Graphic Communication—Advanced Higher

File Types 2

The different computer file types listed need to be known, as well as their characteristics.

JPEG/JPG
One of the most widely-used image formats is the JPEG format (Joint Photographers' Expert Group). This format uses lossy compression– this means that a certain amount of the image quality is lost during saving. It also allows the user to specify what level of compression they desire, trading off the true image for file size. It is not recommend using JPEG files for rasterized vector art, as the compression artifacts substantially degrade the quality of the image near edges.

BMP
There are actually several BMP formats (BitMaP). Windows and Apple have their own formats, both of which are called BMP. Most modern image editing tools are able to read both.
In any case, all of the variants of BMP should be avoided when possible, as they use little to no compression and consequently have unnecessarily large file sizes.

PNG
The best of the lossless image formats is called PNG (Portable Network Graphics). This format is widely supported by web browsers and image viewers/editors. PNG also saves **colour transparency** when saving.

AI
Drawings created with Adobe Photoshop and Adobe Illustrator, a vector graphics editing program; composed of paths connected by points, rather than bitmap image data; commonly used for logos and print media.
Since Illustrator image files are saved in a vector format, they can be enlarged without losing any image quality. Some third-party programs can open AI files, but they may rasterize the image, meaning the vector data will be converted to a bitmap format.

EPS
This used to the most common file format when preparing artwork for print. It may contain 2D vector graphics, bitmap images, and text and it can also include an embedded preview image in bitmap format and can also be placed within another PostScript document.
EPS files are supported by several different drawing programs and vector graphic editing applications. They are often used as a standard means for transferring image data between different operating systems.

PDF
Adobe's PDF format (Portable Document Format) is very widely used as a general purpose platform independent document format.
A PDF file captures document text, fonts, images, and even formatting of documents from a variety of applications. You can e-mail a PDF document to your friend and it will look the same way on their screen as it looks on yours, even if they have a Mac and you have a PC. Since PDFs contain colour-accurate information, they should also print the same way they look on your screen. To view a PDF file, you need Adobe Reader, a free application program distributed by Adobe Systems. Adobe also makes an Acrobat Plug-in for Web browsers that enables PDF files to be viewed inside a browser window.