

# WORKING WITH DIGITAL IMAGES

Using GIMP  
By Kathy Bierscheid



# A LITTLE **BIT** ABOUT DIGITAL IMAGES

- File Types: .jpg, .png, .gif, .tiff, .bmp
- Raster vs. Vector:
- Resolution: affects file size, the quality of the image, based on the # of pixels vertical and horizontal

- .png** - Portable Network Graphic
- .gif** - Graphic Interchange Format
- .Jpg** - Joint Photographic Experts Group
- .tiff** - Tagged Image File Format
- .bmp** - Bitmap Photo File
- .raw** - Raw Data

### In short -

- \*PNG is good option for transparency and non-lossy, smaller files but remember files will be larger.**
- \*GIF is largely a novelty and only useful for animation, but can produce small 8-bit images.**
- \*JPG is still the king for photographs and photo-like images on the internet, but be careful, as your file can degrade with every save.**
- RAW is best image data straight off of camera for photo editing**
- TIFF is best file format for publishing & widely used in industry**
  
- \*can be used on the Internet**

- PNG - [http://cdn3.howtogeek.com/wp-content/uploads/2010/10/200x160xHTG.png.pagespeed.ic.xkA850aaA\\_.png](http://cdn3.howtogeek.com/wp-content/uploads/2010/10/200x160xHTG.png.pagespeed.ic.xkA850aaA_.png)
- GIF - [http://cdn3.howtogeek.com/wp-content/uploads/2010/10/DANCING\\_BABY.gif](http://cdn3.howtogeek.com/wp-content/uploads/2010/10/DANCING_BABY.gif)
- Try getting white background from picture

