Photoshop Guide

If you have not installed photoshop yet, follow the instructions here: https://software.berkeley.edu/adobe-creative-cloud

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If there is anything you want added to this guide, message Sebastian on discord.

How to get started with (pixel) art

Starting with a new doc, you should see this:

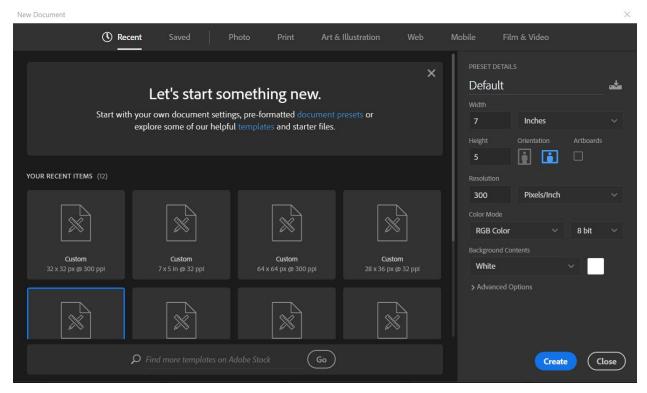


Figure 1

Change inches to pixels in the right panel here:

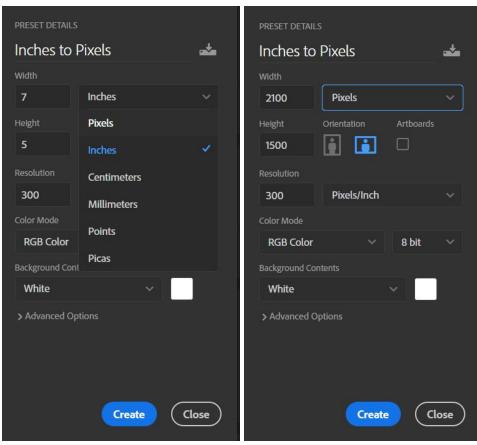


Figure 2

Figure 3

Change it to the desired resolution, usually 16x, 32x, 64x+. But ultimately the pixel resolution is up to you, and you should be consistent across a project.

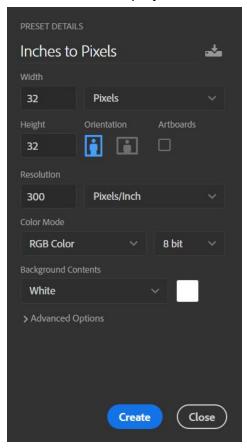


Figure 4

Press create and your pixel art file will be ready!

In order to make pixel art, you should change Brush Tool to Pencil Tool. This can be done in the left hand toolbar:

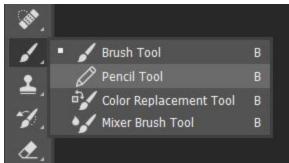


Figure 5

Also, with smaller resolutions you should adjust the size of the brush to 1. This is done in the top right:

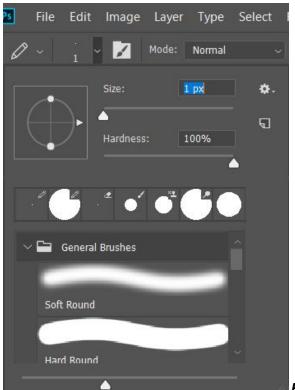


Figure 6

You may find it helpful to see which pixels you are using by setting up pixel grid and grid. This is done by going to View>Show>Grid

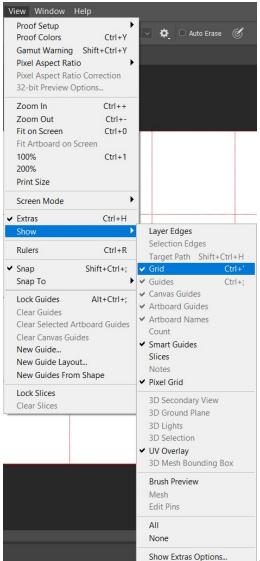


Figure 7

At first, your grid will not look like the one in *Figure 7*. You have adjust under the edit tab. Go to edit, then preferences, and then click Guides, Grid & Slices...

