Microsoft Word 2010
Lesson 2

Open the “Lab Report” Word file that you saved in Lesson 1. We will begin by adding a title page to the report.

Position the cursor before the first character in the document.

Preparing a Cover Page

Next we would like to add a cover page for the report. On the Insert ribbon, select Cover Page and then Conservative.

You will see a template for a conservative cover page, an appropriate form for a lab report.
Modify the cover page so it looks like the picture below when the View is to One page.

Along with adding the text shown at the right, make the following changes:

- Change the font to Courier New
- Make the name and date 14 pt
- Remove the subtitle
- Make the abstract 14 pt. Move the abstract up on the page so that it is positioned as shown.

The text of the abstract is shown below:

The drinking bird is a toy that bobs up and down when its head dips into a container of water. In this experiment we determined that heating the bird’s tail and cooling its head causes the liquid in the bird to evaporate in the tail and condense in the head. This pushes the liquid into the head, causing the bird’s head to fall, at which point the liquid runs back into the tail. This continues as long as the bird’s tail is warmer than its head.

Change the Zoom View back to 100%.
Automatically Checking Spelling and Grammar

Office has a spelling and grammar checker that you always should use after you have written a document. It is possible to set this up so that Office automatically checks for potential spelling and grammar problems as you type, and indicates the potential problems by underlining them with a squiggly line.

To see if Office is set up to automatically check spelling and grammar, click on the **File** and then **Options**.

In the Word Options window, select **Proofing** in the menu on the left. The boxes should be checked by “Check spelling as you type,” “Mark grammar as you type,” and “Check grammar with spelling.

If they are not, check these boxes and click on **OK**.
Potential grammar problems are indicated by a squiggly green line under the potentially offending section.

Not all of the potential grammar problems identified by the Grammar Checker actually are problems: the sentence above is grammatically correct, for example. Right-clicking on the sentence will bring up a window explaining what the Checker thinks the problem. Click on Ignore Once to ignore this grammar “problem” with this sentence. When you do, the green underline will disappear.

Potential spelling errors are words that the Spelling Checker does not find in its dictionary. For example, suppose that the word “coloured” is in a document. If you right-click on this word, you would see four options:

- Replace it with “colored”
- Ignore this occurrence of the word
- Ignore all occurrences of this word in the document
- Add the word to the Dictionary

This really isn’t an error, just an alternate British spelling of “colored.” Still, it probably is preferable to use the American spelling. You could click on colored to replace “coloured” in the sentence.

Checking Spelling and Grammar in the Entire Document

You also can check the spelling and grammar yourself. In the Review ribbon, click on the Spelling & Grammar button.

The Spelling and Grammar checker will run through the entire document looking for potential problems.
Hanging Indented Margins

Open up some space in the last section of the report and type in the text shown here.

We removed the felt, paper eyes, and tail feathers from one of our toy birds.

Felt: The felt was difficult to remove because it adhered so strongly to the glass. We scraped it away with razor blades.

Eyes: The eyes came off when we removed the felt.

Tail: The tail could be pulled off. We then used acetone as a solvent to remove the glue that was holding the tail on.

We then dipped the head into a beaker of water and watched to see if it would continue to bob up and down.

It would be nice to indent the explanatory text to make the main words (Felt, Eyes, and Tail) stand out, like in a bulleted list. We can do this with hanging indented margins.

Select the three paragraphs that we want to set up with hanging indent margins.

In the Page Layout ribbon, click on the small arrow located in the lower right corner of the Paragraph section.
In the Paragraph window, under the **Indents and Spacing** tab, set **Special** to **Hanging**. Leave the **By:** set to its default value of 0.5”.

Click on **OK**.

A **hanging indent** indents the margins of all lines in a paragraph except the first, as shown below. It is a little bit like a bulleted list, except that the “bullets” are words.

We removed the felt, paper eyes, and tail feathers from one of our toy birds.

**Felt:** The felt was difficult to remove because it adhered so strongly to the glass. We scraped it away with razor blades.

**Eyes:** The eyes came off when we removed the felt.

**Tail:** The tail could be pulled off. We then used acetone as a solvent to remove the glue that was holding the tail on.

