

# *Edexcel*

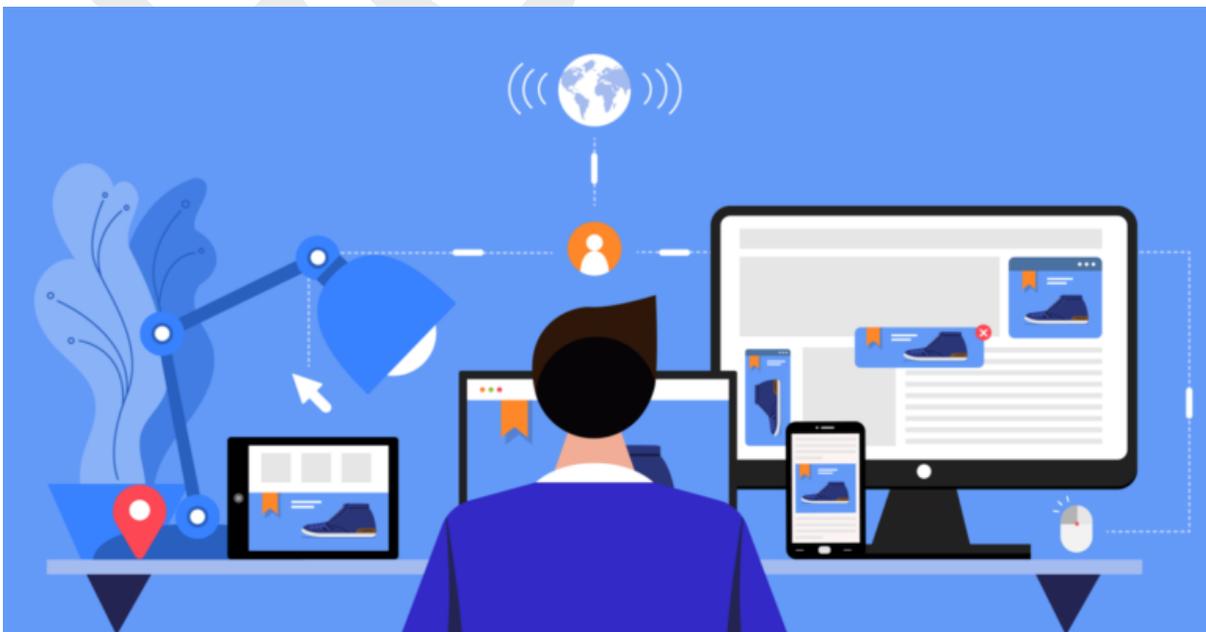
## *IGCSE - ICT*

*CODE: (4IT1)*

*Unit 05 – Chapter 14 to*

*Chapter 18*

*Software skills*



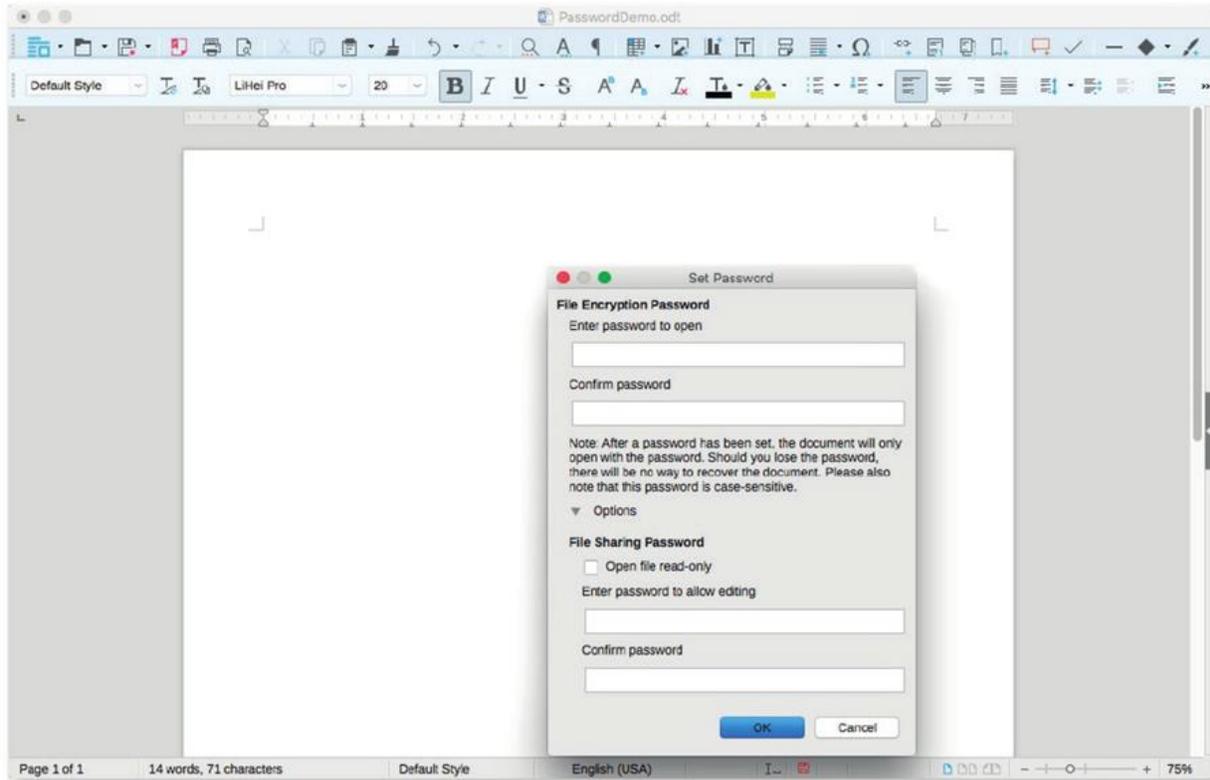
## Chapter 14 – File management

### SAVING WORK

When you are creating digital products, it is important that you save your work regularly. This is to make sure that you have a copy of your work in case the application crashes or you lose power to your computer. This should include saving your work frequently to secondary storage.

### SECURING FILES

You can secure your files by adding a password to be able to read or edit the file, as shown in Figure 14.1.



▲ Figure 14.1 Applications often have **built-in** features that allow you to secure your files

### NAMING FILES

It is important to use sensible filenames. A sensible filename describes the contents of a file so that it can be found easily.

The following points are some of the considerations that will help you to decide on a good filename.

- You might choose to name it Poster. However, you might make more posters later.
- You could name it First Poster, to be followed by Second Poster, third poster and so on, but in the future you may not remember what Second Poster referred to.
- You could name it Sports Club Poster, but what would happen if you were asked to create a different sports club poster in the future? What if you needed to create more than one poster for the same club?

If you need to use more than one word in your filename, you should not use spaces between the words. This is because the spaces can cause problems with some software. Instead, you can use **snake case**.

▼ Table 14.1 Examples of good filenames

PRODUCT	FILENAME	REASON
A poster for the City Sports Club's Summer 2018 Activity Week	CSC_Summer18_ActWeek	<ul style="list-style-type: none"> <li>• CSC for City Sports Club</li> <li>• Summer18 for the date</li> <li>• ActWeek for the event (Activity Week)</li> <li>• _ used to separate words (snake case)</li> </ul>
A presentation to your school about a fundraising day on 16th November 2018	School_Charity_Presentation_181116	<ul style="list-style-type: none"> <li>• Describes the event</li> <li>• Uses snake case</li> <li>• Gives the date in reverse so that the files will appear in date order when they are sorted by name</li> </ul>

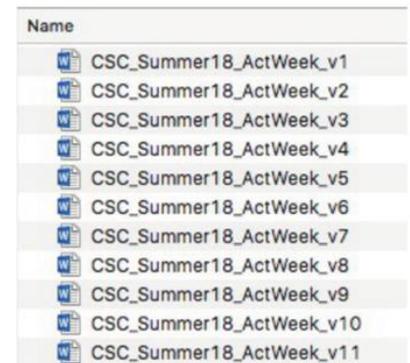
**SUBJECT VOCABULARY**  
 snake case using underscores (underlines) to separate words in a filename

### VERSIONING

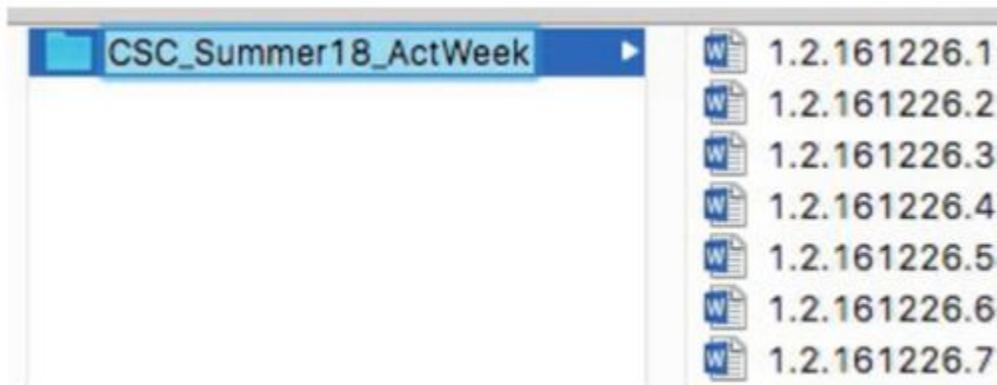
As you make changes to a file, you can name it with a version number. This is known as versioning, and it allows you to return to earlier versions of the same document at a later date.

You could also include the date in your versioning by using the format MAJOR.REVISION.BUILDdate.BUILDnumber. For example, 1.2.161226.5 specifies the following information.

- MAJOR: version 1
- REVISION: 2
- BUILDdate: 161226 (26th December 2016)
- BUILDnumber (from that BUILDdate): 5



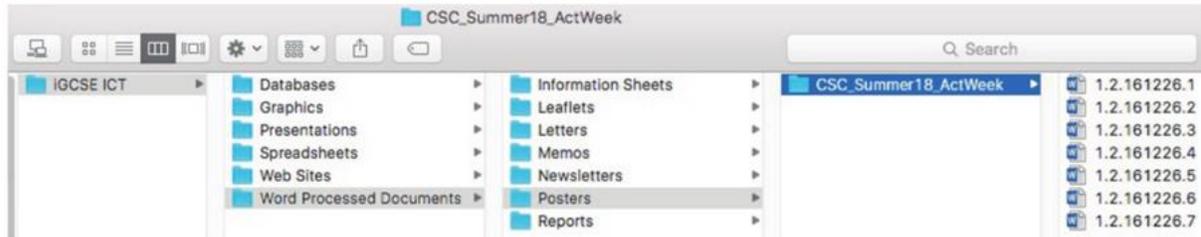
▲ Figure 14.2 An example of versioning



▲ Figure 14.3 A folder titled CSC\_Summer18\_ActWeek containing versions of files

### FOLDERS

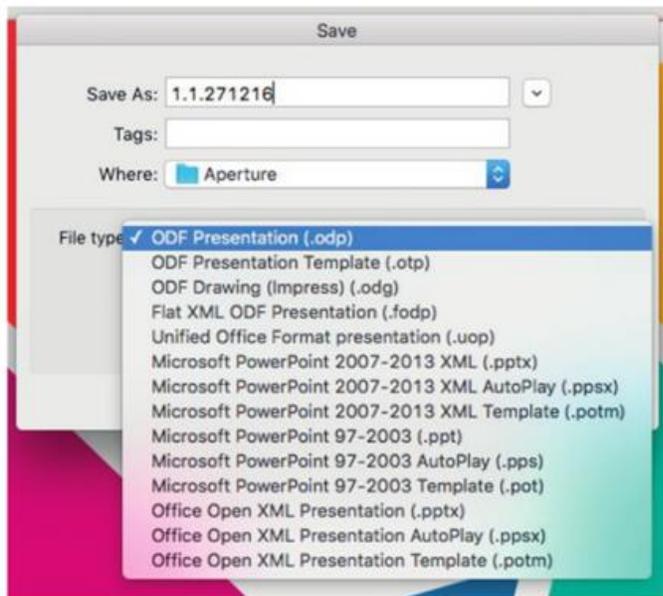
You can use a folder structure to keep your folders and files organised. This ensures that your files remain organised and also lets you know what type of documents are inside the folder. In turn, the Posters folder could be placed inside a folder called Word Processed Documents, as shown in Figure 14.4.



