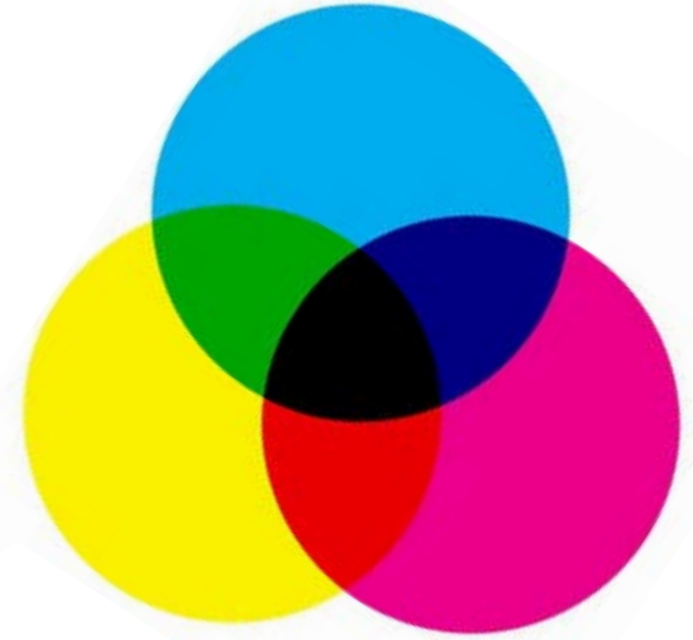


Digital Philately for Beginners

RGB and CMYK Summary



RGB Additive Colour



CMYK Subtractive Colour

Document / Image Creation

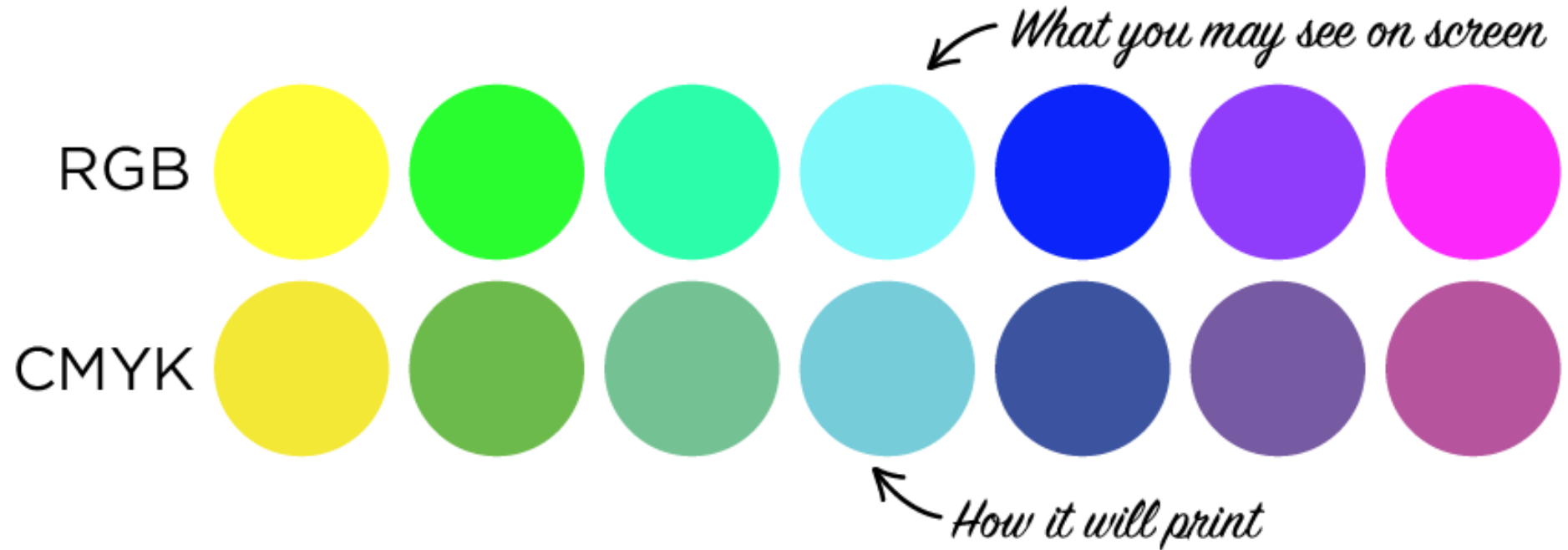
Software Support

- Most software will scan in RGB and will not support CMYK at all
- This includes Microsoft Word, Microsoft Publisher, Adobe Photoshop Elements, and Irfanview
- Only high end software products such as Adobe Creative Suite (now Cloud) (which includes Photoshop and Indesign) handle CMYK.
- This is used for production of the *London Philatelist* and usually for creating RPSL books.
- Expensive: £46 per month!

Implication

- Therefore, any document that has been created using software that only supports RGB needs to be converted to CMYK for printing.
- This can be done as part of the printing process or specific software is used by printers to do it before printing.

The Effect of Conversion between RGB and CMYK?



Assessment

- Difficult to assess the impact of the conversion without actually doing a test print

RGB and CMYK Colour Modes

Conclusion

Does colour accuracy for printing matter?

If so, then you need to use CMYK, so talk to the printer / editor about how to achieve it.

Otherwise, use RGB technology and accept a printed version might look a bit different.

Conversion Software

Online converter at: <http://www.cmykconverter.com>

The technique works best with a black postmark on a light coloured stamp.

- a. First scan the desired cancel and stamp.
- b. In Image Editing software, split the image by creating a CMYK split. This creates four new (greyscale) images, each containing the colour information for one of the 4 ink colours (Cyan, Magenta, Yellow, and Black) that would be used to print the original image.
- c. Use the black 'channel' containing a negative image of the black parts of the original scan.
- d. Invert the image colours, using the 'Invert Colours' command to replace black with white and vice-versa.
- e. Retouch the image as desired for the final required image.
- f. Save image(s) for future use.

This technique can also be used for 'lifting' transit marks, instructional marks, etc. for printing alongside the original item that has been mounted on the album page.

It is also useful for reproducing the marks on the reverse side of a cover.

It's up to you to how much 'repair' work you do to the final image, but remember it is unethical to alter (enhance) the original philatelic item in any way.

Digital Philately for Beginners

Isolating Cancellations from Scanned Stamps and Postal History

Tip: Work on a copy of your image, not the original.

1. Open a copy of your image in Photoshop. If the image has layers, use the menu command Layer> Flatten Image. From the Channels palette menu, choose Split Channels. (NOTE: This command cannot be undone. However, you can reverse the process with the Channels palette menu command Merge Channels.)

A separate file is created from each colour channel in the image. The grayscale images show the distribution of each colour throughout the image. The individual file names include the channel's colour after the file extension. Be aware that this file naming convention can prevent file type recognition by the operating system. You may need to re-name the files.

2. With the Cyan file active, use the menu command Image> Mode> Duotone. In the Duotone dialog box, select Monotone (which uses a single ink). Click the colour swatch to the left of the ink name and define the monotone's ink as CMYK 100/0/0/0. (You can also select Pantone Process Cyan from the Custom Colours.)

Using the same procedure, convert the Magenta file to a Monotone using CMYK 0/100/0/0 and the Yellow file to a Monotone using CMYK 0/0/100/0. The Black file can be left as Grayscale.

These images can now be used individually, producing colour separations in their own colours. (These colour separations cannot be used to produce printing plates.)

More reading on the subject (RGB images and CMYK processing):

<http://www.slideshare.net/bobswansons/isolating-cancellations-ver2>

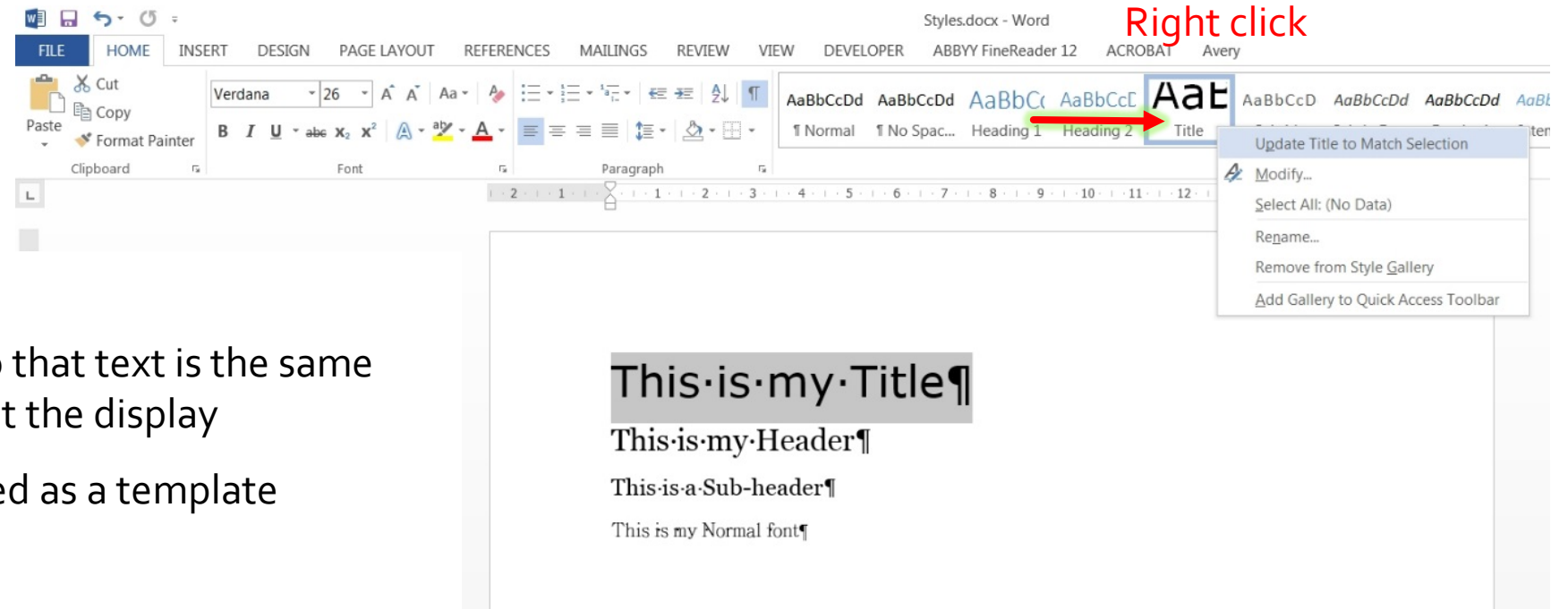
Preparation of Physical Display Sheets

You can use Microsoft Word – it's easy!
(and you can use Microsoft PowerPoint as well)

Initial checklist:

- Page size
- Margin size
- Orientation

Preparation of Physical Display Sheets



Optional: Styles

- Create Styles so that text is the same style throughout the display
- This can be saved as a template

Preparation of Physical Display Sheets

Optional: Master Sheet

- Styles
- Text boxes
- Headers
- Footers

Save it to use as a master sheet which can be used for all your display sheets

Preparation of Physical Display Sheets

Creating your layout

- Text boxes

Insert > Text box

The screenshot shows the Microsoft Word interface with the **DRAWING TOOLS** **FORMAT** tab selected. The ribbon includes sections for **Shape Styles**, **WordArt Styles**, **Text**, and **Arrange**. Red arrows point to specific features with explanatory text:

- For overlapping items, bring up a layer or send back a layer:** Points to the **Bring Forward** and **Send Backward** buttons in the **Arrange** section.
- Align to page:** Points to the **Align** button in the **Arrange** section.
- Can change the Shape Fill to transparent:** Points to the **Shape Fill** dropdown in the **Shape Styles** section.
- Shape outline can be any colour or thickness:** Points to the **Shape Outline** dropdown in the **Shape Styles** section.
- Text box size:** Points to the **Size** dropdown in the **Arrange** section, which shows dimensions of 1.07 cm by 6.3 cm.

