

# to Creating Lab Reports in Microsoft Word



# A Public Health Guide to Creating Lab Reports in Microsoft Word

Navigating Microsoft Word 2016 for Lab Reports in the Public Health and Health Sciences Field

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# **Acknowledgements**

I would like to thank my two friends, Simone and Karl, for helping to inform my research and understanding of public health in order to produce this manual. I would also like to thank my usability testers who gave me feedback on how to apply this manual to its intended audience. Finally, I would like to thank my peers in English 380 for all the helpful feedback during workshops, and Professor Janine Solberg for being a technical writing wizard and constant helping hand from the beginning of this project to the end.

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# Chapter 1: Getting Familiar

- 1.1 Introduction
- 1.2 Key Features for the Health Sciences

### 1.1 | Introduction

You have your methodology, you've gathered results, you have visual data to support your findings- what next?

Creating lab reports in the Public Health and Health Science field can mean a lot of tedious paper formatting and inserting visuals alongside your work, and luckily Microsoft Word is a program that caters to these kinds of lab report necessities no matter what level of expertise you are reading this at.

#### Why Microsoft Word?

Microsoft Word 2016 is a program that gives users the ability to complete a number of tasks ranging from producing standard text documents to creating charts and graphs to designing your own cover pages. This kind of versatility is useful for a lab report in that it offers a wide-selection of features that can help contribute to lab sections such as data evidence and gathering results.

#### What to Expect

In this manual, you will find sections dedicated to helping you with the presentation of your lab report, the insertion of visual data and captions to go alongside text, as well as formatting your work to align with the industry standard for public health. Some of the functions that this manual dedicates sections to includes functions that will help with tasks such as:

- Repeating a term or phrase related to your methodology
  - → 2.3 Inserting Quick Parts Text
- Creating a graph that will show a trend in data
  - → 3.5 Inserting Charts
- Citing a list of references
  - → 4.3 Creating a Works Cited

With the help of this manual, any lab report can be presented at the professional level of public health researchers and health science specialialists.

# 1.2 | Key Features for the Health Sciences

For some of you public health and health science students, the selection of functions that this manual covers may seem overwhelming at first glance. If you don't know what functions might be beneficial to your lab report, consider turning to these commonly used features:

Inserting
Quick Parts
Text

Inserting SmartArt Graphics

Formatting in APA

Inserting Running Headers/Footers

Inserting Charts

# Chapter 2: Presenting Your Lab Report

- 2.1 Formatting a Cover Page
- 2.2 Using a Style Set
- 2.3 Inserting Quick Parts Text

# 2.1 | Formatting a Cover Page

In the Health Sciences field, many reports that you will produce require a cover page to begin your paper with. There is a standard structure to this cover page, and with the use of the Microsoft Word toolbar, the features that will help you format this page quickly are easily accessible. Along with this, the functions are a good way of first getting familiar with Microsoft Word as a whole.

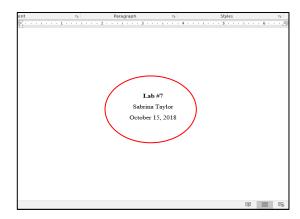
#### Formatting Your Page

- 1. Open a new blank Microsoft Word document.
- Type out all the information that is required of your cover page, such as the title of the report, your name, the course or subject that it falls under, collaborator names, and the date.
- 3. Highlight all of the text on this page only it is required that you center this information on the page.
- 4. Under the Home tab in the Paragraph section at the top of the screen, select the Center icon that displays four lines centered evenly in the middle.



**Note:** If you are unsure of whether or not you have selected the right icon, you can hover your cursor over each icon to see the names for them; select the one that says **Center (Ctrl+E)**. Space the text of this cover page as instructed, with this information in the middle of the page.

Under the Insert tab on the far left side, select
 Pages → Page Break to continue the report on a new page.



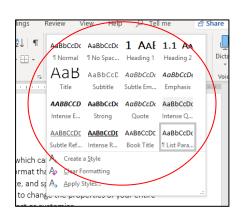
**Note:** The text on your cover page should be centered in the middle of the document as displayed.

# 2.2 | Using a Style Set

Lab reports can have a wide range in length, which can make it difficult for you to keep track of and be consistent in the document format that you choose to follow- through features such as font, bold and italics, font size, and spacing. Style Sets are a way to avoid this inconsistency in formatting, allowing you to change the properties of your entire document all under a single style that you select or customize.

