

WORD DOCUMENT PRODUCTIVITY

Working with Tables and Mail Merge

CASE STUDY | Community Disaster Relief Centre

Wacey Rivale is the Director of Fundraising for Alberta's Community Disaster Relief Centre (CDRC). She spends many hours giving speeches across the province to companies, organizations, and civic groups so they will be familiar with the efforts and activities of the Relief Centre. Because the CDRC is a nonprofit organization, Wacey and other CDRC staffers must demonstrate the need, the benefits, and the success of the service they provide.

Wacey always sends a letter of appreciation to the people who donate to and support the CDRC, but her latest marketing efforts have increased public response. Typically, she sends one or two per week, but now she is in a position where she needs to send several dozen letters. She asks you, her co-worker, to start a list of donors, their addresses, and their contribution amounts so no donor is overlooked when it comes time to send the letters. You decide to document donor information in a table in Word. Then it will be part of a mail merge to create thank-you letters quickly and efficiently.



OBJECTIVES

AFTER YOU READ THIS CHAPTER, YOU WILL BE ABLE TO:

1. Insert a table
2. Format a table
3. Sort and apply formulas to table data
4. Convert text to a table
5. Select a main document
6. Select or create recipients
7. Insert merge fields
8. Merge a main document and a data source

Tables

A **table** is a series of columns and rows that organize data.

A **cell** is the intersection of a column and row in a table.

The table feature is one of the most powerful in Word and is an easy way to organize a series of data.... In addition to the organizational benefits, tables make an excellent alignment tool.

A **table** is a series of columns and rows that organizes data effectively. The columns and rows in a table intersect to form **cells**. The table feature is one of the most powerful in Word and is an easy way to organize a series of data in a columnar list format. For example, you can create tables to organize data such as employee lists with phone numbers and e-mail addresses. The donor registry in Figure 1, for example, is actually an 8 × 13 table (8 columns and 13 rows). The completed table looks impressive, but it is very easy to create once you understand how a table works. In addition to the organizational benefits, tables make an excellent alignment tool. Although you can align text with tabs, you have more format control when you create a table. (See the Practice Exercises at the end of the chapter for other examples.)

FirstName	LastName	Street	City	Province	Postal Code	Donation	Date
Allison	Greene	123 North Street	Camrose	AB	T4V 0A2	500.00	8/13/2012
Bennett	Fox	456 South Street	Grande Cache	AB	T0E 0Y0	100.00	8/15/2012
Anna	Szweda	143 Sunset Avenue	Camrose	AB	T4V 0A2	1000.00	8/19/2012
John	Whittenberger	P. O. Box 121802	Fairview	AB	T0H 1L0	500.00	8/20/2012
Michael	Aucamp	31 Oakmont Circle	Acheson	AB	T7X 5A1	500.00	8/21/2012
Ethan	Crawford	377 Hillman Avenue	Camrose	AB	T4V 0A2	500.00	8/22/2012
Anthony	Finnegan	1 Clark Smith Drive	Grande Cache	AB	T0E 0Y0	100.00	8/23/2012
Abigail	Irons		Fairview	AB	T0H 1L0	150.00	8/25/2012
Hanna	Mcconie		Camrose	AB	T4V 0A2	325.00	8/26/2012
Paul	Robichaud		Camrose	AB	T4V 0A2	20.00	8/28/2012
						\$3,695.00	

FIGURE 1 Table Containing Names of Donors ▶

After you create a basic table, you want to enhance the appearance to create interest for the reader and improve readability. Word includes many tools to assist with these efforts, and you will use several of them to complete the table used for the Donor Registry. In this section, you will insert a table in a document. After inserting the table, you can insert or delete columns and rows if you need to change the structure. Furthermore, you will learn how to merge and split cells within the table and how to change the row height and column width to accommodate data in the table. You also will learn how to format a table using borders, shading, and the styles provided by Word. Finally, you will modify table alignment and position.

Inserting a Table

You create a table from the Insert tab. Click Table in the Tables group on the Insert tab to see a gallery of cells on which you drag to select the number of columns and rows you require in the table, or you can choose the Insert Table command below the gallery to display the Insert Table dialog box and enter the table composition you prefer. When you select the table dimension from the gallery or from the Insert Table dialog box, Word creates a table structure with the number of columns and rows you specify. After you create a table, you can enter text, numbers, or graphics in individual cells. The text wraps as it is entered within a cell, so that you can add or delete text without affecting the entries in other cells.

You format the contents of an individual cell the same way you format an ordinary paragraph; that is, you change the font, apply boldface or italic, change the text alignment, or apply any other formatting commands. You can select multiple cells, rows, or columns and apply formatting to the selection all at once, or you can format a cell independently of every other cell.

After you insert a table in your document, use commands in the Table Tools Design and Layout tabs to modify and enhance it. Place the insertion point anywhere in the table, and

Click the **Table Move handle** to select a whole table at one time.

then click either the Design or Layout tab to view the commands. In either tab just point to a command and a ScreenTip describes its function. When you hover the mouse over any cell of a table the **Table Move handle** displays (see Figure 1). You can click this handle once to select the whole table at one time, which is useful when working with design and layout features.

TIP Using Tabs to Move Within Tables

The Tab key on your keyboard functions differently in a table than in a regular document. Press Tab to move to the next cell in the current row, or to the first cell in the next row if you are at the end of a row. Press Tab when you are in the last cell of a table to add a new blank row to the bottom of the table. Press Shift+Tab to move to the previous cell in the current row (or to the last cell in the previous row). You must press Ctrl+Tab to insert a regular tab character within a cell.

Insert and Delete Rows and Columns

You can change the structure of a table after it has been created. If you need more rows or columns to accommodate additional data in your table, it is easy to add or insert them using the Rows & Columns group on the Table Tools Layout tab. The Insert and Delete commands enable you to add new or delete existing rows or columns. When you add a column, you can specify if you want to insert it to the right or left of the current column. Likewise, you can specify where to place a new row—either above or below the currently selected row.

You can delete complete rows and columns using the commands mentioned previously, or you can delete only the data in those rows and columns using the Delete key on your keyboard. Keep in mind that when you insert or delete a complete row or a column, the remaining rows and columns will adjust to the positioning. For example, if you delete the third row of a 5 × 5 table, the data in the fourth and fifth rows move up and become the third and fourth rows. If you delete only the data in the third row, the cells would be blank and the fourth and fifth rows would not change at all.