We then dipped the head into a beaker of water and watched to see if it would continue to bob up and down.
Setting Tab Stops

Enter a 14 pt Bold heading called “Results: Heating.”

We now want to enter the results of our heating experiments, which are shown below.

<table>
<thead>
<tr>
<th>Run</th>
<th>Where</th>
<th>Temperature (°C)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td>40</td>
<td>No motion</td>
</tr>
<tr>
<td>2</td>
<td>Head</td>
<td>35</td>
<td>No motion</td>
</tr>
<tr>
<td>3</td>
<td>Tail</td>
<td>42</td>
<td>Head moved</td>
</tr>
<tr>
<td>4</td>
<td>Tail</td>
<td>39</td>
<td>Head moved</td>
</tr>
</tbody>
</table>

We want to align the experimental results in the report so that their format looks like the above. We will do this by setting tab stops in appropriate positions.

The default tab stops in Word are every left tabs positioned every ½ inch. We can change these to other types of tabs located at positions we select. There are several tab types:

- **Left tab**: Aligns text to right of tab
- **Center tab**: Centers text on the tab
- **Right tab**: Aligns text to left of tab
- **Decimal tab**: Aligns numbers by their decimal pt.
- **Bar tab**: Inserts a vertical bar at the tab stop

Choose **Ruler** from the **View** ribbon if the ruler is not visible above the page.

The current **tab type** is shown on the left side of the ruler bar. This is probably the default **Left tab**.
Click on the tab type icon once to change it to a **Center tab**.

*With the cursor positioned two lines below the “Results: Heating” heading*, click on the ruler in three spots: 1.5”, 3”, and 5”. This will insert three Center tab stops at these locations.

Type in “Run,” press **Tab**, type in “Where,” press **Tab**, type in “Temperature(°C),” press **Tab**, and type in “Results.” Note: In “Temperature(°C), a lower case “o” is before the final “C.” Put this line in **Bold**.

**Press the Enter key to move down to the next line and retain the tab stops that you set for the previous line.**

Enter the data as shown below. Pressing **Tab** on the keyboard will move you from column to column. Press **Enter** to move to the next line and retain the tab stops.

<table>
<thead>
<tr>
<th>Run</th>
<th>Where</th>
<th>Temperature(°C)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td>40</td>
<td>No motion</td>
</tr>
<tr>
<td>2</td>
<td>Head</td>
<td>35</td>
<td>No motion</td>
</tr>
<tr>
<td>3</td>
<td>Tail</td>
<td>42</td>
<td>Head moved down</td>
</tr>
<tr>
<td>4</td>
<td>Tail</td>
<td>39</td>
<td>Head moved down</td>
</tr>
</tbody>
</table>

*Space down three lines below that data you just entered.* We now will make a tab stop that will insert a line of periods when you move to that tab:

Summary.............................................See the line of periods
In the **Page Layout** ribbon, click on the small arrow located in the lower right corner of the **Paragraph** section.

![Page Layout ribbon](image1)

At the bottom of the **Paragraph** window, click on the **Tabs** button.

![Paragraph window](image2)

In the Tabs window, click on **Clear All** to clear the tabs you had set to display the experimental results.

![Tabs window](image3)

Enter a **tab stop position of 3”** in the text box under “Tab stop position”

Set the **Leader to 2 ……….**

Click on **Set**.

Click on **OK**.

![Tabs settings](image4)
Type in “Summary” as shown at the right and then press Tab. You should see the periods appear, leading over to the tab at 3”. Type “Heating the tail makes the head dip.” Also type in the sentence below the summary.

### Using Superscript and Subscript Fonts

We need to make the “o” in (“oC”) into (°C) by changing it into a superscript.

Select the “o” in “oC.”

In the Home ribbon, click on the Superscript icon, $x^2$. This will make the “o” look like the degrees symbol, °C.

### Using the Thesaurus

When you are writing, you may encounter a situation in which you have written a word for which you think there may be another that sounds better. Word has a built-in thesaurus that will supply synonyms of words you choose.

Suppose that you are dissatisfied with the word “squirted” in the description of the experiments. Right-click on “squirted” in the “Water” section and select Synonyms in the window that pops up.

You then will see a list of synonyms, from which you can choose if you like. Click on sprayed.
Using the Dictionary

You also can look up words in the program’s built-in dictionary. Suppose that you are not quite certain about the meaning of the word “pivots” in the Wikipedia description of the bird.