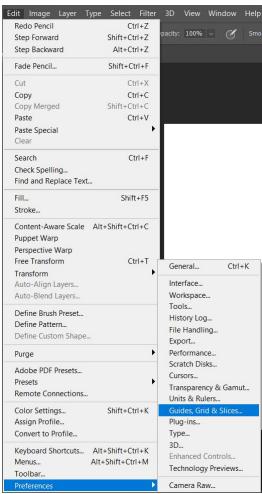


Figure 8

In preferences, change the grid size to what you want to use. I use 32 with 4 subdivisions. This is useful when creating sprite sheets and making sure your art is consistent.

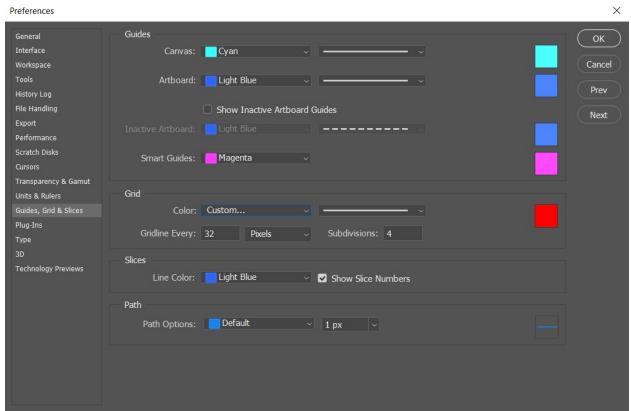


Figure 9

Tips and Tricks for working with pixel art

SKETCH INITIAL CONCEPT

If you have a tablet, you should always start with a rough sketch on another photoshop doc or even the same one (or both).



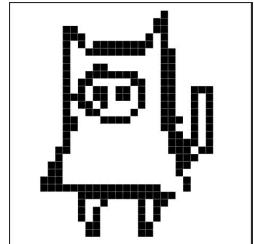
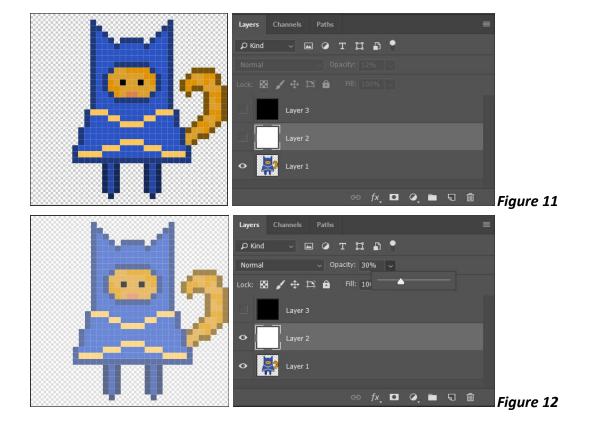
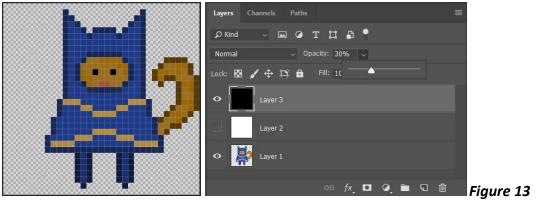


Figure 10

ADJUSTING COLORS

In order to adjust the hue, value, or intensity of areas (or your whole piece) by having a white or black layer and adjusting their respective opacities.





Animating

Use the timeline to animate! This is found under the window tab. (Window>Timeline) Figure 14

