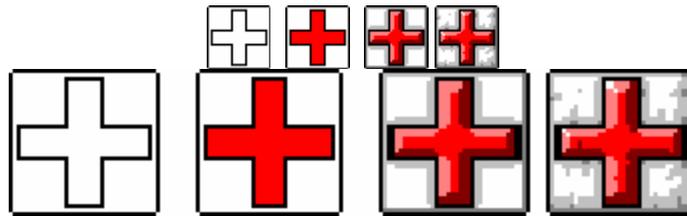


# Sprite Art Method Tutorial

A *sprite* is a two-dimensional image (often animated) is integrated into a larger scene. Creating good sprite art is about being able to take an idea or a drawing and reduce it to a clean, low-resolution, two-dimensional image. While this can be automated to a large extent, creating good sprites requires being able to build up a sprite manually from scratch. The process of creating most sprites begins with a phase dedicated to creating the basic outline of the drawing. Next some flat colors are added to give a basic idea of the look for the sprite. Then, shading, smoothing, and highlights are added to make the sprite appear more three-dimensional. Depending on the type of sprite, the outline color may also be changed as part of the shading. Finally, the simple shading or any overly-symmetric outline is broken up with some added texture and other accents.



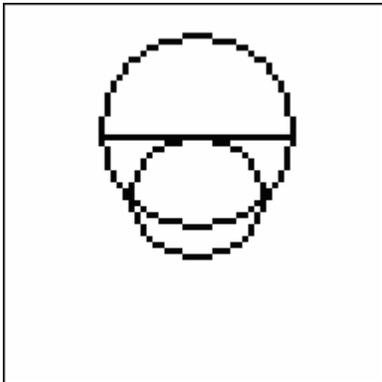
A "health-pack" sprite in each of the four stages. (This sprite, and others in the tutorial, show a smaller version of the image and a larger one to illustrate the details.)

This tutorial will take you through the process of creating a portrait as a sprite. As you work, be sure to save your sprite at various stages in case you make a mistake and need to go back. You might even name the different stages with different file names, even.

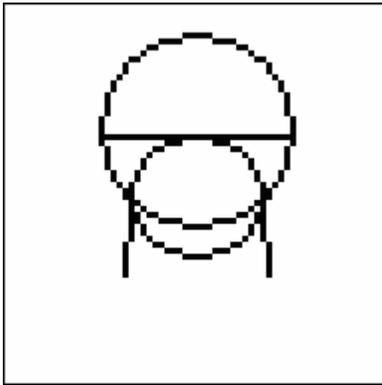
## Outline

For this image we'll start by:

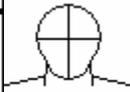
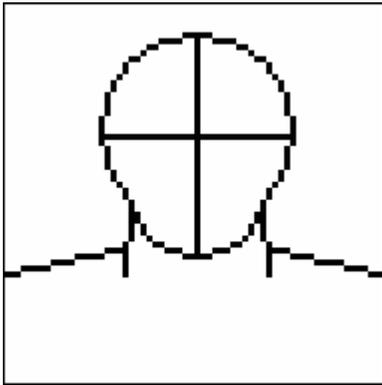
- 1) Create a blank image of 64 x 64 pixels. Make the entire background white to make it easier to work in.
- 2) Next, create a 34 pixel wide circle, center it horizontally on your image and move towards the top (about 12 pixels down).
- 3) Draw a line one pixel below center
- 4) Starting at the middle line, about 5 pixels in, create a second circle. Be careful to make it centered. It should be approximately 22 pixels wide.



- 5) Draw lines for the neck, using the line tool, by starting at the jaw line and moving out 1 pixel and down about 12. Make sure both sides are symmetrical.



