DOCUMENT DESIGN AND LAYOUT

When producing documents in Word, it is important to consider the overall design and layout of your document. A well-designed document will be attractive to the reader and will improve readability.

There are several design principles that you should be aware of when designing documents to ensure that you create professional-looking documents.

In this session you will:

✓ gain an overview of the different types of business documents

✓ gain an understanding of meeting organisational requirements

✓ gain an understanding of the four basic principles of design

✓ gain an understanding of document layout

✓ gain an understanding of white space

✓ gain an understanding of typeface

✓ gain an understanding of visual elements

✓ gain an understanding of rules and borders

✓ gain an understanding of headings

✓ gain an understanding of page layout

✓ gain an understanding of computer graphics

✓ gain an understanding of colour

✓ gain an understanding of document writing aspects.

TYPES OF BUSINESS DOCUMENTS

A business must communicate with its customers, employees, suppliers, the government, and other businesses. This communication is mostly done through a variety of business documents. As a result there are a large number and variety of documents produced by businesses.

A good way to understand the types of business documents produced in organisations is to examine the needs and requirements of the various parts of an organisation, and to group documents according to the functions performed.

Management

Management requires documents that help it make business decisions and help it keep the business running. These types of documents include:

- Production reports
- Sales reports
- Meeting minutes

Sales and Marketing

Sales and Marketing require documents that help promote the business and its products to the customers. These types of documents include:

- Price lists and order forms
- Product brochures
- Sales reports
- Bulk mail-outs to customers

Human Resources

Human Resources deal with a variety of matters regarding employees. They require a very broad range of documents including:

- Job descriptions
- Employment forms
- Training manuals and guides
- Job procedures

Manufacturing and Production

Manufacturing and Production produce the goods and services sold by the business and require documents that help them produce these goods and services on time and in the most cost-effective manner. The types of documents they require include:

- Production reports
- Supplier price lists and forms
- Product specifications and procedures

Administration and Accounts

Administration and Accounts are responsible for ensuring that the day-to-day operation of the business proceeds smoothly, that customers are invoiced, that bills are paid, that money is collected and banked, and the like. They require a variety of documents including:

- Memos, faxes and letters
- Sales reports
- Accounting reports

MEETING ORGANISATIONAL REQUIREMENTS

Word processing programs such as Microsoft Word allow you to create a huge range of documents, from the personal letter to complex organisational reports. While most personal documents are designed from personal taste, an organisation's documents should be produced according to the image that the organisation wants to convey to the public.

Organisational Logo

An organisation's logo is usually a special graphic image that is used to identify the organisation to the public. These images are stored digitally as image files, and can easily be imported into word processing programs such as Microsoft Word. Organisational logos are generally found on the first page of a letter (known as the letterhead), or they may be found at the top (header) or bottom (footer) of every page.

Organisational Colour Scheme

As well as an organisational logo, each organisation will further brand itself by having specific corporate colours that are used throughout their documents. Usually the corporate colours will be the same colours as those used in the logo. These colours may be used in business documents, brochures, flyers and other advertising material to further help identify the organisation to the public. Microsoft Word allows you to apply colour to text, for example, as well as to apply and customise ***document themes***. Document themes contain colour schemes and you can customise these to match organisational requirements. As colour printing becomes less expensive, more documents are being printed with coloured elements, such as shapes and borders, which reflect the organisation's corporate colours.

Established Guidelines

Large organisations often have established guidelines in place for producing organisational documents. These guidelines will most likely be found in the company's ***Style*** guide or similar document. These guidelines are developed so that employees can produce consistent documents that convey the organisation's image.

Styles

In word processing programs you can create documents that have a consistent look and feel by using styles. A ***style*** is a stored set of formatting attributes that can easily be applied to text. Many organisations will have a range of styles that you are required to use when producing business documents and these may be contained in the organisation's templates (see below). Information about using styles will also be contained within the company's ***Style*** guide or similar document.

