



**Subject:** IT

**Topic:** Web Design and Content Creation

**Summary of key information:**

**Types of Graphics**

<p>Bitmap</p> 	<p>Bitmap graphics are made up of pixels. Each pixel is stored on the computer as a series of 1s and 0s. When you take a photo with your smart phone it stores the digital image as a bitmap.</p>
<p>Vector</p> 	<p>Vector graphics do not have any pixels. Instead they are made up of lines and shapes. When a vector is enlarged the lines and shapes are redrawn; making them great for resizing.</p>

**File Types**

JPG	Bitmap format that <u>compresses</u> digital images. Common file type used by smart phones and compact cameras.
PNG	Bitmap format that does not compress digital images (bigger file size than JPG). Supports <u>transparent</u> background.
GIF	Bitmap format that compresses digital images. Supports transparent background, <u>animation</u> and <u>web safe colours</u> .
TIFF	Bitmap format that does not compress digital images (file sizes tend to be bigger). Great for printing good <u>quality</u> images.
SVG	Vector format; not widely supported. SWF files can be viewed using a <u>web browser</u> , such as Internet Explorer.

**File size compression**

<p>Lossy Compression</p>	<ul style="list-style-type: none"> <li>• Data is removed from the file to reduce the size of the file.</li> <li>• The process cannot be reversed, data loss is permanent</li> <li>• Increased compression introduces a greater reduction of image quality</li> <li>• Ideal for communication over the internet and viewing on small screens</li> </ul>
<p>Lossless Compression</p>	<ul style="list-style-type: none"> <li>• All original image quality is retained, hence no loss</li> <li>• Slight decrease in file size</li> <li>• Ideal for archiving images to retain original quality Used for large images, such as posters and billboards</li> </ul>

**Key terms:** Bitmap, Vector, Resolution, Pixel, Compression, Lossy, Lossless, HTML, Tag, Markup, Element,



## Summary of key information:

Design Principle	Two things that designers should do	Two things which designers should avoid
Colour	<ul style="list-style-type: none"> <li>Use the organisation house style colours</li> <li>Use Textures</li> </ul>	<ul style="list-style-type: none"> <li>Don't use too many colours</li> <li>Make sure that colours don't clash</li> </ul>
Text	<ul style="list-style-type: none"> <li>Ensure that font size and style is readable</li> <li>Use appropriate font types</li> </ul>	<ul style="list-style-type: none"> <li>Avoid Decorative fonts</li> <li>Avoid use of language that may not be appropriate for younger users</li> </ul>
Layout	<ul style="list-style-type: none"> <li>Consistency</li> <li>Feedback to the user</li> </ul>	<ul style="list-style-type: none"> <li>Don't group unrelated tasks together</li> <li>Avoid any difficulty for users to navigate the interface</li> </ul>
Navigation and Input Controls	<ul style="list-style-type: none"> <li>Search Fields</li> <li>Icons</li> <li>Breadcrumbs</li> </ul>	<ul style="list-style-type: none"> <li>Avoid using unfamiliar icons</li> <li>Avoid putting them too close together</li> </ul>

## HTML Tags

<html> </html>	The most basic element – each page begins and ends with these
<head> </head>	These signify where the head of the webpage is – data like the title go here
<title> </title>	A title – this is viewable in the tab or browser window
<body> </body>	These show where the content of the webpage goes. Anything visible on a page is found between these tags
<h1> </h1>	A heading – a large, bold piece of text. Can range in size from h1 to h6
<p> </p>	A paragraph – a large piece of text
<a> </a>	A link – creates a link to another page or website
<img>	An image – adds an image to your page, either from a file or another website