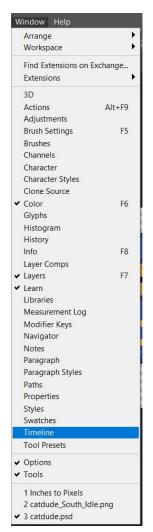


Figure 14

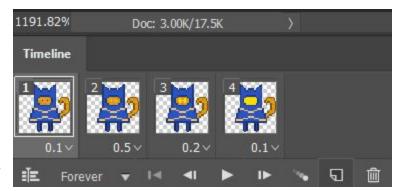


Figure 15

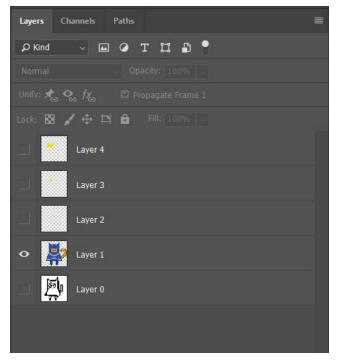


Figure 16

You will be presented with the timeline at the bottom of the photoshop window. In order to add a new frame button, it is the same as the new layer button (*Figure 15*). For each frame, you can adjust the timing where it says .1 in *Figure 15*, the dropdown will give you options for how long each frame will last. An easy way to make animations is by adding onto previous layers with new layers, like in *Figure 16*. In each frame you choose which layers are present and this makes creating frames easy.

Useful Hotkeys

B: brush (pencil)

E: eraser

V: move tool (to adjust the whole layer or selected area)

M: rectangular select tool (to select a rectangular area)

I: eyedropper (to copy a color that you used or a color you like from inspiration material)

X: swap colors

Ctrl + D: deselect

Ctrl + = (+): zoom in

Ctrl + _(-): zoom out

Alt + scroll: zoom in and out Ctrl + scroll: scroll left and right

These are hotkeys I use often, but you should find a workflow you work best with.

All the hotkeys can be found here: https://helpx.adobe.com/photoshop/using/default-keyboard-shortcuts.html

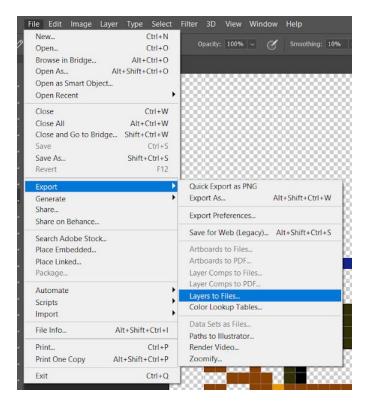
Making Circles

In order to make perfect pixel circles, google: "minecraft circle generator," and click the first link: https://donatstudios.com/PixelCircleGenerator

You can also change the brush to the desired circle size and use the pencil once. Then use the eraser 2 pixels smaller to erase the center and a smaller eraser to clean up the rest.

Exporting Multiple Layers at Once

There are multiple ways to export layers for animation. The first way is to export each layer as its own file. Go to File>Export>Layers to Files... (*Figure 17*). Then in the pop up menu, change File Type to PNG-8 (*Figure 18*). For animations, you can export everything as a PSD if you want to edit each frame more.



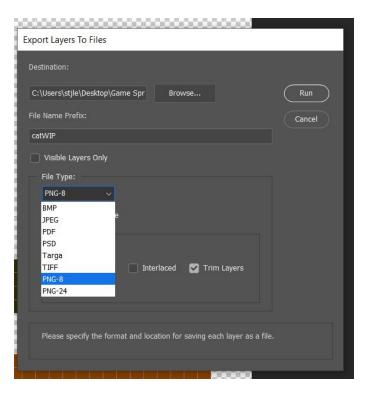


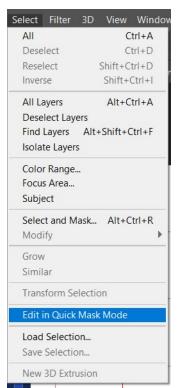
Figure 17 Figure 18

Creating A Sprite Sheet

Create a new file that is the same height as your animations while the width is the amount of frames X the original width.

If your animation is 32x32px and 6 frames. Create a file that is 32x192px.

If you exported your animation into separate files, open each file, then copy and paste the layer from the file into the spritesheet file. From there, you can drag the layer to the appropriate spot. Make sure you are not editing in Quick Mask Mode. You can turn this off by going to Select>Edit in Quick Mask Mode (*Figure 19*). If you did not export into separate files, copy and paste the layers for each



frame into the sprite sheet document. You are going to have to adjust every layer to where you want it to be. Make sure to have your grid on to make this process easier. This is the same process if each frame is in a single photoshop document.

Figure 19

Making Gifs

In order to make a gif, make sure you are using the timeline function with each frame being the desired length of time. Go to File>Export>Save for Web (Legacy)... (*Figure 20*). You will be presented with *Figure 21*. Make sure to click GIF 128 dithered and press save. The prompt will be the same as saving any other file, just do as you usually would.