Templates

Templates are often used in organisations for most standard business documents and are made available to all users. Each template will already contain the prescribed layout and formatting as well as the organisation's styles. Many templates already contain standard or boilerplate text to reduce the time it takes the user to create a document. These templates will usually be available on the organisation's intranet or network.

Organisational Details

With organisational documents it is important to be able to locate them easily. Information such as the file name, file location, author, date, and/or time is often found in the footer (bottom) of the first page or each page of the document and this information will help to locate electronic copies of documents. Again, the established guidelines for the organisation will spell out requirements.

Copyright Legislation

It is important that document content adheres to copyright laws and requirements. Organisations that produce documents that fail to meet copyright guidelines are often the subject of law suits. Again, the established guidelines for the organisation or your supervisor should indicate what can be placed in a document and how it should be presented.

THE FOUR BASIC PRINCIPLES OF DESIGN

Robin Williams, in her excellent book on design, *The Non-Designer's Design Book*, has identified four basic principles to assist users in the design of effective and striking publications: ***contrast***, ***repetition***, ***alignment*** and ***proximity***. These interconnected principles should be applied to all documents that you create to ensure effective and professional-looking documents.

1 Contrast

Contrast is used to create interest on the page or in the document and occurs when two elements are different. Contrast demands that you take risks and be bold. If two elements are *sort of* different, then you have conflict rather than contrast. For contrast to be effective the elements must be very different.

For example, you can contrast large fonts with small fonts, old fonts with new fonts, a thin line with a thick line, a cool colour with a warm colour, wide spacing with narrow spacing, a small picture with a large picture, and much more.

2 Alignment

Aligning items on a page creates a strong visual connection and implies order and cohesion. The basic rule of alignment is that nothing should be placed on the page arbitrarily – every item on a page should have a visual connection to something else on the page. The purpose of alignment is to unify and to organise, and it is often alignment that determines the mood or look of a publication – formal, humorous, serious, and the like.
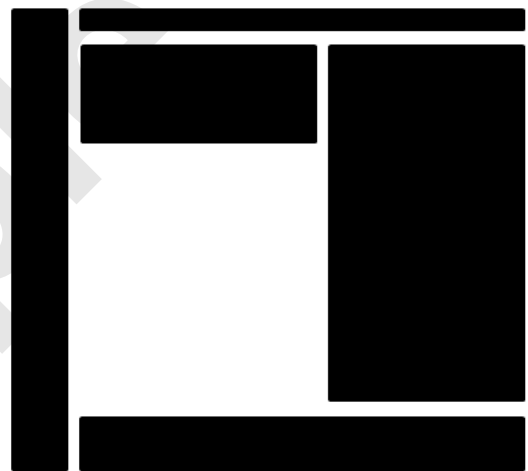
3 Repetition

In life, repetition is boring, but in document design, repetition is everything! The basic principle here is that you repeat some element or aspect of your design throughout the entire document or publication. This is done in a variety of ways. For example, you can make all of your main headings the same, create a consistent header or footer on each page, indent the body text in the same way throughout the publication, and more.

Use repetition to provide a theme and consistency throughout your publication – but avoid going overboard and allowing repetition to become annoying or overwhelming. In some ways repetition is the antithesis of contrast – yet good documents have both principles working together.

4 Proximity

Many designers tend to place design items too far apart – often items are placed at different corners of a page. Placing related items together creates a strong visual unit and helps the eye of the reader to find the information they're looking for. Grouping related items in close proximity to each other creates an impression of organisation.

To achieve proximity you should avoid placing too many differing and separate elements on a page and avoid placing items in the corners or the middle of the page. Equal amounts of white space should also be avoided.

Further reading: *The Non-Designer's Design Book* by Robin Williams (Peachpit Press, 1994)

UNDERSTANDING DOCUMENT LAYOUT

To understand how to *lay out a document* effectively, you need to understand how readers read information, as well as how to control the flow of text on a page. When reading a document, readers will scan a page in a specific way and text flow will determine the readability of a document. Similarly, alignment of text will dictate the warmth (or otherwise) of your documents.