Right-click on the word and, in the window that pops up, click on Look Up.

A Research pane will open up on the right of the screen. Choose the Encarta Dictionary from the list of reference books. The Research pane then will display a list of definitions for the word “pivot.” The first one is the best for our purposes.

Close the Research pane when you are through.

Finding and Replacing Words

Occasionally a writer may find that he or she needs to change a word that is used throughout a document. In the past this was painful for a long document because it required the writer to go through the text, replacing the word one at a time. Now it is easy, because we can ask Word to find all occurrences of a word and replace it with the new one.

Suppose you find, for example, the “dunking bird” is a more commonly used name for the toy than “drinking bird.” You decide to replace the word “drinking” with “dunking” in your lab report.

Place the cursor at the beginning of the document by holding the Ctrl key down and pressing the Home key.
Select the **Home** ribbon and **Replace**.

![Image showing the Home ribbon and Replace option]

Enter “drinking” in the **Find what:** box.
Enter “dunking” in the **Replace with:** box.

We don’t want to replace all occurrences of drinking – in the Wikipedia reference for example – so click on the **Replace** button, which will allow us to choose when we want the replacement to be made.

You will see the first occurrence of the word “drinking” highlighted on the Cover Page. Click on **Replace** to replace it with “dunking.”

![Image showing the first occurrence of the word highlighted]

You then will see the next occurrence of the word on the next page. Again, click on **Replace**.

Continue replacing “drinking” until you reach the footnote. Click on **Find Next** for the two occurrences of “drinking” in the footnote, because you do not want these to change.

Eventually you will see a message that you have searched the entire document. At this point, **Close** the Replace window.

Hold down the **Ctrl** key and press the **End** key to move to the end of the document.
Insert a **Page Break** at this point to start a new page. Start the new page with a heading, **Results: Cooling**, in the 14 pt Bold heading style.

## Adding a Table

For the sake of example, let’s organize the experimental data for the Cooling experiments in a table.

<table>
<thead>
<tr>
<th>Run</th>
<th>Where</th>
<th>Temperature (°C)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td>5</td>
<td>No motion</td>
</tr>
<tr>
<td>2</td>
<td>Head</td>
<td>8</td>
<td>No motion</td>
</tr>
<tr>
<td>3</td>
<td>Tail</td>
<td>6</td>
<td>No motion</td>
</tr>
<tr>
<td>4</td>
<td>Tail</td>
<td>7</td>
<td>No motion</td>
</tr>
</tbody>
</table>

*Position the cursor three lines below the heading* and select **Table** from the **Insert** ribbon.

Choose the number of columns (4) and rows (5) that you need.

You should see the table below the heading.
Enter the labels for the columns in the top row in **12 pt bold Courier New** font. **Center** each label in its respective cell. Use a superscript to make the temperature in °C.

<table>
<thead>
<tr>
<th>Results: Cooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Run</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Adjusting the Column Width**

We need to adjust the width of the columns in the table. Move the cursor over the line separating the “Run” and “Where” columns. When you see a double arrow, hold the mouse button down and pull the line to the left.

Do the same for the next line to the right, narrowing the “Where” column. This should widen the “Temperature” column so the label doesn’t fill the entire cell.

Enter the data into the table. The font should be 12 pt Courier New. Center all the data in their respective cells.

<table>
<thead>
<tr>
<th>Run</th>
<th>Where</th>
<th>Temperature (°C)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td>5</td>
<td>No motion</td>
</tr>
<tr>
<td>2</td>
<td>Head</td>
<td>8</td>
<td>No motion</td>
</tr>
<tr>
<td>3</td>
<td>Tail</td>
<td>6</td>
<td>No Motion</td>
</tr>
<tr>
<td>4</td>
<td>Tail</td>
<td>7</td>
<td>No Motion</td>
</tr>
</tbody>
</table>
Shading Cells in a Table

Select the top row of cells. **Right-click** on the selected portion.

Choose **Borders and Shading** in the window that pops up.

Select the **Shading** tab and choose one of the colors – for example, Blue, Accent1, Lighter 40%.

Click on **OK**.