▲ Figure 14.4 Keep your folders organised so that you can find your files easily

FILE FORMATS

Software applications can only read files that are saved in compatible formats. For example, presentation applications cannot open files saved in a format used by spreadsheet applications. It is good practice to save your files in a format that will be compatible with the software that you will use to edit it. When saving files, you can choose to save them in different formats.



**SUBJECT VOCABULARY**  
**transparency** areas of an image that do not have a colour value, including white, are made see-through; if transparency is unavailable due to the file format, those areas are displayed as white

**SUBJECT VOCABULARY**  
**file extension** the letters at the end of the name of a computer file, which show what type of file it is, such as .doc

▲ Figure 14.5 Files can be saved in different formats, such as ODF Presentation (.odp) in this example

▼ Table 14.2 Examples of application file formats and their related published file formats

APPLICATION TYPE	APPLICATION	APPLICATION FILE FORMAT	PUBLISHED OR EXPORTED FILE FORMAT
Word processor	Microsoft® Word	.docx	.pdf
Presentation	LibreOffice® Impress	.odp	.ppsx
Graphics	GIMP	.xcf	.jpeg .png
Web authoring	Serif® WebPlus	.wpp	.html

Different published graphics file formats have different properties. For example, to keep the **transparency** of an image, you could choose to export it as a .png file.

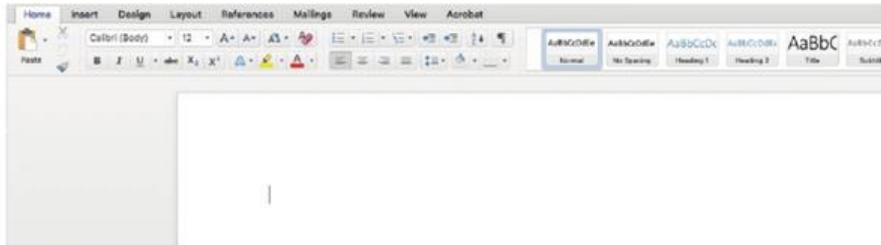
# Chapter 15 – Word processing

**SUBJECT VOCABULARY**  
**cursor** a movable point on a screen that identifies the point that the user's input will affect

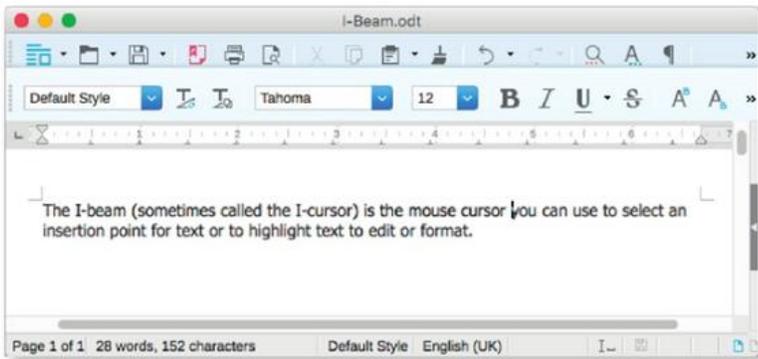
## ENTER AND EDIT TEXT

When you open a word processing application, it will open a new document or ask you to choose a type of document to open. When you type into the document, characters will appear beside the **cursor**.

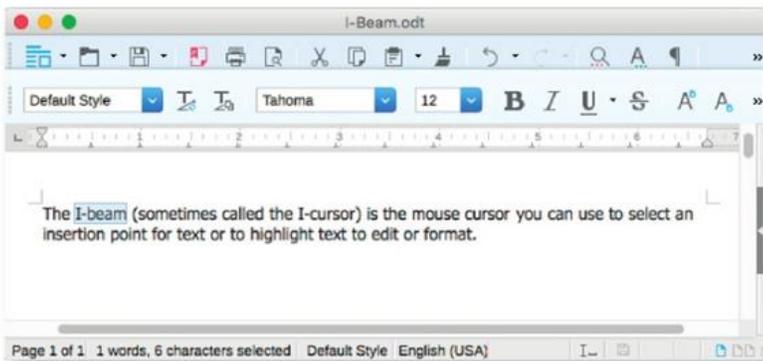
The I-beam (sometimes called the I-cursor) is the mouse cursor that you can use to choose the insertion point for text or to highlight text to edit or format.



▲ Figure 15.1 The I-beam



▲ Figure 15.2 In this screenshot from LibreOffice Writer, the insertion point has been positioned between the words 'cursor' and 'you'



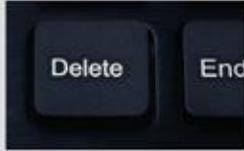
▲ Figure 15.3 In this screenshot from LibreOffice Writer, the I-beam has been used to highlight the text 'I-beam'

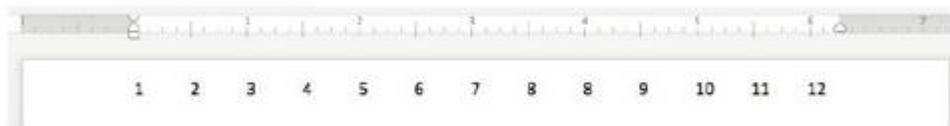
▼ Table 15.1 Common keys and their functions

KEY	IMAGE	FUNCTION
Return		Creates a new line and moves the insertion point to that new line
Space		Inserts a space between characters
Caps Lock		Sets the text entry mode to upper case (capital) letters

**SUBJECT VOCABULARY**  
**indent marker** a point at which text can be moved in from a margin, used to produce standardised spacing between text

▼ Table 15.1 – continued

KEY	IMAGE	FUNCTION
Backspace		Removes the text to the left of (behind) the insertion point, either one character at a time or entire highlighted sections of text.
Delete (Del)		Removes the text to the right of (in front of) the insertion point, either one character at a time or entire highlighted sections of text.
Shift		<ul style="list-style-type: none"> <li>Used to access second-function characters or commands. For example, the second-function symbols in Figure 15.4 are &lt;, &gt; and ?.</li> </ul>  <p>▲ Figure 15.4 First- and second-function symbols on a keyboard</p> <ul style="list-style-type: none"> <li>Used to create capital letters by holding down the shift key while pressing a letter.</li> </ul>
Insert		Switches between insert mode and overwrite mode. Insert mode lets you enter text to the right of the insertion point, moving the existing text along as you type. In overwrite mode, the characters to the right of the insertion point are replaced by the text entered.
Tab		Moves the insertion point to the next <b>indent marker</b> . In Figure 15.4, each number in the image is aligned with an indent marker. For more information about tabs, see page 216.



▲ Figure 15.5 Indent markers in Microsoft Word

## SPELLING, PUNCTUATION AND GRAMMAR (SPAG)

To help you check your spelling, punctuation and grammar, you can use automated checking tools to proofread your work as you type.

In Figures 15.6 and 15.7, the automatic checking tools in Microsoft® Word and LibreOffice Writer indicate that 'thi' is misspelled. You can see that both applications indicate the misspelling with red underlining. Both applications also indicate a grammatical error ('a' instead of 'an') with blue underlining.

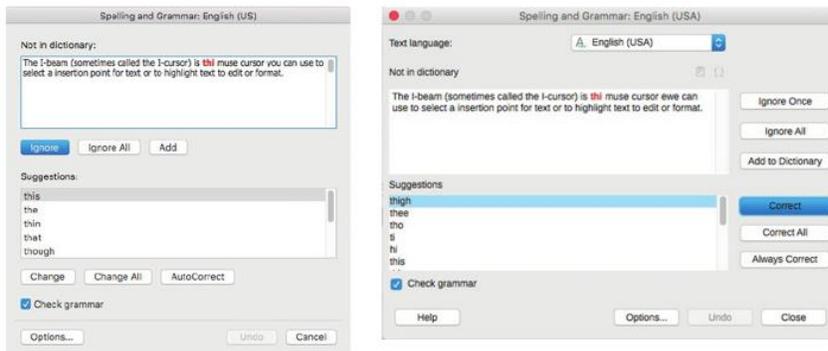
Neither tool highlights the incorrect use of the word 'muse', which should read 'mouse', because 'muse' is also a word that is spelled correctly. This is one reason why it is important to proofread your work yourself, rather than only relying on checking tools, because automated systems will not pick up all errors.

The I-beam (sometimes called the I-cursor) is thi muse cursor you can use to select a insertion point for text or to highlight text to edit or format.

▲ Figure 15.6 Automatic spell checker running on text in LibreOffice Writer

The I-beam (sometimes called the I-cursor) is thi muse cursor you can use to select a insertion point for text or to highlight text to edit or format.

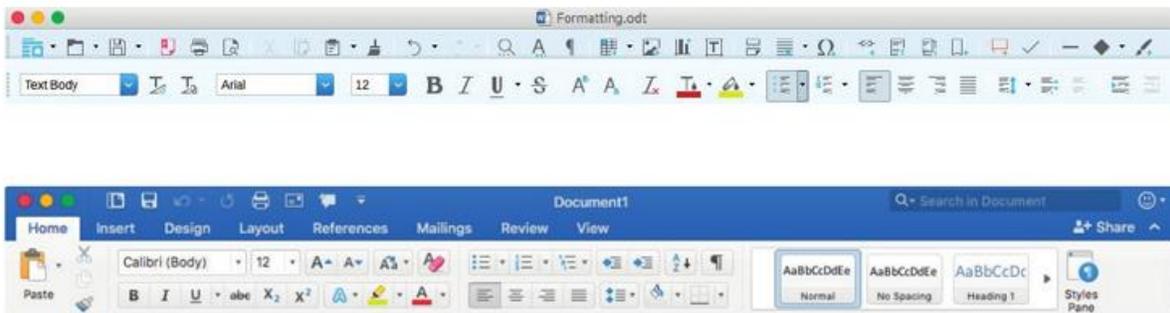
▲ Figure 15.7 Automatic spell checker running on text in Microsoft Word



▲ Figure 15.8 The spell-checking tools in Microsoft Word (left) and LibreOffice Writer (right) suggest different words to replace the incorrectly spelled word 'thi'

## FORMATTING

You can use a range of effects to change the appearance of your document. Word processing software usually provides a number of formatting tools, as shown in Figure 15.9.



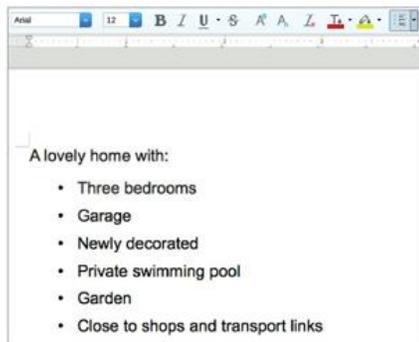
▲ Figure 15.9 The formatting tools available in LibreOffice Writer (top) and Microsoft Word (bottom)

## PARAGRAPH FORMATTING

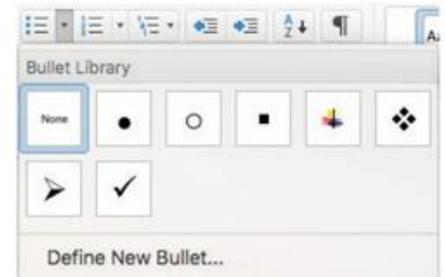
Paragraph formatting affects the layout of the document.

### BULLET POINTS

To emphasise key points in your document, you can use bullet points. Bullet points are set out as a list, with each point on a separate line, preceded by a symbol. Usually this symbol is a filled-in circle, but you can use many different symbols including squares, arrows and ticks or crosses.