TIP Inserting Multiple Rows (or Columns) Simultaneously

If you need to insert more than one row (or column) at a time, simply select multiple rows (or columns), right-click, and select the Insert command, and the same number of blank rows (or columns) you selected will display. For example, if you select three rows before you click the Insert row command, three blank rows will appear.

Merge and Split Cells

You can use the Merge Cells command in the Merge group on the Table Tools Layout tab to join individual cells together (merge) to form a larger cell, as was done in the first row of Figure 1. People often merge cells to enter a main title at the top of a table. Conversely, you can use the Split Cells command in the Merge group to split a single cell into multiple cells if you require more cells to hold data.

Change Row Height and Column Width

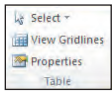
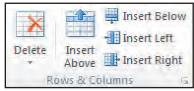


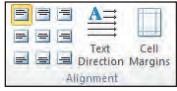
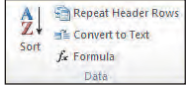
When you create a table, Word builds evenly spaced columns. Frequently you need to change the row height or column width to fit your data. **Row height** is the vertical distance from the top to the bottom of a row. **Column width** is the horizontal space or width of a column. You might increase the column width to display a wide string of text, such as first and last name,

Row height is the vertical space from the top to the bottom of a row.

Column width is the horizontal space or length of a column.

to prevent it from wrapping in the cell. You might increase row height to better fit a header that has been enlarged for emphasis.

The Table command is easy to master, and as you might have guessed, you will benefit from reviewing the available commands listed in the Design and Layout tabs. Features in the Layout tab are described in Table 1. You will use many of these commands as you create a table in the Hands-On Exercises.

TABLE 1 Table Tools Layout Tab		
Group	Commands	Enables You to
Table		<ul style="list-style-type: none"> • Select particular parts of a table (cell, column, row, or entire table). • Show or hide the gridlines around the table. • Display the Table Properties dialog box to format the table.
Rows & Columns		<ul style="list-style-type: none"> • Delete cells, columns, rows, or the entire table. • Insert rows and columns. • Display the Insert Cells dialog box.
Merge		<ul style="list-style-type: none"> • Merge (join) selected cells together. • Split cells into separate cells. • Split the table into two tables.
Cell Size		<ul style="list-style-type: none"> • Adjust the row height and column width. • Adjust the column width automatically based on the data in the column. • Display the Table Properties dialog box.
Alignment		<ul style="list-style-type: none"> • Specify the combined horizontal and vertical alignment of text within a cell. • Change the text direction. • Set margins within a cell.
Data		<ul style="list-style-type: none"> • Sort data within a table. • Repeat header rows when tables span multiple pages. • Convert tabulated text to table format. • Insert a formula in a table.

Formatting a Table

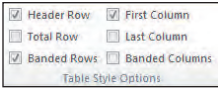

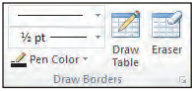
You can use basic formatting options to enhance the appearance of your table. The Borders and Shading commands, for example, offer a wide variety of choices for formatting the table structure. **Shading** affects the background colour within a cell or group of cells. Table shading is similar to the Highlight feature that places a colour behind the contents in a cell. You often apply shading to the header row of a table to make it stand out from the data. **Border** refers to the line style around each cell in the table. The default is a single line, but you can choose from many styles to outline a table such as a double, triple, or a wavy line. You can even choose invisible borders if you want only data to display in your document without the outline of a table. Borders and Shading commands are located on both the Home tab and the Table Tools Design tab, but you will probably find it more convenient to access the command from the Table Tools Design tab while you work with tables. The Design tab features are described in Table 2.

Shading affects the background colour within a cell.

Border refers to the line style around each cell.

TIP Right-Click for Table Formatting Options

As an alternative to using the Layout tab, you can find many table options in the context-sensitive menu that displays when you right-click the mouse. The insertion point can be anywhere in the table, and after you right-click you see several table options including Insert, Delete Cells, and Split Cells. You also can change format and alignment of table cells using the Borders and Shading, Cell Alignment, and Text Direction commands in this menu. The Table Properties option is available in the menu if you need to access features such as table alignment and cell spacing.

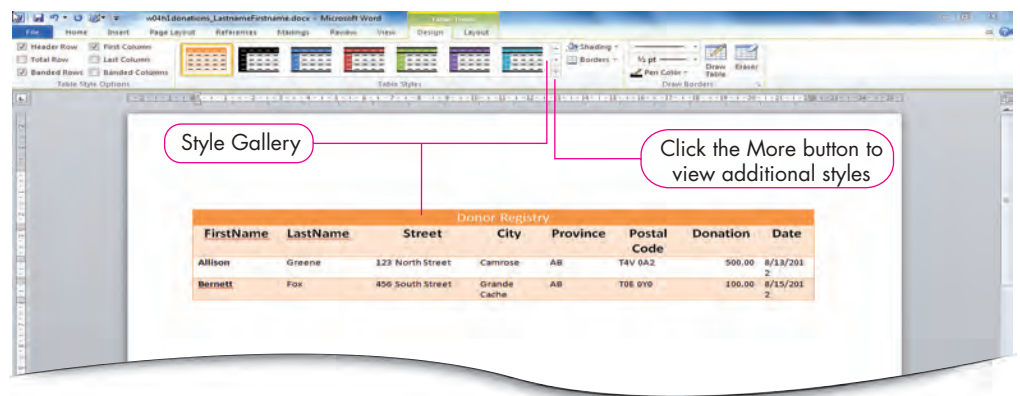
TABLE 2 Table Tools Design Tab		
Group	Commands	Enables You to
Table Style Options		<ul style="list-style-type: none"> • Turn Header Row on or off. • Turn Total Row on or off. • Display banded rows; formats even- and odd-numbered rows differently. • Display special formatting for first column. • Display special formatting for last column. • Display banded columns; formats even- and odd-numbered columns differently.
Table Styles		<ul style="list-style-type: none"> • Select predefined style from gallery. • Apply colour behind the selected cell(s) or table. • Customize borders of selected cell(s) or table.
Draw Borders		<ul style="list-style-type: none"> • Alter style of line used around border of cell or table. • Alter size of line used for borders. • Change Pen Color feature; use with Draw Table feature. • Manually draw borders of cell(s) or table. • Erase borders of cell(s) or table. • Display the Borders and Shading dialog box.