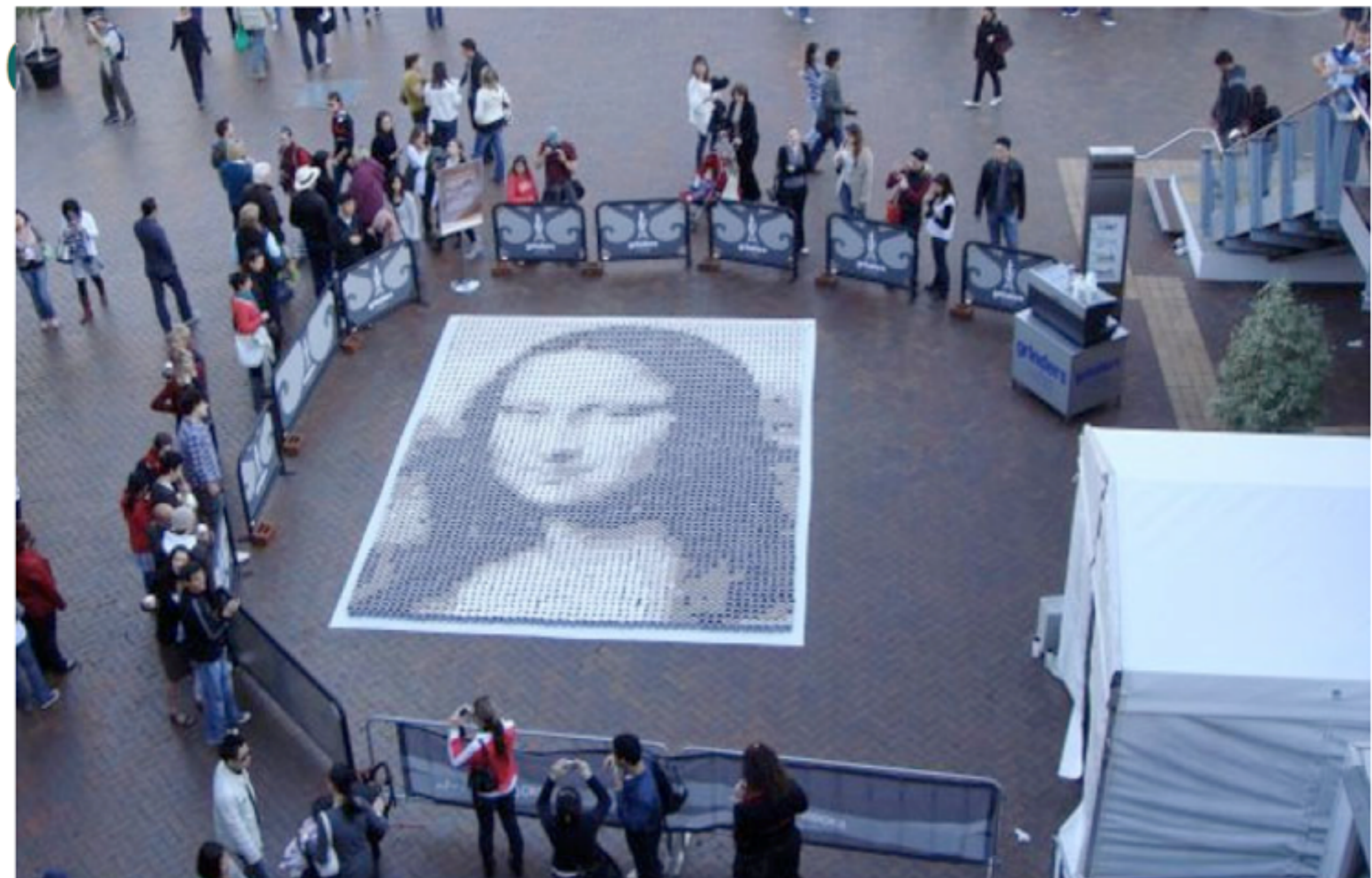
# RASTER VS. VECTOR

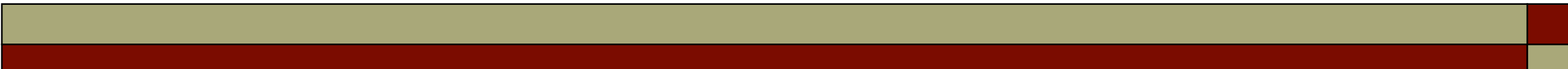
- Click to add text



**This is an example of  
Vector Graphic~**







C

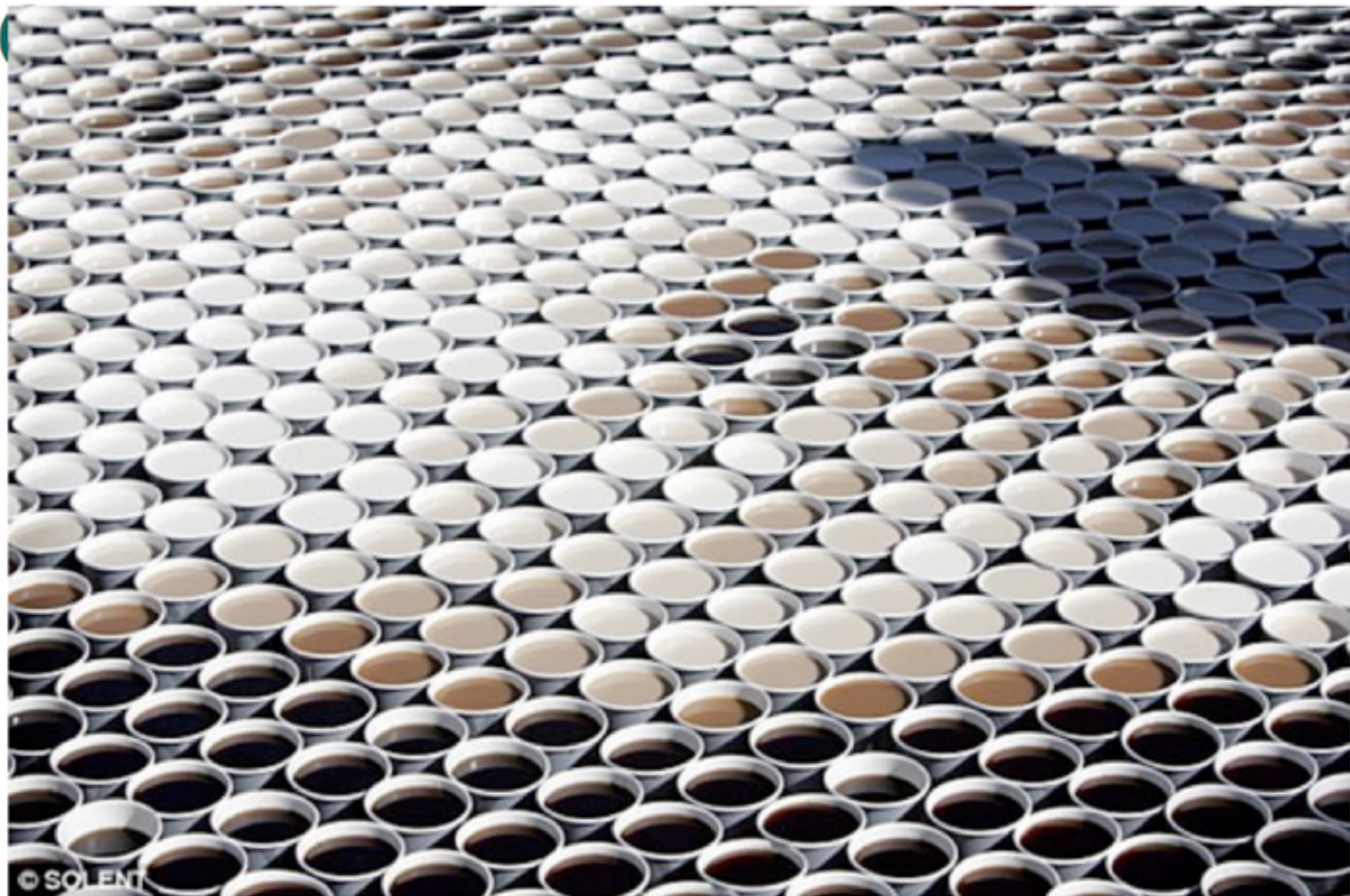




Click to add title

- C





# RESOLUTION

## Making sense of resolution

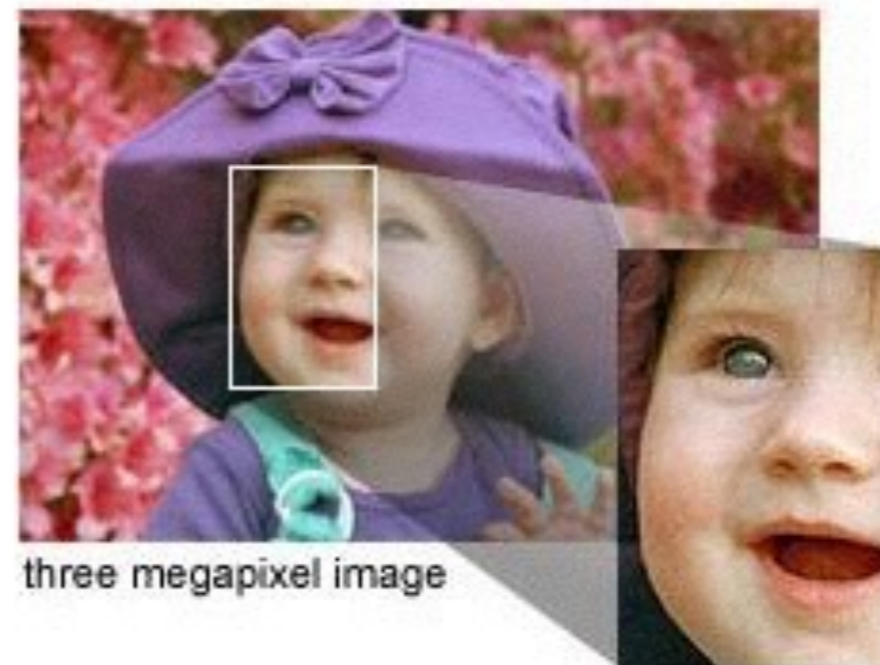
With all those pixels in my camera, how do I know how much I am capturing? To make sense of capture resolution, think about the area of a rectangle. The area is the length multiplied by the width. In the case of a digital camera sensor, the number of horizontal pixels times the number of vertical pixels is the capture resolution.