Controlling Text Flow

When looking at a page, readers will generally scan the page across the top from left to right, then scan down to the bottom left and across to the bottom right. This is shown in illustration *1* below.

The scanning pattern of readers can be varied by including visual elements on the page, such as pictures, graphics, tables and the like. In illustration *2* below, two visual elements have been introduced to change the scanning pattern of the reader.

Placing strong visual elements at the top left and bottom right of the page, as shown in illustration *3*, captures the reader's attention and often forces them to read the text in between. Their eyes are drawn back and forth between the visual elements forcing interest and curiosity.
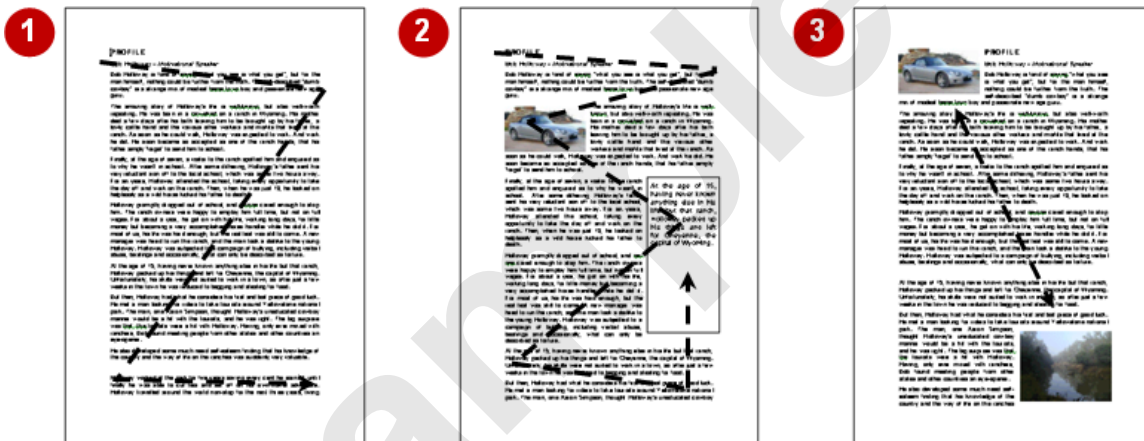
Text Alignment

Text alignment can be used to set the tone of your document. Basically, you have four alignments to work with:

1. *Justified* – even alignment at left and right – is used to provide an official tone to your document
2. *Left* – with ragged right edge – sets a casual tone to your document
3. *Centred* – with left and right ragged edges – should only be used for one-page fliers and the like
4. *Right* – with ragged left edge – should only be used for specialised purposes as it is very difficult to read.
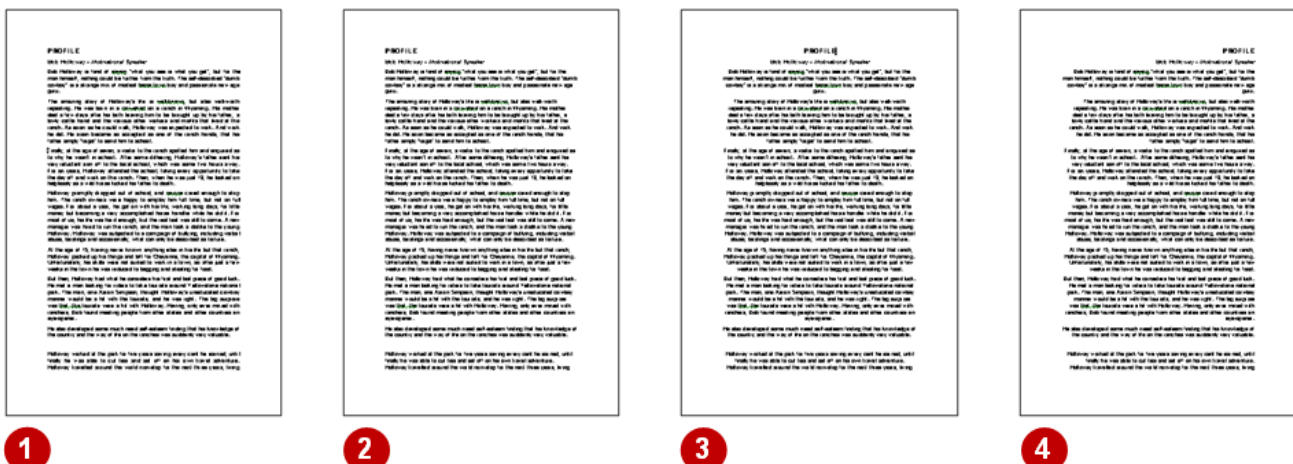
UNDERSTANDING WHITE SPACE

