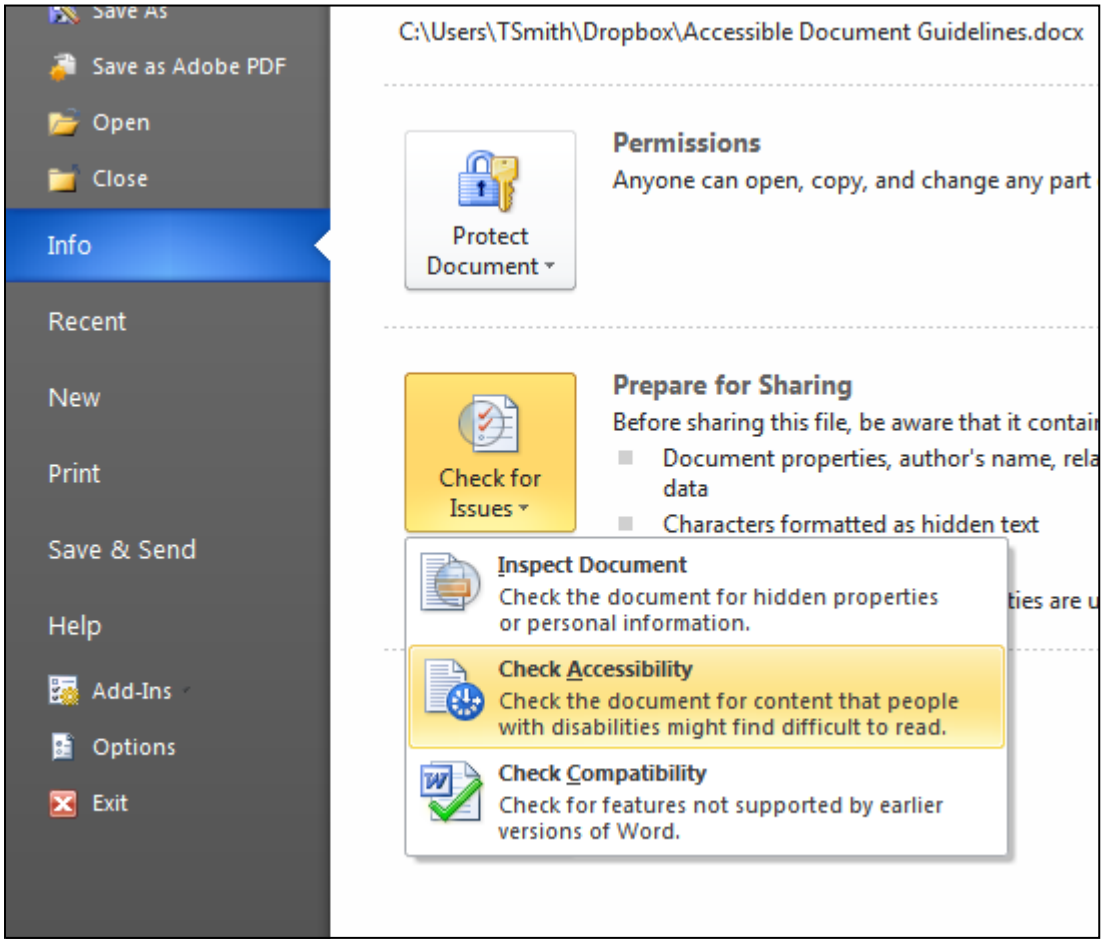
Accessible Document Guidelines

A good way to think of document accessibility is to treat it in the same way we consider spelling and grammar. It should be built into a document, not added on afterwards. By incorporating these guidelines, your document will not only be inclusive, it will be professional, clear, and easy to understand.

Microsoft Word 2010 Accessibility Checker

Microsoft Word 2010 has a built in accessibility checker that works much like a spell check. It is not a full check, but it does check some these guidelines.
Note: Will need to saved in .docx format to work

1. Select File Tab
2. Select Info
3. Select Check For Issues
4. Select Check Accessibility



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Accessible Document Guidelines Summary

Fonts (Page 3-5)

1. Minimum size is 12pt.
   Default large print size is 18pt
   Line spacing of 1.2 font size
2. Do not use ornate fonts.
3. Avoid using italics.
4. Avoid using block capitals.
5. Avoid using underlining.
6. Use **bold text** to emphasize text without reducing readability.
7. Use descriptive hyperlinks.
8. Documents should have a Flesch Reading score of 60 (Plain Text).