#### Applying a Built-In Style Set

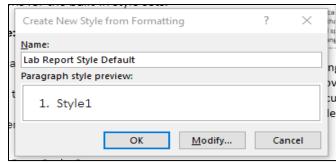
- 1. Select the text that you wish to apply the style set to.
- Select the **Home** tab at the top of the Microsoft Word toolbar
- Under the Styles section, click on the More cursor that is
  displayed as a line and an arrow pointing down. This shows
  you all options for the built-in style sets.
  - a. Note: You may choose to use one of the built-in style sets and still modify it to your desire. To do so, right click the style set you want to use and select Modify under the list that appears beneath it.
- 4. Select a style from this list.



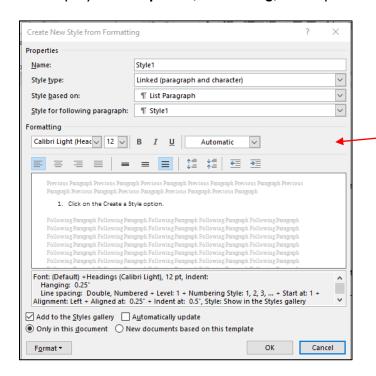
**Note:** Using the selection style sets displayed above, you may choose to format your document through one of the build-in style sets provided by Microsoft Word.

#### Customizing A Style Set

- 1. Under the **Styles** section of the **Home** tab, select the **More** cursor that is displayed as a line and an arrow pointing down. Underneath the selection of built-in style sets, it shows a list of 3 functions to choose from.
- Click on the Create a Style option. A window will appear with the Name and Paragraph Style
   Preview fields.



- 3. Give this style set a name that is significant to the report that you are using it for.
- Once you have named this customized style set, select Modify. A new window appears
  that displays the Properties, Formatting, and a preview of your style set.



Using the tools in this window, you may choose to modify any number of properties and formatting features for your default style set.

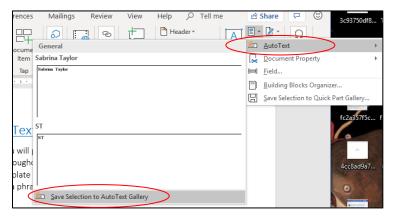
- 5. Modify this style set to your desire.
- 6. When finished, select **OK**.

Note: This style set will now be used consistently throughout your document.

# 2.3 | Inserting Quick Parts Text

For many of the reports that you will produce, there will be lengthy terms and phrases that get repeated frequently throughout your paper, such as names of diseases, conditions, or body parts. Quick Parts is a function that serves as a shortcut to this, allowing you to save Auto Text and select a phrase to the Microsoft Word toolbar without having to retype it each time.

- 1. First, begin by selecting the group of text that you want to repeat throughout your document.
- 2. Under the **Text** section of the **Insert** tab, select the top middle icon that appears as a sheet of paper with boxes inside of it.
  - a. Note: If you are unsure whether or not you have selected the correct icon, hover your cursor over it. You should see this icon as the Explore Quick Parts feature.
- 3. Once the drop-down list appears under this option, select Autotext.
- 4. Under the drop-down list that appears following this, select Save Selection to AutoText Gallery. This saves your selected phrase to the list of options above Save Selection to AutoText Gallery.



**Note:** If you are unable to select the option **Save Selection to AutoText Gallery**, this means that you have not highlighted a section of text to save to the toolbar.

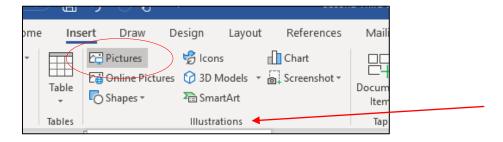
# Chapter 3: Inputting Visual Evidence and Data

- 3.1 Uploading Images
- 3.2 Choosing an Object Layout Option
- 3.3 Inserting Tables
- 3.4 Inserting SmartArt Graphics
- 3.5 Inserting Charts
- 3.6 Inserting Captions

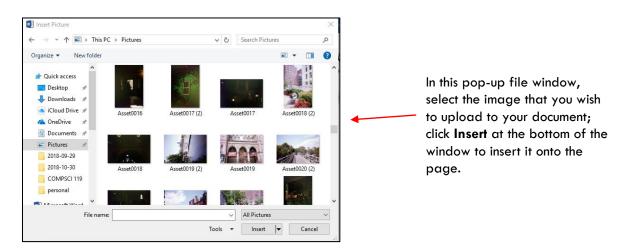
# 3.1 | Uploading Images

In any given lab report, uploading images is one of the most commonly used tools in Microsoft Word. Providing visual evidence through the use of uploaded images can help to support your body of text in a report in that visuals such as images are where readers' eyes will first gravitate, and the use of uploading images onto your document can either make or break the layout of your report.