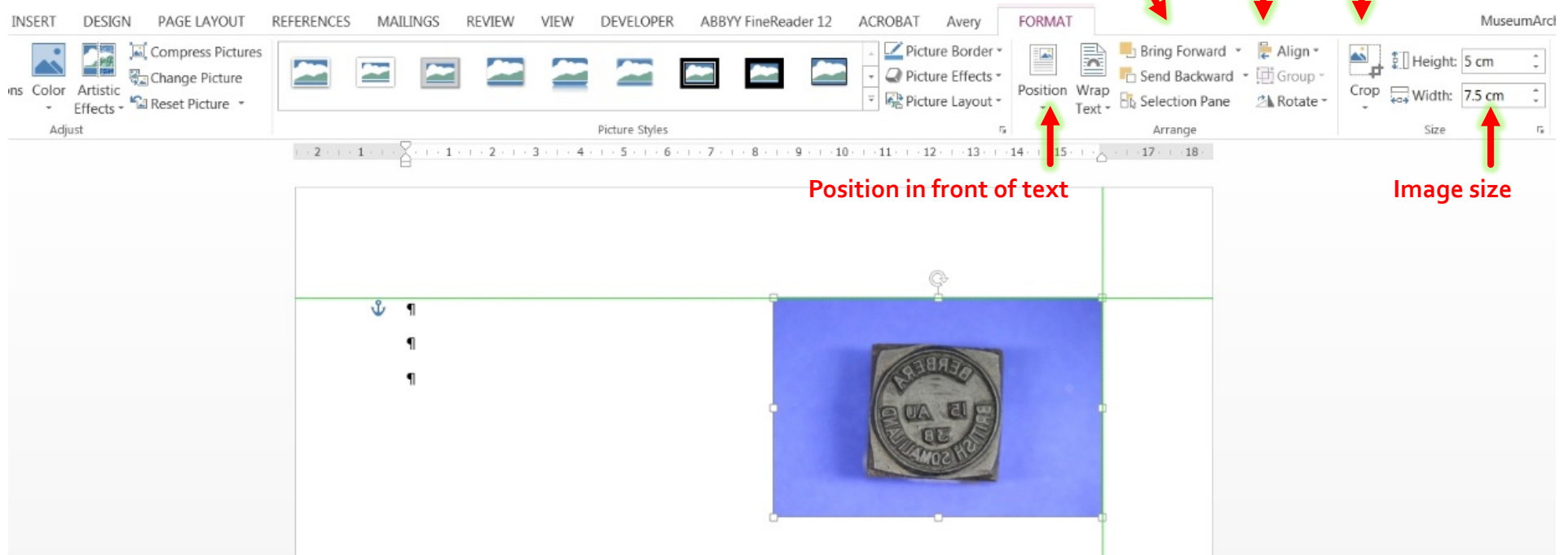
In the background, a text box labeled "Text-Box" is visible on the document page.

Preparation of Physical Display Sheets

Creating your layout

- Inserting images

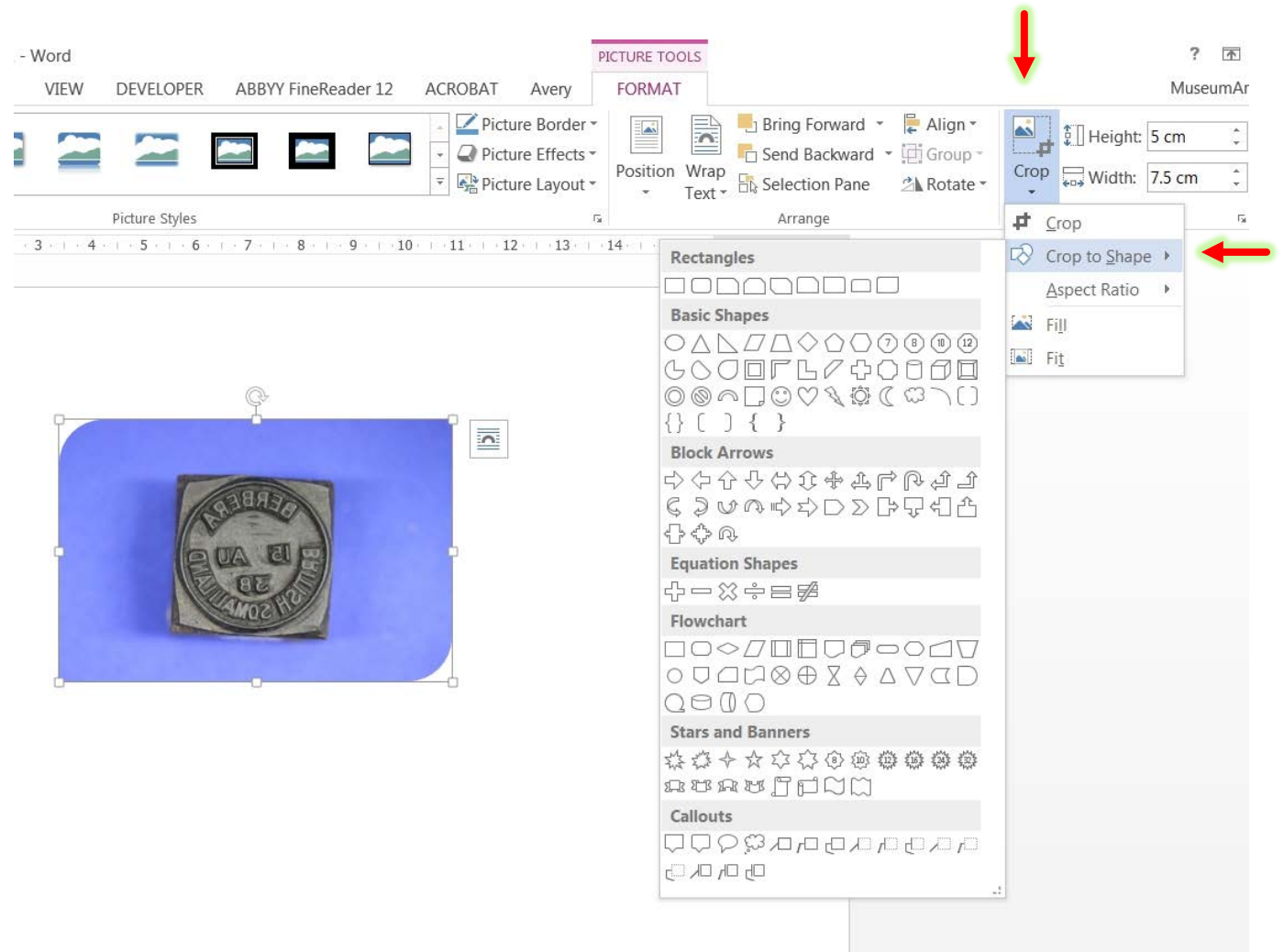
Insert > Picture



Preparation of Physical Display Sheets

Creating your layout

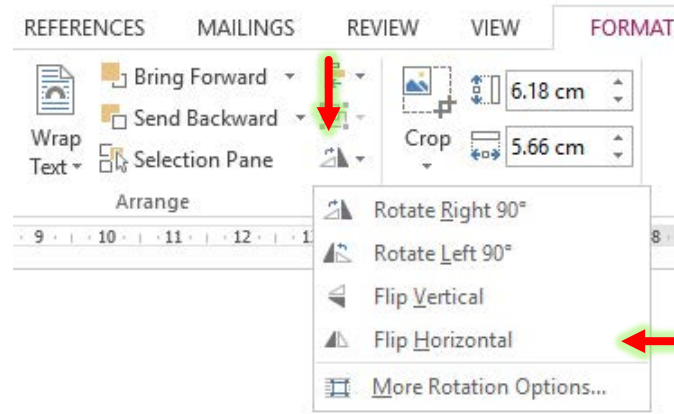
- Can crop an image to a shape
- Choose the shape



Preparation of Physical Display Sheets

Creating your layout

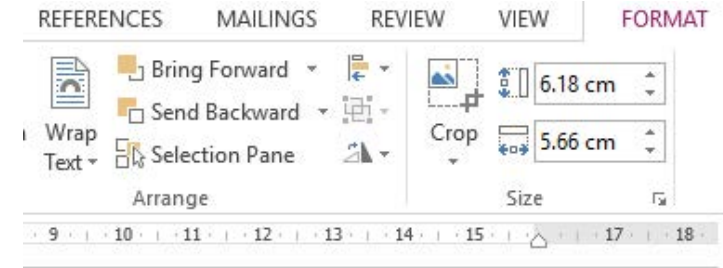
- Can flip an image



An image showing
the hand stamp ...



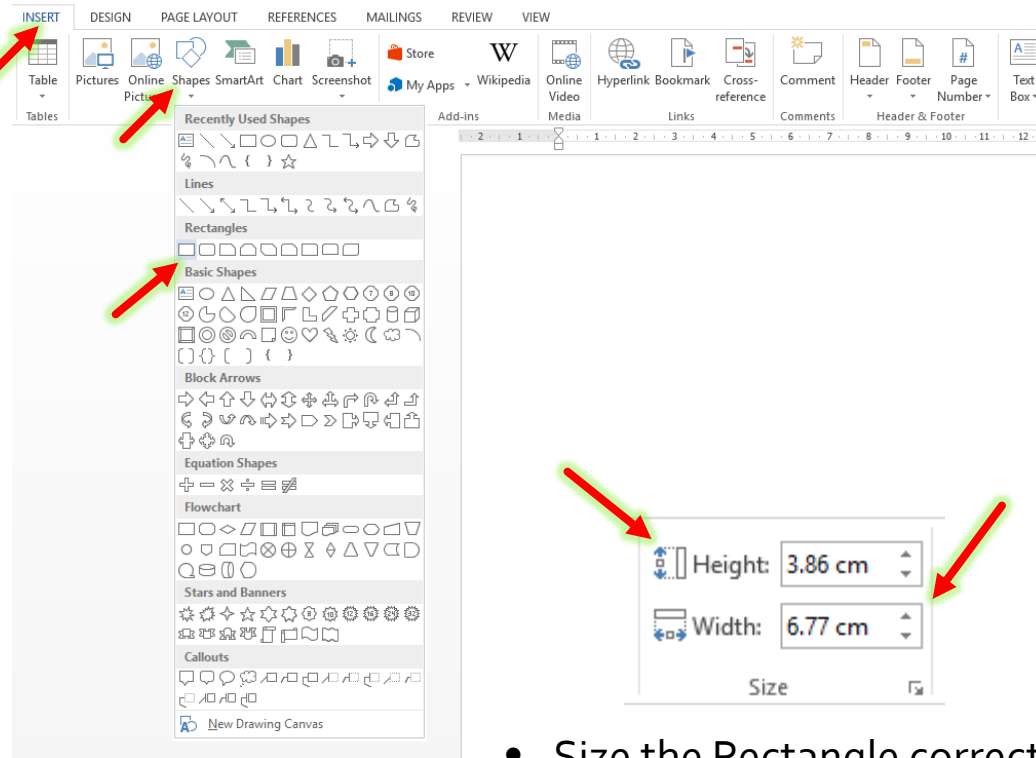
... flipped shows the
postmark produced
by the hand stamp.