Images (Page 6-8)

1. All images in a Microsoft Word document require alternate text.
2. All graphs, flow charts and diagrams require a text or tactile equivalent.
3. Do not use text boxes in Microsoft Word.
4. Do not use scanned PDF files.

Layout (Page 9-11)

1. Text should meet the WCAG AAA colour contrast standard.
2. Avoid mixing colour contrast.
3. Left align text. Avoid using centred headings and mixing text alignment.
4. Use a vertical line to indicate separate columns.
5. Repeat visual elements.
6. Items relating to each other should be grouped close together.
7. Ensure paper is thick, non-glossy and bound so it can be laid flat

Tables (Page 12-13)

1. Avoid using merged cells
2. Avoid using blank rows and columns
3. Consider reading order of tables
4. Add bookmarks for table headers

Headings (Page 14)

1. Use Heading styles to format Microsoft Word documents

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Fonts

1. **Size**
   When writing to an individual, use their preferred typeface and size.
   For documents for a general audience use…

   - Minimum size is 12pt
   - PowerPoint minimum 32pt
   - Default large print size is 18pt
   - Line spacing of 1.2 font size

2. **Ornate typefaces**
   Do not use ornate fonts.

   For example, do not use fonts such as …
   Gigi, *Brush Script*, Curlz MT, **STENCIL,** Papyrus, Jokerman and Chiller

   Types of typefaces
   Typefaces fall into two broad categories, Serif and Sans Serif. Serif fonts are widely used for text because they were considered easier to read than sans-serif fonts in print. However, scientific studys on this topic has been inconclusive.

   Serif (with little lines)

   Sans Serif (without little lines)

   Handglovery

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3. **Italics**
   Avoid using italics.

   With some typefaces, the italic letters are different from the regular letters. The characters are usually thinner and more ornate, making them more difficult to read (Figure 1).

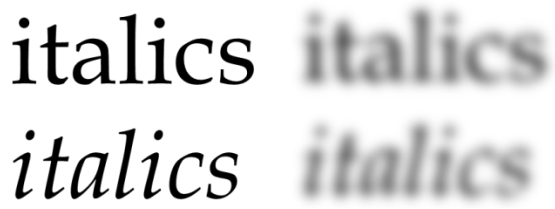

Figure 1

4. **Block Capitals**
   Avoid using block capitals.

   There are different theories as to why we find capitalised text difficult to read. In 1886 James Catrell came up with the idea that we use word shapes to help identify words. More recently, the work by Kenneth Paap and Keith Raynor on eye movement and reading cognition suggest the act of reading is more complex.

   Regardless of the theories, capitalized text is considered harder to read because we are not used to reading in all caps. Also, many regard capitalized text as shouting. These are the primary reasons for avoiding all caps text.

5. **Underlining**
   Avoid using underlining.

   Underlining text can create problems due to the the cross over with the “descenders” (figure 3) of the characters (the bits of g, y, j, p and q that hang down below the baseline)

Figure 2

6. **Bold**
   Use **bold text** to emphasize text without reducing readability

7. **Hyperlinks**
   Use descriptive hyperlinks

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Hyperlinks are used as a form of navigation for screen reader users. How they are formatted can affect the accessibility of a document. It is important that link text is descriptive and makes sense. For example