Apply Table Styles

A **table style** contains borders, shading, and other attributes to enhance a table.

Word provides many predefined **table styles** that contain borders, shading, font sizes, and other attributes that enhance the readability of a table. The Table Styles feature is helpful in situations where you want to apply a professional-looking format to a table; when you are coordinating the design of a table with other features in Word, Excel, or PowerPoint; or when you do not have time to apply custom borders and shading. The styles are available in the Table Styles group on the Design tab. To use a predefined table style, click anywhere in your table, and then click a style from the Table Styles gallery. A few styles from the gallery display, but you can select from many others by clicking the More button on the right side of the gallery, as shown in Figure 2. The Live Preview of a style displays on your table when you hover your mouse over it in the gallery. To apply a style, click it one time.

FIGURE 2 Table Styles Command ▶



You can modify a predefined style if you wish to make changes to features such as colour or alignment. You also can create your own table style and save it for use in the current document, or add it to a document template for use in other Word documents. Click the More button in the Table Styles group to access the Modify Table Style and New Table Style commands.

Select the Table Position and Alignment

Table alignment is the position of a table between the left and right margins.

Table alignment refers to the position of a table between the left and right document margins. When you insert a table, Word aligns it at the left margin by default. However, you can click Properties in the Table group on the Layout tab to display the Table Properties dialog box, as seen in Figure 3. The *Alignment* section of the dialog box offers four choices for table alignment—Left, Center, Right, or a custom setting in which you specify an amount that the table is indented from the left margin. For example, you might want to use the custom setting to indent the table exactly 5 centimetres (2 inches) from the left margin so it aligns with other indented text.

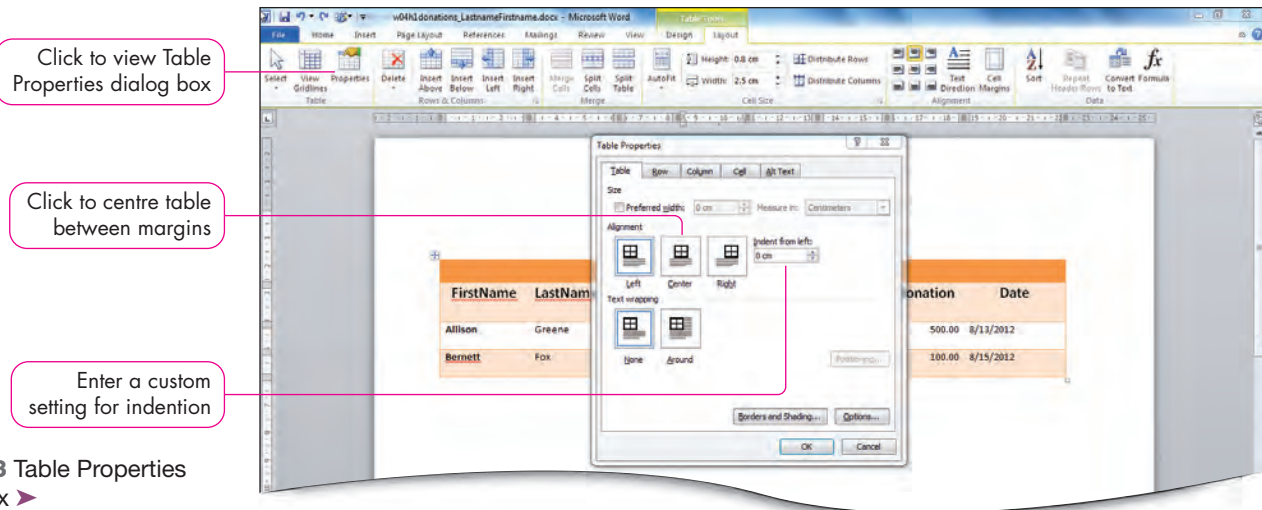


FIGURE 3 Table Properties Dialog Box ►

You can also choose from two text wrapping options in the Table Properties dialog box. The option to wrap text *Around* will enable you to display text on the side of the table. This is useful if you have a narrow table so you will not waste a great deal of space on the page by displaying the table and text close together. The option for *None* prevents text from displaying beside the table, and will force text to display above or below it. If your table is narrow, this will enable a large amount of white space to display beside it.

You also can change alignment of the data in a table separately from the table itself using commands on the Layout tab. The Alignment group contains many options to quickly format table data. Table data can be formatted to align in many different horizontal and vertical combinations. We often apply horizontal settings, such as Center, to our data, but using vertical settings also increases readability. For example, when you want your data to be centred both horizontally and vertically within a cell so it is easy to read and does not appear to be elevated on the top or too close to the bottom, click Align Center in the Alignment group.

The default **text direction** places text in a horizontal position. However, you can rotate text so it displays sideways. To change text direction, click Text Direction in the Alignment group. Each time you click Text Direction, the text rotates. This is a useful tool for aligning text that is in the header row of a narrow column.

The **Cell Margins** command in the Alignment group on the Layout tab enables you to adjust the amount of white space inside a cell as well as spacing between cells. Use this setting to improve readability of cell contents by adjusting white space around your data or between cells if they contain large amounts of text or data. If you increase cell margins, it prevents data from looking squeezed together.

Text direction refers to the degree of rotation in which text displays.

A **cell margin** is the amount of space between data and the cell border in a table.

1 Tables

Since you will be tracking information about the donors and donations that Wacey Rivale receives for the Community Disaster Relief Centre (CDRC), you quickly determine that a table is the logical choice for a professional and easy-to-read document. It also gives you flexibility in adding more information because you expect the donations to keep pouring in.

Skills covered: Create a Table • Insert Data, Rows, and Columns • Change Row Height and Column Width • Merge Cells to Create a Title Row • Apply a Table Style and Align Data

STEP 1 CREATE A TABLE

After a discussion with Wacey, you now know the donor information that should be documented. You determine the size of the table you will use based on the fact that it must display the donor's name, address, date, and amount of donation. Refer to Figure 4 as you complete Step 1.

