# Raster v.s. Vector

### Vector:

Vector images are comprised of points and paths that result in a sharp and clean appearance. They can be resized infinitely without loss of quality. See below.

#### **Raster:**

Raster images are comprised of pixels which enable the images to have a photographic quality. Results can be poor if raster images are enlarged beyond their pixel limitations. See below.



## Resolution

**Pixel dimensions** measure the total number of pixels along an image's width and height.

**Resolution** is the fineness of detail in a bitmap image and is measured in pixels/dots per inch (ppi or dpi). The more pixels per inch, the greater the resolution. An image with a higher resolution produces a better print quality.

## **Image Quality Requirements:**

**Raster artwork** (.jpeg, .tiff, .psd) needs to be at least the pixel dimensions (height and width) to be printed and 360 dpi. If the artwork is not the desired print dimensions, we cannot increase it without losing quality (see raster 4x image above).

\*\* You cannot increase the dpi (add dots per inch) to an image. If the image is low res (i.e. 72 dpi) and you change the resolution to 300dpi in photoshop, you haven't added any pixels/ increased the resolution regardless of the new dpi value shown.