Let's use the Kodak EasyShare DX3900 zoom digital camera as an example. The number of horizontal pixels is 2,160. The number of vertical pixels is 1,440. When the two numbers are multiplied, the result is 3,110,400 pixels or 3.1 megapixels. If you know the size of print you want, you can use the table below as a guide to the capture resolution you need.

Maximum Print Size	Capture Resolution Needed
5 x 7 inches (15 x 20 cm)	1 megapixel
8 x 10 inches (20 x 25 cm)	2 megapixels
11 x 14 inches (28 x 36 cm)	3 megapixels
20 x 30 inches (50 x 75 cm)	4 megapixels



one megapixel image



three megapixel image

# TECHNIQUES IN MAKING PHOTOS BETTER



August 31, 2009 12:05:43 AM

# CROPPING





# LEVELS







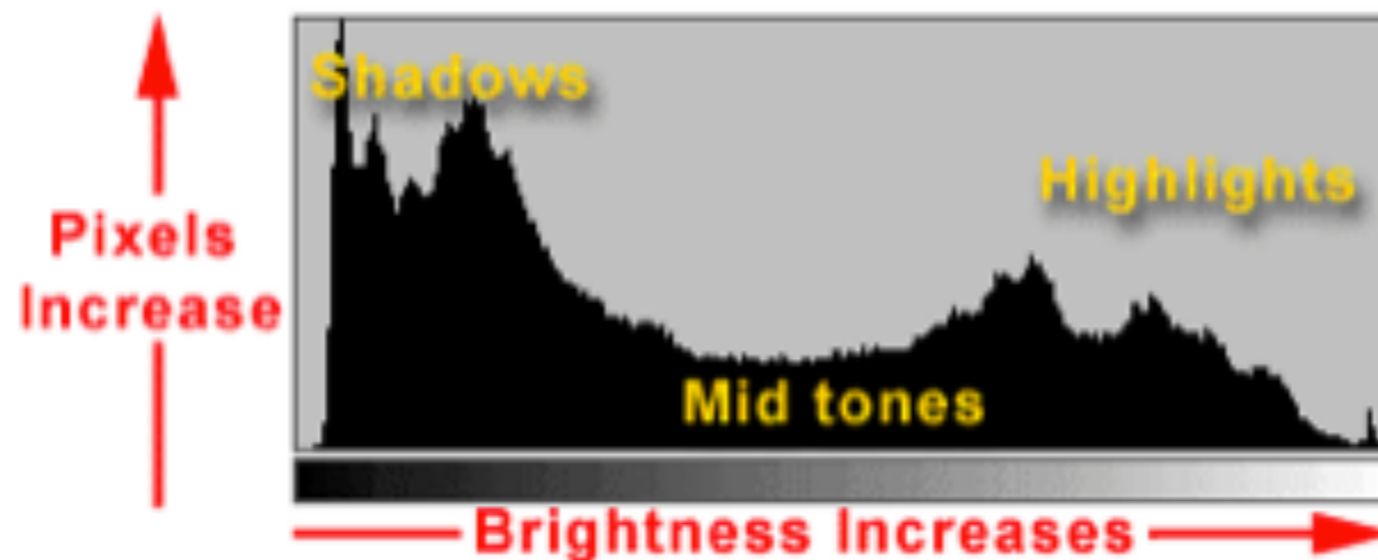
# OTHER EDITING

- red eye
- blending
- exposure (contrast / brightness)
- hues (white balance)
- saturation (over exposed pic)

# HISTOGRAM / LEVELS

## Histograms

Many cameras now display a histogram and overexposed highlights indicator that shows what areas are so overexposed they have gone pure white without any detail. These let you know if you got the best possible exposure. The histogram, like those found in most serious photo-editing programs such as Photoshop, let you evaluate the distribution of tones. Since most image corrections can be diagnosed by looking at a histogram, it helps to look at it while still in a position to reshoot the image. Each pixel in an image can be set to any of 256 levels of brightness from pure black (0) to pure white (255). A histogram is a graph that shows how the 256 possible levels of brightness are distributed in the image.