- 1. Select the Insert tab at the top of the Microsoft Word toolbar.
- Under the Illustrations section of this tab, select the Pictures icon. A pop-up window appears that displays a selection of image files from your computer.



Search for the photo that you wish to upload by either typing in the file name in the File
name field at the bottom of the page, or finding it under its location from the drop down
list on the left-hand side of the window.



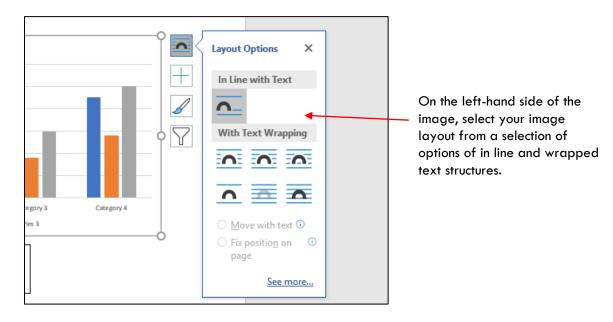
- 4. Select the image; the file name appears in the File name field.
- 5. Click Insert.
- 6. Move the image to your desired location on the page.

# 3.2 | Choosing an Object Layout Option

With the reliance on visual data for many lab reports, it is important to consider the amount of space that you allow these documents to take up on your document- positioning matters. Whether an image relates to a particular body of text, serves as the primary source of evidence in your report, or is just there as a supplementary, choosing a layout option for your images can help to organize your information in a way that is more concise and effective for your reader.

- 1. Select an image that you wish to reorganize the layout of.
- 2. Select the **Layout Options** icon at the top-right corner of the image; it appears as a square with lines and a half-circle inside of the square.
- 3. Under the drop-down menu that appears, select the way in which you want your image to move in relation to the text.





4. Move the image to your desired location on the page

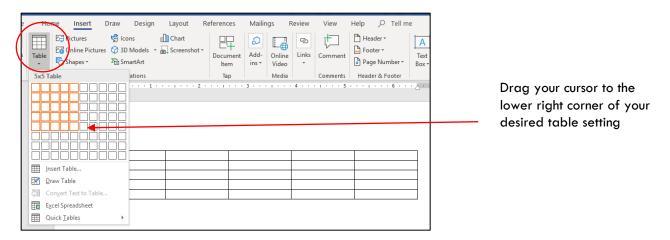
**Tip:** Keep in mind the relationship between your image and the text that this image is supporting.

# 3.3 | Inserting Tables

In many of the lab reports that you will complete, it will be useful to present any collected data that you have through the use of visuals such as tables. A table can be helpful for presenting both text and numerical information, as it allows you to juxtapose sets of information and compare them through its particular visual format.

#### How to Quick Insert a Table

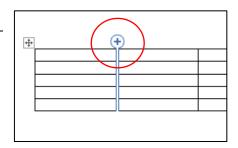
- 1. Select the Insert tab at the top of the Microsoft Word toolbar.
- 2. Click on the **Table** icon under the **Tables** section of this tab; a drop-down menu appears.
- 3. Select the number of rows and columns that you want by hovering your cursor over the grid; a measurement (ex. 5x5 Table) appears to show the number of rows and columns you have selected.



4. Move the table to your desired location by hovering your cursor over the top left corner of the table and dragging the plus sign symbol with arrows at each end.

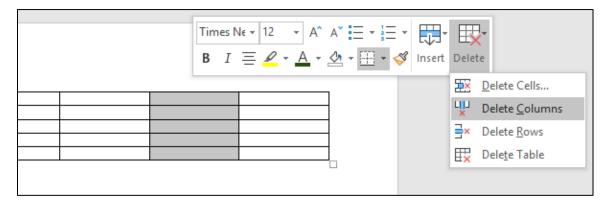
#### Adding Columns and Rows to a Table

- 1. Hover your cursor outside of the table in between two rows or columns that you wish to add to. A plus sign icon appears.
- 2. Select the plus sign icon. A new row or column is inserted in between this section.



