

Creating Colouring Pages from Collection Images

Museum collections present innumerable opportunities for learning. One opportunity is by converting images of artifacts, artworks, postcards and photographs into colouring pages, and making these freely available to the public. This concept has evolved into an international social media festival held every February, using the hashtag #ColorOurCollections.

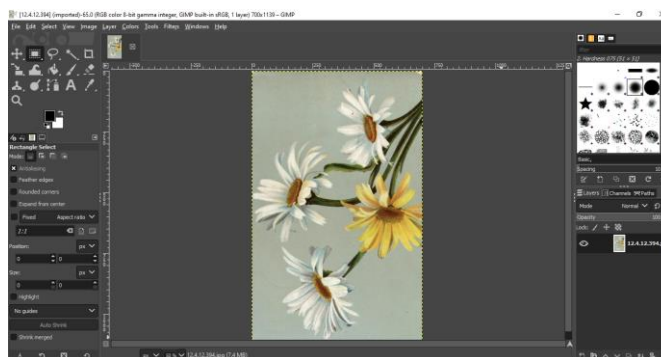
There are numerous ways to create colouring pages, the results of which can be quite mixed. In this Tip Sheet, two methods for creating colouring pages from photographs will be discussed. These two methods are the most consistent.

Creating colouring pages with easily defined lines depends on image selection. The images that work best for colouring pages are ones that are in focus, have one subject, and do not have a busy background.

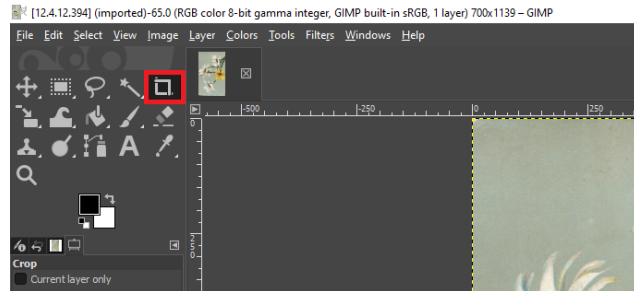
Method 1: This method has the fewest steps and uses the website [Rapid Resizer](#). Firstly, click the “Use an Image from your Device” button. Select a photograph and then click open. The photograph will now appear in a preview box, automatically opening using the “Edges” setting. Before finishing, adjust the final product using the two sliders. The sliders will change the balance of black and white and the sharpness of the photo. When adjustments are done click the “Download or Print on One Page” button. Now the colouring page can be printed, saved to the computer, or copied and pasted to another document.

Method 2: This method uses the program GIMP. GIMP is free to [download and use](#) and is similar to Adobe Photoshop. Using this program can be time consuming but produces great results. **(Quick step instructions can be found at the end of this document)**

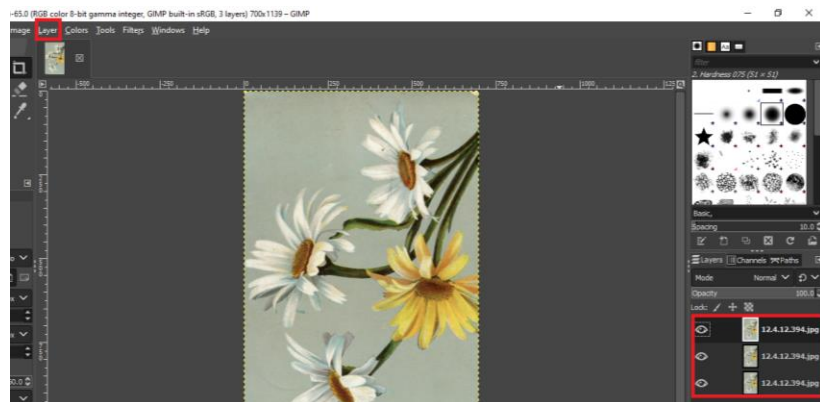
The first step in this process will be opening a photo in GIMP. First click the “File” button in the top left corner and then click “Open.” Now a photo can be selected from the computer. Once selected click “Open” in the dialog box. Now the photograph will appear in GIMP.