▲ Figure 15.10 This screenshot from LibreOffice Writer shows that the bullets icon on the right has been selected by the user



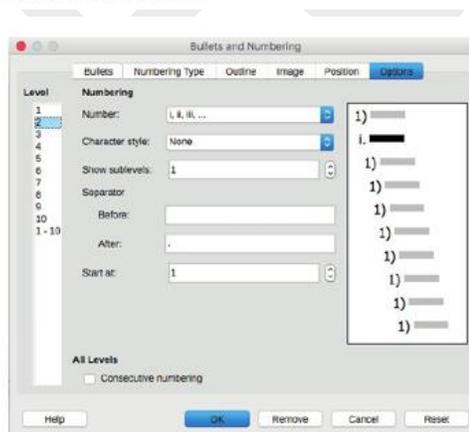
▲ Figure 15.11 Some different bullet symbols available in Microsoft Word

### NUMBERING

Numbering is used for ordered lists, either when it is important to show a numerical order or to show that some items take priority over others. Numbering can use numbers (1, 2, 3, 4), letters (a, b, c, d), and Roman numerals (i, ii, iii, iv).



▲ Figure 15.12 This screenshot from LibreOffice Writer shows that the numbering icon on the right has been selected by the user



▲ Figure 15.13 You can choose the style of bullet or number for different levels; in this screenshot from LibreOffice Writer, the style of the second level (selected left) has been set to use Roman numerals (previewed right)

## Alignment

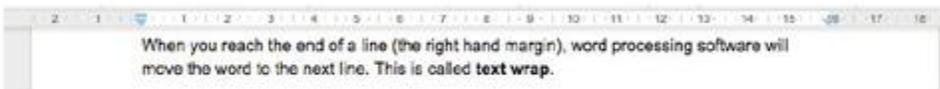
Alignment refers to the position in which text appears on the page. For example, text can be aligned so that it starts on the left page margin or so that it finishes on the right page margin. This is done using the alignment buttons shown in Figure 15.14.

### SUBJECT VOCABULARY

**page margin** in a word processing application, the white area of the ruler ends and the grey part begins



▲ Figure 15.14 Alignment buttons in three different word processing applications (left to right: Google Docs™, LibreOffice Writer, Microsoft Word)



▲ Figure 15.15 The page margins in Google Docs

- **Left-aligned:** If the text is left-aligned, the beginning of each line of text will start at the edge of the left page margin.
- **Right-aligned:** If the text is right-aligned, the end of each line of text will finish at the edge of the right page margin.
- **Centre-aligned:** If the text is centre-aligned, the middle point of each line of text will sit at the middle point of the page between the left and right page margins.
- **Justified:** If the text is justified, it will start at the edge of the left page margin and enough space will be added between words and letters so that the text fits the width of the page, with the last character of each line ending at the edge of the right page margin. If there are only a few words on a line, then they will not be justified.

This paragraph has been **left aligned** so that it starts at the left margin. The spacing between each word is consistent, so some lines do not stretch all the way to the right margin.

This paragraph has been **right aligned** so that the lines of text end at the right margin. The spacing between each word is consistent, so some lines do not begin on the left margin.

This paragraph has been **centre aligned** so that equal parts of each line of text appear on either side of the centre line of the page. The spacing between each word is consistent, so not all the lines of text stretch all the way to either the right or the left page margin.

This paragraph has been **justified** so that it starts at the left page margin and ends at the right page margin. The spacing between words changes so that all the lines of text stretch all the way across the page (except for the final line, which is not long enough to be justified).

▲ Figure 15.16 Examples of text alignment

### TABS (INDENTATION)

You can use tabs to move text away from a margin or to produce standardised spacing between text.

This text uses tabs before each word, not spaces

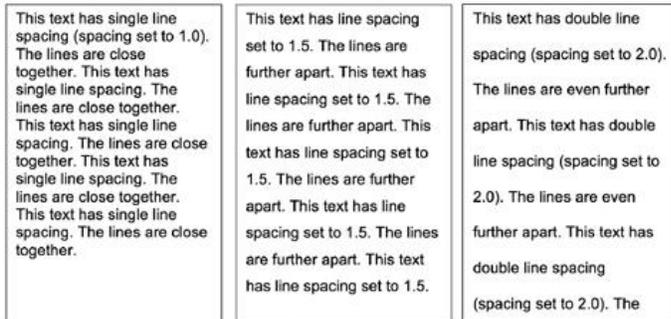
▲ Figure 15.17 This text has been spaced using tabs

### LINE SPCING

You can change the line spacing of your document if you want to add more space between the lines of text. This can improve the readability of the document and provides space for people to make hand-written notes in between the lines of your text when printed.



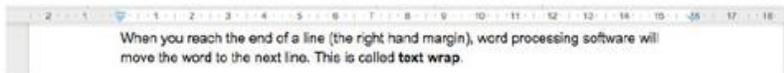
▲ Figure 15.18 The different line spacing options in Microsoft Word



▲ Figure 15.19 Examples of different line spacing in LibreOffice Writer

### TEXT WRAP

When you reach the right page margin at the end of a line, word processing software will move the last word to the next line if it is too long to fit on the current line. This is called text wrap and is shown in Figure 15.20.



▲ Figure 15.20 In this screenshot from Google Docs, the word 'move' cannot fit at the end of the line so it has been wrapped to the next line

### FONT FOMMATING

Font formatting affects the appearance of the text in your document.

### COLOUR

You can change the colour of the text using the tools listed in the Format or Font menu, as shown in Figure 15.21.



▲ Figure 15.21 Changing the colour of text in Microsoft Word

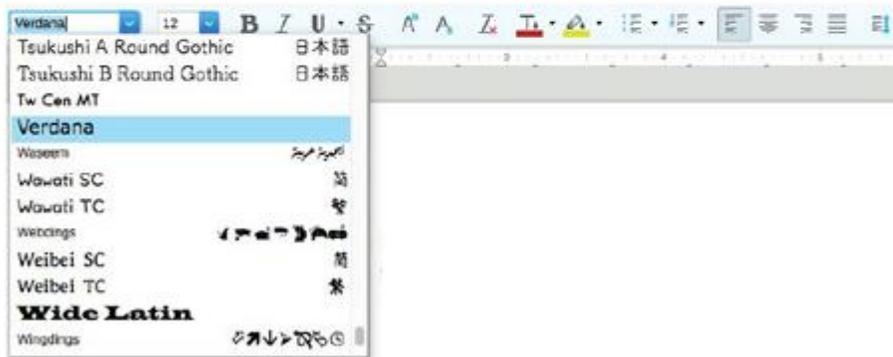
### FONT SIZE AND STYLE

The text that you enter can be made larger or smaller by altering the font size, as shown in Figure 15.22. Using different font sizes is useful if you are trying to show a visual hierarchy, in order to make some items in a document look more important than others.



▲ Figure 15.22 Font size can be changed using a drop-down menu in LibreOffice Writer

The font can also be changed using a drop-down menu, as shown in Figure 15.23. For example, you could choose to use one font style for the body text and a different font style for headings, but it is often best to limit the number of fonts used in a document.



▲ Figure 15.23 Word processing software such as LibreOffice Writer comes with many built-in font styles and more can be installed if necessary

▼ Table 15.2 Sans serif fonts

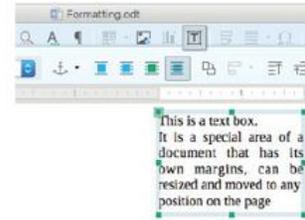
Arial font style – size 8	Trebuchet MS font style - size 8
Arial font style – size 10	Trebuchet MS font style - size 10
Arial font style – size 12	Trebuchet MS font style - size 12
Arial font style – size 14	Trebuchet MS - size 14

▼ Table 15.3 Serif fonts

Times New Roman font style – size 8	Garamond style – size 8
Times New Roman font style – size 10	Garamond font style – size 10
Times New Roman font style – size 12	Garamond font style – size 12
Times New Roman font style – size 14	Garamond font style – size 14

### Text boxes

You can use a text box to place text in a precise location on the page. The text box creates a moveable and resizable area of a document that has its own margins, as shown in Figure 15.24.

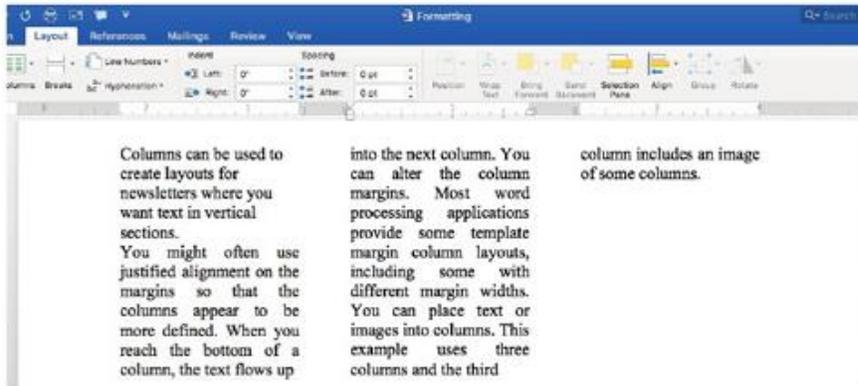


▲ Figure 15.24 A text box in LibreOffice Writer

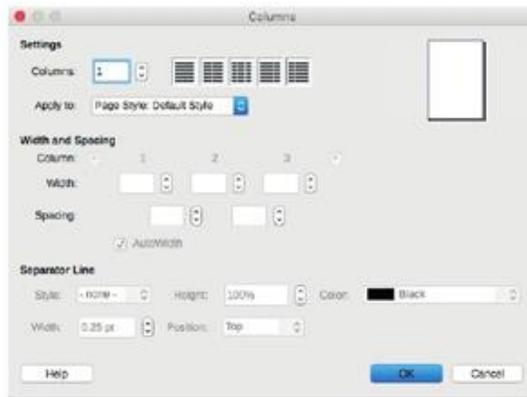
### COLUMNS

You can choose to have your lines of text laid out in vertical columns, rather than running all the way across the page. This is the sort of layout you generally see in newspapers and newsletters.

When you want text from the first column to move up into a second one, you can use a column break from the Breaks menu.



▲ Figure 15.25 A document laid out using a column layout in Microsoft Word; read the text for more guidance on the use of alignment in columns



▲ Figure 15.26 Most word processing applications, such as LibreOffice Writer, provide advanced options for columns

### TABLES

Another way to arrange text in a document is by using tables. Tables are useful for displaying comparisons between different pieces of text. Like columns, they keep the text aligned but have more features than columns.

A table is made up of rows and columns of cells. For example, in the table shown in Figure 15.27, the red-shaded area is a row of four cells. The area with thick borders is a column of three cells.

	Right		

▲ Figure 15.27 A table

### Alignment

Just like the body text on a page, the text in cells can be aligned left, right or centre, or it can be justified. Text can also be aligned to the top, the middle or the bottom of a cell.



▲ Figure 15.28 The alignment options for text in a table in Microsoft Word

### Merge

You can merge different cells together to form one large cell. This is useful for creating headings in tables, as shown in Figure 15.31.



▲ Figure 15.29 Cell text alignment options in Microsoft Word

Left Top	Centre Middle	Right Bottom
----------	---------------	--------------

▲ Figure 15.30 Aligning text in a cell

The four cells in the top row of this table have been merged together			
		These two cells have been merged	

▲ Figure 15.31 Merging cells

### Split

In some word processing applications, you can also split cells in a table. Cells can be split vertically and horizontally, as shown in Figure 15.32.

**Before splitting**

One cell			
	Two cells		
	Three cells	here	

**After splitting**

Split	into two		
	Two cells split into...		
	...one column and two rows		
	Three cells split into...	...two columns and one row	

▲ Figure 15.32 A table before and after some of its cells have been split

One example of using this feature would be to show groups of information, as in the fitness training plan in Figure 15.33.

Section 1 (Base)	Week 1	2 × 30-minute run 3 × 10-minute rowing
	Week 2	2 × 40-minute run 3 × 15-minute rowing
Section 2 (Endurance)	Week 3	3 × 45-minute run 4 × 10-minute rowing
	Week 4	3 × 50-minute run 4 × 20-minute rowing
Section 3 (Taper)	Week 5	3 × 25-minute run 3 × 15-minute rowing
	Week 6	2 × 30-minute run 2 × 10-minute rowing

▲ Figure 15.33 A training plan with some cells merged to show the way in which information is grouped

## Gridlines

Some word processing applications have a gridlines feature that makes the table layout visible while you are working with it. However, the gridlines are not printed or shown when the final version of a document is exported.