#### Removing Sections of a Table

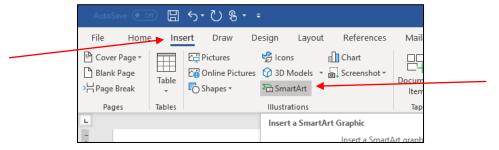
- 1. Select the section of the table that you wish to delete; this highlights the section and opens a pop-up toolbar.
- 2. Click on the **Delete** option at the end of the pop-up toolbar.
- 3. Select the portion of the table you wish to delete (ex. **Delete Columns**). The highlighted section of the table is removed.



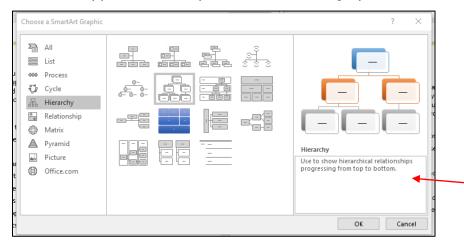
# 3.4 | Inserting SmartArt Graphics

SmartArt graphics are a function on Microsoft Word that organizes visual data for your lab report such as cycles, lists, pyramids, and processes shape templates.

- 1. Select the Insert tab at the top of the Microsoft Word toolbar.
- Under the Illustrations section of this tab, select the SmartArt icon; a pop-up window appears.



- 3. In this new **Choose A SmartArt Graphic** window, select a SmartArt layout category from the left-hand side.
- 4. Under the selection that appears in the middle section of the window, select the design that you want for your data presentation; this selection is inserted into the document and text boxes appear in each separate section of the graphic.



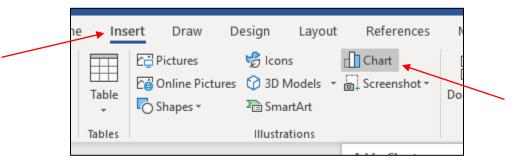
Tip: Underneath the display of your layout selection on the right-hand side, there is a description of the SmartArt graphic's purpose. This may be useful when determining what kind of data you are presenting.

5. Fill in each text box given with your own data or text.

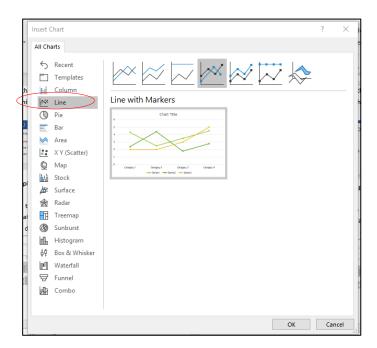
# 3.5 | Inserting Charts

When comparing the collection of data through the use of a visual graph, inserting charts is one way of using a qualitative structure to compare a collection of data and numbers. For lab reports in particular, charts are useful for supporting your hypotheses and providing clear, visual evidence for any pattern changes and rises or declines within a given set of information.

- 1. Select the Insert tab at the top of the Microsoft Word toolbar.
- Under the Illustrations section of this tab, select the Chart icon; a pop-up window appears.



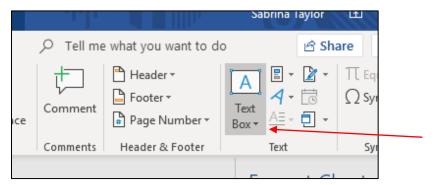
- 3. In this new Insert Chart window, select a Chart layout from the drop-down menu on the
  - left-hand side of the window; a row of charts within your selected category appears at the top of the window.
- Select the chart that you wish to use for your particular data set.
- Click OK; a pop-up Microsoft Excel window will appear with a collection of your data in table-format.
- 6. Move the chart to your desired location on the page.



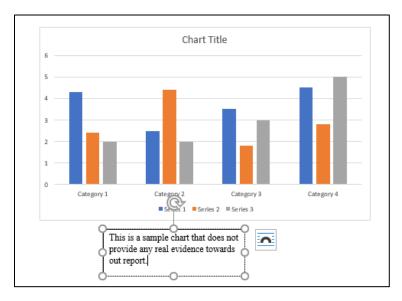
# 3.6 | Inserting Captions

Much of the visual data that you will be inserting into lab reports will require some kind of description in order for the reader to understand how the graphic relates to your overall argument in the report. Inserting captions alongside your graphics is the best way to draw a clear connection between any visual evidence that you have and parts of the text in your report that the evidence points to, as it gives room for a short and concise summary of what the reader is looking at and how the image relates to parts of your argument in the report.

- 1. Select the **Insert** tab at the top of the Microsoft Word toolbar.
- Under the Text section of this tab, select the Text Box icon on the left-hand side; a dropdown menu appears.