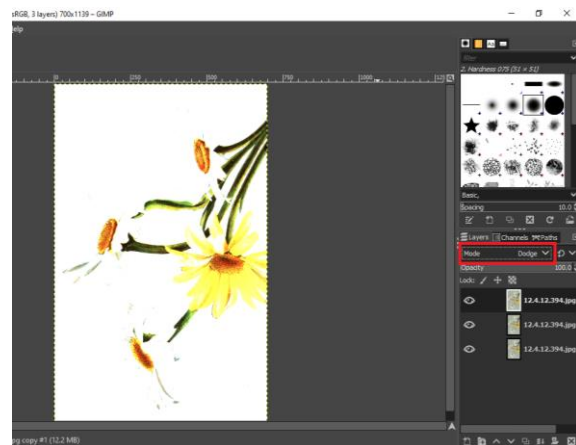
Before proceeding ensure the photograph does not include unwanted elements. The crop function is helpful for getting rid of unwanted parts. This function can be found in the top left corner of GIMP in the toolbar. Drag the box around the part of the photo that will become the colouring page, then click the image to crop it.



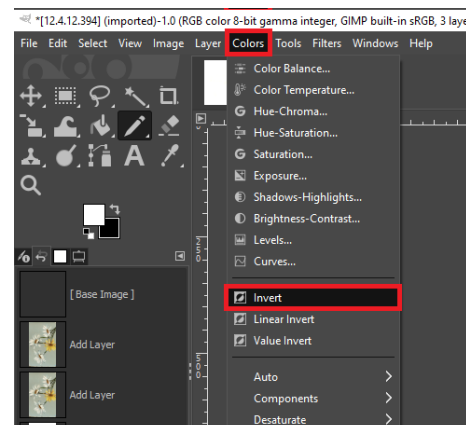
The photo is now ready for the next step. Go to the "Layer" dropdown menu at the top of GIMP and select "Duplicate Layer". Repeat this step again. There should now be three identical layers of the same photo in the bottom right of GIMP.



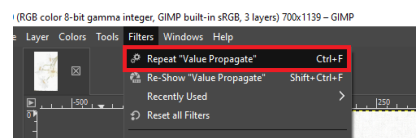
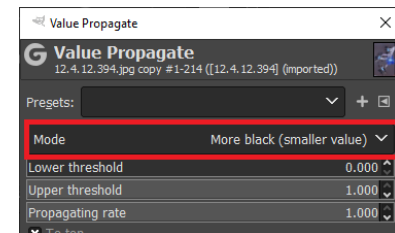
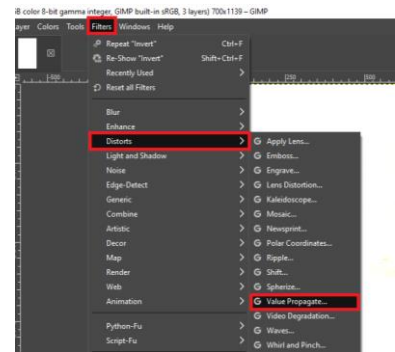
Proceed to the "Mode" tab and select "Dodge." The "Mode" tab is right above the three duplicate layers at the bottom left of GIMP. This will make the image a lot brighter.



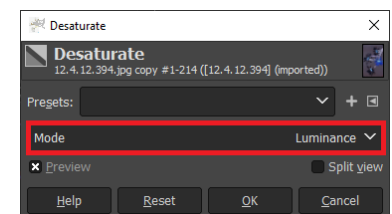
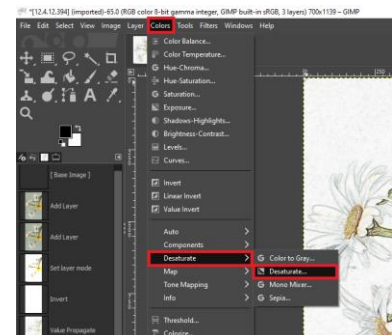
Click the "Colors" dropdown menu at the top of GIMP and select "Invert." Inverting, will make the photo completely white or close to it.