Preparation of Physical Display Sheets

- Add Shapes

Insert > Shapes, then select Rectangle

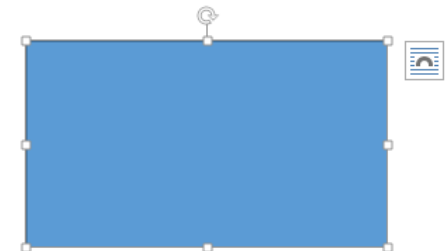
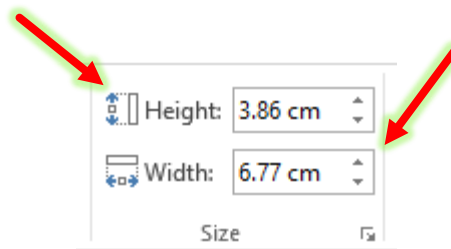


- Format Shapes

Click shape > Format

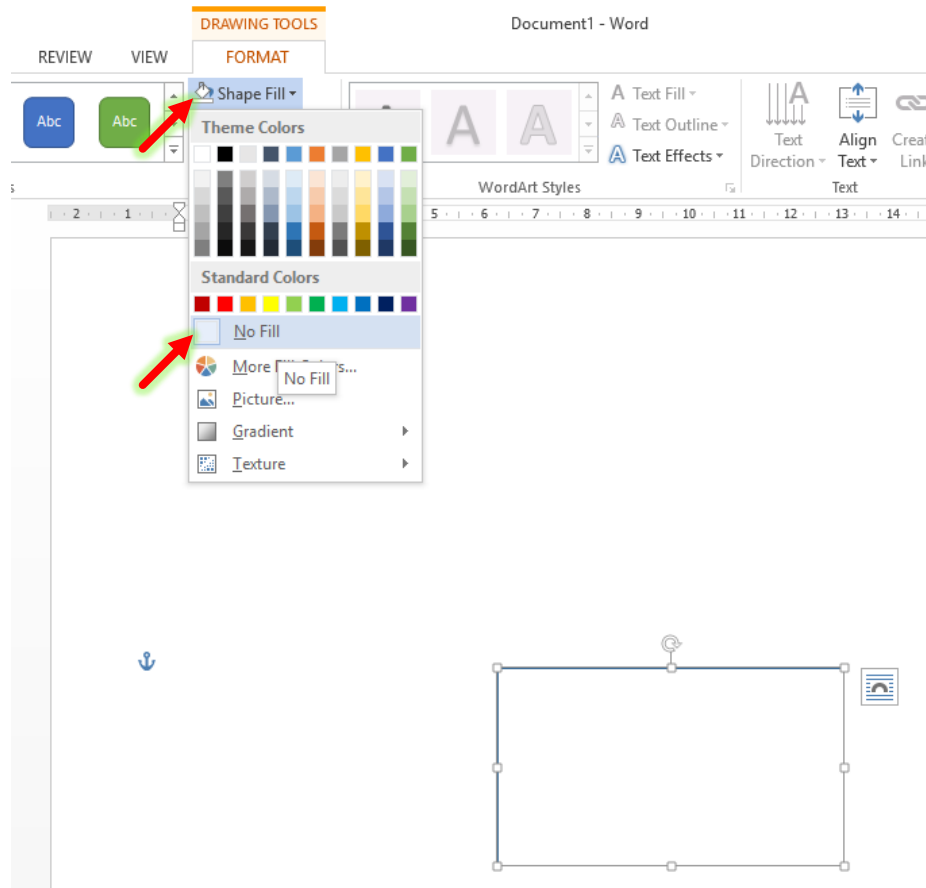


- Size the Rectangle correctly
- tip: allow 2 mm extra on each side and top and bottom to surround the item

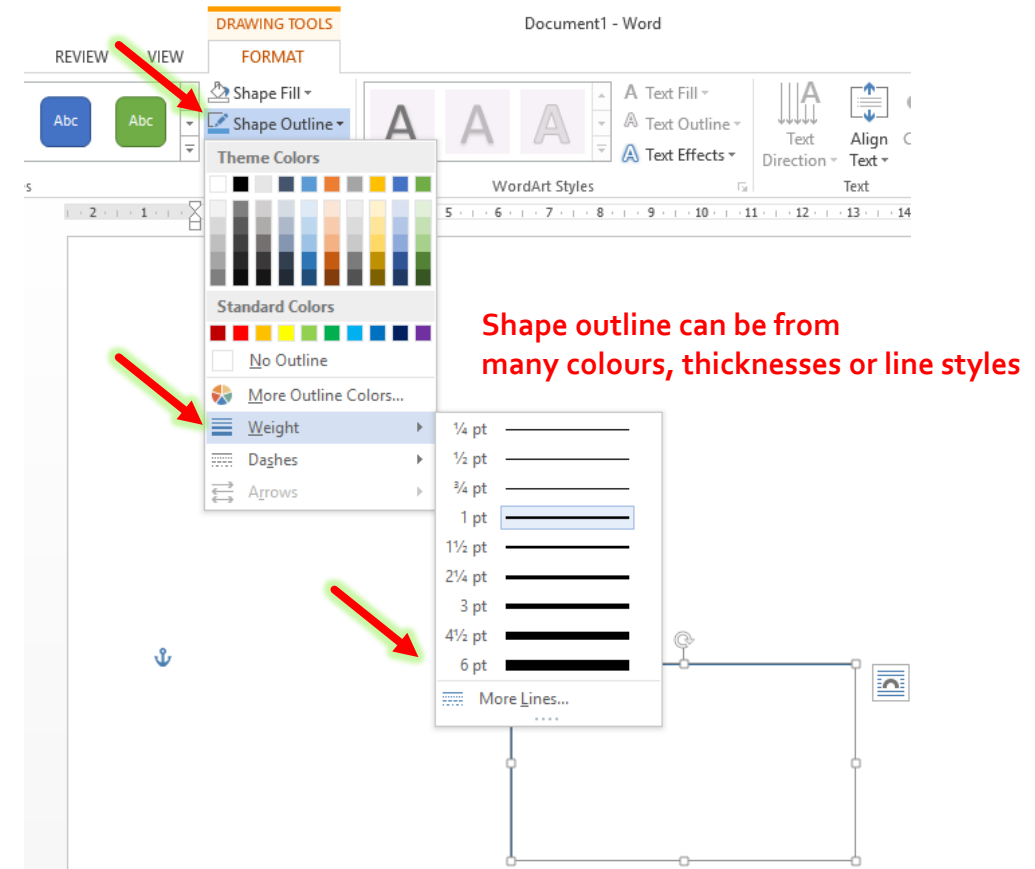


Preparation of Physical Display Sheets

- Shape Fill

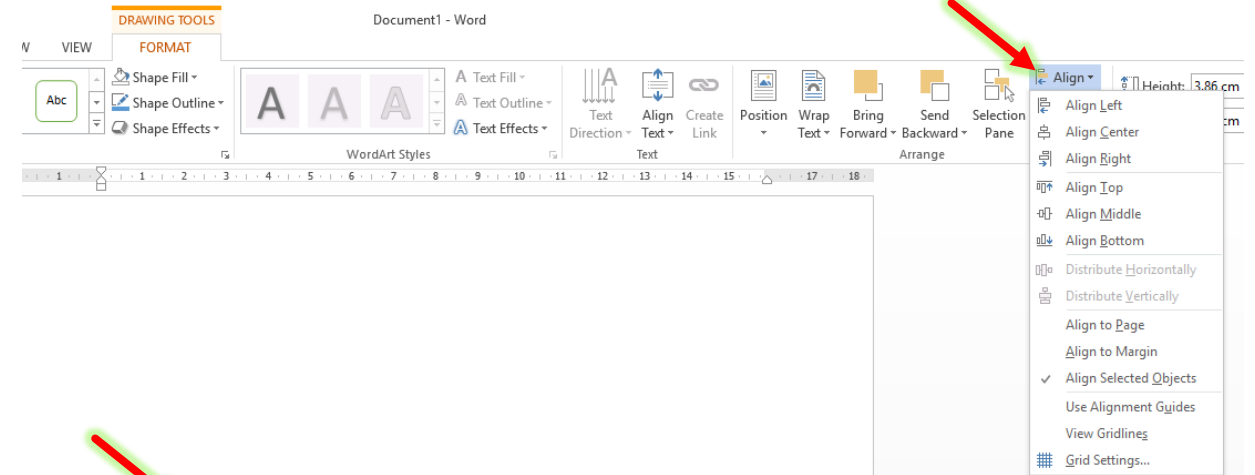
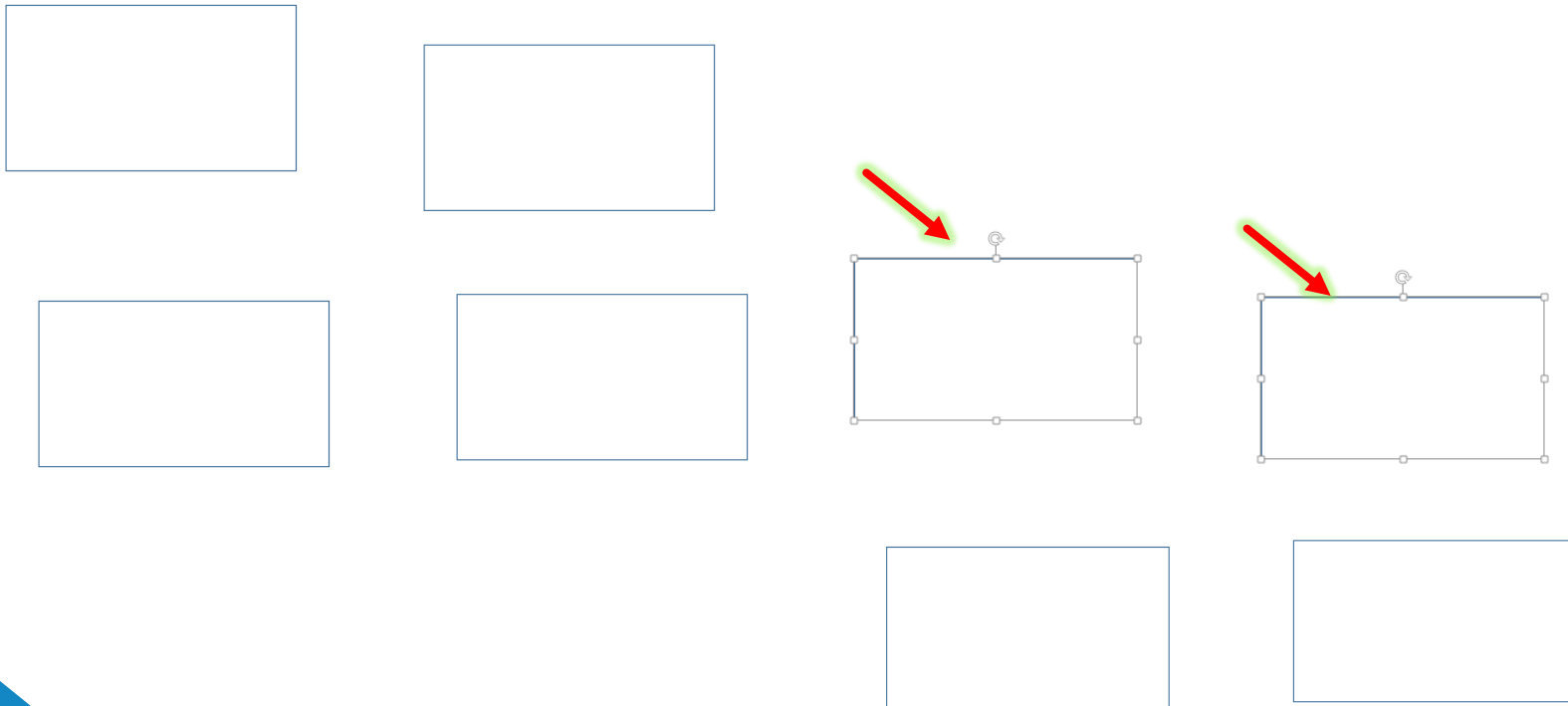