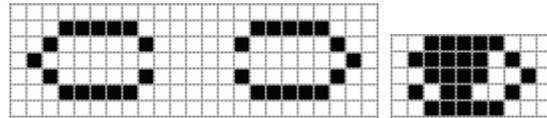
- 6) Using the line tool again, draw a line from the side of the neck out to the edge of the image, moving down about 5 pixels along the way.
- 7) Erase the inside circle lines
- 8) Draw two lines around the center (or just one line if there is a center line.)



- 9) To mark off the eyes, paint the 3rd and 10th pixels out from each center line.
- 10) Erase the eye-line across the head except for in between the marks.
- 11) Draw a single pixel, one space out and down from the outside mark of each eye
- 12) Mirror the top curve along the bottom.



- 13) Draw in the pixels for the iris.



Eye Pattern

- 14) Draw the nose halfway in between the eyes and the chin.
- 15) Draw the mouth line just under halfway between the bottom of the nose and the bottom of the chin. The nose and mouth should about equally wide.
- 16) After this, erase the center line.



- 17) Eyebrows can be drawn by redrawing the top curve of the eye about 3 pixels above it.



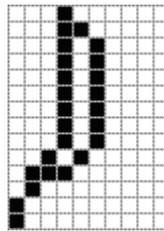
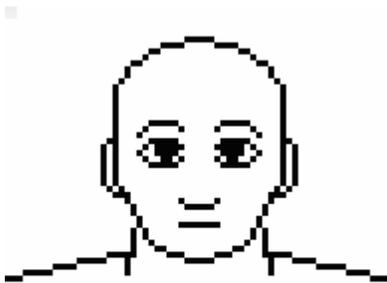
We're going to need to narrow the head to correct the shape and make room for ears. To do this:

- 18) Erase the pixels at the outside edge of the head and one pixel in.
- 19) Connect the sides with the line tool.

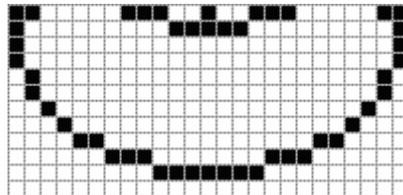
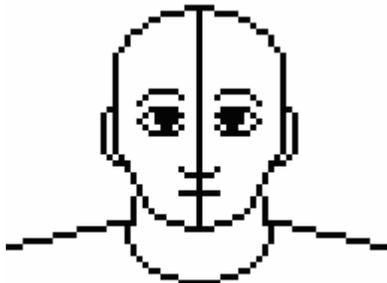


The top of the ears themselves will be at the same level as the top of the eye, and the bottom of the ears will be around the nose.

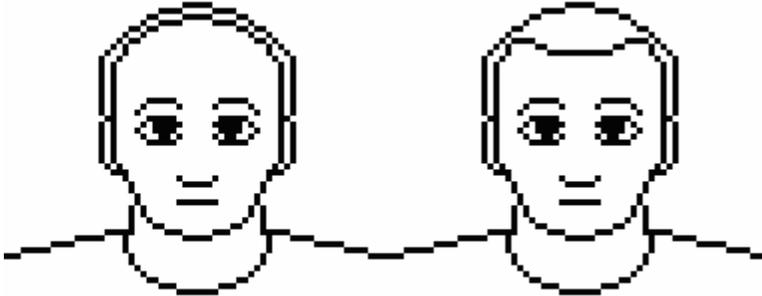
- 20) Draw a pixel just outside the face at these two spots
- 21) Then connect them with a straight line down from the top
- 22) Follow this with a pixel or two back in to the bottom mark.



- 23) Close off the neckline to make the appearance of a simple collar. Do this by drawing a curved line from the bottom pixels of one neckline to the other. A simple way to create a nice-looking curved line here is to draw small lines of pixels at decreasing angles. Start with two pixels vertical on either side, and then draw two diagonal pixels one pixel down from them, two horizontal pixels one down from them, three horizontal pixels down one from them, etc. until your lines meet up.