- Select your preferred text box type; this text box is automatically inserted into the document.
- Position the text box in close proximity to the image that the caption is in reference to.
- Type in the desired text that you wish to caption the image with.



# Chapter 4: Formatting Your Report

- 4.1 Formatting in APA
- 4.2 How to Insert a Running Header and Footer
- 4.3 Creating a Works Cited

# 4.1 | Formatting in APA

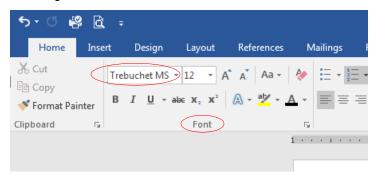
For professional writing in the science fields, the industry standard is to use APA formatting to layout your writing or reports. APA format requires 1" on each side, Times New Roman 12 point font, and double spacing of all the text. Because this is the format that you will use for all your reports related to the health sciences, it is important to become familiar with how to regularly use the Microsoft Word functions to format your document in this standard way.

#### Setting Your Font

1. Highlight any text that is already on the document.

**Note:** Microsoft Word will use the font changes on the rest of the document unless otherwise changed.

- 1. Select the **Home** tab at the top of the Microsoft Word toolbar.
- 2. Under the **Font** section of the tab, select the top left box by clicking the upside down triangle symbol to the right side of the box.

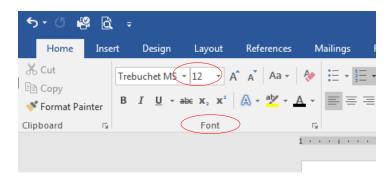


**Note:** A drop-down menu appears with a list of fonts for you to select from.

3. Under the drop-down menu, locate and select the font Times New Roman.

**Tip**: Alternatively, you may also type in "Times New Roman" into the font box as long as the font currently there is highlighted.

- 4. Once you have set the font style, select the same upside down triangle symbol in the white box to the right of the fonts with a number inside of it; this is to select font sizing.
- 5. Under the drop down menu of font-sizes that appear, select 12 point font.



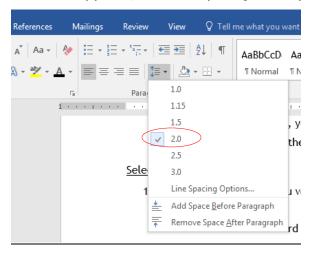
**Note:** Alternatively, you may also type in "Times New Roman" into the font box as long as the font currently there is highlighted.

#### Selecting Double Spacing

- Highlight any text that you wish to apply the setting to and is already on the document.
   Note: Microsoft Word will use the font changes on the rest of the document unless otherwise changed.
- 1. Under the **Paragraph** section of the **Home** tab, select the icon that displays two arrows pointing away from each other and 4 lines beside it.

**Tip:** This symbol will appear as the **Line and Paragraph Spacing** function. If you are unsure whether or not you have selected the right function, hover your cursor over the icon and it should be named this.

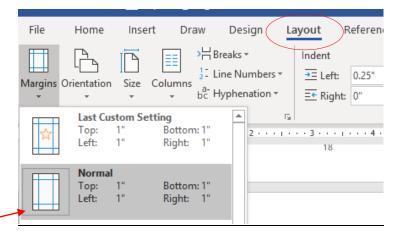
2. Under the drop-down menu that appears, select the spacing that says 2.0.



**Note:** If you are unsure whether the change has been applied to your document, re-select the **Line and Paragraph Spacing** icon. Under the drop-down menu that appears, there should be a checkmark on the left side of the **2.0** size spacing.

#### Creating 1" Margins for Every Page Side

- 1. Select the Layout tab at the top of the Microsoft Word toolbar.
- 2. Under the **Page Setup** section of this tab, select the far-left icon labeled **Margins**. A drop-down menu appears.
- 3. From the drop-down menu, select the margin setting labeled **Normal**. This setting uses 1" margins on the top, bottom, left, and right sides of the document.



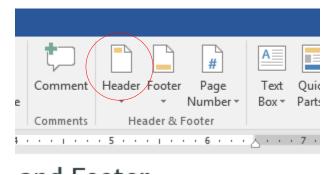
Tip: Alternatively, you can also select 1" margins on every side of the page by selecting the Margins icon and clicking Custom Margins. In the pop-up window that appears, change the top, bottom, left, and right margins settings all to 1".