- Shape Outline, to change the outline as required (line style and colour)



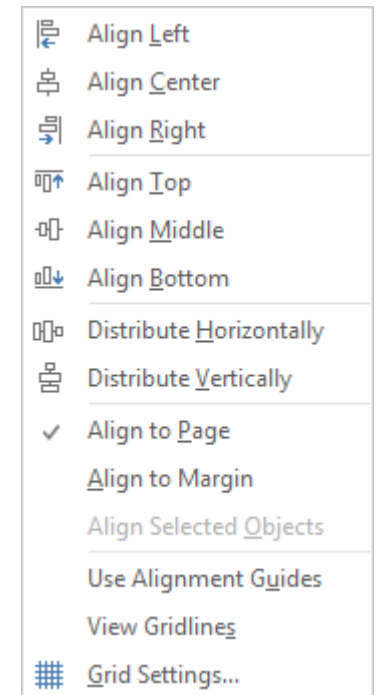
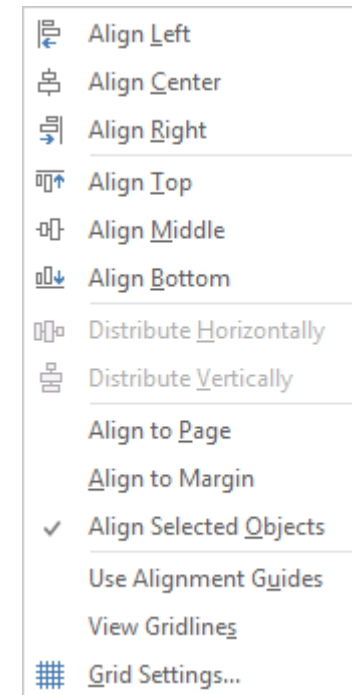
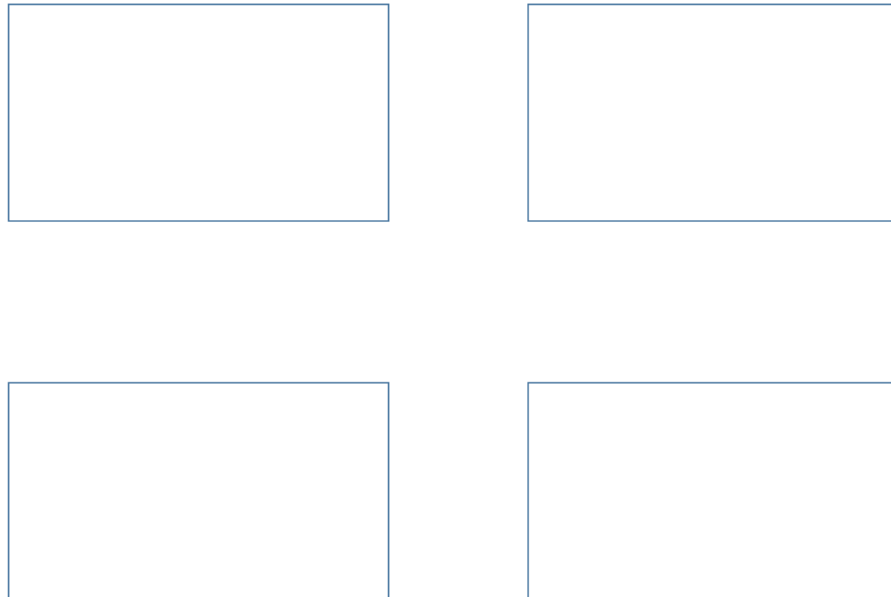
Preparation of Physical Display Sheets

- Copy and paste the rectangle to add more of the same
- Click, shift, click ... to select the top 2, then Align



Preparation of Physical Display Sheets

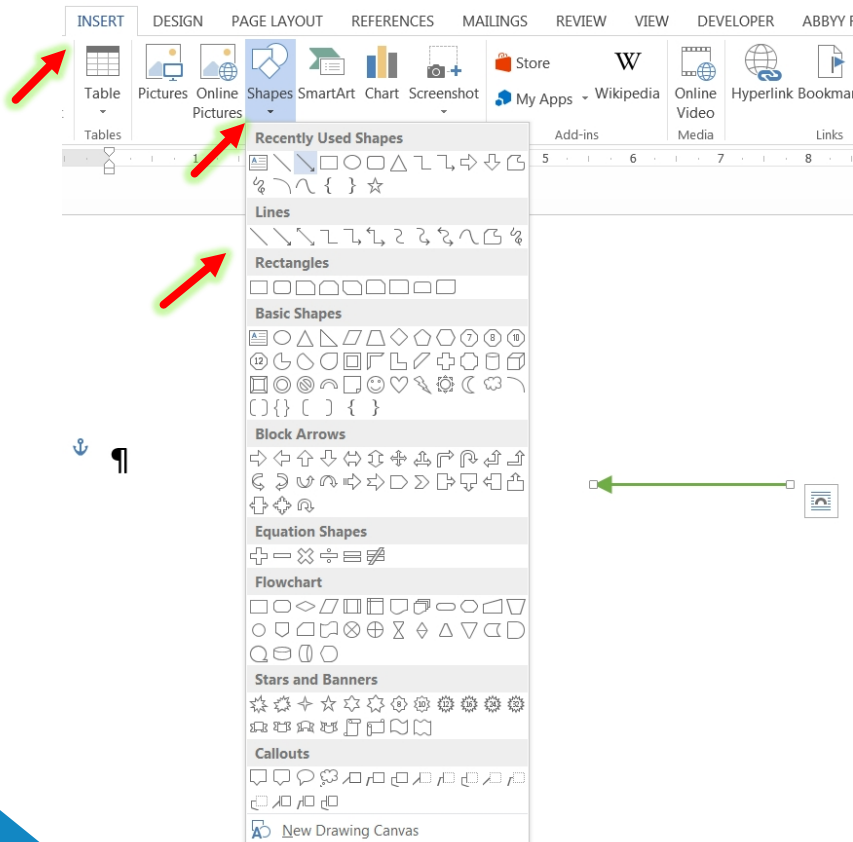
- Use Alignment options to align the rectangles as required, and repeat for the other rectangles



Preparation of Physical Display Sheets

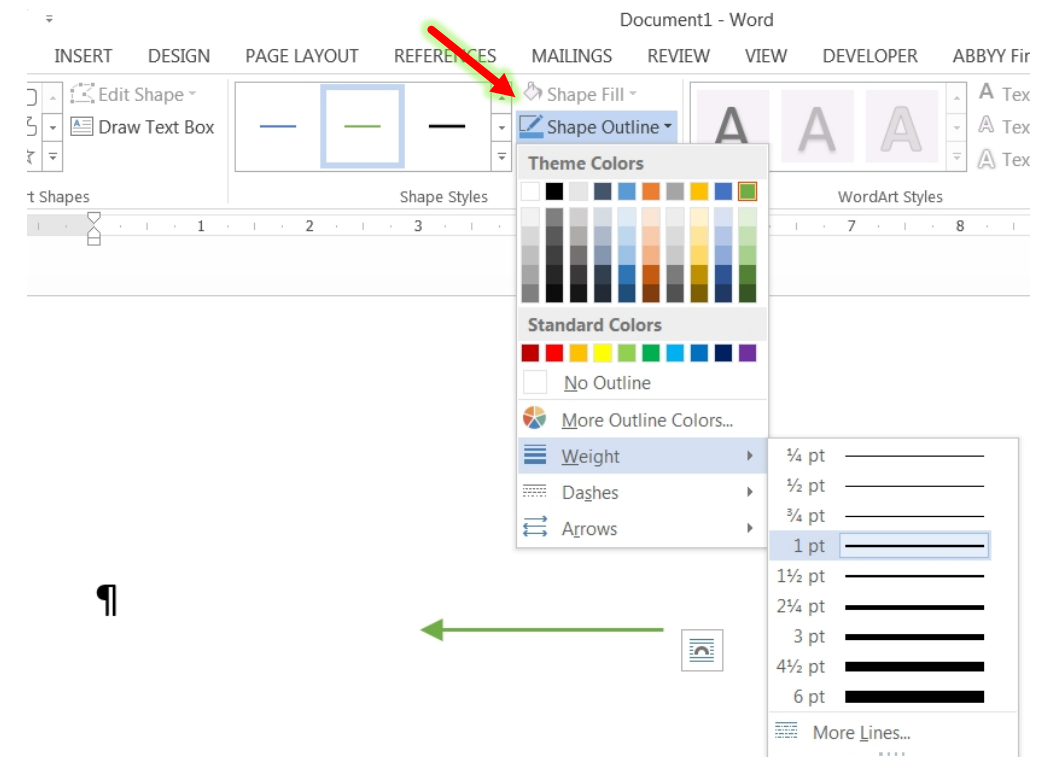
- Add Shapes

Insert > Shapes



- Format Shapes

Click shape > Format



Digital Philately for Beginners

Short introductory paragraph (2 or 3 sentences)

1662 – Privately carried letter from Dumfries to Edinburgh

Succinct title

Border on box shapes outlining the items

Relevant supporting picture

Explanatory paragraphs

24th May 1662. Privately carried letter from Dumfries to Edinburgh. At this date there were no public postal services operating within Scotland other than the one that ran along the North Road from Edinburgh to Berwick. Personal letters sent within the country had to be carried privately.