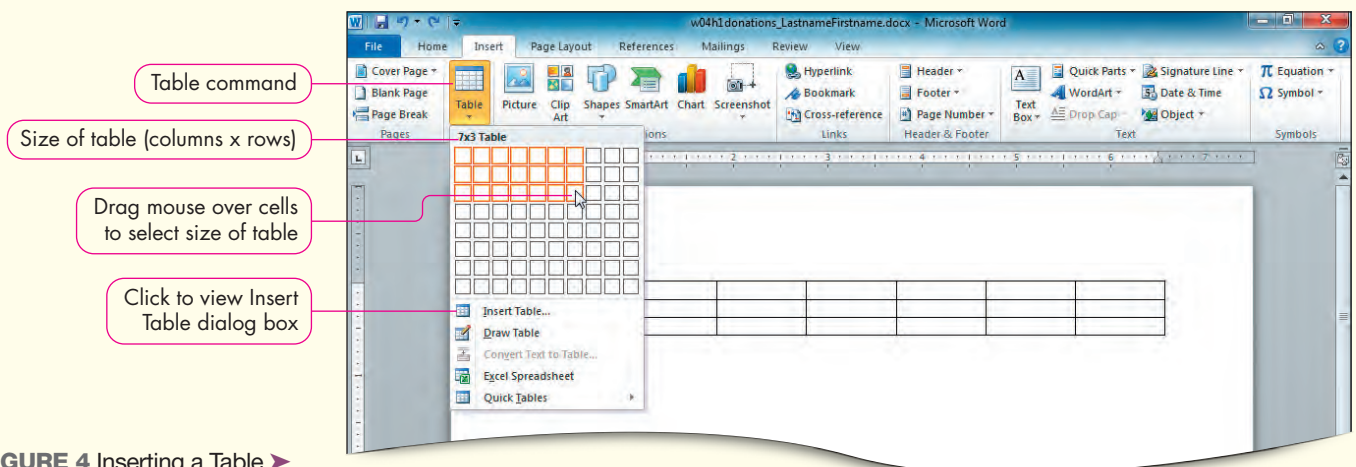


FIGURE 4 Inserting a Table ►

- Open a new blank document and save it as **w04h1donations_LastnameFirstname**.
- Press **Enter** twice in the blank document, and then click the **Insert** tab.
You will find it easier to work with a table if it does not begin on the very first line of the document. The Insert tab contains the Table command.
- Click **Table** in the Tables group, and then drag your mouse over the cells until you select seven columns and three rows; you will see the table size, 7×3 , displayed above the cells, as shown in Figure 4. Click the bottom-right cell (where the seventh column and the third row intersect) to insert the table into your document.
Word creates an empty table that contains seven columns and three rows. The default columns have identical widths, and the table spans from the left to the right margin.
- Practise selecting various elements from the table, something that you will have to do in subsequent steps:
 - Select a single cell by pointing inside the left grid line. The pointer changes to a black slanted arrow when you are in the proper position, and then you can click to select the cell.

- Select a row by clicking in the left margin of the first cell in that row (the pointer changes to a right slanting white arrow).
 - Select a column by pointing just above the top of the column (the pointer changes to a small black downward pointing arrow) and click.
 - Select adjacent cells by clicking a cell and dragging the mouse over the adjacent cells.
 - Select the entire table by dragging the mouse over the table or by clicking the Table Move handle that appears at the top-left corner of the table.
- e. Save the document.

STEP 2 INSERT DATA, ROWS, AND COLUMNS

With the table in place, you can now begin entering the headings for each column, and then you can add the donor information later. When you realize you need one more column, you relax because Word makes it easy to add one just where you need it. Refer to Figure 5 as you complete Step 2.

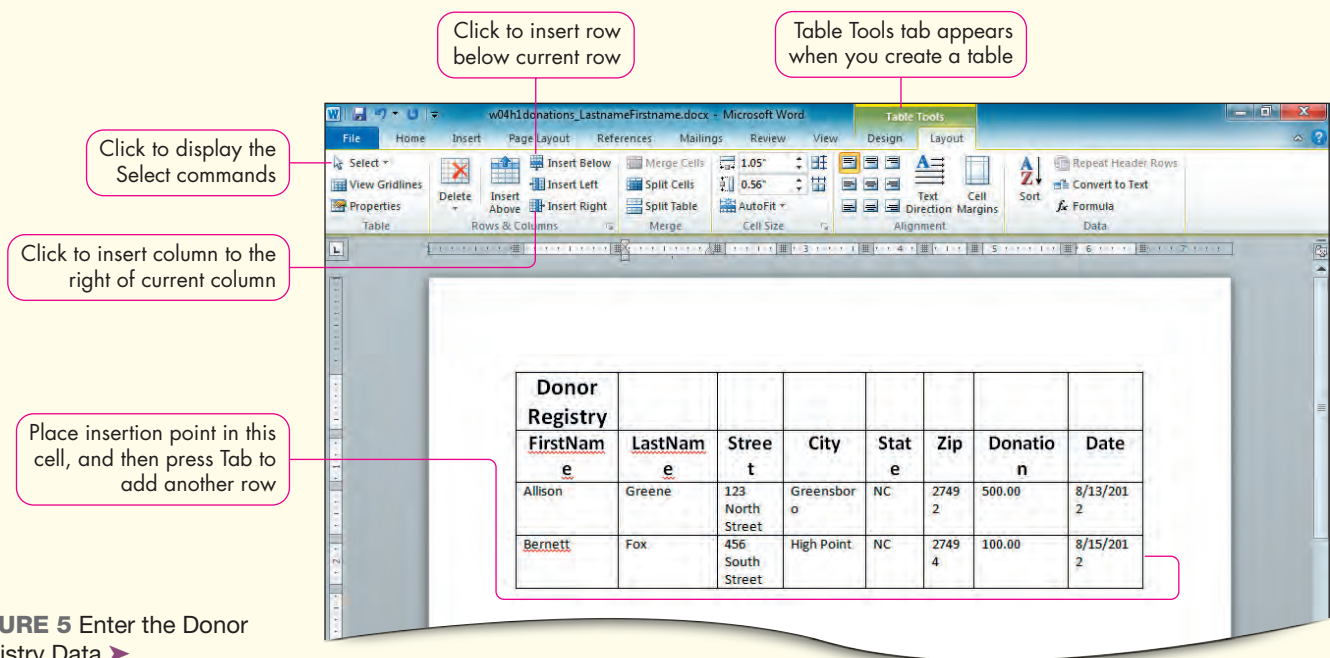


FIGURE 5 Enter the Donor Registry Data ▶

- a. Enter data into the table by completing the following steps:
- Click in the first cell of the first row, and then type **Donor Registry**.
 - Press **↓** to move to the first cell in the second row, and then type **FirstName** (this displays directly below *Donor Registry*).
You do not insert spaces in the First Name column heading because this format is used in documents we later use to associate with this information.
 - Press **Tab** (or **→**) to move to the next cell, and then type **LastName**.
 - Press **Tab** to move to the next cell, and then type **Street**.
 - Enter the following labels in the next four cells: **City**, **State**, **Zip**, and **Donation**.
You realize you need one more column for the date of the donation.