▲ Figure 15.35 In LibreOffice Writer, the grid can be made visible in the Options settings

### With visible gridlines


### Without visible gridlines


▲ Figure 15.36 A table in Microsoft Word with and without visible gridlines

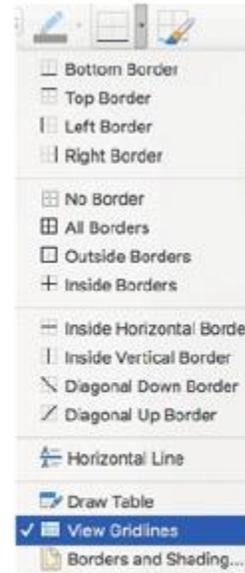
### With visible gridlines

Cell 1	Cell 2	Cell 3	Cell 4
Cell 5	Cell 6	Cell 7	Cell 8
Cell 9	Cell 10	Cell 11	Cell 12

### Without visible gridlines

Cell 1	Cell 2	Cell 3	Cell 4
Cell 5	Cell 6	Cell 7	Cell 8
Cell 9	Cell 10	Cell 11	Cell 12

▲ Figure 15.37 A table in LibreOffice Writer with and without visible gridlines



▲ Figure 15.34 Gridlines can be activated from the Borders menu in Microsoft Word

## Borders

Unlike gridlines, **borders** are visible when the document is printed or published. You can change the thickness and colour of the borders. Some word processing applications allow you to add patterned borders or repeated images to create a patterned border.

## Shading

You can use shading to apply different colours to different cells. For example, some of the cells in Figure 15.34 are coloured in order to highlight cells that have been merged or split. Similarly, in Figure 15.36, some cells are highlighted to make the table easier to read.

## PAGE LAYOUT

### Heading and subheading

The page layout relates to how content is positioned on the page.

To make the layout of your document consistent, you can use heading and sub-heading styles. These styles can be applied to heading text in order to apply a particular font style, size, formatting and colour to headings throughout a document. Figure 15.39 shows an example of heading styles.

**SUBJECT VOCABULARY**

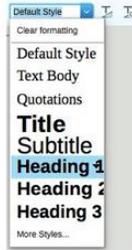
**borders** lines that surround the cells in a table



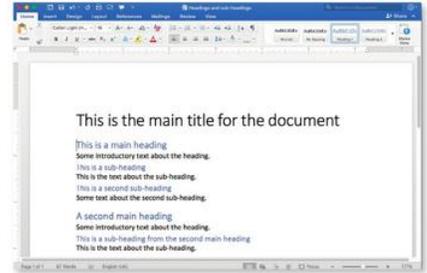
▲ Figure 15.38 The cell shading options in Microsoft Word



▲ Figure 15.41 The Styles options in Microsoft Word

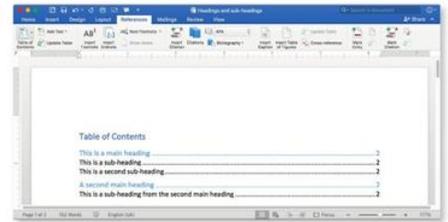


▲ Figure 15.42 The Styles options in LibreOffice Writer



▲ Figure 15.39 This document in Microsoft Word shows that Heading 1 has been selected for the text, 'This is a main heading'

When styles are applied to headings and sub-headings, they can also be used to create an automatic table of contents.



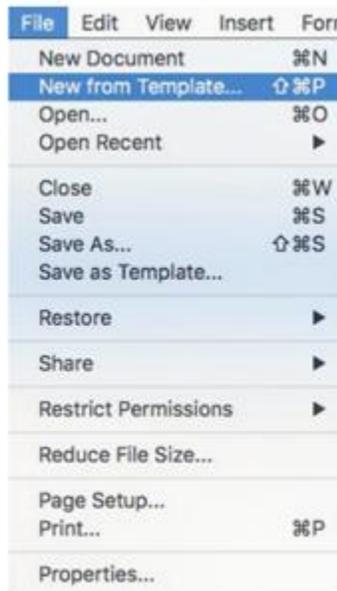
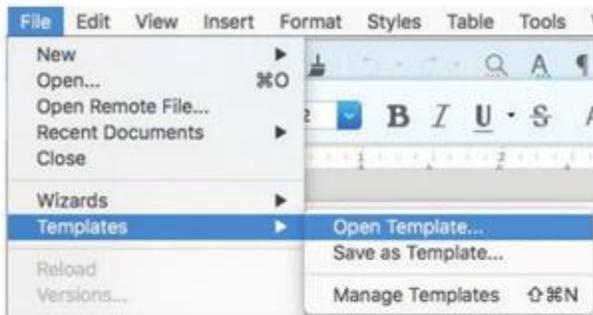
▲ Figure 15.40 This table of contents in Microsoft Word is created automatically from the styles applied to the text in Figure 15.39

### Lists

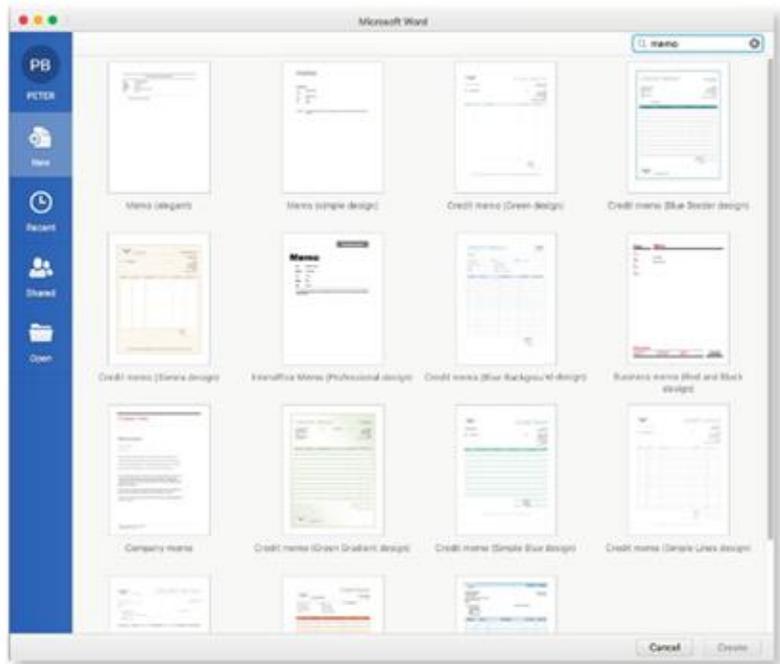
You learned about bullets and numbering on pages 213-215.

### Templates

You can create documents using an existing template. Using a template gives your documents a consistent style. In a business or organisation, this consistency is known as a house style. For more information about house styles, see Unit 5 Applying Information and Communication Technology (pages 188-189).

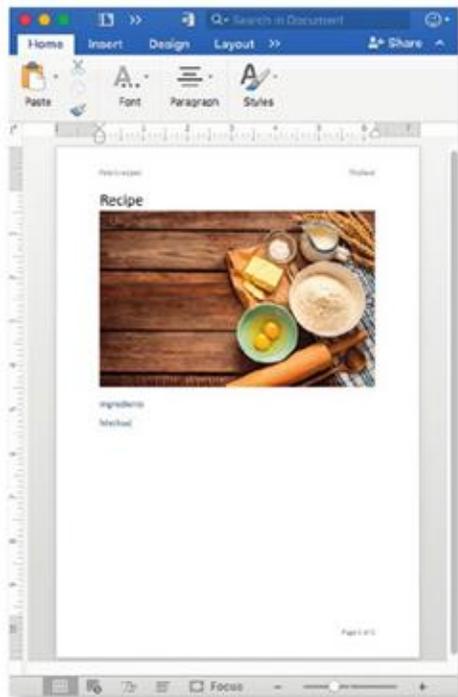


▲ Figure 15.43 You can often access templates by choosing the Templates option from the File menu (left to right: LibreOffice Writer and Microsoft Word)

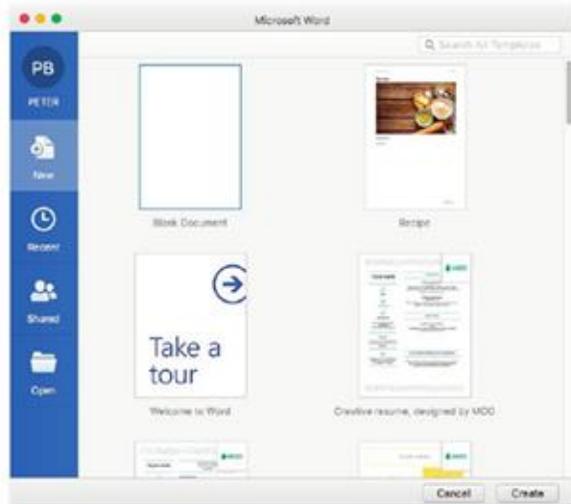


▲ Figure 15.44 Some applications have a feature that lets you search for online templates

You can also create your own templates by creating a document and saving it as a template from the File menu. The next time that you or someone else uses your template, you or they will be able to save the file as a document based on that template. For example, Figure 15.45 shows a new template that can be used to create chapters for a recipe book. In some applications, once the template file is saved, it will then appear in the list of available templates (see Figure 15.46).



▲ Figure 15.45 A new template in Microsoft Word for a chapter of a recipe book



▲ Figure 15.46 After saving the file as a template, it appears in the New Document window in Microsoft Word

## Header and footer

The header is the area at the top of a page in a document. It can contain text or graphics. The footer is the area at the bottom of a page that can also contain text or graphics.

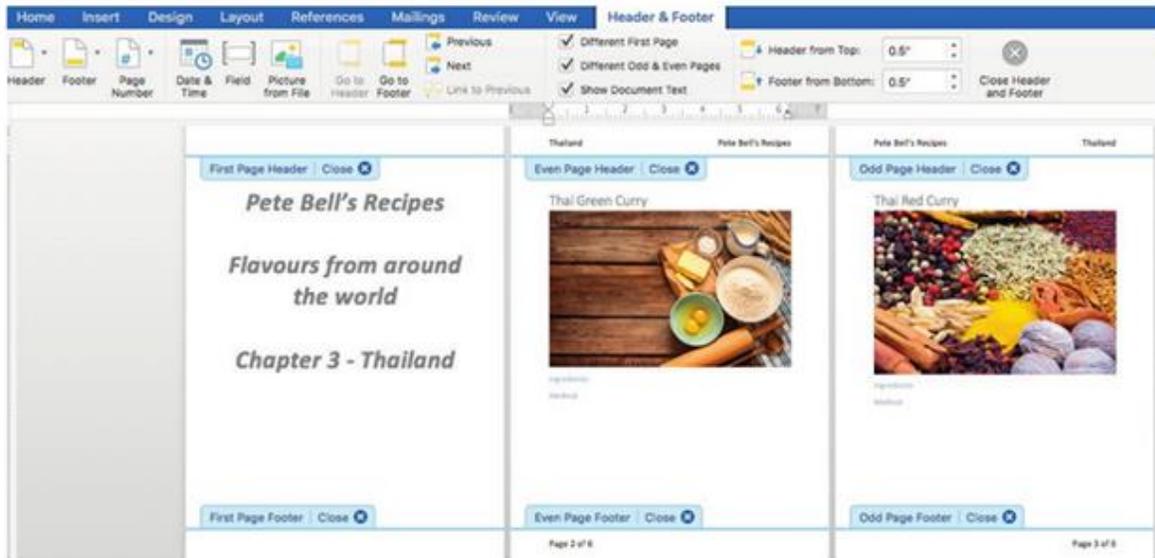
**SUBJECT VOCABULARY**

**header** the area at the top of a page or presentation slide that contains content to be repeated on every page or slide

**footer** the area at the bottom of a page or presentation slide that contains content to be repeated on every page or slide

The content in the header and footer is usually repeated on every page.

Common content for headers and footers includes the title of the document, the author's name, page numbers and the date and time when the document was created or modified.