Thes for
Her deir and worthie
brother
Alexr: Hepburne and in
his absenc to Andrew Gray
give it to his
landlord William Harper
in gladstons land

Gladstone's Land is a six-storey building on the High Street, Edinburgh.

In the 16th and 17th Centuries the road between the castle and the Palace of Holyroodhouse was known as the King's High Street. On either side of the road were plots of ground called tenements. These plots were bought by merchants and the buildings erected on them were known as *lands*.

In 1617, Thomas Glecstanes, a merchant, and his wife, Bessie Cunningham, bought the property which became known as 'Gladstone's Land'.

On the ground floor was an arcade of two arches behind which booths were set. Above the ground floor were five floors of apartments, some of which were rented out. Access to all floors other than the ground floor and basement was by way of a turnpike stair approached by an outside flight from the pavement. Under, or close to this flight of stairs, was a pen for livestock, often a pig, which would forage amongst the rubbish in the street.

Non-competitive display

Competitive exhibit

Section One: Production

Archival Material

Essays and Proofs

1 Cent Design

To allow prepayment as provided by the Act of March 3, 1851, Postmaster General Hall authorized the issuance of three stamps: 1, 3 and 12 cent values. Later a 5 cent and 10 cent stamp were added. This section shows essays, proofs and major types and varieties of production stamps. The production stamps were produced by Toppan, Carpenter, Casilear & Co.

Border on box shapes outlining the items

Numerous text boxes

Succinct caption

Use of accenting colour text to draw the eye to important information

Black trial color plate proof on stamp paper. Position 87L1¹. Only recorded plate proof from plate 1st.

Die proof. Complete design and showing two dots below the 'C' of 'CENT'. Most likely created from the original die. One of five recorded.

Blue die proof on card. Only recorded in blue.

Black die proof on card. Left side of the colorless oval frame shows small dot most likely added as die returned to the Post Office Department. One of three recorded in black.

The Franklin design was originally considered for a 6 cent stamp. This value was considered and then changed to the 1 cent value. This essay shows the complete design.

NY 2016

Imperforate Issues of 1851-1856

Frame 1 page 2 of 15

Digital Philately for Beginners

Laying out your sheets

Bringing the techniques together

Rectangular shape outlining the item



Madame Joseph postmark.

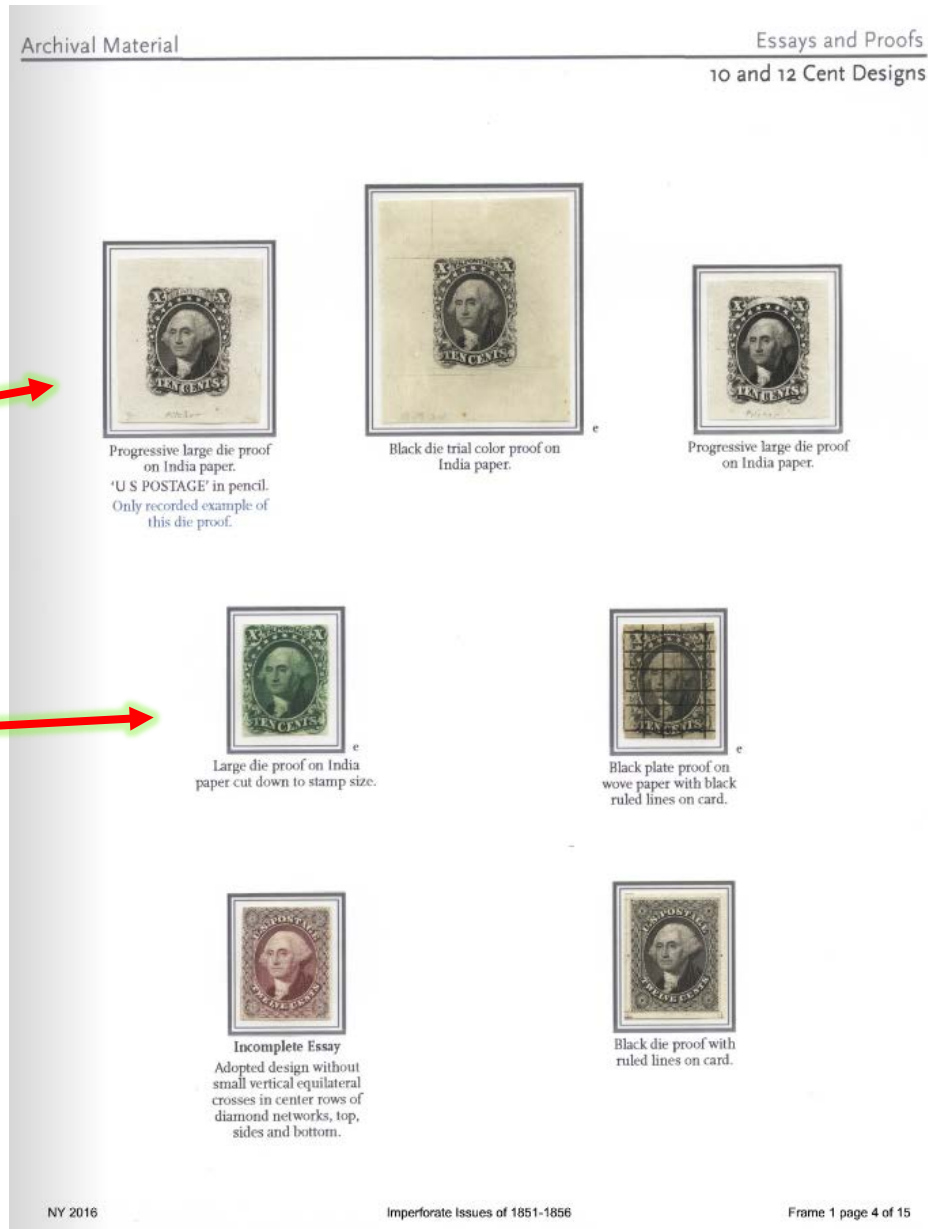
Succinct
captions in
text boxes



Photographs of the two circular Madame
Joseph devices from the RPSL Museum.
Images reversed.

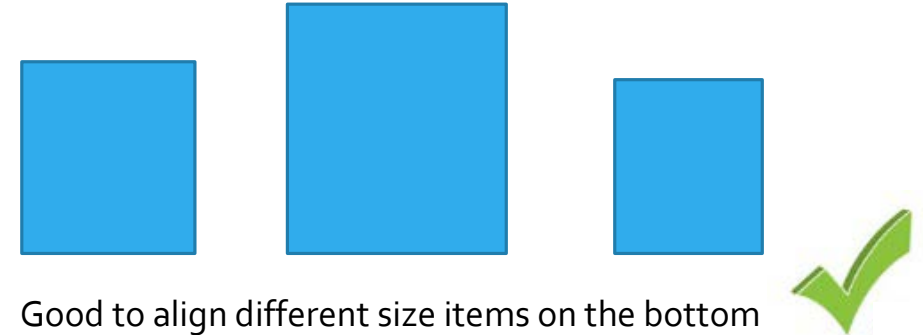
Photographic images
flipped to show the
postmark produced by the
hand stamp (also with thin
border, consistent with the
style of the other items)

Digital Philately for Beginners



Laying out your sheets

Bringing the techniques together



Not on the top ("clothes on a washing line")



Digital Philately for Beginners

Left edges
aligned

Centred in the
row of three
(and in the centre
of the sheet)

Laying out your sheets

Bringing the techniques together

Items also look good aligned items by their middles



Right edges
aligned



Digital Philately for Beginners

The Sixpence Stamp 1859 to 1895

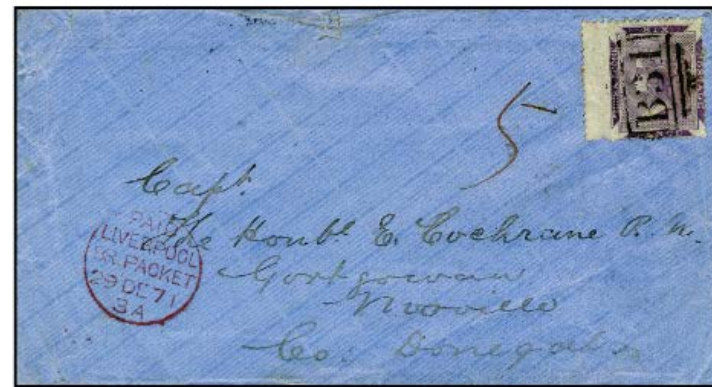
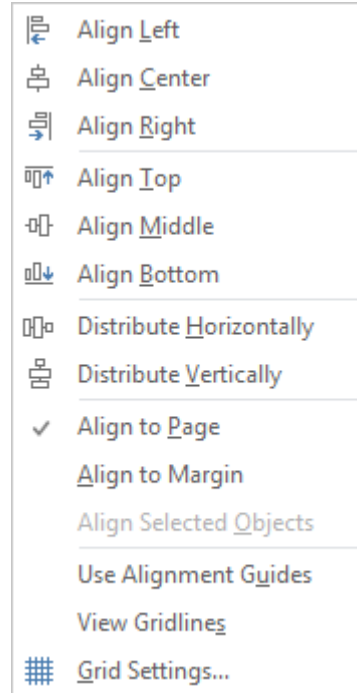
1865 Second Printing. No Watermark. Comb Perf 14 with wing margins at edges of panes.

The initial supply of stamps lasted the colony over five years, when a further order was made. This second printing was in grey-lilac, much paler than the original stamps.

Bottom edges of these rows of objects are aligned



Distributed horizontally across the page



Aligned centred to the page

Freetown to Donegal, Ireland. Dated PAID-AT-SIERRA-LEONE (11 Dec 1871), Liverpool (29 Dec 1871) and Derry (31 Dec 1871)

The grey-lilac adhesive from the second printing pays the half-ounce letter rate to the UK. The manuscript 5 represents the 5d credit to the British post office. Examples from this printing on cover are scarce.

Digital Philately for Beginners

The Edward VII Keyplate 1902 to 1912

1904 Multiple Crown CA Watermark. Perf 14.

Each sheet of the new watermarked paper had 485 impressions of the die compared with 120 of the previous design. The 1d was first despatched on 7 April 1904 on ordinary paper, all subsequent printings were on chalky paper. The other values were only on chalky paper, first being sent on 8 June 1905.



Laying out your sheets

Bringing the techniques together

As a guideline, don't put too much on a single sheet. Up to about 16 stamps is fine, above that the sheet will likely look too crowded.

- ✓ Symmetry
- ✓ Alignment
- ✓ Horizontal and vertical distribution
- ✓ Succinct text in text boxes

Digital Philately for Beginners

The Edward VII Keyplate 1902 to 1912

1902 UPU Specimens. Crown CA Watermark. Perf 14.

In 1903 the UPU received 727 sets overprinted SPECIMEN. Every member country received a strip of five stamps, each having the Type D12 handstamp.

The constant varieties on the Type 12 overprint give some clues to the way in which the forme was created. Seven of the ten 'M's in the fifth column have some variety, suggesting that the SPECIMEN forme was made up from a stereo manufactured from an original horizontal setting of type.