### 4.2 | How to Insert a Running Header and Footer

For the long lab reports that you may produce, it can be helpful for the reader to have a running header or footer that keeps track of what section of the document you are on, so they can easily turn to that section later just by looking at the top or bottom of the page. Headers and footers are page markers that contain information to help users identify where they are within a document, and can help your lab report clearly separate sections to better help the audience look through specific parts of your report that they need.

#### How to Insert a Running Header

- 1. Select the **Insert** tab at the top of the Microsoft Word toolbar.
- Under the Header & Footer section of this tab, select the Header icon. A drop-down menu appears.



Select Edit Header at the bottom of the drop-down menu. Microsoft Word automatically directs your cursor to the top of the page where the header is located.

**Note:** Alternatively, you may select to use one of the built-in headers displayed in the drop-down menu.

4. Type in the title or name that you wish to use as the header for your document.

#### How to Insert a Running Footer

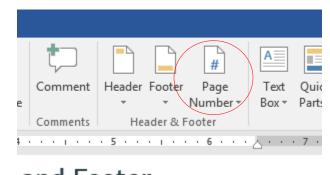
- 1. Select the **Insert** tab at the top of the Microsoft Word toolbar.
- Under the Header & Footer section of this tab, select the Footer icon. A drop-down menu appears.
- Select Edit Footer at the bottom of the drop-down menu. Microsoft Word automatically directs your cursor to the top of the page where the header is located.

**Note:** Alternatively, you may select to use one of the built-in footers displayed in the drop-down menu.

4. Type in the title or name that you wish to use as the footer for your document.

#### How to Insert Page Numbers

- 1. Select the Insert tab at the top of the Microsoft Word toolbar
- 2. Under the **Header & Footer** section of this tab, select the **Page Number** icon. A drop-down menu appears.



- 3. From the drop-down menu, select hover your cursor around the selection of options for where you want your document to be located. A new drop-down menu appears.
- 4. From the new drop-down list that displays a variety of placements to insert your page numbers with onto the page, select your desired location and style for the page numbers.

A Tip on Headers & Footers: Alternatively, you may choose to edit or insert and of these three functions by simply double-clicking the top or bottom margin of any page in the document, and your cursor is automatically directed to typing in this section of the document.

# 4.3 | Creating a Works Cited

With the abundance of information that you will cite from and use to support arguments made in your lab reports, it is required that you produce a works cited page that will provide the reader with the collection of sources you turned to in order to support your report. A works cited page helps to organize these sources that you referred to and provide a clear page of references to other works that further discuss the topics covered in your own report. Creating a works cited page in APA format means alphabetizing your list of sources, properly italicizing section of each citation, and creating a hanging indent after the first lines of each citation.

#### Italicizing Titles

- 1. Highlight the selection of text that you wish to italicize.
- 2. Keeping this section of text highlighted, select the **Home** tab at the top of the Microsoft Word toolbar.
- 3. Under the **Font** section of this tab, select the icon that appears as *I*. This is the **Italics** function.

#### Creating a Hanging Indent

- 1. Select a single source listed under your "Works Cited" page.
- 2. Select the **View** tab at the top of the Microsoft Word toolbar.
- 3. Under the **Show** section of this tab, click the box next to the **Ruler** feature. A ruler will appear above the pages of your document that is the same length as the page.
  - a. Note: The gray-filled areas of the ruler indicate margin spaces. The white section indicates text spaces on the page.
- 4. Hover your cursor over the white triangle in the ruler labeled **Hanging Indent**. This hanging indent refers to any text following the first line of a paragraph or chunk of text.
- 5. Drag the **Hanging Indent** icon 0.5" away from the left margin, or 5 tick-marks before the 1 on the ruler.
  - a. **Note:** This should only move the second line and on of your selected text. The first line should not be moved by this action.
- 6. Repeat for each citation source.

AaBbCcDc

#### **Alphabetizing Your Sources**

1. Highlight the list of sources that you have typed onto the document.

Tip: Add all citations before using the function to alphabetize them.

- Select the **Home** tab at the top of the Microsoft Word toolbar.
- 2. Under the **Paragraph** section of this tab, click on the icon that displays an A and Z on top of each other, with an arrow pointing down. This icon is labeled as **Sort**. A pop-up window appears titled **Sort Text**.
- 3. In the first drop-down menu of the **Sort by** section of the window, select **Paragraph**.
- 4. In the second drop-down menu labeled Type:, select Text.
- 5. On the far-right side of the **Sort by** section, select **Ascending** for the text. This alphabetizes it from A to Z.
- 6. Click **OK**.