- b. Add another column by completing the following steps:
- Click anywhere in the last column of your table, and then click the **Layout tab**, if necessary. Click **Insert Right** in the Rows & Columns group to add a new column to your table.
 - Click in the second row of the new column, and then type **Date**.
- You added a new column on the right side of the table. Notice that the column widths decrease to make room for the new column you just added.

TROUBLESHOOTING: If the column you insert is not in the correct location within the table, click **Undo** on the Quick Access Toolbar, confirm your insertion point is in the last column, and then click the appropriate Insert command.



- c. Select the text *Donor Registry* in the first row. On the Mini toolbar, click the **Font Size arrow**, select **18**, click **Bold**, and then click **Center** to centre the heading within the cell.

The table title stands out with the larger font size, bold, and centre horizontal alignment.

- d. Click in the left margin to select the entire second row. On the Mini toolbar, click the **Font Size arrow**, select **16**, and then click **Bold** and **Center**.

Now the labels in the second row stand out as well. They are not quite as large as the first row because they should not overpower the title.

- e. Insert the donor information into your new table using data in the table below. When you get to the last column and find you need another row to hold the next row of data, press **Tab** to add a row to the end of your table, and then enter the next item and amounts. Compare your results to Figure 5.

FirstName	LastName	Street	City	State	Zip	Donation	Date
Allison	Greene	123 North Street	Greensboro	NC	27492	500.00	8/13/2012
Bernett	Fox	456 South Street	High Point	NC	27494	100.00	8/15/2012

- f. Save the document.

TIP Other Ways to Select a Table

You can click **Select** in the Table group on the Layout tab to display commands for selecting a cell, a column, a row, or the entire table. Figure 5 shows the location of the Select command.

STEP 3 CHANGE ROW HEIGHT AND COLUMN WIDTH

Now that you have donor information in the table, you decide to adjust the way it displays so it is easier to read. Adjusting the orientation of the page enables you to increase column widths so text does not need to wrap as much. This is especially useful for addresses, which are easier to read if they do not wrap. Refer to Figure 6 as you complete Step 3.

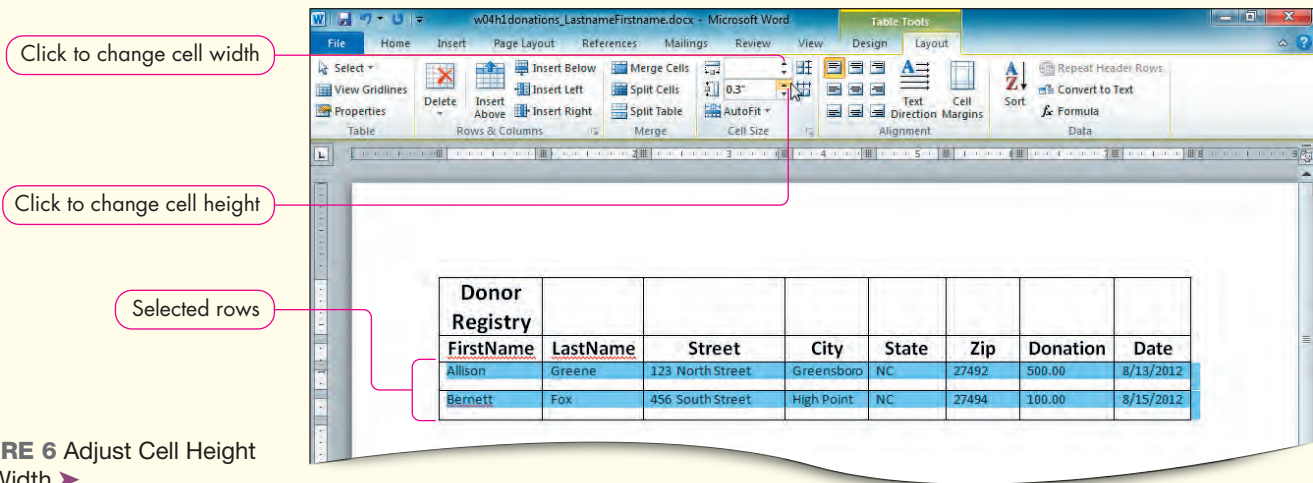


FIGURE 6 Adjust Cell Height and Width ▶

- a. Click the **Page Layout** tab, click **Orientation**, and then click **Landscape**.

You have more room to display the donor information without wrapping the text if your page orientation is in landscape mode.

- b. Hold your mouse above the top cell in the third column of data until the small black arrow appears, and then click to select the column that displays the street address.
- c. Click the **Layout** tab, and then click the **Width** arrow in the Cell Size group until 1.5" (3.81 cm) displays.

You changed the width of the column so that the whole address displays without wrapping. Other column widths did not change, even though the table stretches to the right of the page.

- d. Change the height of the row by completing the following steps:
 - Place the insertion point anywhere in the cell that contains the text *Allison*, and then click **Select** in the Table group.
 - Click **Select Row**, and then hold down **Shift** and press \downarrow on your keyboard to select the remaining row in the table.
 - Click the **Height** arrow in the Cell Size group until .3" (0.76 cm) displays, as shown in Figure 6.

You changed the height of the last two rows in the table to 0.3" (0.76 cm) tall, which makes the data easier to read.

- e. Save the document.

TIP Adjusting Column Width and Row Height

If you are not certain of the exact measurements needed for row height or column width, you can use the mouse to increase or decrease the size. Position the mouse pointer on the gridline that separates the rows (or columns) until the pointer changes to a two-headed arrow. The two-headed arrow indicates you can adjust the height (or width) by dragging the gridline up or down (right or left) to resize the cell.

STEP 4 MERGE CELLS TO CREATE A TITLE ROW

Any table that displays important information should have a title to explain the contents, and it should be easy to read and look professional. You recognize this table fits that description, so you merge the cells in the first row and centre the text. Refer to Figure 7 as you complete Step 4.