Visit the Human Rights Commission **Not** Click here to visit the HRC website

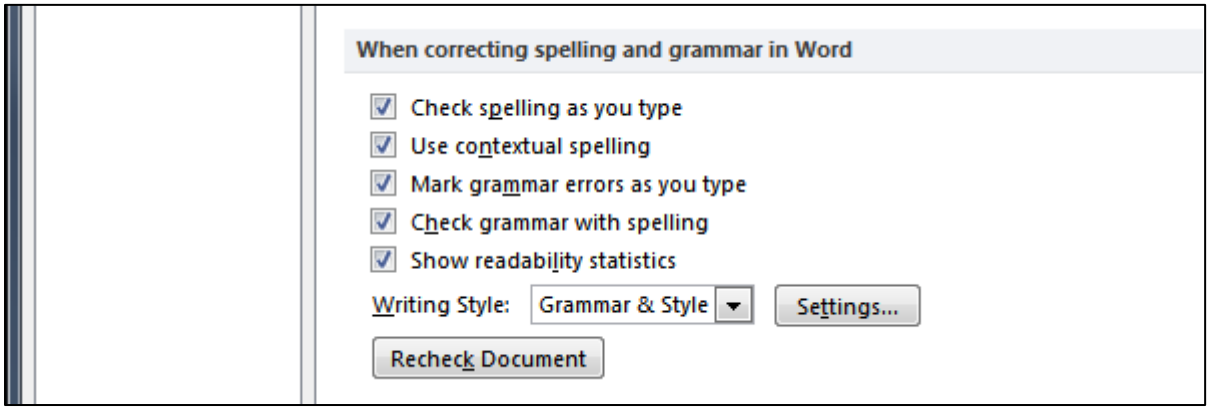
8. Plain English

Documents should have a Flesch Reading score of 60 (Plain Text)

The Flesch Reading Ease measures textual difficulty, which indicates how easy a text is to read. This measure does not measure the complexity of the subject; it measures how difficult a piece of text is to read. By factoring aspects such as word length and syllables, a numerical value is given. The higher the score the easier it is to read.

There is a built in tool to measure Flesch reading ease in Microsoft Word. However, it is not set by default. Follow these instructions below to set it to check your document by default.

1. Select File tab
2. Select Options
3. Select Proofing
4. Check Show readability statistics checkbox



Tips for Plain English writing

- Split long sentences into shorter ones.
- Target complex words and replace with two word combinations.
  E.g. ‘establishment’ into ‘setting up’

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Images

1. **Alt Text**

   All images in a Microsoft Word document require alternate text.

   Alternate text (or alt text) is required for screen reader users to access text equivalents in place of the image. A text equivalent does not require a full description of every detail. A good way to think of alt text is to imagine you are describing the image to someone over the phone.

   Alt text is different from a caption, as the alt text is read out when the screen reader gets to the image. A caption may not be in the right reading order, and it may not be clear the caption is referring to the image. For example, if the caption is something like “figure 1”.

   Alt text example

   Too little: Dog

   Just Right: Sam the guide dog puppy runs through the field

   Too much: Sam the golden Labrador guide dog puppy wearing a red coat running towards the camera through a field of grass with two types of daisy.

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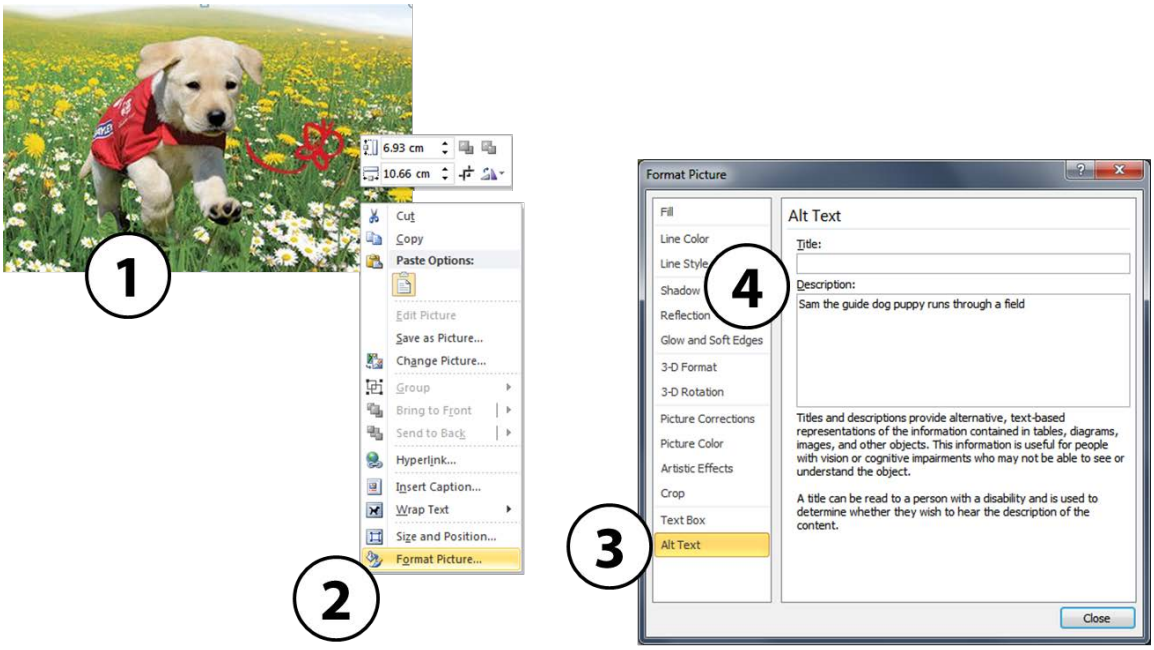
How to Add Alt Text to Images in Microsoft Word and Outlook