This will shade the top row to set it apart from the others.
Adding Rows to a Table

Let’s add a row to the top of the table, so we can add a table heading.

*Place the cursor somewhere in the top row of the table* and select **Table Tools** and **Layout** in the ribbon.

Click on **Insert Above** to insert a new row in the table above the selected row.

You should see that a row has been added to the table. We will use this row to hold a title for the table.

![Table Tools and Layout](image)

Merging Cells

If we are going to add a heading to the table, we don’t need four columns. Let’s merge the four cells in the top row, so that there is only one cell.

After you have added the new row, select it and remove its shading by choosing **No Color** in the **Borders and Shading** window.

![Borders and Shading](image)
Select the top row and choose **Merge Cells** from the **Layout** ribbon.

![Select Merge Cells](image)

This will merge the top four cells of the table into one long cell. Enter “Cooling Data” into this cell (12 pt Bold Century New). Center the text in the cell.

<table>
<thead>
<tr>
<th>Run</th>
<th>Where</th>
<th>Temperature (°C)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td>5</td>
<td>No motion</td>
</tr>
<tr>
<td>2</td>
<td>Head</td>
<td>8</td>
<td>No motion</td>
</tr>
<tr>
<td>3</td>
<td>Tail</td>
<td>6</td>
<td>No motion</td>
</tr>
<tr>
<td>4</td>
<td>Tail</td>
<td>7</td>
<td>No motion</td>
</tr>
</tbody>
</table>

**Adjusting the Row Height**

Let’s make the top row taller by increasing its height. Use the mouse to “grab” the lower line of the first cell and pull it down to increase the height of this cell.

<table>
<thead>
<tr>
<th>Run</th>
<th>Where</th>
<th>Temperature (°C)</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td>5</td>
<td>No motion</td>
</tr>
<tr>
<td>2</td>
<td>Head</td>
<td>8</td>
<td>No motion</td>
</tr>
<tr>
<td>3</td>
<td>Tail</td>
<td>6</td>
<td>No motion</td>
</tr>
<tr>
<td>4</td>
<td>Tail</td>
<td>7</td>
<td>No motion</td>
</tr>
</tbody>
</table>
Aligning Text in Cells

We have widened the first cell, but the text remains at the top of the cell, which doesn’t look very good. We would like to center the text in the cell vertically as well as horizontally.

Select the **Layout** ribbon and click on the **Align Center** icon, which centers the text both horizontally and vertically in the cell.

Add the text shown below in the space below the table.

<table>
<thead>
<tr>
<th>4</th>
<th>Tail</th>
<th>7</th>
<th>No motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooling the bird at either end does not make the head dip. However we did notice that the liquid in the neck rose toward the head when the head was cooled. It did not rise high enough to make the head dip, though.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Results: Dissection**

We compared the behavior of the bird when its head was dipped in water, with and without felt on its head.

With felt: The liquid in the bird’s neck rose somewhat, although not enough for the head to dip.

Without felt: The liquid in the bird’s neck rose only slightly.

Changing the Indent Level of a Paragraph

We would like to indent the two observations of what happens with and without the felt.

Select both paragraphs and click on the **Increase Indent** icon in the **Home** ribbon.
Removing a Hyperlink

When you pasted the information into the report from Wikipedia, you may have noticed two words that retain their hyperlinks from the web site.

A dunking bird consists of two glass bulbs joined by a glass tube (the bird's neck). The tube extends nearly all the way into the bottom bulb, and attaches to the top bulb but does not extend into it. The space inside the bird contains a fluid, usually colored. The fluid is typically dichloromethane, also known as methylene chloride. Formerly trichloromonofluoromethane was used.

We would like to remove these hyperlinks. Right-click on one of the hyperlinked words and select Remove hyperlink in the menu that pops up.

Do the same for the second hyperlinked word.

Using Microsoft Office Word Help

In spite of my best efforts, these lessons do not teach everything about Microsoft Word. If you have a question about how to do something, click on the small Question Mark symbol in the upper right of the screen.

You can either enter a phrase in the Search text box or browse for help.

Using Word Help, find the answer to the following questions:

1. How can I create a numbered (rather than a bulleted) list?

2. How can I type a word, such as école or naïf, that includes a non-English symbol?

3. How can I create a custom dictionary?