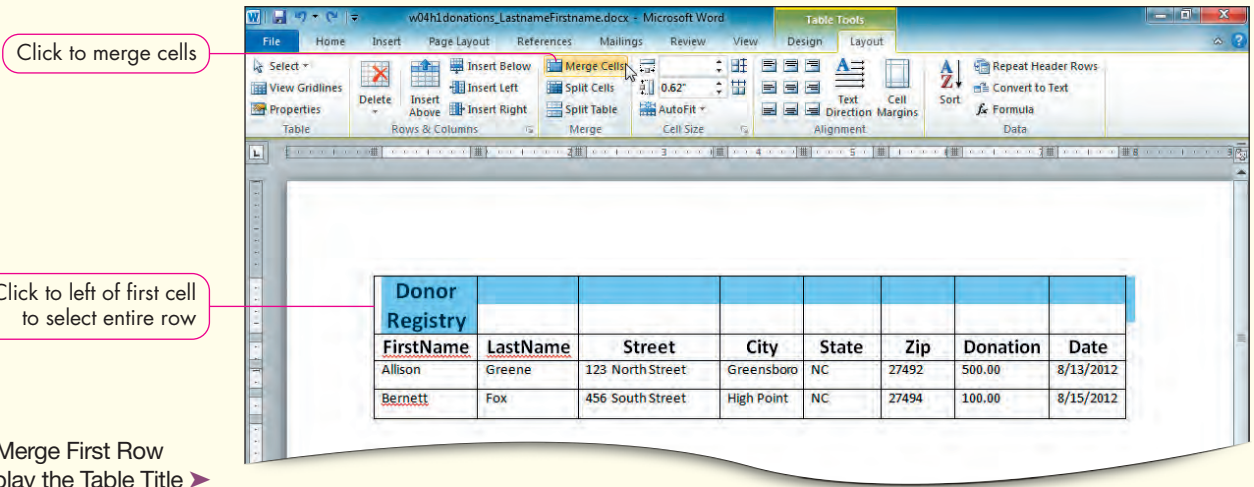


FIGURE 7 Merge First Row Cells to Display the Table Title ►

- Click outside the table to the left of the first cell in the first row to select the entire first row.
- Click **Merge Cells** in the Merge group, as shown in Figure 7.
You merged the selected cells. The first row now contains a single cell.
- Right-click the row to display the Mini toolbar, and then click **Center**.
- Save the document.

STEP 5 APPLY A TABLE STYLE AND ALIGN DATA

The table is sufficient for holding information, but you want to format it using Table Styles in Word so that the information is easy to read when it displays. Using alternating colours across the rows prevents the data from being blurred together or mixed up when you read it. It is also a good practice to apply proper alignment to the columns that contain monetary values. Refer to Figure 8 as you complete Step 5.

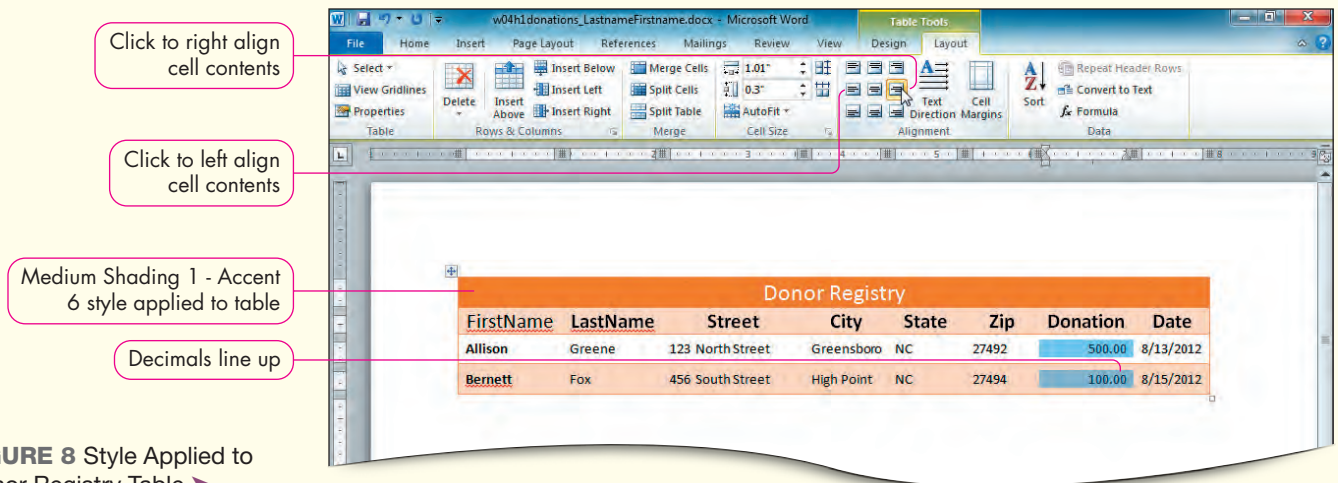


FIGURE 8 Style Applied to Donor Registry Table ►

- Apply a style to your table by completing the following steps:
 - Click the **Design** tab, and then click the **More** button in the Table Styles group.
 - Hover your mouse over several styles and notice how the table changes to preview that style.
 - Click **Medium Shading 1 - Accent 6** (last column, fourth row) to apply it to your table.

Previous formatting such as alignment and cell shading, if it exists, may be replaced by the formatting attributes for a style when applied to a table.

- b. Select rows three and four. Click the **Layout tab**, and then click **Align Center Left** in the Alignment group.
- c. Select the cells which display the donation amount in the last two rows. Click **Align Center Right** from the Alignment group.

Because this column contains monetary values, you right align them to give the effect of decimal alignment, as shown in Figure 8. Technically, the numbers are not decimal aligned, so if you display an additional digit in a value, it will result in misaligned numbers.

- d. Save the document. Keep the document onscreen if you plan to continue with Hands-On Exercise 2. If not, close the document and exit Word.

Advanced Table Features

You now have a good understanding of table features and realize there are many uses for them in your Word documents. But did you know you can use tables to perform simple tasks that are typically performed in a spreadsheet? Word includes features that enable the user to sort and perform simple mathematical calculations to data in a table. You can also convert plain text into a table.

Word includes features that enable the user to sort and perform simple mathematical calculations to data in a table.

In this section, you will learn how to sort data within a table and insert formulas to perform calculations. Finally, you convert text to a table format.

Sorting and Applying Formulas to Table Data

Sorting is the process of arranging data in a specific order.