White space is a term used to describe the area on a page or in a document that is blank, that is, contains no text, picture, table, or other item. It is important to include areas of white space in a document, as this improves the readability of your document, especially where there are long blocks of text. There are a number of ways of controlling the amount of white space in your document.

Page Margins

Every page of your document contains four margins – top, bottom, left and right. These margins can be individually set from the edge of the page. The greater the margin, the larger the area of white space you will have on the page. The left margin is often set at a higher value than the right margin in documents and this is handy as it enables the reader to make notes in the margin if required.

You can adjust the document's page margins by clicking on *Margins* in the *Page Setup* group on the *Page Layout* tab.

Spacing Between Lines

Some documents, such as draft reports or essays, are often produced with text that is double-spaced. Double-spacing these documents makes them easier to review, especially where annotations or notes need to be written on the page. In Word you can set the spacing infinitesimally.

You can adjust the double-spacing of text by clicking on *Line spacing* in the *Paragraph* group on the *Home* tab.

Spacing Between Paragraphs

Large slabs of text can be easier to read by manipulating the spacing between paragraphs. You can normally set spacing before a paragraph and also after a paragraph. Spacing between paragraphs is usually measured in points – 72 points are equivalent to 1 inch (2.5 cm).

You can adjust the spacing between paragraphs by increasing or decreasing *Before* and *After Spacing* in the *Paragraph* group on the *Page Layout* tab.

Indenting

While page margins are measured from the page edge, indents are measured from the margin. Normally text appears between the left and the right margins. However, you can increase the spacing from the left or right margins by changing the paragraph indentation. Indentation can also be set to negative values so that they go back into the margins.

You can adjust the indentation of paragraphs by increasing or decreasing the *Left* and *Right Indent* in the *Paragraph* group on the *Page Layout* tab.
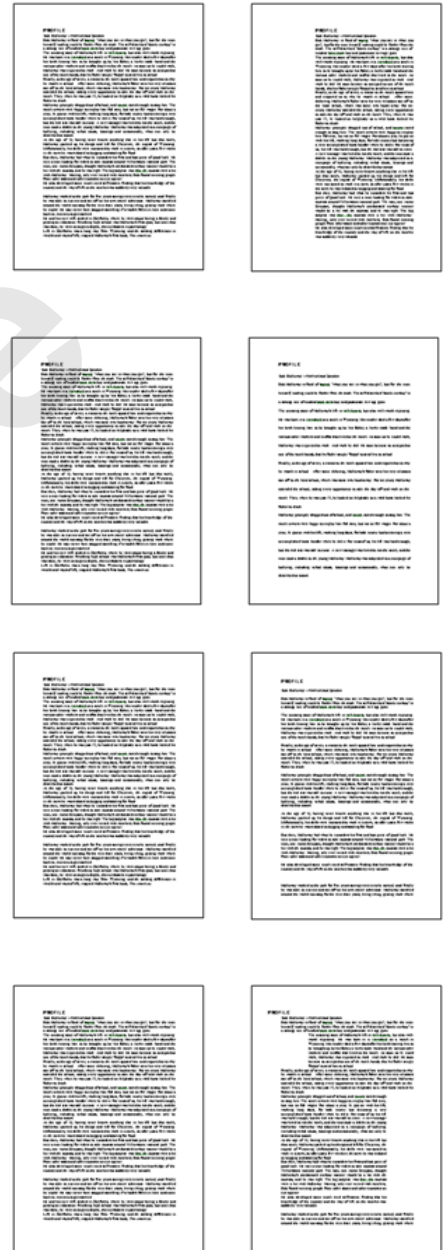
White Space – Pros and Cons

Pros

- Improves readability
- Allows reader to make notes and annotations
- Attracts interest

Cons

- Increases document size
- Higher printing costs due to page size

UNDERSTANDING TYPEFACE

In the past, printers used metal typefaces to determine the style of printing. In computers *typeface* refers to the type of font (the style of printing) and usually the size of the font used.