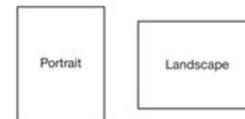
▲ Figure 15.47 You can set different headers and footers for odd, even and first pages of a document

## Page breaks

If you want to start a new page, such as for a new section or chapter in a document, you can insert a page break. This can be done using the mouse to select the Breaks menu or using the keyboard by pressing Ctrl+Enter on a Windows® PC or Command+Enter on an Apple® Mac®.

Inserting a page break ensures that the gap at the bottom of the page on which the page break is inserted will be. In this case, if you add text at the end of the first page, the text on the next page may be pushed down to accommodate all the line returns.

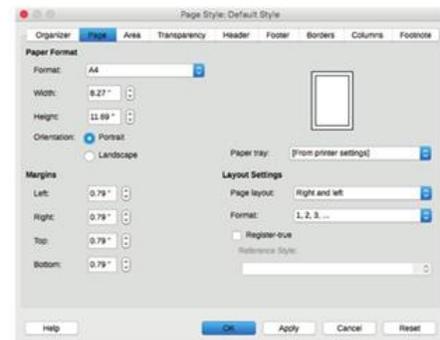
The orientation of a document affects the layout of the document. There are two orientations, as shown in Figure 15.48:



▲ Figure 15.48 Landscape and portrait orientations

- portrait, with the long side of the page vertical like a portrait painting
- landscape, with the long side of the page horizontal, like a landscape painting.

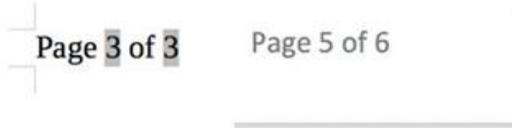
The default page orientation is portrait.



▲ Figure 15.49 Page Options allows you to change the orientation of the document in LibreOffice Writer

## Page numbering

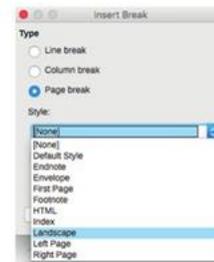
Page numbers can be included in the footer as a repeated element that appears on every page. They can be set to automatically increase as the document gets longer.



▲ Figure 15.51 Examples of page numbering in LibreOffice Writer and Microsoft Word

Changing the orientation will change the orientation of every page in the document.

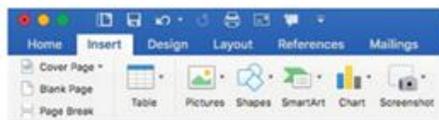
If you want to include a mixture of orientations in your document, as shown in Figure 15.50, you need to use section breaks or manual breaks. Section breaks can work in the same way as page breaks, but they split the document into different sections, each of which can have a different orientation.



▲ Figure 15.50 In LibreOffice Writer, a landscape page break is used to set the second page to landscape orientation

## DOCUMENT ELEMENTS

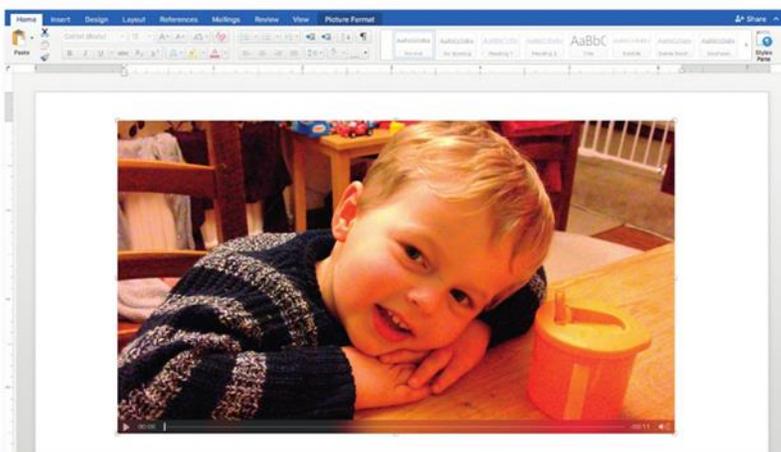
You can insert different types of elements into a document.



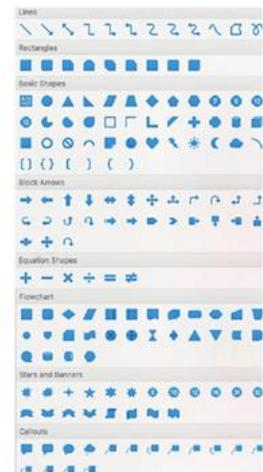
▲ Figure 15.52 Most document elements can be inserted from the Insert tab in Microsoft Word

These document elements include:

- charts and values from spreadsheets
- tables (see page 220)
- images, including screenshots
- videos, as shown in Figure 15.53
- shapes, as shown in Figure 15.54, including lines, geometric shapes, arrows, mathematical shapes, flow chart symbols, stars and banners and callouts
- text from other files, usually by copying it and then pasting it into your document text boxes (see page 219).



▲ Figure 15.53 Many types of element, such as video, can be inserted into a document



▲ Figure 15.54 Many different types of shape can be inserted into a document

## DOCUMENT TYPES

Word processing software can be used to create a number of different types of document, including letters and posters.

### Letters

When creating letters, it is a convention to start the document with a salutation and end it with a complimentary close. Table 15.4 contains examples of salutations and corresponding complimentary closes.

Table 15.4 Examples of salutations and complimentary closes

SALUTATION	COMPLIMENTARY CLOSE
Dear Mr Bell,	Yours sincerely,
Hi, Mr Bell!	Kind regards,

When creating a letter, it is also conventional to:

- include your own address, the recipient's address and the date of the letter
- put these different elements in standard places on the page, as shown in Figure 15.56
- sign the letter by hand.

Some application software provides templates that will provide a letter layout for you.



Figure 15.56 An example of a letter layout in Microsoft Word

### REPORT

A report is a formal document that is used to bring together and present information about a specific topic. To help present the information as clearly as possible, most reports are split into sections with each section having a heading.

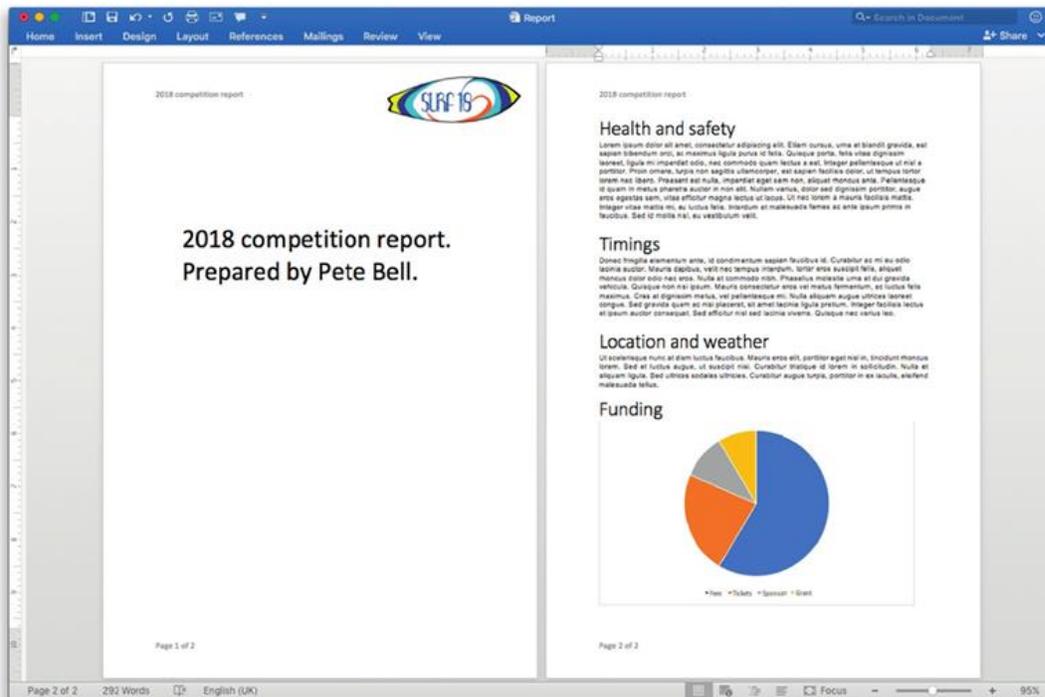


Figure 15.57 An example of a report layout in Microsoft Word

## NEWSLETTER

Newsletters are a less formal way of distributing information, such as to members of a club or society. Typically, newsletters use a column layout, as shown in Figure 15.58. For more information about column layouts,

## POSTER

A poster is used to draw people's attention to something as they walk past it in the street or see it displayed on a notice board. A well-designed poster should not contain too much information, as people are unlikely to spend a lot of time reading it.



▲ Figure 15.59 The sky, background landscape and water/beach in this poster are approximately positioned on the imaginary horizontal lines; the surfer is positioned at an intersection, making it a focal point

## Leaflet

A leaflet is a document used to distribute information or advertise products or services. Like newsletters, leaflets use columns (see page 219), but in leaflets this layout is used to create a design that can be folded once the document is printed. This produces the effect of separate pages.

## Information sheets or fact sheets

Information sheets and fact sheets usually contain more information than you would place on a poster, for example. They are designed to be handed out to people in the street as flyers, given out at meetings or left on information stands for people to pick up.

An information sheet is usually a single, unfolded page, but they can be double-sided. The page size is usually set to A5 and the page orientation is often set to portrait.



▲ Figure 15.58 The layout for the first page of a newsletter in Microsoft Word



▲ Figure 15.60 This double-sided, folded leaflet in Microsoft Word uses a two-column design; note how the front page is on the right-hand side of the first page and the back page is on the left-hand side of the first page

## Memo

Memo is an abbreviation of the word memorandum and means a brief note or message. Memos are commonly used within businesses to convey information quickly and clearly. The language and tone used in memos is less formal than the language used in a letter. When you are creating a memo, it is conventional to specify the subject, as shown in Figure 15.62, to make it clear to the recipient what the memo refers to.



▲ Figure 15.62 An example of a memo in Microsoft Word



▲ Figure 15.61 An example of an information sheet in Microsoft Word

## MAIL MERGE

Mail merge is used when you want to send the same document to many people but would like to personalise part of the document for each individual recipient. For example, you may want to add individual names and addresses to different copies of the same letter or to include personalised information in the text of a document, so that it appears to have been created for each recipient individually. Mail merge uses two files:

- a data source
- a main document.

## Chapter 16 – Graphics

### FEATURES OF IMAGE TYPES

Graphic software can produce two types of images:

- bitmap images
- vector graphics.

Bitmap images are used for photographs and scanned documents. They are made up of small squares called pixels. Each pixel is a tiny square of one single colour. Images that use more pixels are said to be higher resolution than images that use fewer pixels, meaning that the image is a better-quality image. This is shown in Figure 16.1.

Title	FirstName	LastName	Address1	Address2	City	PostalCode
Mr	Pete	Bell	Hillside	Happy Valley	Calderdale	CA11PB
Mr	Lucas	Dune	Penthouse	Valley Apartments	Kirkstoes	KL12AOZ
Mrs	Raquel	McGiddy	The Terrace	Pauper Lane	Gloagville	GL666DV

▲ Figure 15.63 A data source created in a word processing application (Microsoft Word)

1	title	firstName	surname	address1	address2	city	postcode
2	Mr	Pete	Bell	Hillside	Happy Valley	Calderdale	CA11PB
3	Mr	Lucas	Dune	Penthouse	Valley Apartments	Kirkstoes	KL12AOZ
4	Mrs	Raquel	McGiddy	The Terrace	Pauper Lane	Gloagville	GL666DV

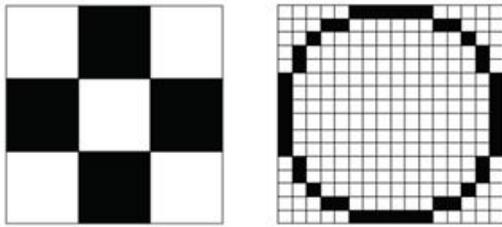
▲ Figure 15.64 A data source created in a spreadsheet application (Microsoft® Excel®)



▲ Figure 15.65 The main document with the merge fields added from the data source



▲ Figure 15.66 The merged document showing the data from second record in the data source shown in Figure 15.64



▲ Figure 16.2 Using a 256-pixel grid (right) allows you to represent a circle more accurately than using a 9-pixel grid (left)



▲ Figure 16.1 The left side of this image uses fewer pixels than the right side of the image

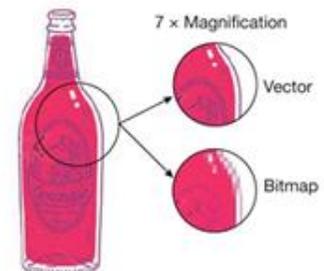
### Vector graphics

Vector graphics do not pixelate when enlarged because they are made up of points or co-ordinates and lines. These are recalculated each time the image is redrawn, either by a printer or on a screen. Although vector graphics can look unrealistic or stylised when compared with bitmap images, they create much smaller files because data for each pixel does not need to be stored.

