# Introduction

Adobe Illustrator is a graphic editing program well-suited to creating graphics from scratch. It is significantly different from many other graphics programs because it deals primarily with *vector graphics*. Most people are more familiar with bitmap (raster) graphics, such as what PhotoShop produces.

Bitmap graphics: saved using a grid full of tiny squares called pixels. Bitmap images are good for continuous and/or irregular shadings and colors (such as in photographs), but do not resize well.

100%   300%   800%
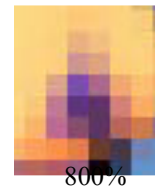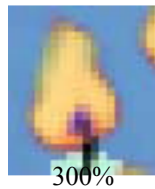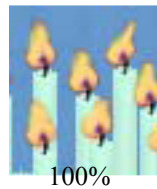
Vector graphics: saved using points and lines (vectors) to describe shapes and objects. The resulting file is made up of lines and patches of color. Generally much smaller files than bitmap graphics. When vector images are resized, there is no loss of quality.

100%   300%   800%
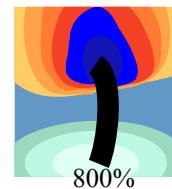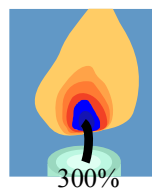
When to Use Illustrator

Types of documents you might choose Illustrator to create:

Single-page document juxtaposing text and images – a handout for a class; a poster for a conference.

Simple line art; logos, buttons, and other images with clear areas of solid color.

Maps and diagrams.

Why to Use Illustrator

It may be difficult to convince yourself to spend the amount of time necessary to learn Illustrator, when similar work can be done in Photoshop. However, for many images, especially of the types listed above, Illustrator produces a MUCH smaller file, that looks better on screen *and* prints much more clearly than a similar document created in Photoshop!