The typeface of your document often dictates the legibility of the document. Typeface can also reflect the tone of your document – formal, happy, sad, comic, and the like.
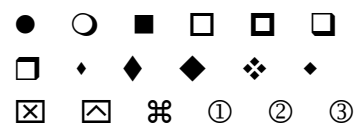
Fonts

Fonts refer to the style of print used. There are thousands of fonts available today. On your computer, fonts are installed in Windows and are made accessible to programs such as Microsoft Word. Factors to consider with your document are font category, font size, and font type.

You can view all available fonts and change the font used by clicking on the drop arrow for *Font* Calibri (Body) in the *Font* group on the *Home* tab.

Font Categories

There are several categories of fonts:

Old style fonts	Old style fonts developed from handwriting and are characterised by *serifs* – tiny tails that help the letters flow into one another. These fonts are used in larger publications such as reports, essays and books.	Cambria Times New Roman Bookman Old Style
Sans Serif fonts	Designed to appear uncluttered, *sans serif* fonts don't have the tails that serif fonts do. Sans serif fonts tend to be slower to read. They are usually used for documents that do not need to be read from beginning to end – e.g. brochures and flyers.	Calibri Arial Century Gothic
Script fonts	Script fonts are designed to look like handwriting.	Lucida Handwriting Bradley Hand ITC
Display fonts	Display fonts are often used for display or decorative purposes, often in headings. They are excellent for posters or flyers.	Comic Sans MS Broadway CASTELLAR
Wingdings	Wingdings are a special font that contain pictures rather than letters or numbers. They are used to place symbols such as telephones, a computer mouse, arrows, squares, scrolls, pointing fingers, and the like in documents.	● ○ ■ □ ❑ ❑ ❑ ◆ ◆ ◆ ❖ ◆ ☒ ☒ ⌘ ① ② ③

Font Size

The size of a font is measured in points (there are 72 points in an inch). In Microsoft Word 2010, the default font for a new blank document is Calibri and the size is 11 points.

The comfort factor with font sizes varies with age and reading skill. New readers, especially children, prefer larger sizes (around 15 points). Competent adult readers prefer sizes between 10 and 13 points, while older people prefer sizes between 13 and 14 points.

Font Style

Fonts also may have certain styles associated with them. The style may be normal (default), italic, bold, underline, or bold and italic. Bold and italics are used for emphasis. Italics are often used for short quotations (2 – 3 lines), unfamiliar foreign words, titles (books, songs, poems), and passing reference to inanimate objects (rockets, ships, planes, trains, cars).

UNDERSTANDING VISUAL ELEMENTS

Traditional documents, especially those created on typewriters, consist entirely of text. With word processing programs, however, it is possible to incorporate *visual elements* into your documents, such as photographs, logos, drawings, graphics and charts. These help to break up text, facilitate technical explanations, and generally make your documents more visually-appealing.

Visual elements are objects inserted into a document that are not text. They include graphics, photographs and drawings.

Graphics

Graphics is a widely used term and can virtually be applied to all visual elements. In Microsoft Word the term is mostly used to refer to graphs or charts from a spreadsheet application, or self-contained images such as logos, SmartArt or Clip art. Clip art are usually entire pictures (such as cartoons) or drawings and are stored as separate files in a library or gallery.

You can insert graphics by using the tools on the *Illustrations* group on the *Insert* tab. Once inserted, you can position and edit selected graphics by using the tools on the *Picture Tools: Format* tab.