Strip 35 - 59



35 - 59



5 - 29



35 - 59



35 - 59



35 - 59

Some constant varieties, such as the club right foot on the 'M', are consistent with a forme of 30 being made and then copied to make a 60-set plate.

Laying out your sheets

Bringing the techniques together

What a superb way to display these Specimen strips.

Digital Philately for Beginners

Waterways and Railroads

Steamship Mail

Steamship rates were charged on loose letters picked up on the route of contract steamers traveling on ocean routes considered post roads by the Post Office Department. No fee was paid to the captain of the ship.

Originated in Nicaragua During William Walker War Period



Cover to New York originating in either Nicaragua or the west coast of the US. Large double oval Nicaragua postmark applied by Wines and then forwarded by an American Steamship to New Orleans. Entered mail in New Orleans as a Steamship letter. 10 cent rate for under 2,500 miles. 'due 7' applied in pencil in New Orleans.

Wines & Co. Express operated in California, Oregon and also Nicaragua during the time that William Walker, the American Freebooter, had seized control of the country by overthrowing the government with a few dozen men and making himself President.

Laying out your sheets

Sometimes just a rectangle will not be sufficient, so you may need to get a little creative.

Rectangles



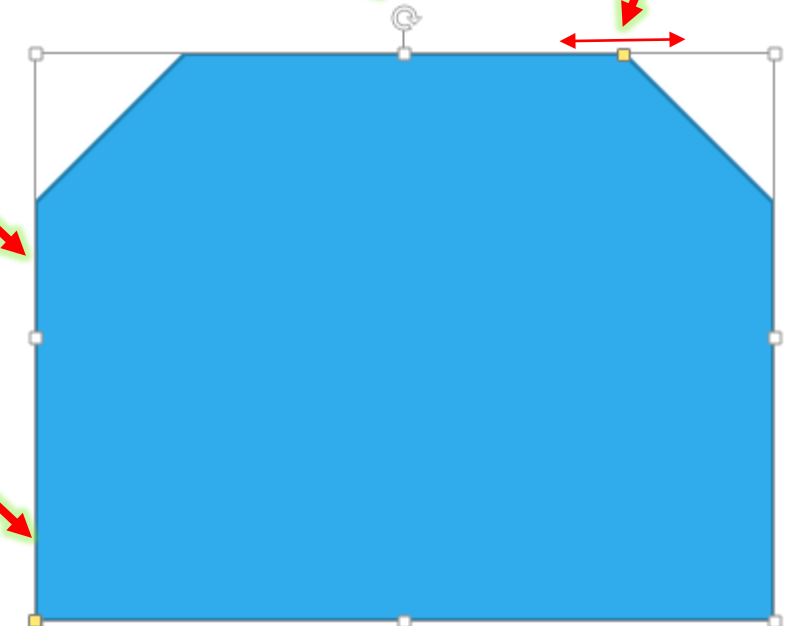
Use the shape "Snip Same Side Corner Rectangle"

Rotate the shape

Adjust the size of the corners and centre section

Format the shape's Line

Format the shape's Fill



Digital Philately for Beginners

Left edges aligned



Laying out your sheets

Two rectangles overlapped to form a frame for the 2 covers

To hide the overlapping, to present a neater outline, overlay the joins with a white rectangle with no outline

Digital Philately for Beginners

Laying out your sheets

Three rectangles overlapped to form a frame for the 3 covers

Left edges aligned



Digital Philately for Beginners

The Edward VII Keyplate 1902 to 1912

ULTRAMAR Overprints

Portuguese Colonies received their specimen stamps via Lisbon rather than directly from the UPU in Berne. In 1902, 25 copies of each new stamp were requested by the Portuguese Ministry for Colonies for onward distribution to the seven colonies. These stamps were additionally overprinted ULTRAMAR in Lisbon, with just one copy being sent to each Colony.



1902 Issue overprinted both SPECIMEN and ULTRAMAR.

Set of 13 single stamps from the Goa Archives.

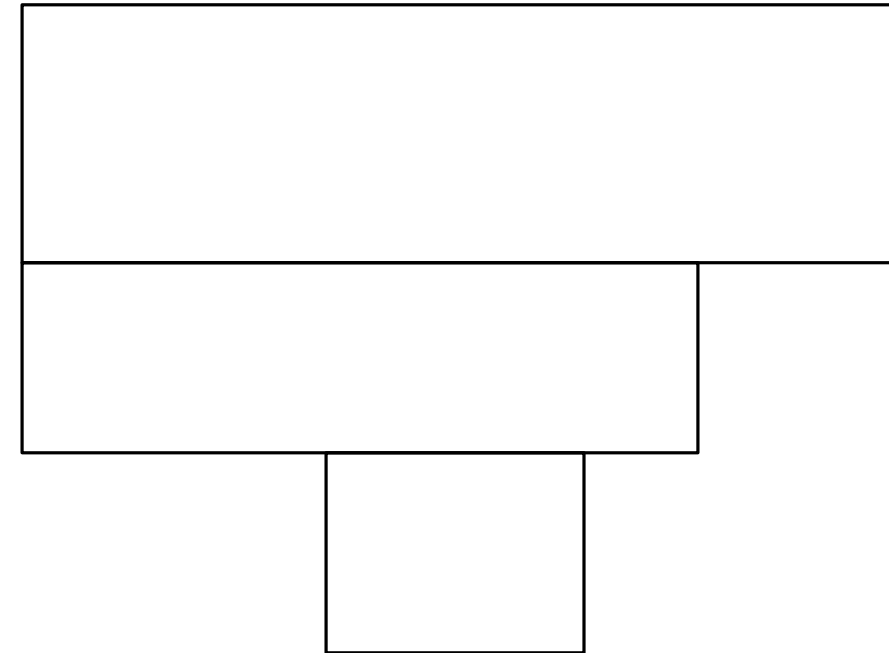
The 2s and 5d values both show the 'Broken left leg to M' variety from position 41 of the De La Rue Type 12 SPECIMEN overprint forme.



Stamps with gum from the 1907 issue, taken from the residual stock retained in Lisbon. Note the double strike of ULTRAMAR on the 3d value.

Laying out your sheets

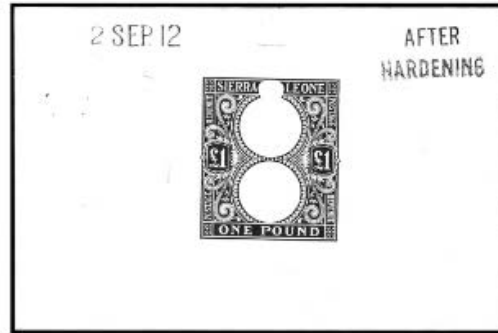
Three rectangles form a frame for this item from the archive



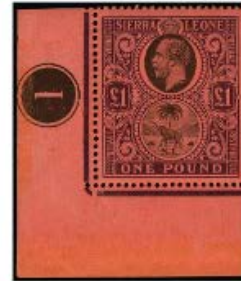
Digital Philately for Beginners

The George V Large Format Issues 1912 to 1931

Pound Values

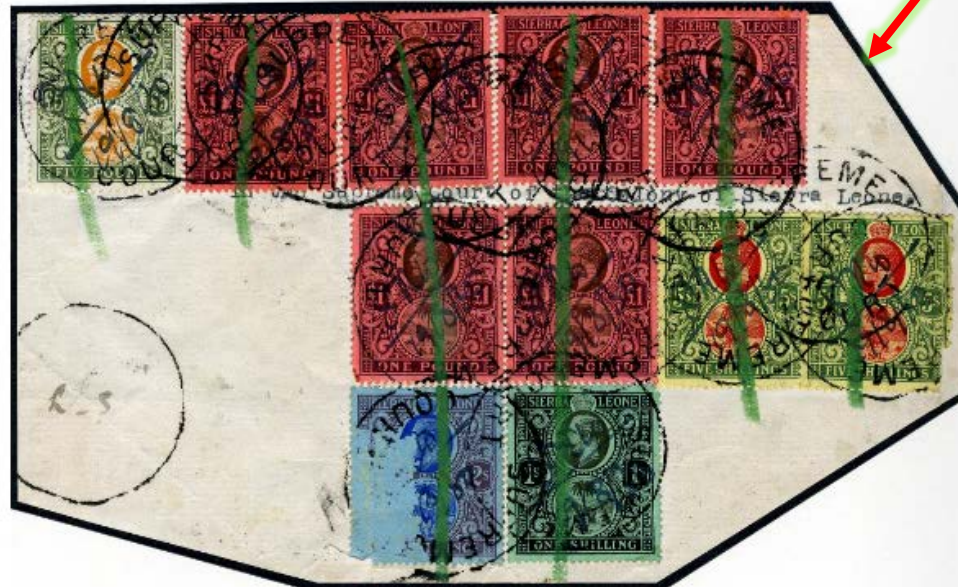


Duty plate die proof for One Pound value



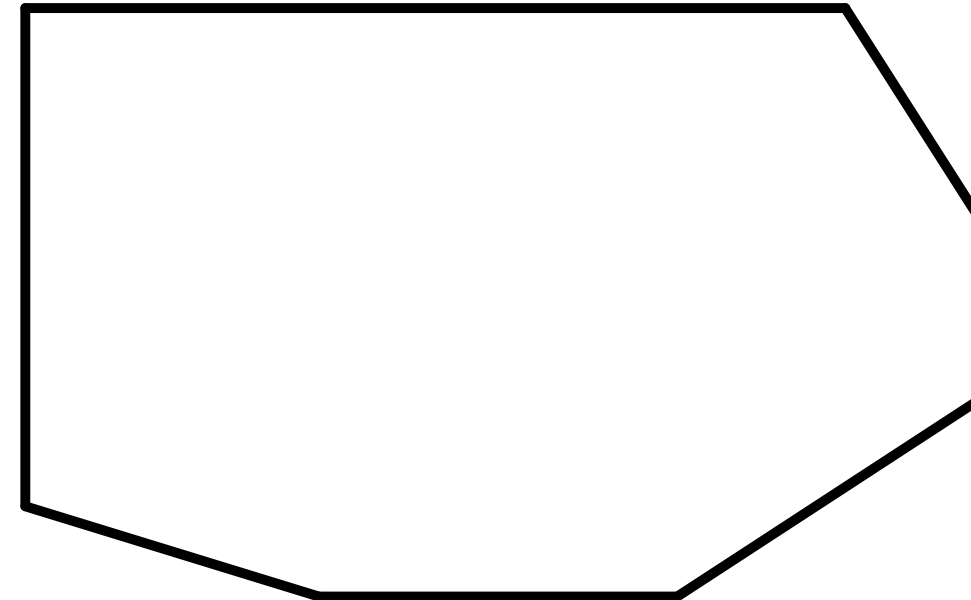
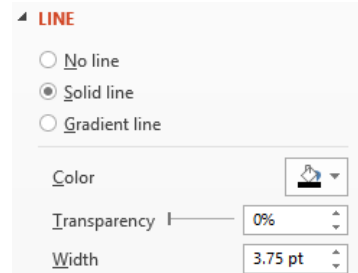
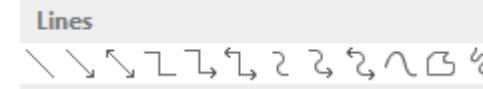
One Pound, Plate 1

The £1, £2 and £5 values were principally intended for fiscal use only. A heavy airmail item could have been charged over £2 from 1926; before this, there was virtually no postal service for which they could be used.