# WORKING WITH A PHOTO EDITOR - GIMP



# THE TOOLBOX

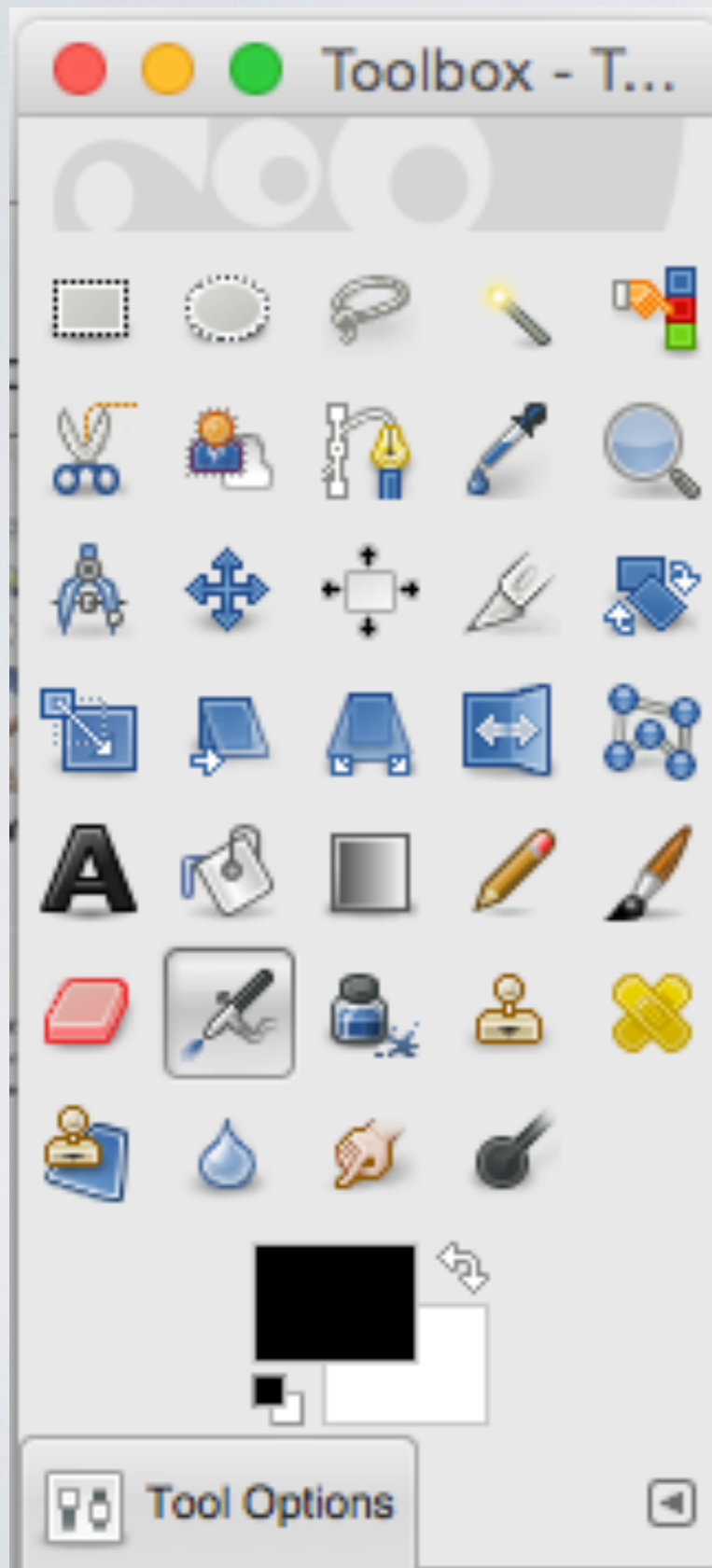