1. Right click image (Select)
2. Select **Format Picture…**
3. Select **Alt Text**
4. Fill out **Description**



Images Must Be "In Line With Text"

The Wrap Text properties of an image change the relationship between the text and the image. For the alt text to work, the image needs to be set to 'in line with text' (Figure 4). This does limit the placement features of word, but a screen reader is unable to pick up the alt text details if this option is not used.

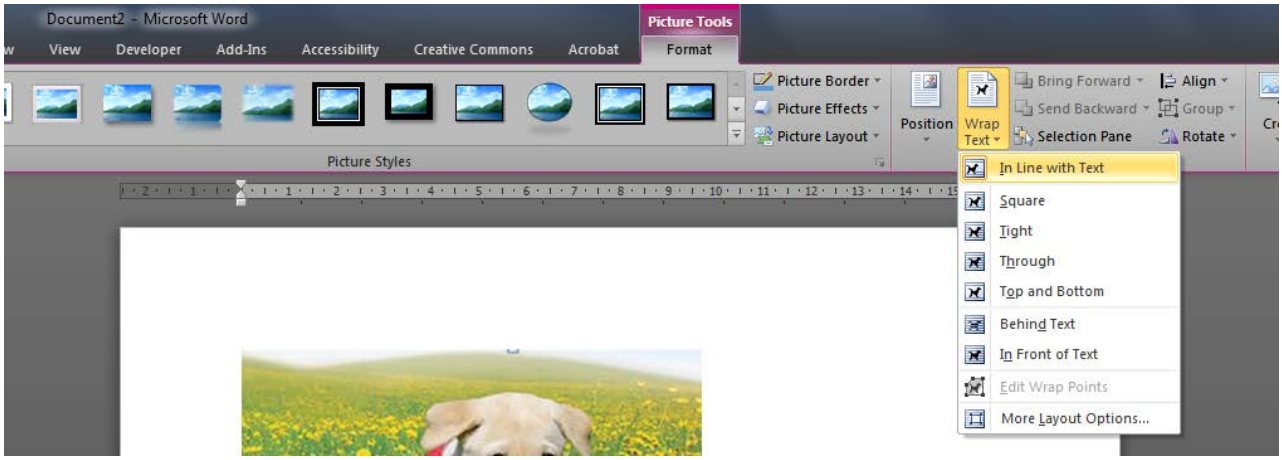


Figure 3

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2. **Graphs, Flow Charts and Diagrams**
   All graphs, flow charts and diagrams require a text or tactile equivalent.

   Graphs, flow charts and diagrams can be difficult to describe with text. With graphs, include a simple table of data that will be able to be read by screen readers. In some cases, a bulleted list can be used for a simple chart. If the image is complex, consider creating a tactile copy for blind people and those with low vision.

3. **Text Boxes**
   Do not use text boxes in Microsoft Word

   Screen readers cannot access text boxes in Word. For similar reasons to why images have to be inline, screen readers simply cannot read the content in a text box or a shape with text in it.

4. **PDF**
   Do not use scanned PDF files.

   A scanned PDF document using a photocopier is completely inaccessible. The photocopier is effectively taking a photograph of each page and storing them within the document. As a result, there is no text in the document for the screen reader to use to read.

   How do I tell if this is a scanned PDF?
   One easy method to tell if a PDF is a scanned is to enlarge it and select it. If the text is clear, and you are able to select the words, then the text is readable (Figure 5).

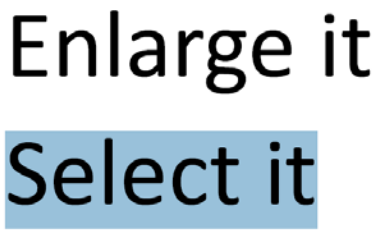

Figure 4

If the text is pixelated and you cannot select the words then it is a scanned document (Figure 6).

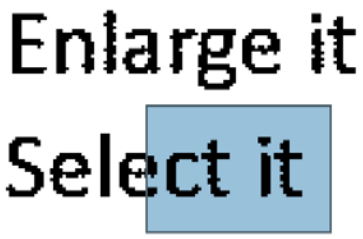

Figure 5

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Layout

1. **Colour Contrast**
   Text **should** meet the WCAG AAA colour contrast standard.