Because tables provide an easy way to arrange numbers within a document, it is important to know how to use table calculations. This feature gives a Word document the power of a simple spreadsheet. Additional organization of table data is possible by **sorting**, or rearranging, data based on certain criteria. Figure 9 displays the donor list you created previously, but this table illustrates two additional capabilities of the table feature—sorting and calculating.

Entries are sorted by date

Formula calculates total

FirstName	LastName	Street	City	Province	Postal Code	Donation	Date
John	Whittenberger	P. O. Box 121802	Fairview	AB	T8H 1L9	500.00	8/20/2012
Anna	Szweda	142 Sunset Avenue	Camrose	AB	T4V 0A2	1000.00	8/19/2012
Paul	Robichaud		Camrose	AB	T4V 0A2	20.00	8/28/2012
Hanna	Mcconie		Camrose	AB	T4V 0A2	325.00	8/26/2012
Abigail	Irons		Fairview	AB	T8H 1L9	150.00	8/25/2012
Allison	Greene	123 North Street	Camrose	AB	T4V 0A2	500.00	8/13/2012
Bennett	Fox	456 South Street	Grande Cache	AB	T0E 0Y0	100.00	8/15/2012
Anthony	Finnegan	1 Clark Smith Drive	Grande Cache	AB	T0E 0Y0	100.00	8/23/2012
Ethan	Crawford	377 Hillman Avenue	Camrose	AB	T4V 0A2	500.00	8/22/2012
Michael	Auscamp	11 Oakmont Circle	Acheson	AB	T7K 5A1	500.00	8/21/2012
						\$4,685.00	

FIGURE 9 Donor List Table with Enhancements ▶

Calculate Using Table Formulas

You know that the intersection of a row and column forms a cell, and the rows and columns are identified by numbers and letters, respectively. Word uses the column letter and row number of that intersection to identify the cell and to give it an address. Thus, the rows in the Donor Registry table are numbered top to bottom from 1 to 13 while the columns are labelled left to right from A to H. The row and column labels do not appear in the table, but are used in the formula for reference. The last entry in the Donation column in the table in Figure 9 is actually a formula entered into the table to perform a calculation. The entry is similar to that in a spreadsheet because it is adding the values in all the cells above it.

The formula is not entered (typed) into the cell explicitly, but is created using the Formula command in the Data group on the Layout tab. You often do not need to know the formula **syntax**, or rules for constructing the formula, because Word provides a dialog box that supplies basic formulas such as sum and average. But sometimes you construct a unique formula from your table entries. Once you use the table formula feature to create a formula,

Syntax refers to the rules for constructing an equation.

you will find it easy to understand because it uses field codes to identify the data and formats you use in the formula. You could, of course, use a calculator and type in the total in the cell. However, it is better to use the Formula command to calculate totals than to type the result because if you add data or change data already in the table, you can use formula tools to recalculate the total for you.

Figure 10 is a slight variation of Figure 9 in which the field codes have been toggled on to display formulas, as opposed to the calculated values. The cells are shaded to emphasize that these cells contain formulas (also called *fields*), as opposed to numerical values. The field codes are toggled on and off by selecting the formula and pressing Shift+F9 or by right-clicking the entry and selecting the Toggle Field Codes command.

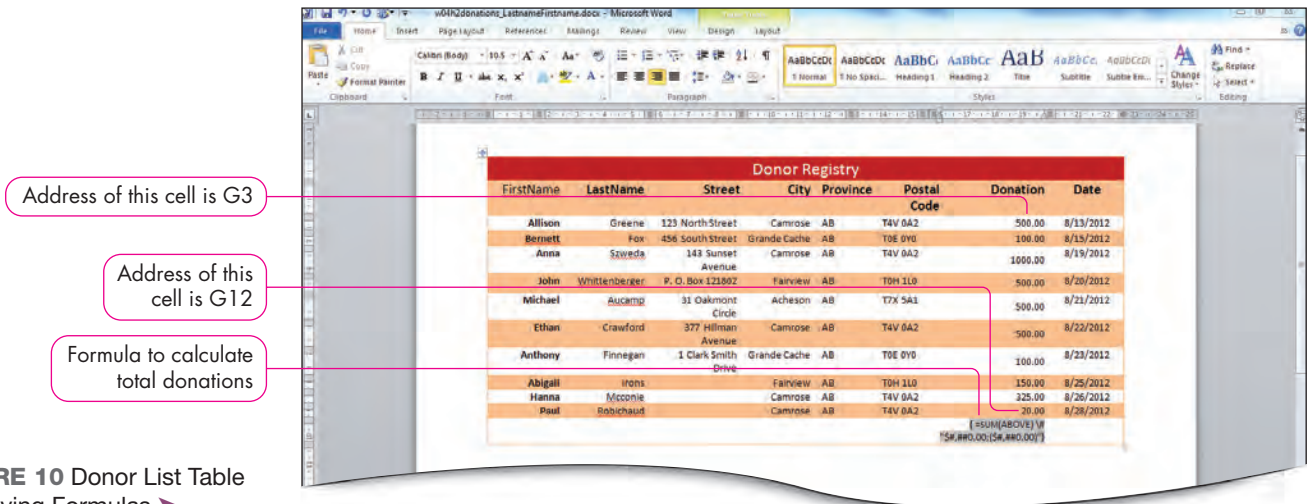


FIGURE 10 Donor List Table Displaying Formulas ▶

Sort Data in a Table

At times, you might need to sort data in a table to enhance the order or understand the data. For example, when a list of employees is reviewed, a manager might prefer to view the names in alphabetical order by last name, or perhaps by department. You can sort data according to the entries in a specific column or row of the table. Sort orders include **ascending order**, which arranges text in alphabetical or sequential order starting with the lowest letter or number and continuing to the highest (A–Z or 0–9). Or you can sort in **descending order**, where data is arranged from highest to lowest (Z–A or 9–0).

You can sort the rows in a table to display data in different sequences, as shown in Figure 11, where the donor list items are sorted by date. You also could sort the data in descending (high to low) sequence according to the donation amount or alphabetically by last name. In descending order the largest amount displays at the top of the list, and the smallest amount appears last. The first row of the table contains the title and the second row contains the field names for each column, so they are not included in the sort. The next 11 rows contain the sorted data; the last row is not included in the sort because it displays the total amount donated.

Ascending order arranges data from lowest to highest.

Descending order arranges data from highest to lowest.