Photographs

As the name suggests, these are photographs that have either been scanned into the computer or captured on a digital camera. Photographs are stored in files (usually JPG files).

You can insert photos by clicking on *Picture* ![icon] on the *Illustrations* group on the *Insert* tab.

Drawings

Drawings can be created with Microsoft Word using the *Shapes* tool ![icon] and consist of combinations of lines, squares, circles, and other shapes to form composite objects such as diagrams, flow charts, organisational charts, logos, and the like. Unlike the other visual elements, they are created within the document rather than inserted, pasted or imported from a file format.

You can insert and create shapes and drawings by clicking on *Shapes* ![icon] on the *Illustrations* group on the *Insert* tab.

When To Use Visual Elements

Visual elements can be used to:

- enhance or explain aspects introduced in the text
- add relief (usually comic)
- fill a large area that would otherwise be empty
- make the document more attractive to the reader
- reduce the amount of textual explanation required.

Where To Place Visual Elements

Visual elements can be placed anywhere on a page in a document. In Microsoft Word they can be placed on the page and in line with the text with the text wrapping around them, behind the text, or floating on the page.

Visual elements can be resized to look comfortable within the constraints of the overall layout of the page and document. However, be aware that reducing an element too much may render it illegible and useless.

Some publications have visual elements in consistent positions, either at the top or bottom of the page. If this is the case it is usually expected that the element will include a caption. In Microsoft Word you can use captioning to apply automatic caption and figure numbers.

Visual elements can provide balance to your document page.

UNDERSTANDING RULES AND BORDERS

Borders, boxes and lines are simple yet effective design elements that you can use to break up content on a page and to make the overall layout more appealing to the reader. In word processing jargon however, there is a great deal of ambiguity over these terms. In general, *rules* are lines placed on a page, while *borders* are lines placed around an item such as a box, border, or even the page.

Rules

Rules are lines usually placed above, below, to the left or to the right (rare) of text. They are used as a means of separating text from its predecessor or successor, for grabbing the reader's attention, or for emphasis.

In Microsoft Word, rules (lines) can be applied to one or more paragraphs using *Borders* in the *Paragraph* group on the *Home* tab (see sample *1*).
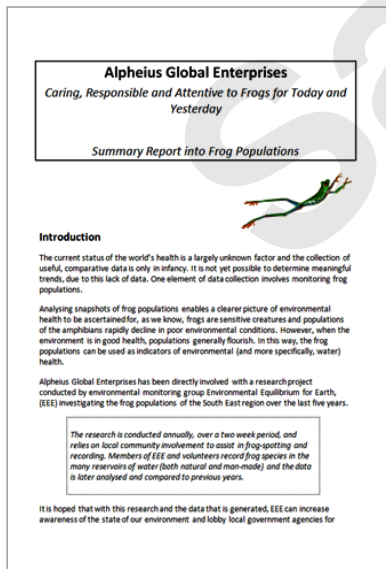
Borders

Borders are lines drawn around something, such as a paragraph, a page, an image, or the like.

