

RASTER VS. VECTOR HANDOUT

There are two kinds of graphic images - raster (composed of pixels) and vector (composed of paths).

A raster image uses a grid of individual pixels where each pixel can be a different color or shade. Raster images are composed of pixels.

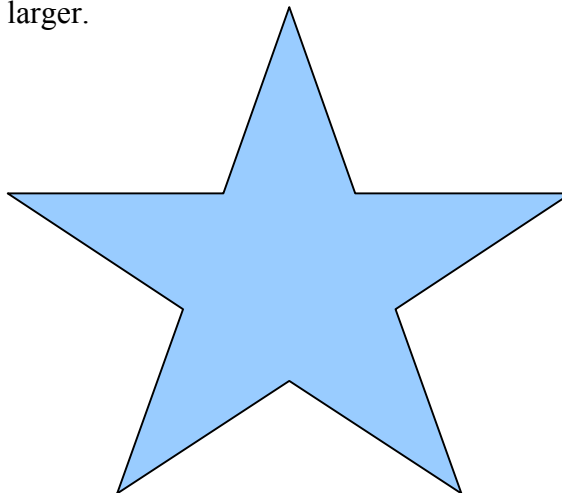
Vector graphics use mathematical equations to create points and the paths connecting them to describe an image. Vector graphics are composed of paths.

The image below is representative of raster. The first is actual size. The second is enlarged to show what the pixels really look like.



Pixels are tiny dots in a grid. The dots are little squares. These dots get larger when a raster image is enlarged. This makes the image look “jaggy” or “pixilated”.

The image below is a Vector graphic. The one on the left is original size. The one on the right is enlarged. When a vector image is enlarged, the computer reads the mathematical equation and makes an exact version of the image, only larger.



Raster images are best used for photographs and images with subtle shading. Graphics best suited for the vector format are page layout, type, line art or illustrations.

Wherever possible use the vector format for all your type, line art and illustrations and use raster images for photos or images with complex or non-uniform shading.

Software used for Raster images: Adobe Photoshop

Software used for Vector images: Adobe Illustrator