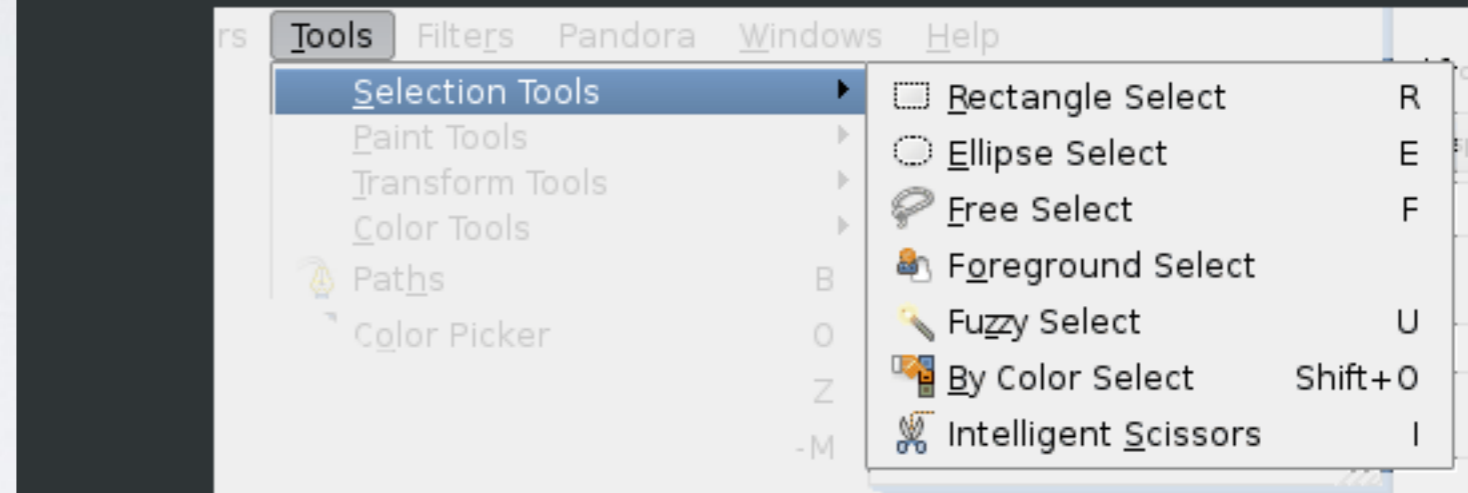
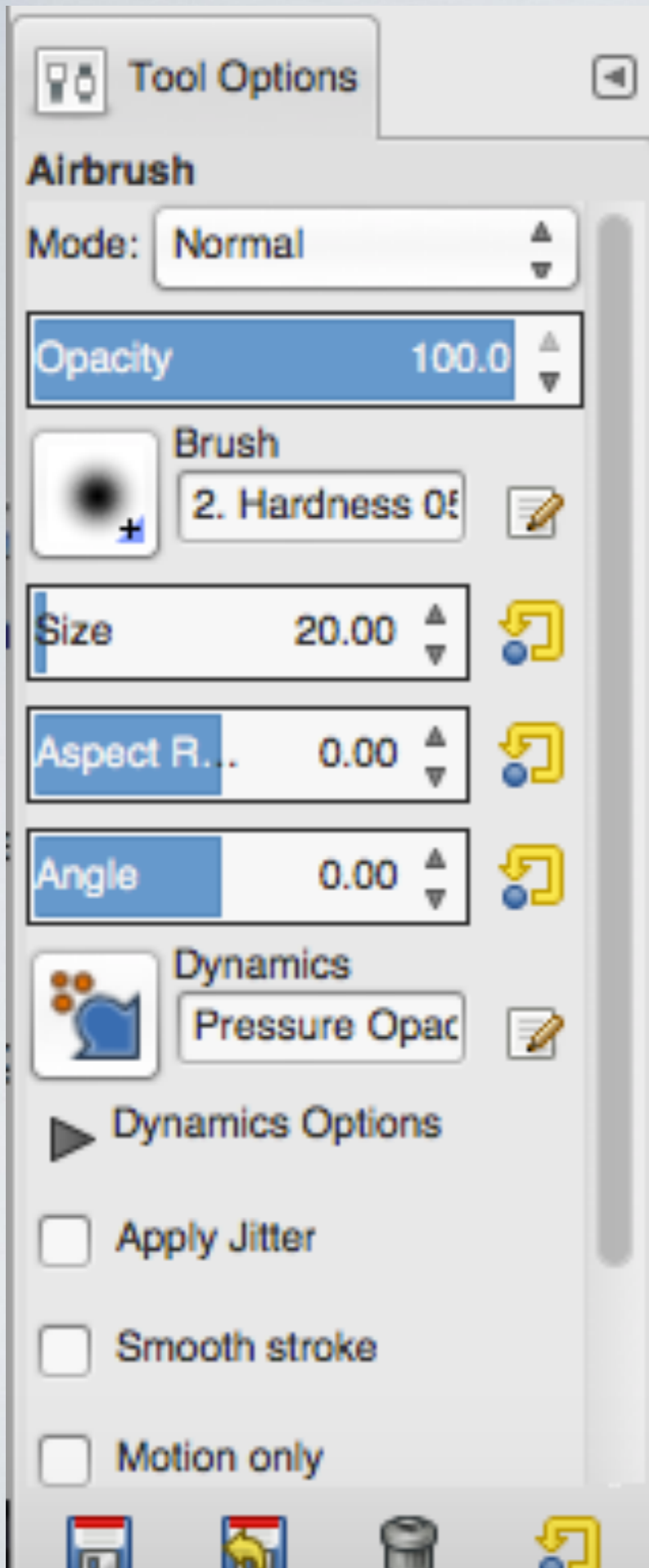