Figure 16.4 shows the key difference between vector graphics and bitmap images. Because a bitmap image is made up of thousands of pixels, it pixelates when the viewer zooms in too far. The vector graphic does not pixelate because it is made of a series of simple mathematical co-ordinates, which means that, when the viewer zooms in, the image is accurately reproduced at a larger size.



▲ Figure 16.3 An image will pixelate when enlarged, as the individual pixels are made more obvious



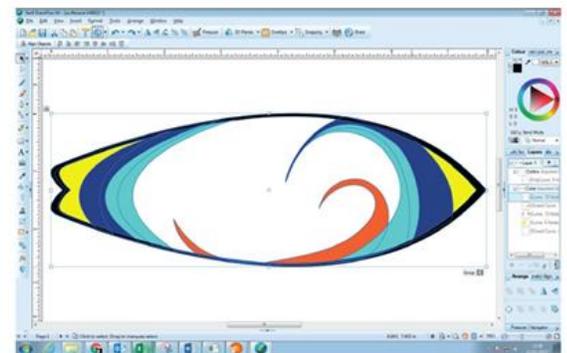
▲ Figure 16.4 The differences between vector graphics and bitmap images

### CREATE IMAGES

When creating images, you must be able to combine basic shapes such as squares, rectangles, circles, ovals, triangles and arrows.

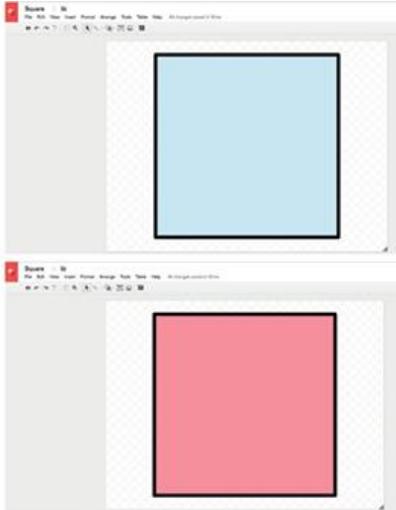
Although you can use specialist graphics applications, many of these shapes are also available in applications that are not obviously associated with graphics, such as Microsoft Word. For more information about the shapes available in word processing applications, see page 229. Often, you can choose from a range of basic shapes or create your own from lines. You also need to be able to incorporate lines and text, including text boxes.

Figure 16.8 is an example of a graphic produced using curved lines filled with colour.



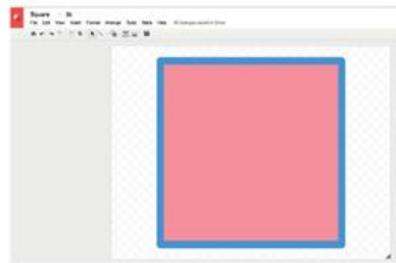
▲ Figure 16.8 A graphic that uses curved lines, some of which are filled with colour; the layers show the individual elements used to create the image

In Figure 16.9, you can see the list of **layers** as displayed in LibreOffice Draw®. This shows the individual elements used to create the image and the order in which they are placed on the **z axis**. In Figure 16.9, you can see that the Outline layer is on top of the Color layer on the z axis.



▲ Figure 16.5 The square has been drawn in Google Drawings and the fill colour has been altered from blue to red

The colour and thickness of the outside lines defining the shape can also be altered, as shown in Figure 16.6.



▲ Figure 16.6 The square's line colour and thickness has been altered

## EDIT IMAGES

Image editing tools allow you to change an image in a number of ways.

### Resize and rotate

You can resize or rotate an image by clicking the image with your mouse to show its handles. These are the resize points and rotate points shown in Figure 16.10.

#### SUBJECT VOCABULARY

**resize point** a point at which an image can be dragged to be resized  
**rotate point** the pivot point around which an image can be rotated

Resizing an image by dragging the handles in the corners of the image maintains the image's aspect ratio. However, resizing the image by dragging the handles on the sides of the image does not maintain its aspect ratio, meaning that the image appears distorted.

Rotation point — Rotate handle

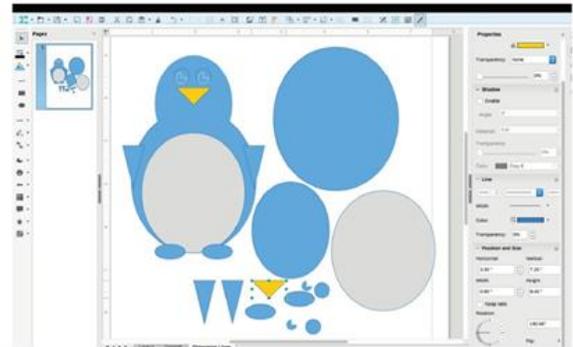


▲ Figure 16.10 Once an image is selected with the mouse, the eight handles that act as resize points and the rotate point will be visible

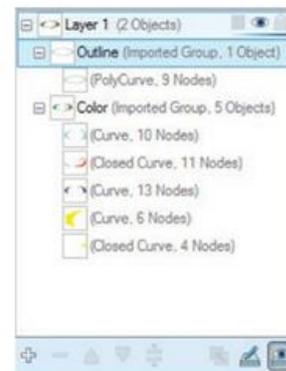
#### SUBJECT VOCABULARY

**dragging** moving with the mouse  
**aspect ratio** the ratio of an image's width and height

Figure 16.7 shows an example of the way in which basic shapes can be combined to produce an image. The basic shapes used to make the image on the left are shown on the right.



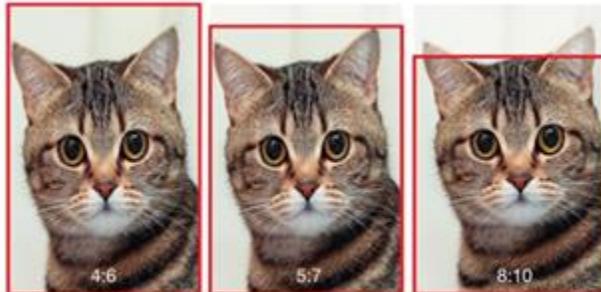
▲ Figure 16.7 An image created in LibreOffice® Draw that uses 12 basic shapes



▲ Figure 16.9 The layers used to create the image in Figure 16.8 (this is a close-up of the feature on the right of the screen in Figure 16.8)

## Cropping

Cropping an image means cutting off and deleting part or parts of it in order to make it a particular size or shape. For example, the image in Figure 16.12 has an original aspect ratio of 4:6. Figure 16.12 shows the image once it has been cropped to 5:7 and 8:10.



▲ Figure 16.12 Cropping allows images to fit different aspect ratios or to remove unwanted parts of an image

## Adding captions and text

Text can be added to an image. For example, you might add a caption to a photograph or add a slogan or strapline to a logo.

## Editing or deleting unwanted parts of an image

If there are areas of a bitmap image that you do not want, you can either erase them or recolour them so that they blend in with surrounding areas of the image. Figure 16.13 shows some of the tools available to do this in Microsoft Paint.



▲ Figure 16.13 Tools in Microsoft Paint

Most applications have a Colour Picker tool that allows you to select a colour from a nearby area of the image and then use a brush or pencil tool to cover the unwanted area with the selected colour. For example, you can remove the tower in the background of Figure 16.14 by picking the colours around it, as shown in Figure 16.15, and using a brush tool with this colour to paint over the tower, as shown in Figure 16.16. Doing this improves the image, as shown in Figure 16.17 and 16.18.



▲ Figure 16.14 The tower on top of a building on the right of this image is unwanted



▲ Figure 16.15 The Colour Picker has been used to select the colour around the tower, which is now ready to be used as Colour 1

▲ Figure 16.16 The tower has been removed



▲ Figure 16.17 The same image after the tower has been removed

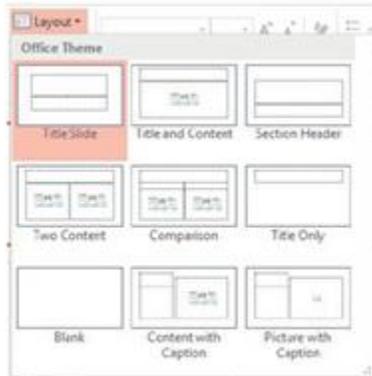


▲ Figure 16.18 Before editing and after editing; the edit has improved the image now the tower has been removed from the background

## Chapter 17 – Presentation

### TEMPLATE AND MASTER SLIDE

To ensure that your presentation has a consistent layout and design, you can use a template or theme. Figure 17.1 shows some of the templates available in Microsoft PowerPoint.

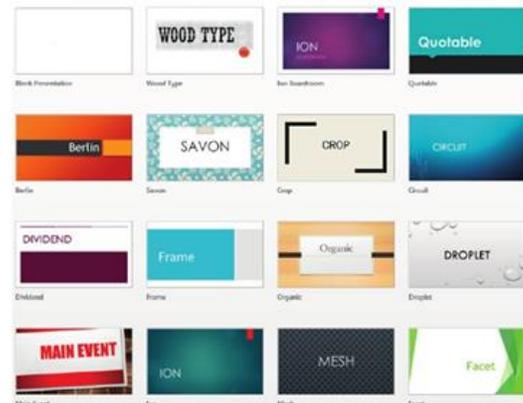


▲ Figure 17.2 Slide layouts in Microsoft PowerPoint

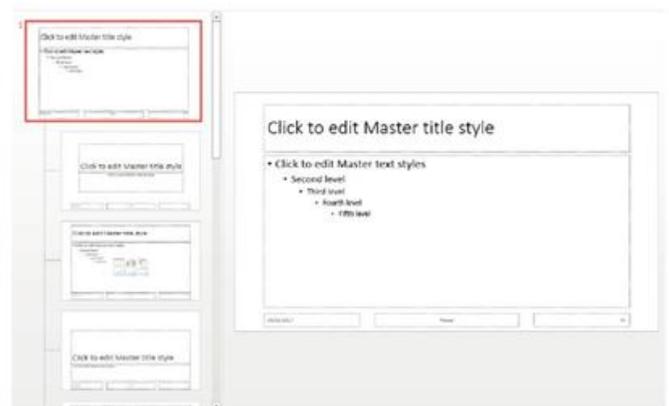
All templates use the same group of slide layouts, some of which are shown in Figure 17.2, but each template has an individual design that is based on a master slide or **slide master**. The slide master content can only be edited using the Slide Master view, which is accessed in Microsoft PowerPoint by choosing Slide Master from the View tab.

#### SUBJECT VOCABULARY

**slide master** (or master slide) in a slide presentation, a template slide that specifies the layout and appearance of content slides



▲ Figure 17.1 Examples of slide design templates or themes in Microsoft PowerPoint



▲ Figure 17.3 Slide Master view in Microsoft PowerPoint; any changes made to the main slide master will be applied to every slide layout master

## Placeholders

The slide master contains placeholders for content. These can be made available or unavailable by selecting Master Layout in the Slide Master tab.