- 24) To create simple short hair, first draw a line around the outside of the head above the ears one pixel away from the head.
- 25) Next, draw a straight line across the head, 5 pixels down from the top of the first line.
- 26) Round this line off in the center to create the hairline
- 27) Erase the extra lines on the inside.



Once that is complete, you should have a complete outline for a profile. Most of the hard work is now over!

## ***Coloring***

The coloring stage for this sprite is actually pretty easy.

- 1) Fill in the head, ears and neck with a skin tone. The color used below is (R: 255 G: 190 B: 160).
- 2) Fill in the simple shirt with the color of your choosing. The shirt below is dark red.
- 3) For the hair, again choose your own color. The hair in this tutorial is brown.



## ***Shading***

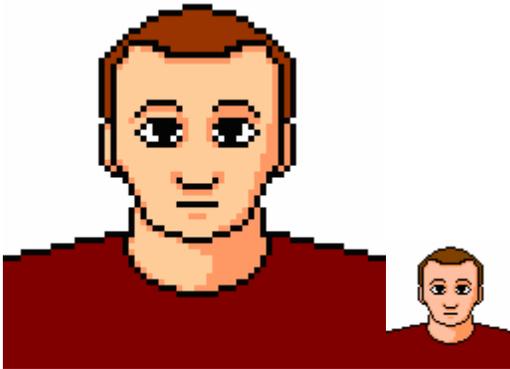
For shading, we'll talk about how to shade the face only. Shading involves using darker tones in selected areas to give the image the appearance of depth (3d). The shirt would use the same principles, so since the tutorial is about learning the process and not making a specific image, these principles can be applied to the shirt, too.

- 1) The first step is to add darker shades. For the darker shade of skin tone, the image below uses (R: 255 G: 150 B: 90). You want to use this shade in a couple different ways. First, shade is used to depict shadow and form. As in the image below, if you assume there is a light source on the left, then the right side of the image will be darker. Use the darker shade

on the neck to show that the head is sticking out farther, casting a shadow over much of the neck. It can be used similarly along the bottom of the hairline or on one side of the face, to show that the character is lit primarily from the side. Finally, use it in the crevices, such as the sides of the nose or under the eyebrows, to show their depth. The second use for this shading is to mimic anti-aliasing. Anti-aliasing is a visual effect in which semi-blended shades of color are used around jagged lines to make them look smoother. Including this in your sprites can make them look less jagged and more professional.



Effect of Anti-Aiasing



- 2) The second step is to add lighter shades as highlights. For highlights on the face, the image below uses (R: 255 G: 220 B: 200). This color is used more sparingly than the dark shades and is only be applied in places that stick out far enough to receive extra light. These include the cheeks, the tip of the nose, and the forehead. Notice that since the right side receives more shadow, the left side receives more light.



- 3) The last thing to do as part of coloring the image is to recolor the outlines. Choose a dark brown for outlines near the skin. The color used below is (R: 50 G: 20 B: 0), but the color could be even a little lighter. For outlines around the shirt and hair, use a darker version of the shirt color you chose. If you chose black, try a light grey. Dark outlines are less important for sprites of this size, but can be extremely useful in much smaller sprites.



## Accents

Accenting your sprite is usually a relatively easy task, the purpose being to lend some texture and more natural-looking asymmetry to a sprite. This can be things such as cracks or moss in a wall, particular highlights on some jewelry, a loose hair on a character, etc. It may seem unnecessary, but this step is where the individual personality of your sprite creation comes through.



- 1) For this sprite, add elements such as highlights to the hair, known as specular highlights (white bits where the light is almost perfectly reflected) to the nose and cheeks. The image above has also changed the facial expression with modifications to the mouth and eyebrows, but further tweaks could be made. Similarly the stance has been changed slightly by altering the curve on either side of the shoulders. It is a minor change, but it helps break up the monotony of the picture. This is also the stage where the eyes are colored. This could have been done at the coloring stage, since it is only a minor fix, and would have had this been a larger image.