There are several commands in Microsoft Word for drawing borders around elements, depending on the type of object you are applying a border to.
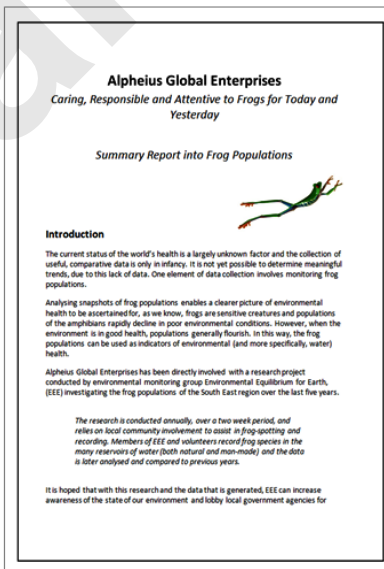
For example, you can apply a border to one or more paragraphs using *Borders* in the *Paragraph* group on the *Home* tab (see sample *2*). You can use *Page Borders* in the *Page Background* group on the *Page Layout* tab to apply a border to the page (see sample *3*) or to create a vertical rule on every page (see sample *4*).
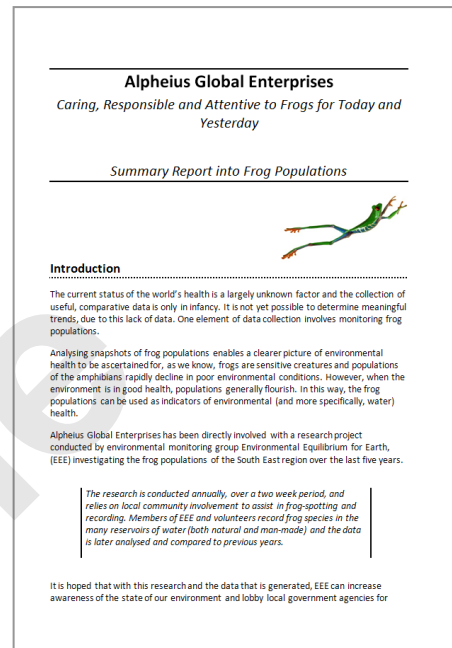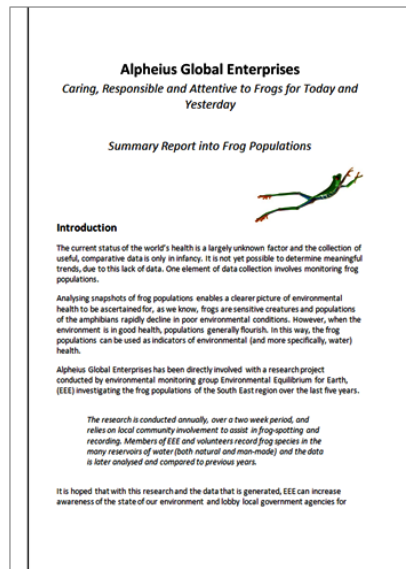
1

2   **3**   **4**

Weight

In word processing jargon the thickness of a rule or border is known as the weight of the line. The weight is usually measured in points. In Microsoft Word you can adjust both the weight of the line and the distance that it appears from the text. This is done using options found in the *Borders and Shading* dialog box, which is accessed by clicking on *Borders* in the *Paragraph* group and selecting *Borders and Shading*.

UNDERSTANDING HEADINGS

Headings provide structure to long documents that run over several pages and enable the reader to quickly locate the information they're looking for. Word processing programs provide a number of tools that will help you to create and organise headings effectively within a document. In Microsoft Word, headings are best created by applying a ***heading style*** to text.

Purpose of Headings

Headings are used to divide paragraphs and sections of a document into related chunks, thereby making it easier for readers to locate specific text or items, especially in longer documents. Headings are also used to enhance the look of your document by breaking up long slabs of text.

Heading Levels

Headings mark the various sections and sub-sections of a document. Not including the main title of your document, it is generally considered that four levels of headings within a document are more than adequate (Microsoft Word actually has nine levels of heading styles – more than enough for your documents!)

Using the available heading styles in the default template, the heading structure would appear as shown below.

Sections (First level heading)

Sub-sections (Second level heading)

Sub-sub-sections (Third level heading)

Sub-sub-sub-sections (Fourth level heading)

Heading Formats

As a rule, the higher the heading level, the greater the font size that will be applied to that heading. Conversely, lower-level headings will be smaller in font size, and may also have a particular font style applied to the heading, such as italics.

As a guide, some formatting options for these various heading levels are presented in the following table.

Level	Size	Font	Style	Space Above	Numbering
Heading 1	14 points	Cambria	Bold	Page Break + 24 points	1
Heading 2	13 points	Cambria	Bold	10 points	1.1
Heading 3	11 points	Cambria	Bold	10 points	1.1.1
Heading 4	11 points	Cambria	Bold Italic	10 points	1.1.1.1
Normal	11 points	Calibri	Normal	0 point	

Generally, if the body text is in a sans serif font (e.g. Calibri) the headings should be in a serif font (e.g. Cambria), or vice versa.

