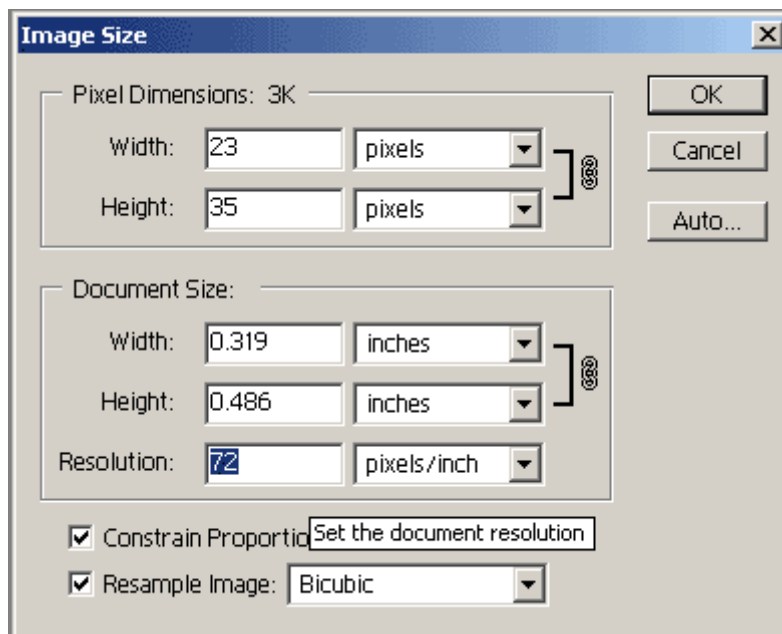# Resolution

What is resolution?

Resolution is the number of pixels or dots per inch (ppi/dpi). The higher the resolution, the more detail is stored for the graphic. This means that a higher resolution image is higher quality, but it also is larger.

Which resolution should I use?

The most common setting for computer monitors is 72 dpi; therefore, images intended for web-based or other on-screen projects should have a resolution of 72 dpi. This lower resolution will reduce file sizes and download times. The normal resolution for low-end printing is 150 dpi, and for high-end, profes-sional, quality photographs the resolution should be 300 dpi or higher.

How do I change the resolution?

To change the resolution of a graphic, pull down the **Image** menu and select **Image Size**. The following dialog box will appear:

Change the resolution in the Resolution box (in blue above). Keep these facts in mind:

- If you have a 72-dpi graphic and you change it to a higher resolution, you will not increase the quality of the graphic. The information was originally stored at 72 dpi, and the computer cannot "make up" more information to improve the graphic quality.
- If you have a 300-dpi graphic and you change it to a lower resolution (say, 72 dpi), you will decrease the quality of the graphic. This is because you will lose the extra pixels of information. If you need to reduce the resolution of a graphic, save the original, high-resolution image in case you need it in the future.
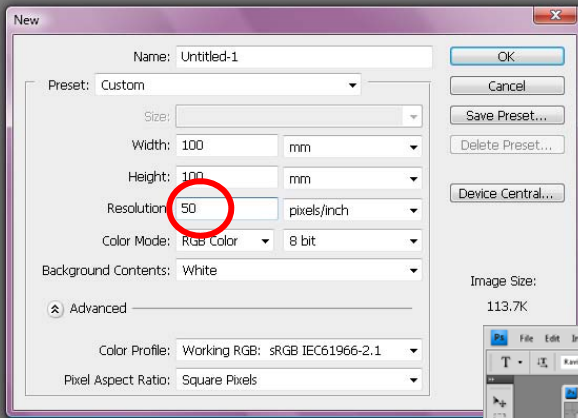
Resolution

Create 4 files - 10cm (100mm) x 10cm (100mm) but each having a different resolution.
- 50 pixels/inch
- 72 pixels/inch
- 100 pixels/inch
- 300 pixels/inch

In each put your name, font and size and the resolution. Choose a nice 'blocky' text.

Print each file - make sure you check your print preview.