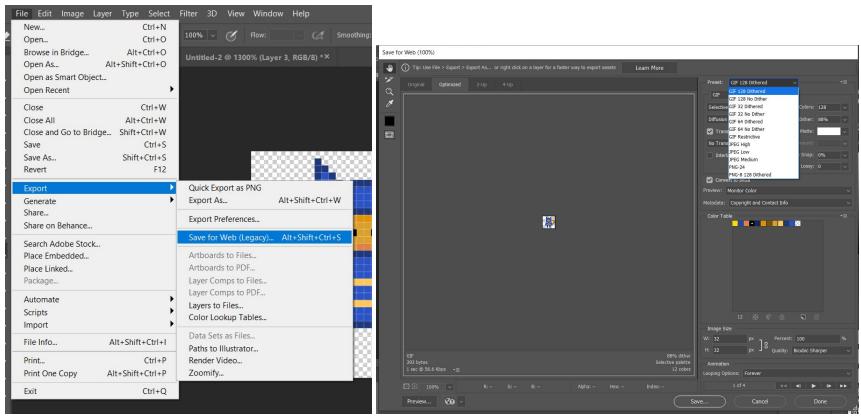


Figure 20 Figure 21

Saving as Transparent PNG

In order to save hassle later, you should not work on the *Background* layer in photoshop. You should either create a new layer with the button in the bottom right corner of the window, *Figure 22*, or through Layer>New>Layer, *Figure 23*. Then, delete the *Background* layer. Alternatively, you can unlock the background by clicking on the lock icon, *Figure 24*, and erasing the layer. This ensures that you are working with a transparent background.

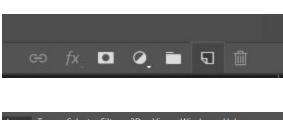


Figure 22

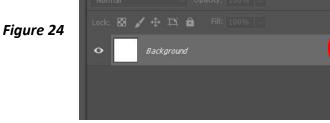
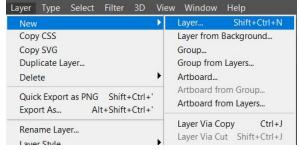


Figure 23



After completing your piece and you are ready to use it in a game, go to File>Export>Export As... Figure 25

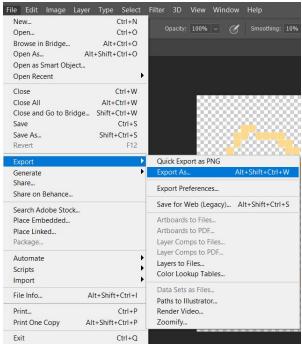


Figure 25

You will then be taken to the Export As tab. Make sure to have format as PNG with the Transparency box checked. It should look like this (*Figure 26*):

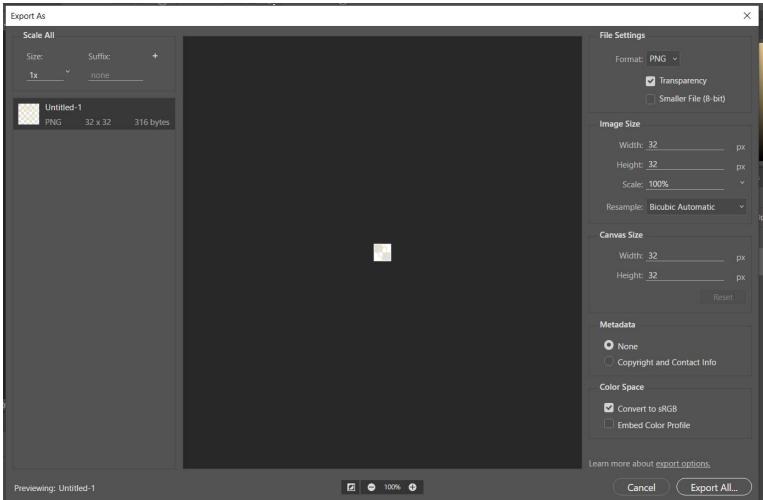


Figure 26

Click Export All... and you will be able to save it onto your computer like any other file.