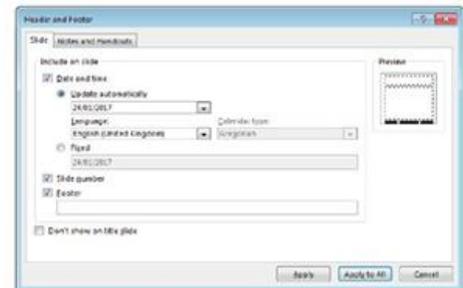
**SUBJECT VOCABULARY**  
**clip art** images, photographs or pictures that you can copy and use in your own computer documents



▲ Figure 17.4 Selecting Master Layout in Microsoft PowerPoint (left) opens the Placeholders window (right), which lets you choose which placeholders to make available on each slide

## DATE AND TIME, FOOTER AND SLIDE NUMBER

At the bottom of a slide layout, you can format the way in which the date and time, footer and slide number will appear on each slide. They will appear on the slides in your presentation if they are selected from the Header and Footer window after the Master View is closed, as shown in Figure 17.5.



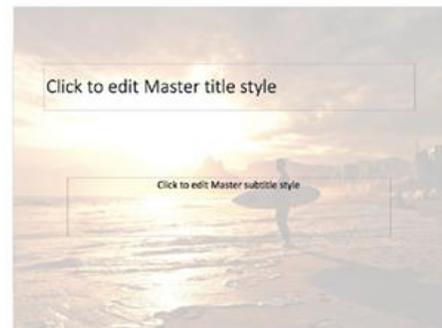
▲ Figure 17.5 The Header and Footer window is available from the Insert tab in Microsoft PowerPoint

## Background

You can change the background of all slides using the slide master. You can add an image or background colour. You should always make sure that your text can still be read if you change the background colour or image (as shown in Figure 17.6). If you are using a light.



▲ Figure 17.6 The text on this slide is not easy to read



▲ Figure 17.8 Once the washout effect has been applied, the text is easy to read



▲ Figure 17.7 Applying a washout effect in Microsoft PowerPoint



▲ Figure 17.9 Applying a slightly transparent background colour to text placeholders makes it easy to read the text on the slide without affecting the colours in the image

## Font enhancement

The fonts on the slide master or slide layout masters can be enhanced using formatting such as bold, italic or underlining.

## SLIDES

Once you have set up your template and slide master, you can begin to add content to your individual slides.

## Text and images

You can add text and images into the content placeholders on your slides. If you add a lot of text to a placeholder, the text will automatically resize so that it fits the placeholder.

Try to limit the amount of text that you use on each slide. Presentations are not meant to repeat everything that the speaker says, but should give a few key points as a visual guide or reminder for the audience. If the audience is too busy reading lots of text on the slide, they may not be listening to what the speaker is saying.

Sometimes, images can be much more powerful than words. You can even use images or charts to summarise the point or points that you are making on each slide without using any text at all. For example, compare Figures 17.10 and 17.11. Both slides give the same information, but Figure 17.11 requires the audience to do less reading



▲ Figure 17.10 This slide provides lots of information in bullet points



▲ Figure 17.11 This slide provides the same information given in the slide in Figure 17.10, but it requires almost no reading

## Action buttons

Presentation applications can be used to create interactive navigation using action buttons. Figure 17.12 shows some examples.

Action buttons have several uses

If you are using buttons to allow users to **navigate** through your presentation, you might want to deselect the On Mouse Click setting from the Transitions tab.

If you do not **deselect** this setting, users who control the presentation with a touch screen will find that pressing any area of the screen will cause the presentation to advance to the next slide.

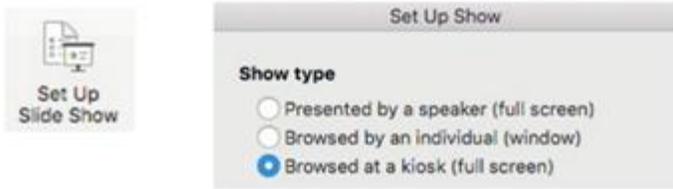


▲ Figure 17.12 Action buttons in Microsoft PowerPoint come with **ready-made** actions, but you can alter their actions

The action buttons feature is only available in Microsoft PowerPoint and can be accessed from the Shapes menu on the Insert tab.



▲ Figure 17.14 Action settings for action buttons appear when you insert an action button into a Microsoft PowerPoint presentation



▲ Figure 17.16 You can set your Microsoft PowerPoint presentation to run in kiosk mode

**SUBJECT VOCABULARY**

**navigate** move around a piece of application software or a system, such as from one slide to the next

**deselect** remove something from a list of choices on a computer



▲ Figure 17.17 This Microsoft PowerPoint presentation uses four custom action buttons to lead to different individual slides

Although this feature is only found in Microsoft PowerPoint, other applications also allow you to create buttons. For example, you can create buttons in LibreOffice Impress by using the Form Control menu, selecting the Push Button feature and setting a macro for that button. You can then make the macro control what should happen when the button is pressed.

**SUBJECT VOCABULARY**

**macro** a function that runs a set of instructions to perform a task



▲ Figure 17.18 Creating a Push Button in LibreOffice Impress

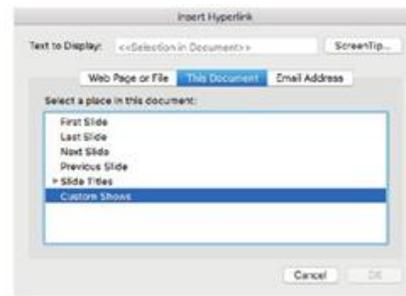
### Hyperlinks

During a presentation, you may want to open content from outside the presentation slides, such as a web page or a spreadsheet in a folder on your computer. You can insert a hyperlink to do this, as shown in Figure 17.19.

Hyperlinks can open:

- local files
- online content
- slides in the current presentation or custom shows
- email addresses (used to compose a new email in the user's default email application with the address field already filled in).

Hyperlinks can be added onto images or text, which is then clicked to access the hyperlink.



▲ Figure 17.19 Hyperlinks can be inserted to allow users to navigate to content inside or outside the presentation slides

### Animations

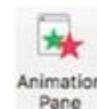
Animations are visual effects that add emphasis and movement. They are used to draw attention to important information, and they can be added to slide content such as text, pictures, shapes, tables, SmartArt graphics and other objects. Figure 17.20 shows some examples of animation effects in Microsoft PowerPoint.



▲ Figure 17.20 Examples of animation effects in Microsoft PowerPoint

**SUBJECT VOCABULARY**

**transitions** (in a slide presentation) the effects that occur when a user moves from one slide to the next



▲ Figure 17.21 The Animation Pane button in the Animations tab in Microsoft PowerPoint

## Transition

Slide transitions are the effects that occur when a user moves from one slide to the next.

The chosen transition and its settings are applied to the active or selected slide.

You can also apply the same transition to all slides using the Apply To All functionality. Applying the same transition to all slides can improve the consistency of your presentation.



▲ Figure 17.22 Different transition effects can be found on the Transitions tab in Microsoft PowerPoint

**SUBJECT VOCABULARY**

**entrance effect** an animation effect that occurs when an object is brought onto a slide during a presentation

**exit effect** an animation effect that occurs when an object leaves a slide during a presentation

## PRINT

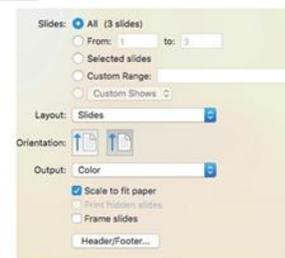
If you need to print your presentation, there are several different print layouts available. Your choice will depend on the purpose of printing your presentation.

### Handouts

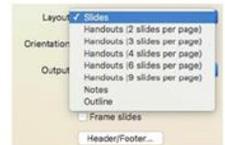
Handouts are given to your audience so that they have a copy of the information that you are presenting. This can help your audience to follow your presentation more easily and allow them to take notes on the slides.

### Notes page

When giving a presentation, you or the person speaking may need to refer to notes. Presentation applications provide a Speaker Notes section with each slide where you can add notes for the presenter, as shown in Figure 17.26. You can use this to add a complete script for the presenter to follow, or a few points that need to be explained.



▲ Figure 17.23 The Print options available in Microsoft PowerPoint



▲ Figure 17.24 Selecting the Layout or Print Layout menu shows a variety of print layout options

The most common handout layouts are Handouts (2 slides per page) and Handouts (3 slides per page). These layouts are shown in Figure 17.25.



▲ Figure 17.25 The Handouts (3 slides per page) print layout includes writing lines to the right of each slide, which are useful if you expect your audience to take notes



▲ Figure 17.27 Choosing the Notes layout option prints the notes underneath an image of the slide



▲ Figure 17.26 Speaker notes for each slide can be added underneath the slides in Microsoft PowerPoint

### Full page

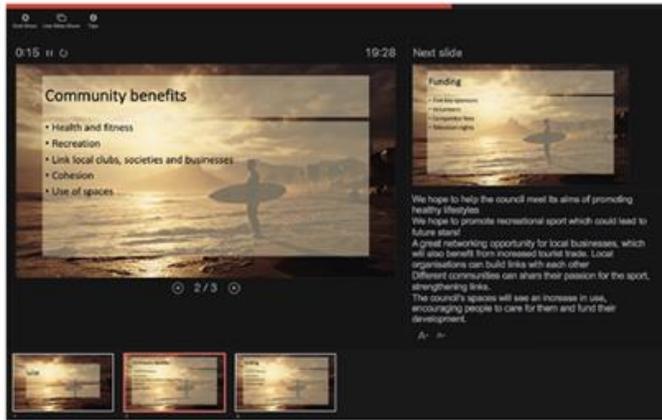
Choosing the Slides or Full Page Slides print layout gives the result shown in Figure 17.28. This print layout is useful if you want to create posters from the slides, which you can display.

### Headers and footers

When printing your presentation, you can choose to print information in the header and footer, such as the time and date, slide numbers and a standard footer. You can do this by selecting Header/Footer or Edit Header & Footer in the Print settings and selecting the appropriate fields, as shown in Figure 17.29.



▲ Figure 17.28 Choc



▲ Figure 17.30 Presenter View in Microsoft PowerPoint



▲ Figure 17.29 Header and footer options for the Notes & Handouts layout in Microsoft PowerPoint

## Chapter 18 – Web authoring

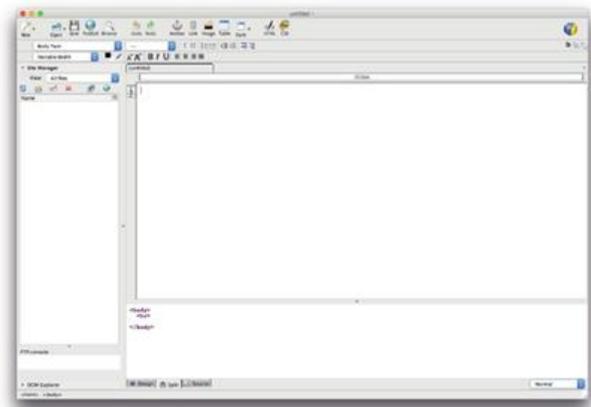
### TEMPLATE

Creating a template ensures that all of your web pages will have a consistent appearance and layout. Once you have created a template, you can add content and edit each page individually.

Creating web pages by placing elements on a page rather than writing HTML is an example of what is known as **WYSIWYG** editing. This makes creating web pages much easier and has enabled more people to contribute to the World Wide Web.

#### SUBJECT VOCABULARY

**WYSIWYG** ('What You See Is What You Get') when something is presented on screen exactly as it will look when the finished product is output or published



▲ Figure 18.1 KompoZer can work as a WYSIWYG web authoring application and creates the HTML in the background as the user edits the content

### Tables and frames

Tables can be used to create a layout template, which specifies how content should be placed on a page. When the page is resized, the table will stretch to fit the page. This means that the page will keep its layout even when viewed on devices with different sized screens.

Merging cells in a table allows you to create more complex layouts than using a simple grid.