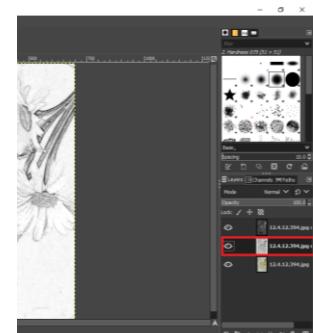
Go to the “Filters” dropdown menu at the top of GIMP and click “Distorts” and then “Value Propagate.” A dialog box will appear. Where it says “Mode”, select “More black (smaller value)” and then click “Ok”. More prominent lines should now start to appear on the photograph. Go to “Filters” again and click “Repeat Value Propagate”. Repeat this step. The lines of the photo should now be clearer. This step can be repeated, although three times is usually sufficient.



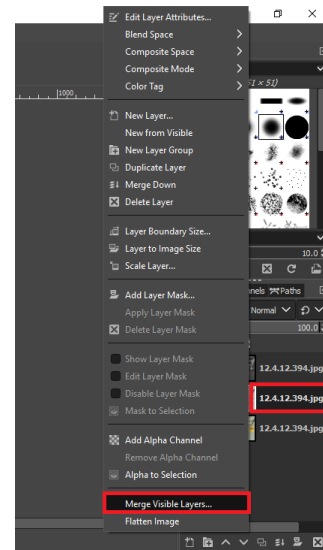
Now go to the “Colors” dropdown menu at the top of GIMP and select “Desaturate”. Select “Desaturate” again. A dialog box will appear. Where it says “Mode”, select either “Luminance” or “Lightness” and click “Ok”. The user can toggle between these two options clicking the one that appears better in the photo. If unsure “Luminance” is usually the best option.



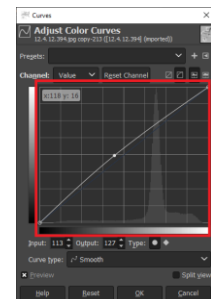
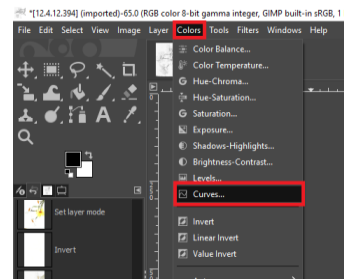
Repeat this step to one of the duplicated layers created at the beginning of this guide. In order to do this, the user must click the layer directly below the primary layer, go to “Colors” and click “Desaturate”. The image should now appear black and white.



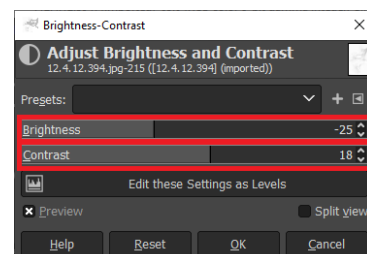
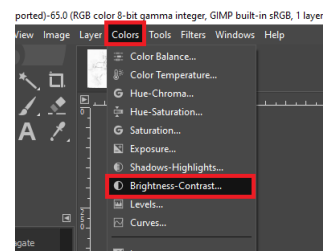
Apart from some tweaking this image will be the finished colouring page. Right-click one of the layers on the right side of the “Layers” toolbar and click “Merge Visible Layers”. Then click “Merge”. Now there should only be one photo in the “Layers” toolbar in the bottom right of GIMP.



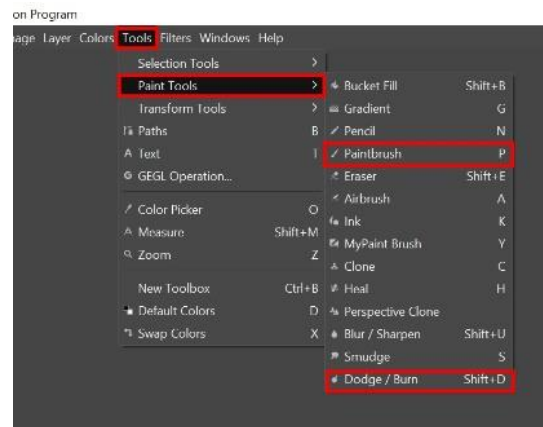
Now the user can adjust black and white colour levels by using the “Colors” dropdown menu and clicking “Curves”. This will cause a box to appear, allowing the user to move a line, changing the colour levels of the photo. Move the line so that the photo is white while still maintaining the black outlines. Then click “Ok”.