Figure 14.8. The Selection tools



# TOOL OPTIONS

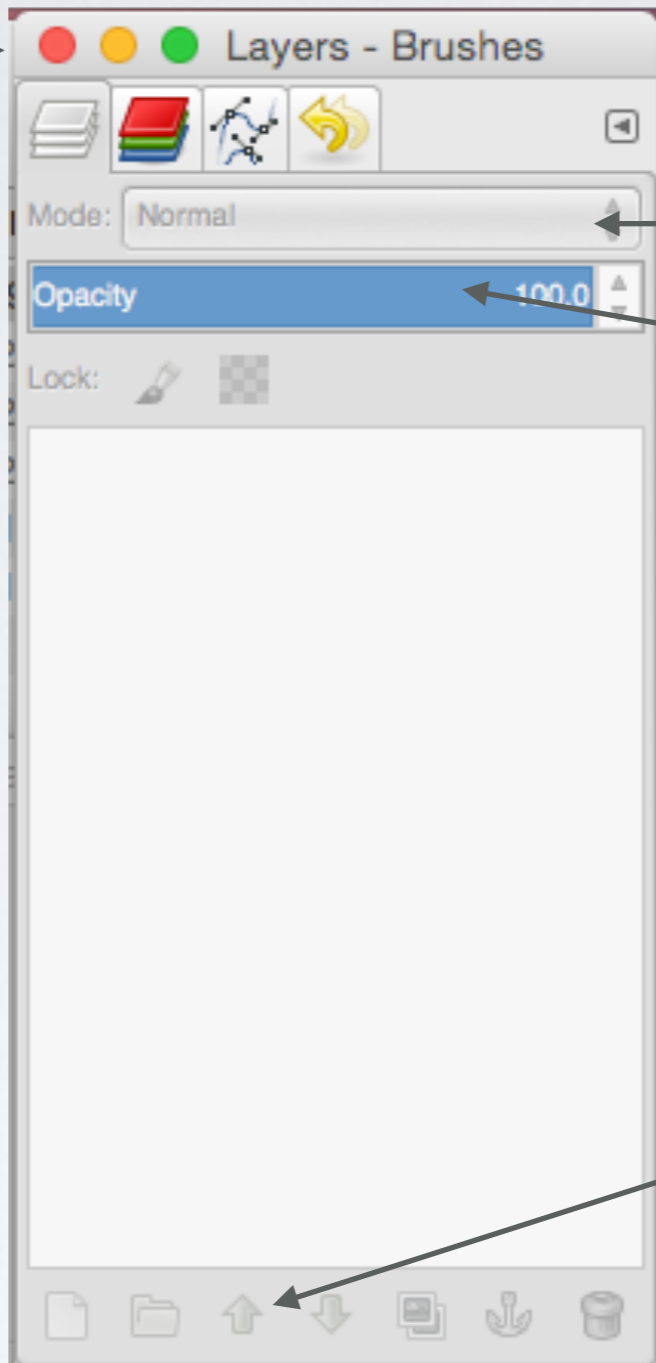
This screen changes every time you select a new tool at the top