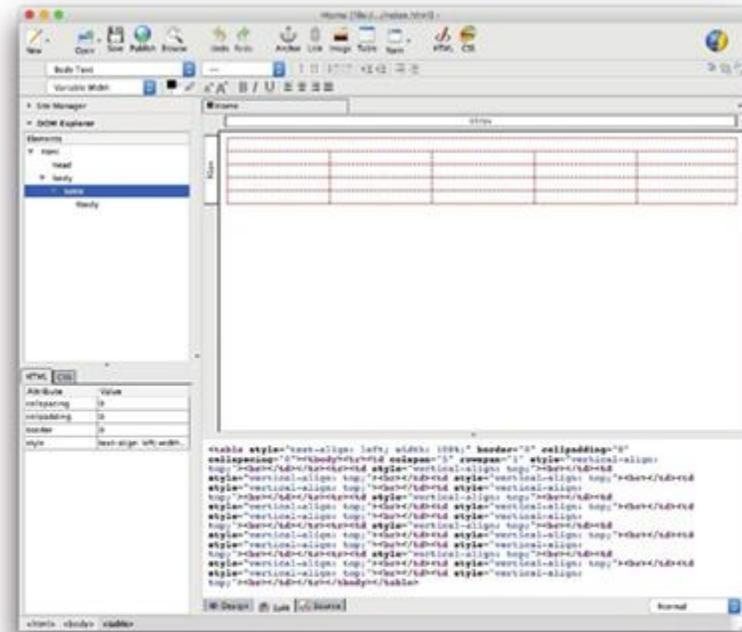
**SUBJECT VOCABULARY**

**cell padding** the space *inside* cells in a table that determines how close to the edge of the cell the content will be placed

**cell spacing** the space *between* cells



▲ Figure 18.2 Settings to use when inserting a table into a web page for the Activity



▲ Figure 18.3 Guidelines showing the outline of the table are displayed in the web authoring application, but the border settings in Figure 18.2a will not allow them to be displayed by the browser

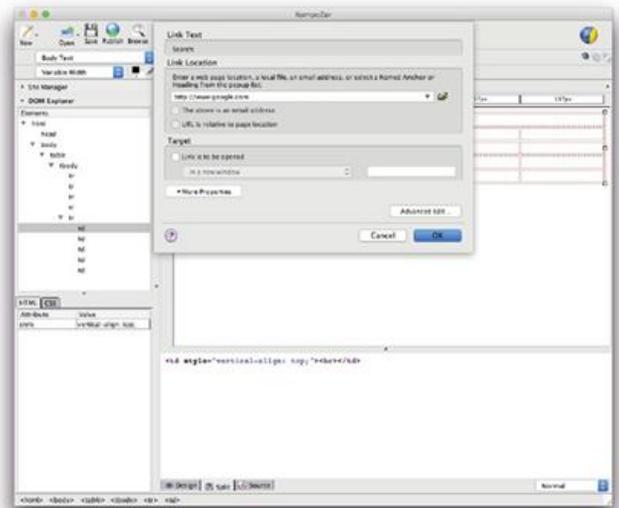
Frames are areas of a page that can be defined to display other web pages. They are not supported in the latest version of HTML, which at the time of writing is HTML5.

### STANDARD PAGE FEATURES

There are certain features that appear on most web pages, such as hyperlinks and menus.

### HYPERLINKS

A hyperlink is a link that can be clicked in order to go to another location, often a web page hosted on a web server connected to the internet. You can insert hyperlinks that allow users to move to a position on a page in the current document, open documents from the current website or open documents from other online locations. This collection of linked content is known as the World Wide Web.



▲ Figure 18.4 Hyperlinks are underlined and coloured blue by default, though you can change this if the page design requires

## BACKGROUND COLOURS

The background colour is the colour displayed as the background of a web page. You can also set an image as the background for a web page. If you do use an image, make sure that the colour of the text on the page contrasts well with the colour of the image.

### SUBJECT VOCABULARY

**Hex colour value** 6 hexadecimal characters which represent the amount of red, green and blue in the colour

## BANNERS

Banners are promotional or marketing images that can be added to a web page, usually appearing at the top of the page. The image will often use the organisation's house style, but some banners advertise goods and services from other organisations. These are known as third-party banners.

Banners can be created using different standard dimensions as shown in Figure 18.5. The leaderboard banner is a standard-sized banner (728 pixels wide and 90 pixels high) that can be placed at the top of a web page. Figure 18.6 is an example of a leaderboard banner.



▲ Figure 18.7 Banner placed at the top of the page



▲ Figure 18.5 Banners can be made in a variety of dimensions



▲ Figure 18.6 A leaderboard banner

## PAGE NAME (FILE NAME)

When you set up the template for your web page you named it 'index.html'. This is because this name causes web browsers to load this page first by default, making it the first page that visitors to your website will see. In other words, 'index.html' will act as your website's **home page**.

## CONTENT

The content of a web page can include text, images, buttons and animation.

### Text

Text can be entered using either the keyboard or voice recognition software, just as when using other applications. You can format text using styles and alignment tools, which you will learn more about later in this chapter (page 271).

### Images

You can insert images such as banners and photographs into your web pages. When you do this, the web page creates a link to the location of the image. If you move the image to a different folder, the link may break and the image will not appear until you re-establish the link.

You can either insert images using the Insert menu or by dragging and dropping the images into the document using the mouse.

## ALT TEXT

Alt text is alternative text that is displayed if an image cannot be loaded. When you add an image to a web page, you can specify the alt text that will be associated with the image, which can be displayed if the image cannot. For more information about alt text, see page 273.

## Buttons

You can add hyperlinks to images to make them act like buttons. Users can click on the image to move around the page or to open other pages or documents, just as they can by clicking on hyperlinked text.

## Animation

You can include animation files such as .swf files or animated .gif files in your web pages. These can be used to draw the user's attention to important content.



▲ Figure 18.10 Animated content is created by sequencing a series of images together

## FORMAT

The content of a web page is formatted using styles and alignment.

You can apply styles to headings, subheadings and body text in order to make their appearance consistent within the web page and across every web page in the website. For more information about styles, see page 218.

## Alignment

You can align content left, right or centre. For more information about alignment, see pages 215 and 220.

## HTML

You have already learned about some ways of using HTML, but there are other ways of using HTML you might use. You can write HTML in a simple text editor, as shown in Figure 18.14.

```

<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>The title of the page would go here.</title>
</head>
<body>

<p>The main part of the document goes here.</p>
<p>The 'p' tags are used to set text out in paragraphs.</p>
<p>This text uses <br>'br' tags, which are used to insert <br>line breaks. These are <br>different to paragraphs...</p>
<p>...which have wider spacing...</p>
<p>...between lines.</p>
<p><a href="http://www.pearson.com" target="_blank">This links to Pearson's website </a> </p>
<p>
<strong>Browsers will display text in bold if it is enclosed in 'strong' tags</strong> <br>
<em>Browsers will display text in italics if it is enclosed in 'em' tags</em> <br>
<u>Browsers should display text underlined if it is enclosed in 'u' tags</u>
</p>
</body>
</html>

```

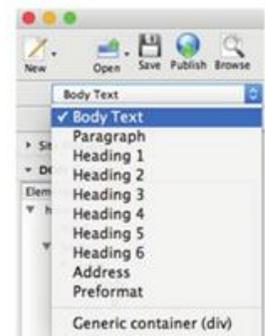
▲ Figure 18.14 HTML being edited in a simple text editor

### SUBJECT VOCABULARY

mark up the tags surrounding elements of text that indicate the purpose of the text and instruct the browser how to handle (display) them

### HINT

Some markup uses tags enclosed in <> and </> pairs. The / character in the second tag is used to let the browser know that the tag has ended. Others, like <img>, do not need to be ended.



▲ Figure 18.13 There are several levels of heading available

```

index.html
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <meta charset="utf-8">
5     <title>The title of the page would go here</title>
6   </head>
7   <body>
8     
9     <p>The main part of the document goes here.</p>
10    <p>The 'p' tags are used to set text out in paragraphs.</p>
11    <p>This text uses <br>'br' tags, which are used to insert <br>line breaks. These are <br>different to paragraphs...</p>
12    <p>...which have wider spacing...</p>
13    <p>...between lines.</p>
14    <p><a href="http://www.pearson.com" target="_blank">This links to Pearson's website </a> </p>
15    <p>
16      <strong>Browsers will display text in bold if it is enclosed in 'strong' tags</strong> <br>
17      <em>Browsers will display text in italics if it is enclosed in 'em' tags</em> <br>
18      <u>Browsers should display text as underlined if it is enclosed in 'u' tags</u>
19    </p>
20  </body>
21 </html>

```

#### GENERAL VOCABULARY

**colour code** mark with, or write in, different colours to represent different categories of information

▲ Figure 18.15 HTML being edited in Atom, an open source programming text editor that **colour codes** the markup to help the developer see the structure of the document

#### INSERT HYPERLINKS

#### GENERAL VOCABULARY

**anchor** fasten something firmly so that it cannot move

Figure 18.16 shows the hyperlink used on line 14 in Figure 18.15.

```
<a href="http://www.pearson.com">This links to Pearson's website</a>
```

▲ Figure 18.16 A hyperlink

This markup provides the following information.

The `<a>` element has one **required attribute**: `href`.

#### SUBJECT VOCABULARY

**attribute** something that provides additional information about an HTML element

**required attribute** an attribute that must be present for the element to work as intended

**element** an individual component of a web page (for example, `<a> ... </a>` is a hyperlink element)

- The `<a>` tag is used to **anchor** the hyperlink to some text, an image or another **element** on the page.
- The attribute `href` is used to tell the browser that the next thing it reads (after the "=" will be the hyperlink (which must be surrounded by quotation marks).
- The text that the browser should display then follows the opening anchor tag.
- The `</a>` tag closes the anchor.

By default, a linked document will be displayed in the current browser window. This means that the browser will replace the current page with the linked one. However, you can specify where the linked document should be opened by using a **target** attribute, as shown in Figure 18.17.

#### INSERT IMAGES

An image is used on line 8 in Figure 18.15.

```

```

▲ Figure 18.18 An image

The `<img>` tag has two required attributes: `src` and `alt`.

#### GENERAL VOCABULARY

**embed** make something, such as a graphic, part of something else, such as a web page

**placeholder** an empty shape that represents the size and location of a missing image

- The `src` attribute specifies where the image is.
- `alt` is the attribute used to tell the browser what alternative text should be used.

Images are not **embedded** in web pages: they are referenced from web pages. This means that the HTML references the source (`src`) or the image and the browser fetches the image from the source and displays it.

Images can either be referenced from an online location or a local file. In this example, the browser will expect to find the file 'bear.jpg' in the same folder as the file 'bear.html' because the source does not specify a different folder or location. If the browser does not find the image in the specified location, it will display a **placeholder**.

#### KEY POINT

Images are not embedded in web pages. Instead, they are referenced from web pages.

## PAGE TITLE

The page title is displayed in the tab at the top of the browser window.

```
<title></title>
```

▲ Figure 18.20 The title tags are read by the browser, which then displays the text between them on the tab

## FONT ENHANCEMENTS

Font enhancements are used to draw attention to important text.

### BOLD

The text on line 16 in Figure 18.15 has been styled as **bold** using the tags `<strong> </strong>`.

```
<strong>Browsers will display text in bold if it is enclosed in 'strong' tags</strong>
```

▲ Figure 18.21 Styling text using 'strong' tags

### ITALIC

The text on line 17 in Figure 18.15 has been styled as *italic* using the tags `<em> </em>`.

```
<em>Browsers will display text in italics if it is enclosed in 'em' tags</em>
```

▲ Figure 18.22 Styling text using 'em' tags

### HINT

`<em>` means emphasis.

### UNDERLINE

The text on line 18 in Figure 18.15 has been styled as underlined using the tags `<u> </u>`.

```
<u>Browsers should display text as underlined if it is enclosed in 'u' tags</u>
```

▲ Figure 18.23 Styling text using 'u' tags

It is no longer good practice to use the `<u>` tag to format text as underlined.

There are two reasons for this:

- Underlines are used by browsers to indicate hyperlinks and so underlining other text may confuse users
- In the latest version of HTML (HTML5), `<u>` tags are used to visually highlight text that is stylistically different (e.g. misspelled words or Chinese proper nouns).

However, the alternative way of styling text as underlined (using CSS) is beyond the reach of this qualification. If you do use `<u>` tags, browsers should still support them and be backwards compatible.