   Good examples are black or dark blue text on a white or yellow background, or white/yellow text on a black/dark blue background. Using light text on a dark background can help to reduce glare.

   Preferences for colour contrast are varied for different eye conditions. As a result, there is no one colour combination that gives the best result for everyone. If it is known, use the preferred options of the person you are communicating with.

   For a general audience, we can effectively measure colour contrast with a tool called the Colour Contrast Analyser (Figure 7). This provides a pass/fail assessment against international standards (Web Content Accessibility Guidelines). Although the tool is primarily for assessing screen accessibility, it is an effective tool for documents intended for print.

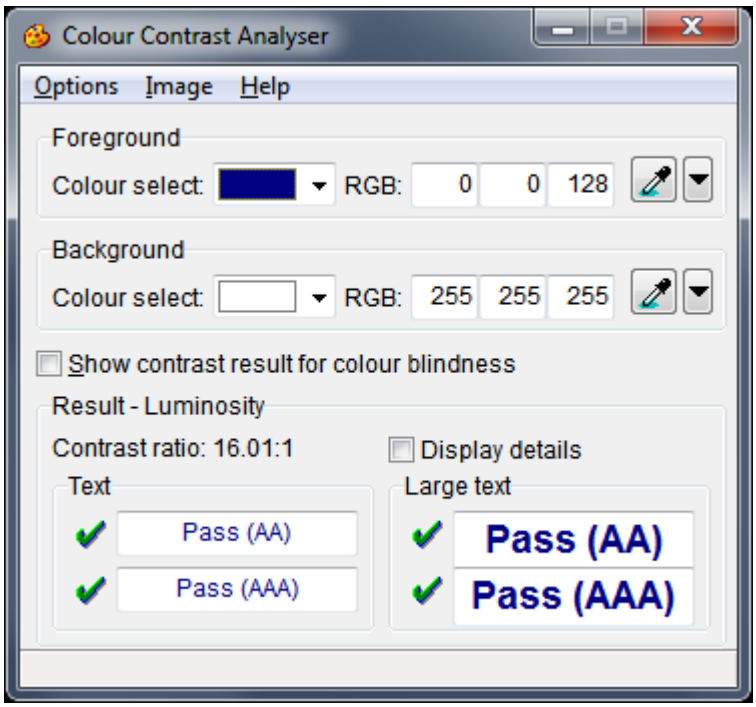

Figure 6

2. **Mixing Colour Contrast**
   Avoid mixing colour contrast.

   Most low vision adaptive technology comes with an option to reverse or modify colours to suit people's needs. It is common to use the negative setting as it reduces the amount of white and as a result reduces glare. Mixing colour contrast prevents people with low vision to be able to maintain these settings.

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Figure 8 shows a table that uses white on black text for the heading, and white on black for the text. Next to the table is the same table with negative settings. The heading is now black on white background, creating more glare around the text of the heading.

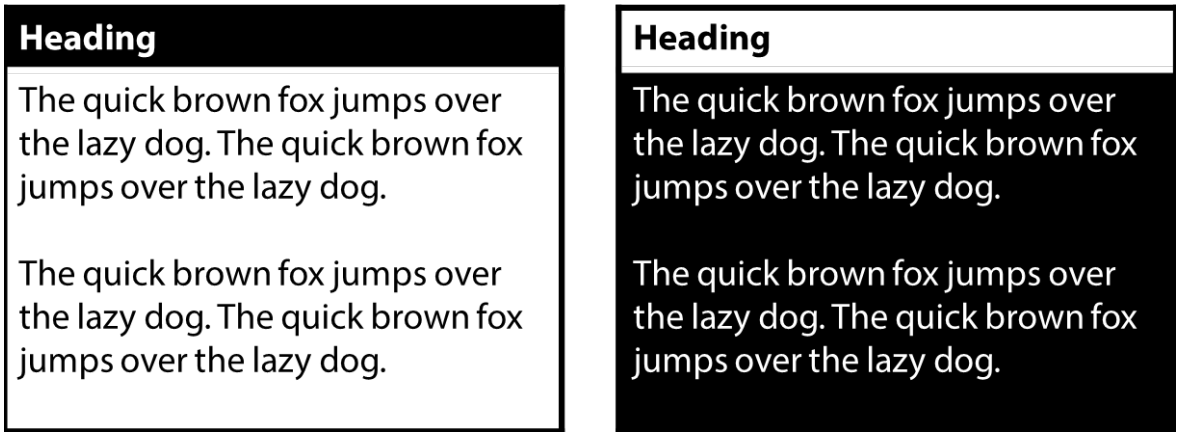

Figure 7

3. Alignment

Left align text. Avoid using centred headings and mixing text alignment.

