

## Why prepare graphics?

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This question becomes more obvious with time. Technology is always advancing, usually at a rate that most things are obsolete by the time they are a month old. Since the advent of digital cameras, they have become increasingly better in quality. The nature of digital images especially is that the better the quality the bigger the file size. As time goes on high quality cameras are becoming more and more available and affordable. Thus the images we take with either scanners or digital cameras are too big for displaying on the internet.

Since most people around the world still are connected to the internet with 56k modems or sometimes even less, we must prepare graphics to keep them in mind. When on dial-up connections time is money. Every minute it takes for your student to download your images cost them either money or limited minutes they could be using elsewhere.

If one was to place an image on the web straight from a 5 Megapixel camera, too things would be horribly wrong with it. The first thing is that it would take a horrible long time to download. If you have ever noticed before 56k modems, never actually reach the speed of 56 k. Another problem would be that the image, once it loaded it would be too large for even the screen itself. So two things must be done to images that are to be uploaded. First they must be resized (length & width), and then it's file size must also be resized (MB vs. kb).

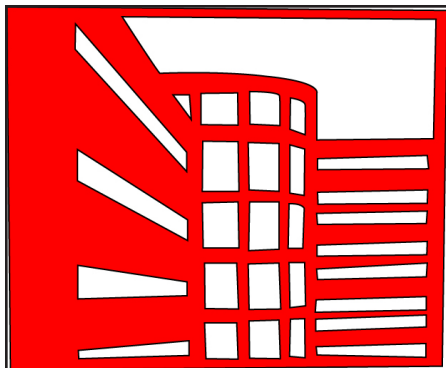
Before we begin to do these things, we will first go over graphic file types for the internet. We will also go over different ways to bring images to your computer.

## JPEG vs GIF

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On the web the two most widely used file formats are, gif ('gif' or 'jif', your choice) and jpg (jay-peg). Because of their different compression schemes (compression reduces the file size of an image at the loss of some of the images' quality) one is suited to photos and images with a wide color range (a scanned painting, or images of people for example) and the other suited to line art and text or other flat, low color images. Gif compression works great with the flat color type of images, because it can only hold up to 256 colors. Jpeg compression works great for photo-type images, because they can hold millions of colors. Your objective when making a graphic for the web is to reduce the file size of the image as much as possible without injuring its appearance.

A good rule to live by when it comes to web graphics is: "use gif images for text and line art and jpg images for photos."



Gif graphic (256 colors or less)



jpeg graphic (millions of colors)