Laying out your sheets

Sometimes it can be difficult to just use the regular shapes, so you may need to draw an outline using straight lines.

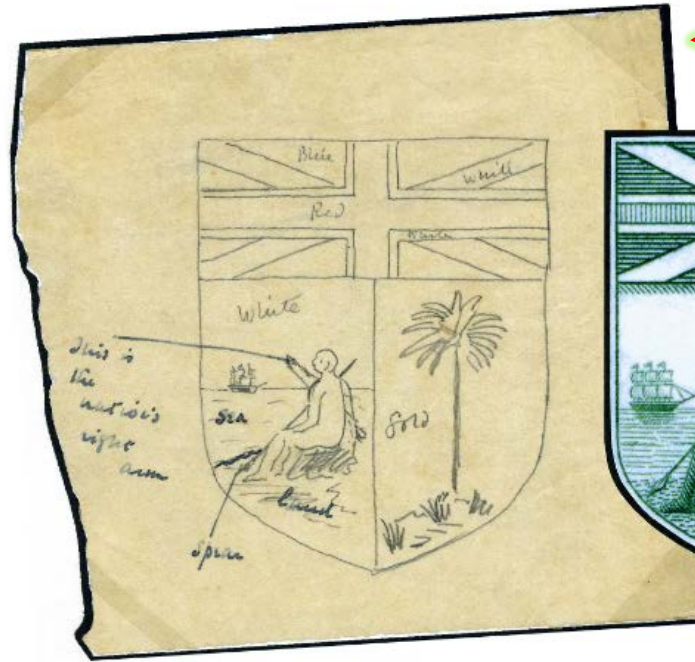


Digital Philately for Beginners

The Wilberforce Issue of 1933

Artwork from De La Rue Archives

The design of all values are attributed to a Sierra Leone based Catholic minister, Rev. Father Welch, who produced a series of 13 sketches. These were sent to both De La Rue and Bradbury Wilkinson, who were only allowed to keep the original sketches for two days, so they took tracings to allow their staff to produce essays.



De La Rue tracing from Welch's original artwork
(ex De La Rue Archive)



Enlargement from
issued stamp

The design is most ingenious: on one side is a seated native warrior welcoming the arrival of an old-time sailing vessel; alongside is a palm tree representing the main export from the country at this time; above is the Union flag as used before 1801, indicating the founding of the colony before that date.

Issued stamps, printed by Bradbury Wilkinson



Laying out your sheets

Sometimes even straight lines will not do, so consider scanning the result of freehand drawing of an outline, or a cut out on paper, and then incorporate the resulting image into the sheet.

Adding detailed images

Including an enlarged image of part of the stamp brings out the detail, and placing it alongside the artwork, at the same size, is very effective in telling the story of the stamp design process.

Digital Philately for Beginners

Adding detailed images

Domestic Letter Rates

Under 3,000 Miles
Underpaid Double Rate

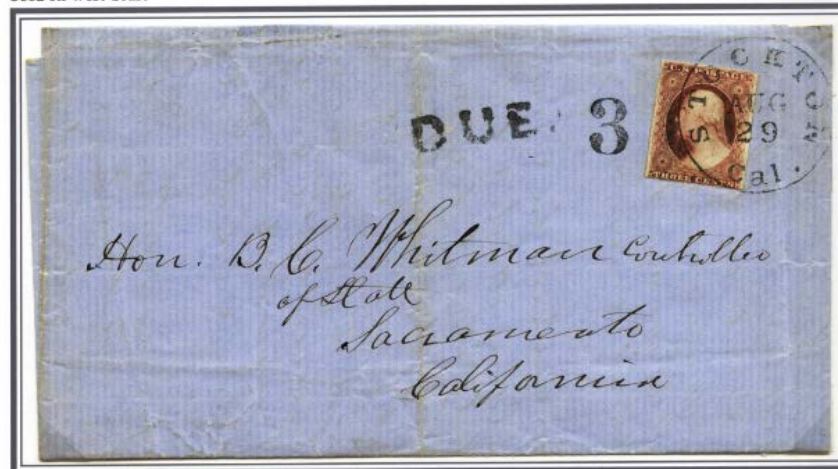
Before 1 January 1856 unpaid rates charged at 5 cents per half ounce. After 1 January 1856 there was no longer an unpaid rate. 3 cents per half ounce charged for overweight as well as forwarding.

Before 1 January 1856



June 1852 folded address sheet from Boston MA to New York City. The letter was between 1/2 and 1 oz. 3 cent stamp underpaid the double rate. Due 5 cents. 'Due/5 cts' making in circle used in Boston between March 1853 until July 1854. Double transfer 'GENTS' shift, with three lines recut in upper left triangle. Position 66R2¹

After 1 January 1856
Used on West Coast



August 1856 folded letter from Stockton CA to Sacramento CA. Letter references enclosed contracts. 'DUE' and '3' markings most likely applied in Sacramento.

NY 2016

Imperforate Issues of 1851-1856

Frame 3 page 13 of 15

Postal Markings and Uses

Fancy Cancels and Rate Markings

Odd Fellows Links



Cover from Canton MS to New Orleans LA. Stamp is type II.

The covers below have stampless rate markings used as canceling device. Rate markings were not needed on stamped mail since the stamps showed the amount paid.



Embossed lady's cover from North Easton to Mechanicsville NY. Fancy negative 'PAID 3 cts' in box. Stamp is orange brown type II.



Cover from Clappville MA to Foxcroft ME. Stamp is dull red type II. Dark blue postmark and cancel.

NY 2016

Imperforate Issues of 1851-1856

Frame 5 page 6 of 16

The images showing examples of the postage due marking, the fancy cancelation and rate marking may have been scanned from reference books.

Preparation of Physical Display Sheets

Hands-on practical session

All participants



Microsoft Office Tools



Microsoft Office Excel 2007



Microsoft Office OneNote 2007



Microsoft Office PowerPoint 2007



Microsoft Office Word 2007

- Title of the sheet
- Brief explanatory introductory paragraph
- Images of the stamps or covers at 100%
- Boxes around the images to act as frames around the items
- Perhaps add a detail image or reduced size scan
- Position and align the elements appropriately
- Include text boxes with captions



Digital Philately for Beginners

10.30 am	Tea, coffee and biscuits	
11 am	Welcome and opening remarks	Frank Walton
11.10 am	Scanning philatelic material	Mark Bailey
	Demonstration	Mark Copley
	Hands-on practical session	All participants
12 noon	Making enlarged, detailed images	Mark Copley
12.30 pm	Lunch break	
	Optional: Lunch at the King's Head – pre-book the food	
1.30 pm	Different colour standards	Mark Bailey
1.35 pm	Preparation of physical display sheets	Mark Copley
	Hands-on practical session	All participants
3 pm	Refreshment break	
3.15 pm	Producing digital exhibits	Mark Copley
3.45 pm	Preparing slideshow presentations	Mark Bailey
4.15 pm	Wrap-up session, with Questions & Answers	All participants
4.30 pm	Closing remarks	Mark Bailey

Producing Digital Exhibits

- Adding Metadata to Microsoft Word documents
- Creating PDF files from Microsoft Word documents
- Creating Flip Books

Digital Philately for Beginners

- Adding Metadata to Microsoft Word documents

Click File > Info

This is added to any resultant PDF file



Properties ▾

Size	11.6KB
Pages	1
Words	17
Total Editing Time	12 Minutes
Title	Add a title
Tags	Add a tag
Comments	Add comments
Template	Normal.dotm
Status	Add text
Categories	Add a category
Subject	Specify the subject
Hyperlink Base	Add text
Company	Hewlett-Packard Company

Related Dates

Last Modified	Today, 12:03
Created	Today, 11:52
Last Printed	

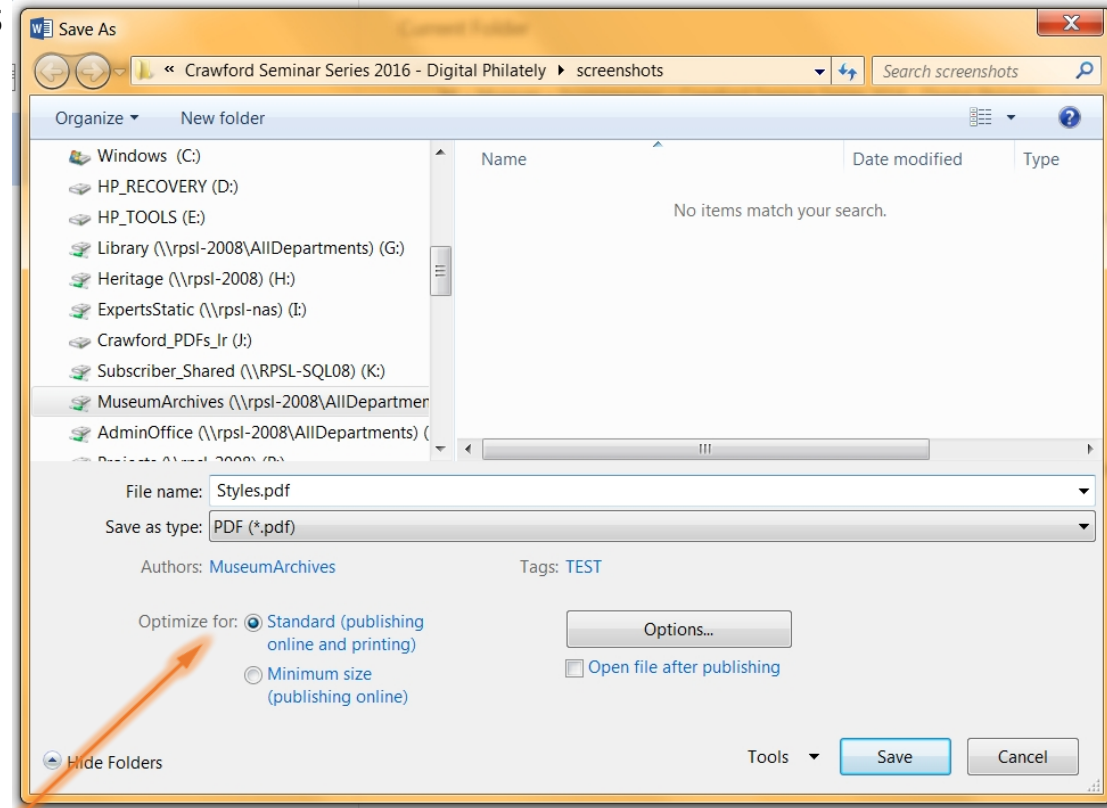
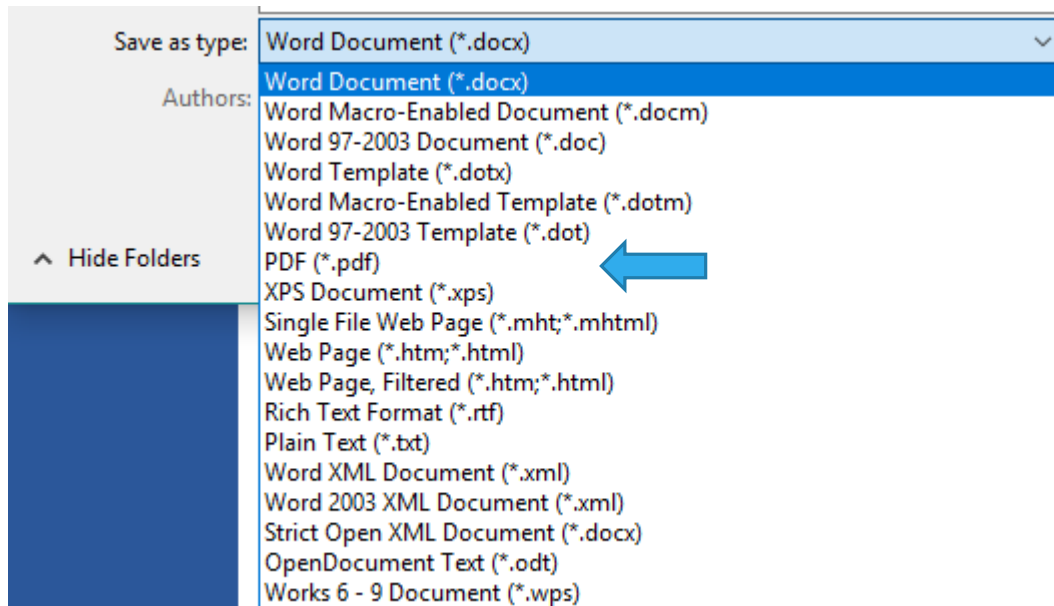
Related People