# LAYERS

Window Controls

Palette Tabs

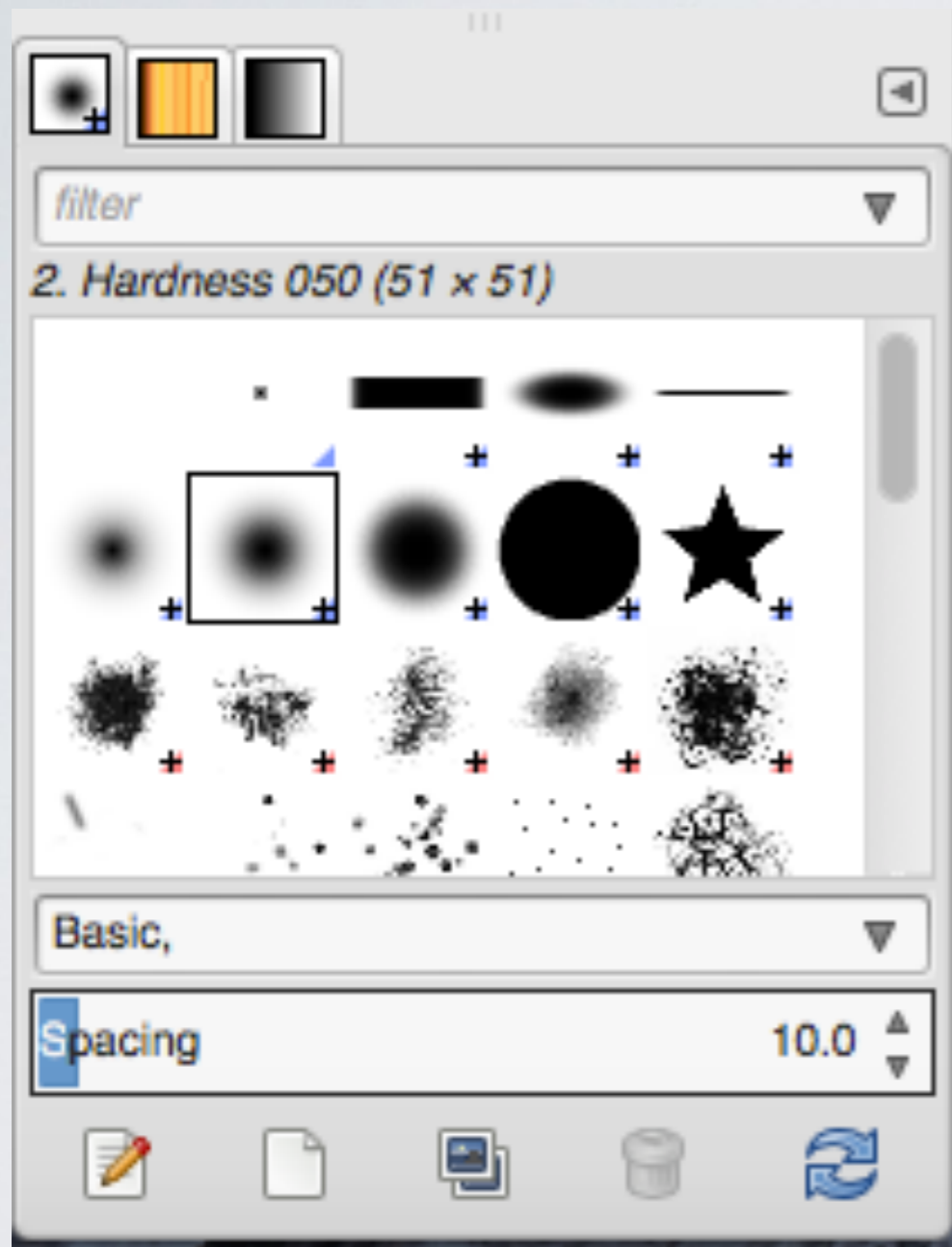


Blending Modes

Opacity Levels

Layer Tools:  
*layer styles*  
*new layer*  
*delete layer*  
*dup layer*

# PALETTES



To select different palettes or reopen ones you may have closed go to the Window Menu at the top and reselect it