UNDERSTANDING PAGE LAYOUT

The *layout of a page* can be managed both horizontally and vertically. Too many documents are created using 1 inch margins simply because the document creator doesn't know any better.

Imaginative layouts attract readers to documents, encourage the reader to keep reading, and to some extent, inform the reader of your skill and ability in presenting information.

Horizontal Page Management

Basically, horizontal page management is achieved through the use of columns. There are four common variations for documents.

1. A single column of text
2. Two equal-width columns of text
3. Three or more equal-width columns of text (this is not recommended)
4. Two columns of unequal-width, with or without text in both columns.

Vertical Page Management

Vertical page management should remain consistent to ensure that the pages appear coherent to the reader. Generally:

1. Long documents usually consist of three areas: the header at the top, the body of the text in the middle, and the footer at the bottom of the page.
2. In shorter documents such as fliers, brochures, newsletters and so on, interest can be created by varying the number of columns. When doing this, the element of the largest size should be in the lower part of the page.

Header

Footer

UNDERSTANDING COMPUTER GRAPHICS

Word processing programs such as Microsoft Word have become fully-fledged desktop publishing programs, as well as providing a range of tools to edit images. This allows you to easily insert and work with images directly in Word. While there are many different image file types, there are only two basic graphic types: *bitmap* (also known as *raster*) and *vector*.

❶ Bitmap Images

Bitmap images are essentially a series of dots or squares that make up the image and are formed using a rectangular grid of squares or pixels (dots). Each pixel in an image contains information that defines its level of greyness or its colour tone. The number of dots in a given area is often referred to as resolution – the more dots in a given area, the higher the resolution and the better the quality of the image.

Dots are almost infinitely changeable and can be used to display just about any type of image imaginable. Dots are most commonly used, for example, to display photographs – in this way the number of pixels in a photograph determines its graininess.

Bitmap, or raster, images are made up of a fixed number of pixels. Therefore, the clarity of the image is greatly determined by how large it is when it is displayed. Bitmap images tend to become blurred and jagged as they are blown up in size.

Another aspect to consider for bitmap images is file size. The quality of the image in a bitmap file is determined by the resolution or the number of dots within a given area. Resolution is often measured in dots per inch (dpi) – the greater the number of dots per inch (dpi), the higher the resolution and the better the quality of the image. However, greater resolutions require more dots which in turn take up more file space and as a result file sizes are determined by the resolution of the image.

Generally, bitmap images used on screen should be around 72 dpi, while images used for printing should be around 300 dpi. Bitmaps have become the preferred image type for on-screen and electronic publications.

Common bitmap file types are *JPEG* (Joint Photographic Experts Group), *PNG* (Portable Network Graphic), *TIFF* (Tagged Image File Format), and *BMP* (Windows Bitmap).

Bitmap image – small and enlarged
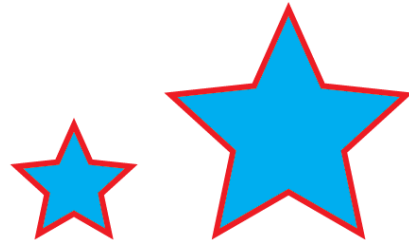
Vector image – small and enlarged

❷ Vector Images

Vector images are made up of shapes and objects with mathematically defined curves and line segments, and are not associated with dots or tied to a grid arrangement. When vector images are displayed, they are calculated to fit to the screen or printer used. The curves and lines are automatically recalculated to fit within the boundaries of the designated area – as such vector images are sometimes known as scaleable images as they can be infinitely scaled. Unlike bitmap images, vector images have smooth edges and therefore do not suffer degradation as they are enlarged.

Because they are resolution independent and can be scaled upwards infinitely, most print publishers prefer to use vector images for simple images where smooth edges (as opposed to the jagged edges of bitmap images) and lines are required. Typically, these images may be logos, plans, drawings, and the like.

Common vector file types are *EPS* (Encapsulated Postscript), *CGM* (Computer Graphics Metafile) and *WMF* (Windows Metafile).