Mixing text can cause information to be missed entirely.
Figure 8 shows a recipe with the headings centred at normal magnification. Figure 10 shows the recipe with magnification, as a result the centred headings are off the screen and difficult to find.

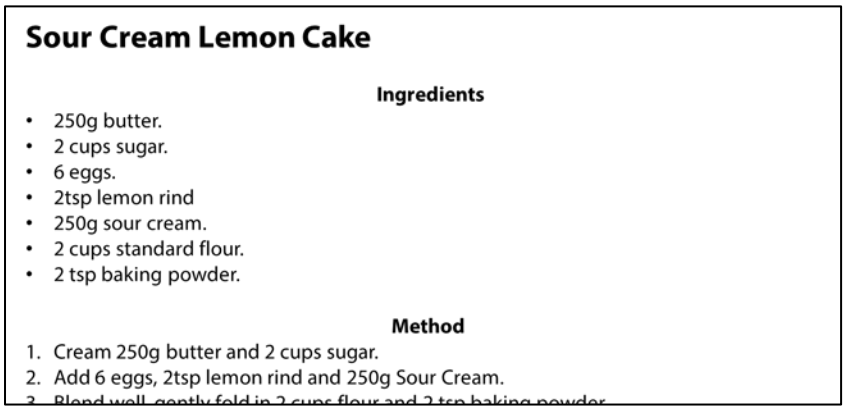

Figure 8

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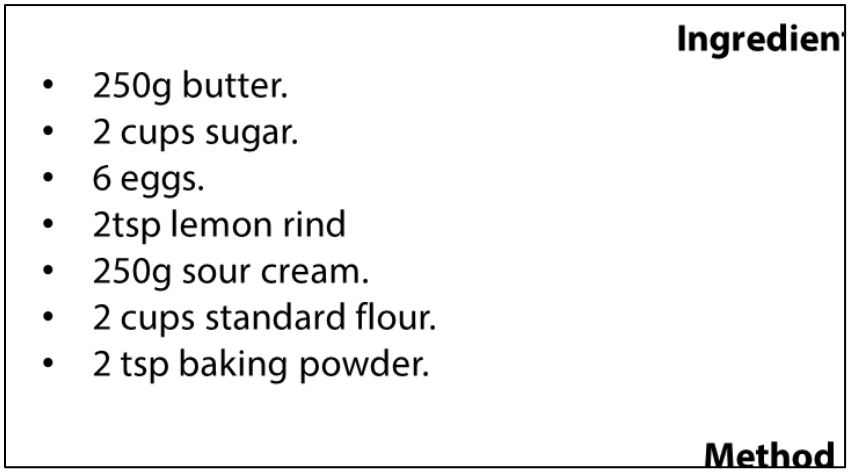

Figure 9

4. **Columns**
   Use a vertical line to indicate separate columns.

   When using magnification a vertical line can help indicate that you are navigating to another column. This gives a clue to move to the next line. If you are unable to use a vertical line, use plenty of white space between columns

5. **Repetition**
   Repeat visual elements, this develops organisation and strengthens unity.

   A common example is using bullet points. Using different visual elements can be confusing to the reader as it can be interpreted as a different topic or subject. Using the same bullet point creates consistency within the document.

6. **Proximity**
   Items relating to each other should be grouped close together.

   Readers will naturally link text that is close together. Separating text can add clarity the text is a different subject or topic.

7. **Printing and binding**
   Ensure paper is thick, non-glossy and bound so it can be laid flat

   Paper or lamination must not be glossy. Some partially sighted people experience light aversion, so glare must be avoided.

   Paper must be thick enough to minimise show-through from the other side.

   Choose a binding method that lets the document open flat. This is more effective for readers using magnification technology.

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Tables

1. **Merged cells**
   Avoid using merged cells

   Merged cells within tables can make navigation using a screen reader very confusing. While technically accessible, a table used for layout is can be difficult to comprehend using a screen reader. For example, the table below is read out as...