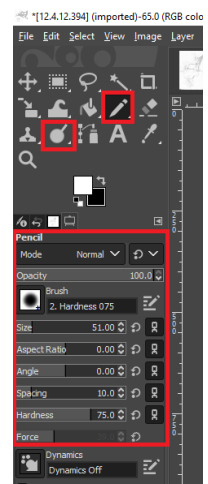
The brightness and contrast of the image can also be adjusted by clicking the “Colors” drop down menu and then “Brightness-Contrast”. A dialog box will appear with two sliders one for brightness and the other for contrast. Keeping the brightness values between -20 and -40 and the contrast values between 10 and 40 garners the best results.



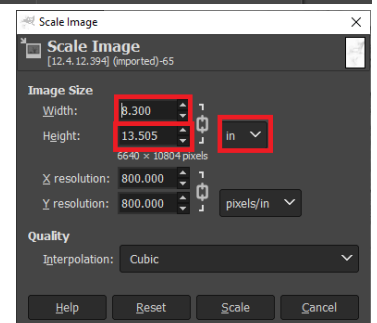
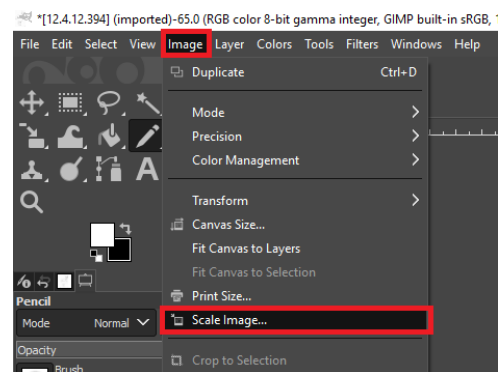
These steps should ensure that the colouring page is white with clear black outlines. If the image needs further tweaking, go to “Tools” - “Paint Tools”, where the “Paintbrush” or the “Dodge” tool can be used. The “Paintbrush” tool is the best for turning parts of the background white. This can help if imperfections are still present in the image. The “Dodge” tool is best for turning grey parts of the image whiter. Make sure that you have selected the colour white from the colour pallet for these changes.



Overall, these tools can make grey or darker parts of the photo whiter. Again, be sure not to remove too much of the darker outlines. The size, opacity, and the hardness of the tools can be adjusted depending on the changes and the level of detail that need to be adjusted by the user. The “Paintbrush” tool can also be used to draw in outlines when they are faint. Be sure to select black or a darker colour from the colour pallet for these changes. Making small adjustments and tweaks are the most time consuming part of the process. However, once they have been made the colouring page is a lot clearer and easier to colour.



Lastly, the colouring page dimensions can be adjusted by going to the “Image” drop down menu at the top of GIMP and clicking “Scale Image”. A dialog box will open allowing the user to change the dimensions of the photo. Change the units to inches and then change the dimensions to as close to 8.3 x 11.7 inches (A4 size paper) and then click “Scale”. As soon as a unit of measure has been assigned on GIMP it will automatically change the other dimension of the photograph. This ensures the image does not become distorted.



The colouring page is now complete! Go to the “File” drop down menu and click “Export As”. The user can name the file and select where the file will be saved on the computer. If the user has the intention of working on the photograph at a later time be sure to save it by going to “File” and then “Save As”. The file can then be renamed and the destination for the file on the computer can be selected. The user can also click “File” and then “Print” to print the colouring page. The saved file can also be dropped into a Word document and printed that way.



Quick Step GIMP Instructions

Launch Gimp→File→Open→Browse to select image

Layer→Duplicate Layer

Layer→Duplicate Layer

In right side settings select Mode→Dodge

Colors→Invert

Filters→Distorts→Value Propagate→set Mode to More Black (smaller value)

Filters→Repeat “Value Propagate”

Filters→Repeat “Value Propagate”

Layer 1: Colors→Desaturate→Desaturate→Select Luminance or Lightness based on best result

Layer 2: Colors→Desaturate→Desaturate→Select Luminance or Lightness based on best result

Right-click a Layer→Merge Visible Layers→Merge

Colors→Curves→adjust line for clarity based on best result

Colors→Brightness-Contrast

Use “Paintbrush” and “Dodge” tool if needed

Image→Scale Image→change px to in and align closely with A4 paper (8.5x11)→Scale

File→Export As→Rename file and select destination folder→Set Quality to 100→Export