Manager	Specify the manager
Author	 MuseumArchives
	Add an author
Last Modified By	 MuseumArchives

Producing Digital Exhibits

- Creating PDF files from Microsoft Word documents

Save As > PDF



Optimize either for Standard (High Resolution, for printing or online viewing) or
Minimum size (for publishing on the Web)

Producing Digital Exhibits

- Creating PDF files from Microsoft Word documents

Save As > PDF

Use OCR (Optical Character Recognition) to create searchable text

Adobe® Acrobat Pro is £12pm

ABBYY® PDF Transformer+ £60

Will also allow you to edit the text and images

<https://www.abbyy.com/en-gb/pdf-transformer/>

Producing Digital Exhibits

- Creating PDF files from Microsoft Word documents

Add more Metadata in the PDF file:

File > Properties > Additional Metadata

Styles.pdf

Description
Advanced

Description

Document Title: TEST

Author: MuseumArchives

Author Title:

Description: TEST

Description Writer:

Keywords: TEST

Commas can be used to separate keywords

Copyright Status: Unknown

Copyright Notice:

Copyright Info URI:

Go To URL...

Created: 23/09/2016 14:52:33
Modified: 23/09/2016 14:52:33
Application: Microsoft® Word 2013
Format:

Powered By xmp

OK Cancel

Producing Digital Exhibits

- Creating Flip Books

Flip books are a great way of placing your exhibit on the web in a fun, interactive way

Flip PDF from Flip Builder \$99

<http://www.flipbuilder.com/flip-pdf/>

Producing Digital Exhibits

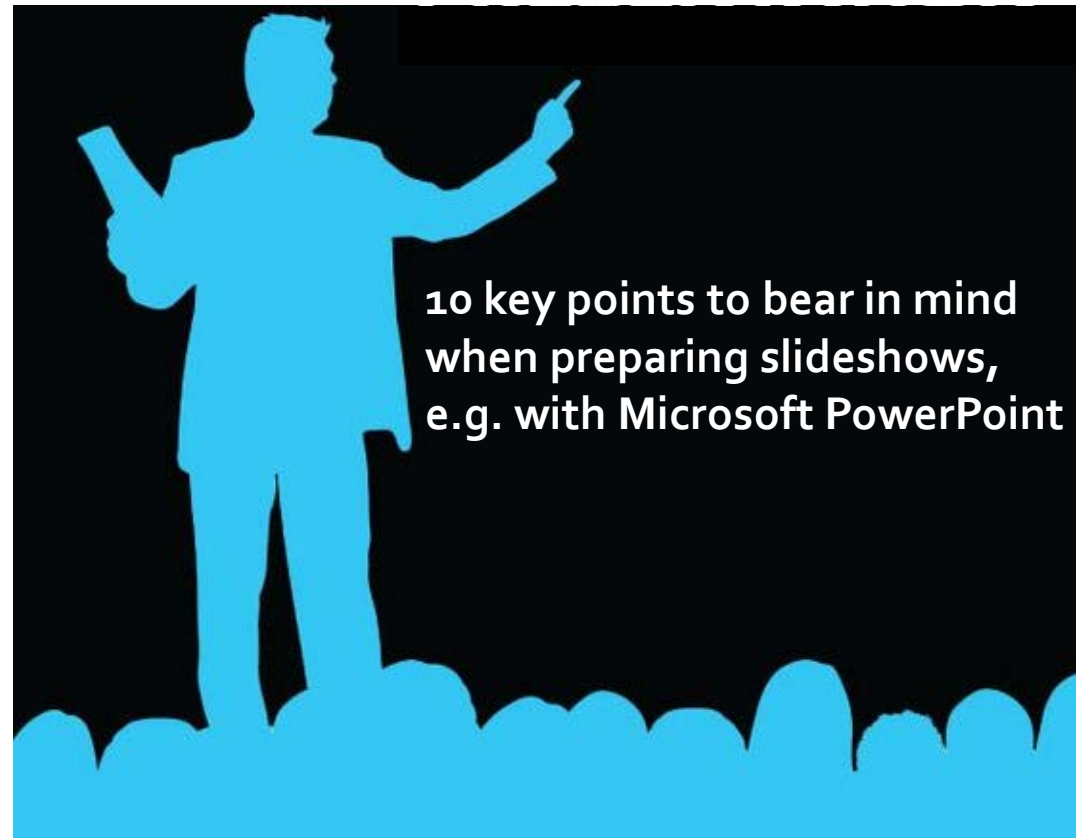
- Creating Flip Books

An example – one of our Standing Displays:

http://www.rpsl.org.uk/documents/standing/SD2016-07_Hugh_Osborne_South_Georgia_etc/

- Can create a whole Library and place on the web

Preparing Slideshow Presentations



10 key points to bear in mind
when preparing slideshows,
e.g. with Microsoft PowerPoint

Preparing Slideshow Presentations

1. Know your goal - make each slide count

**KNOW YOUR
GOAL**

Be clear about the goal of your presentation
before you begin composing it.

Preparing Slideshow Presentations

2. Plan it out - in some detail

PLAN IT OUT

Create an outline or storyboard of the major topics you want to address.

Preparing Slideshow Presentations

2. Plan it out - in some detail

Sketch the basics



Preparing Slideshow Presentations

2. Plan it out - in some detail

Make sure your presentation follows a logical or chronological sequence.

Show restraint

Resist the urge to cram everything you know about your topic into your show.

**If you
try and
tell them
everything,
they won't
remember
anything.**

Preparing Slideshow Presentations

3. Generally, avoid templates - they can detract

**AVOID STOCK
TEMPLATES**

Preparing Slideshow Presentations

3. Generally, avoid templates - they can detract

The Problems with Stock Templates

- They lead to *infinite bullet point syndrome* (IBPS)
- They discourage graphics
- Every slide ends up looking the same
- The designs are usually hideous
- The presentation looks like every slideshow presentation you've ever seen
- Your audience will lose interest and focus after slide number ~~one~~ zero
- It reminds people of the 90s (that's bad)

Preparing Slideshow Presentations

3. Generally, avoid templates - they can detract

**Build your own
theme instead.**

Preparing Slideshow Presentations

4. Choose a colour scheme - 4 colours, 1 accent

**CHOOSE A
COLOUR SCHEME**

Preparing Slideshow Presentations

4. Choose a colour scheme - 4 colours, 1 accent



Choose 1 accent colour that stands out from the rest

Preparing Slideshow Presentations

5. Choose a font scheme - match tone

**CHOOSE A
FONT SCHEME**

Don't get too crazy with fonts.
Pick 3 and stick to them.

Preparing Slideshow Presentations

5. Choose a font scheme - match tone

**Choose one font
for titles.**

One font for body copy.
One font for body copy.
One font for body copy.

and a font for accents

Like colour, your fonts should also match
the tone of your presentation.

Preparing Slideshow Presentations

5. Choose a font scheme - match tone



Preparing Slideshow Presentations

6. Choose a layout scheme - comprehension

**CHOOSE A
LAYOUT SCHEME**

Develop a few layouts and repeat them
throughout the presentation for
cohesion and clarity.

Preparing Slideshow Presentations

6. Choose a layout scheme - comprehension

You can sometimes get away with just one layout, but in general, you'll need a few basic layouts:

- ✓ Transitional slides
- ✓ Image only slides
- ✓ Text only slides
- ✓ Mixed slides

Use the same layouts for slides that have the same purpose.

The layout tells your audience where the slide fits into the big picture.

Preparing Slideshow Presentations

A few samples

6. Choose a layout scheme - comprehension



Preparing Slideshow Presentations

7. Use images (wisely) - they're more memorable

**USE IMAGES
(WISELY)**

After a 30-60 minute presentation, no one's going to remember what you said; they're going to remember meaningful imagery

Preparing Slideshow Presentations

7. Use images (wisely) - they're more memorable

USE IMAGES SPARINGLY

Use images that you think are related to your topic.

Visuals will keep audiences engaged.

Preparing Slideshow Presentations

7. Use images (wisely) - they're more memorable



Preparing Slideshow Presentations

8. Keep to 15 words or less per slide

**15 WORDS
OR LESS**

For live presentations

Preparing Slideshow Presentations

8. Keep to 15 words or less per slide

- Slides with multiple paragraphs of text have shown to significantly decrease the attention of the audience, and thus the effectiveness of getting your message across.
- Since we can't read and listen at the same time, this basically tells the audience to read directly off the slides and stop listening to you.

Preparing Slideshow Presentations

Limit one main point per slide.

8. Keep to 15 words or less per slide

Preparing Slideshow Presentations

9. Play with typography - impact, interest

PLAY WITH TYPOGRAPHY

It's an easy way to spice up slides with text

Content is what the text says; typography is how it *appears*. By manipulating attributes like colour, **font**, size, weight, and **position** you can enhance the impact and visual interest of your slides

Preparing Slideshow Presentations

10. Don't overdo it - white space



Preparing Slideshow Presentations

The white space that surrounds the object adds emphasis and gives the page a clean, fresh feeling.

10. Don't overdo it - white space



Preparing Slideshow Presentations

1. Know your goal - make each slide count
2. Plan it out - in some detail
3. Generally, avoid templates - they can detract
4. Choose a colour scheme - 4 colours, 1 accent
5. Choose a font scheme - match tone
6. Choose a layout scheme - comprehension
7. Use images (wisely) - they're more memorable
8. Keep to 15 words or less per slide
9. Play with typography - impact, interest
10. Don't overdo it - white space

Thank You