   “Non-uniform table, “Title” row 1 of 3 column 1 of 2, “Date” Column 2 of 2, “Name” row 2 of 3, number of columns changed from 2 to 3, “Code” column 2 of 3, “Currency” column 3 of 3, “Address” row 3 of 3 column 1 of 3, “Country” column 2 of 3, “Reference” column 3 of 3”

<table>
<tr><td colspan="2">Title</td><td>Date</td></tr>
<tr><td>Name</td><td>Code</td><td>Currency</td></tr>
<tr><td>Address</td><td>Country</td><td>Reference</td></tr>
</table>

   Changing this table so that it is **small, simple and symmetrical** will make this table easier to comprehend and navigate. The following table will be easier to navigate.

Form	**Details**
Name	
Date	
Currency	
Address	
Code	
Reference	

2. **Blank columns and rows**
   Avoid using blank rows and columns

   Blanks rows and columns can be interpreted as the end of a table. Tables with blank areas can also be difficult to navigate to find data even if the information is accessible.

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3. **Reading order of tables**

Screen readers read tables from left to right. For example, in the table below it would be read out as “Basement up toilets flush must” not “Basement toilets must flush up”

Basement			up
toilets		flush	
	must		

Each line of information in a table should have its own row. The table below shows a table with 2 rows, however there is multiple lines of text in the cells in row 2. This would read out as “Maths, English, Physics” then “Tuesday, Monday, Friday” and finally “10:00, 12:00, 10:30”

Class	**Day**	**Time**
Maths English Physics	Tuesday Monday Friday	10:00 12:00 10:30

The following table has correct formatting; each line of information has its own table row.

Class	**Day**	**Time**
Maths	Tuesday	10:00
English	Monday	12:00
Physics	Friday	10:30

4. **Add bookmarks for table headers**
    - If a table has both row and column headings insert a bookmark named ‘title’ in column 1 row 1.
    - If a table has column headings only, insert a bookmark named “ColumnTitle” in row 1
    - If a table has row headings only, insert a bookmark named “RowTitle” in Column 1

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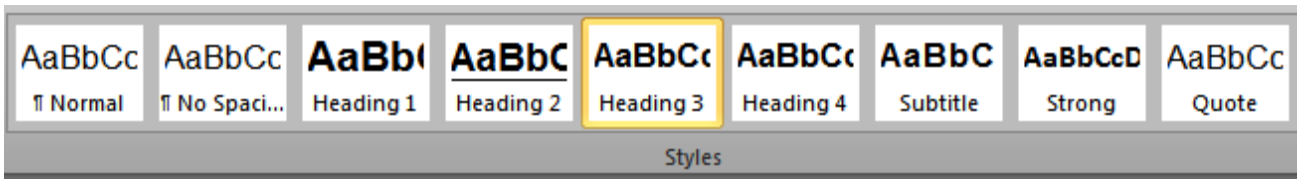
Headings



1. **Styles**
   Use Heading styles to format Microsoft Word documents

   A good heading structure is probably the most important accessibility consideration in most Word documents.

   Headings must be formatted using styles in Word, rather than simply changing the visual appearance of the text by making it bigger or applying bold.

   Styles are not an accessibility tool; it is how Microsoft meant for you to format documents. It is the most efficient method of formatting documents.

   While there are many styles within Word, screen reader users only use the Heading styles for navigation.

   Marking headings correctly means that…

   - You can use features in Word that rely on heading codes, like adding a table of contents, creating hyperlinks automatically and using the Navigation Pane.
   - Screen reader users can use headings to navigate using the headings as a list of contents to scan the document
   - The document can be converted into an accessible PDF file, braille, large print and synthetic audio more quickly and efficiently.

   Note: Styles can be modified by right clicking (or using the context menu key) and selecting **Modify**. These changes will affect every instance of the style throughout the document. If you modify a heading, it will still be readable by a screen reader.

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Resources Consulted

- CNIB Clear Print guidelines
- Print Round Table guidelines
- European Blind Union guidelines
- WebAIM Word Document guidelines
- RNIB Word document formatting guidelines
- American Printing House for the Blind guidelines
- Accessible Digital Office Document Project
- British Dyslexia Style Guide
- Web Content Accessibility Guidelines (WCAG 2.0)
- Microsoft Create Accessible Word Document Guidelines
- Microsoft: Article on Word recognition http://www.microsoft.com/typography/ctfonts/wordrecognition.aspx

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