Take your 100dpi file and go to Image - Image size and change it to 20cm (200mm) x 20cm (200mm).
Save (remember to do file - save as and rename it) and print the file.
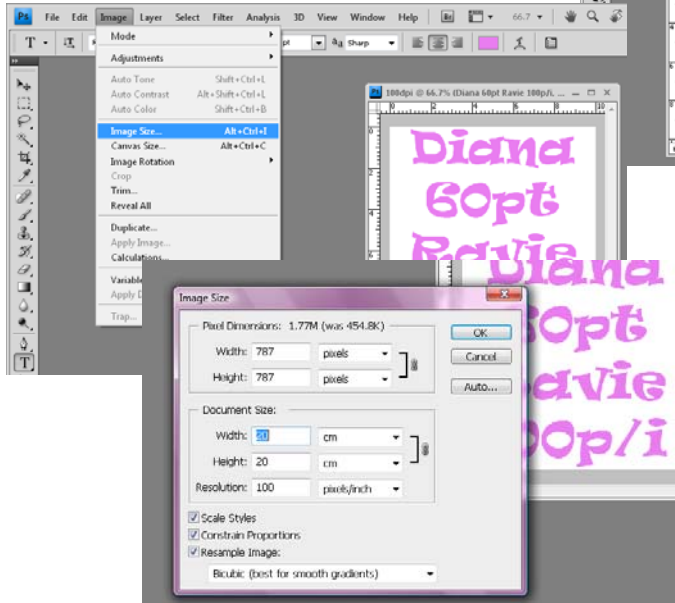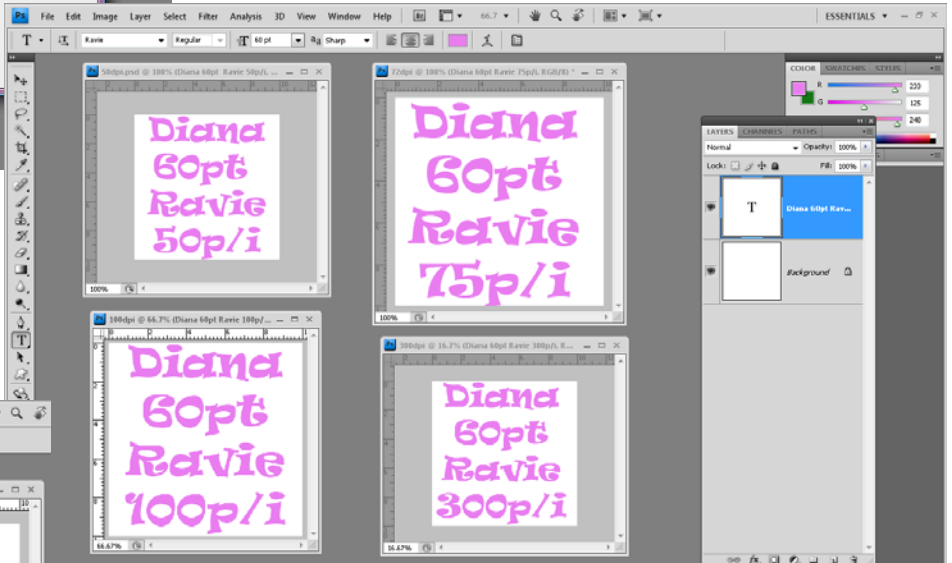
On your 300dpi file, drag the words from your other 3 files on to it and see what happens. You will have to change the colour of your text before dragging across. Print the file. Remember to save as and give it a new name also.
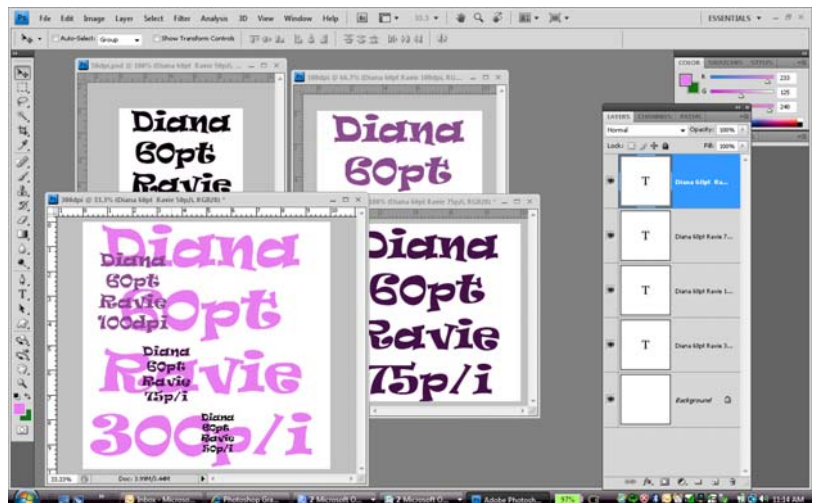
Stick files **neatly** into your workbook for final presentation - 6 files in all, headings etc. will all play a part in assessment.