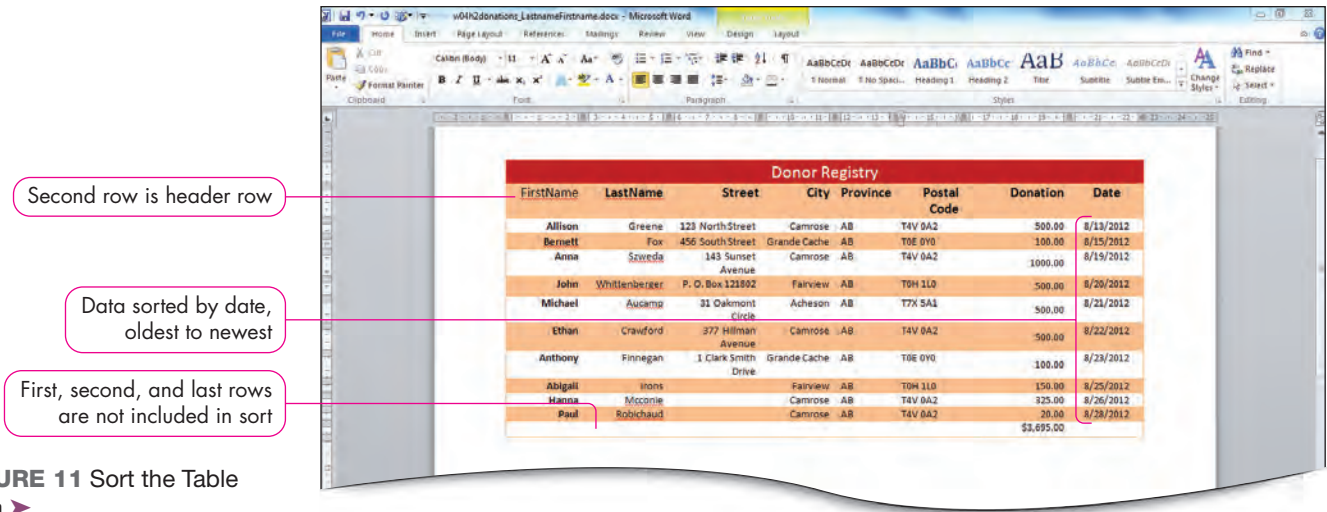


FIGURE 11 Sort the Table Data ➤

To perform a sort of data in a table you select the rows that are to be sorted, rows 2 through 12 in this example, and then you click Sort in the Data group on the Layout tab. The Sort dialog box displays, as shown in Figure 12, which enables you to select the direction and sort criteria. In this case, you include the second row, which contains field names, and then select the option on the Sort dialog box that indicates your data includes a Header row. When you include the header row and then identify it to the sort program, it displays the header row names in the Sort by list so you can identify your sort criteria easily. Identifying the header row also removes it from the sort.

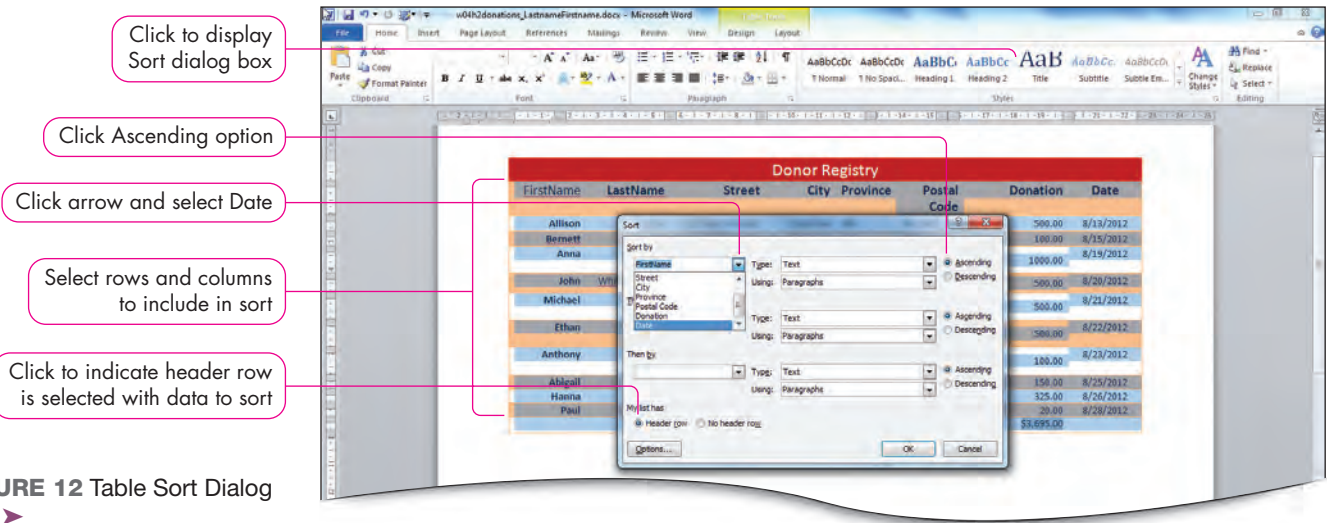


FIGURE 12 Table Sort Dialog Box ➤

Converting Text to a Table

The table feature is outstanding, but what if you are given a lengthy list of items that should have been formatted as a table but is currently just text? For example, you have a document containing a list of two items per line separated by a tab, and the list needs to be sorted. The Table command on the Insert tab includes the Convert Text to Table command, and it can aid you in this transformation. After you select the text and choose this command, the Convert Text to Table dialog box displays and offers several options to assist in a quick conversion of text into a table. The command also works in reverse; you can convert a table to text. You will perform a table conversion in the next Hands-On Exercise.

2 Advanced Table Features

The information you track for Wacey Rivale and the CDRC can be useful in a variety of ways. To prepare the information for reports and letters, you enhance the table in Word so it sorts the information and includes a row to display the total amount of donations. You also combine this table with another table of donor information that Wacey found on her flash drive.

Skills covered: Enter a Formula to Calculate Total Donations • Convert Text to a Table • Combine Two Tables into One • Sort Data in a Table

STEP 1 ENTER A FORMULA TO CALCULATE TOTAL DONATIONS

It is good to have an estimate of the amount of donations made to the CDRC over a period of time. Wacey would like you to include a row in the table that adds the donations together, and you agree that it can be done quickly and easily using the formula tool for tables. Refer to Figure 13 as you complete Step 1.

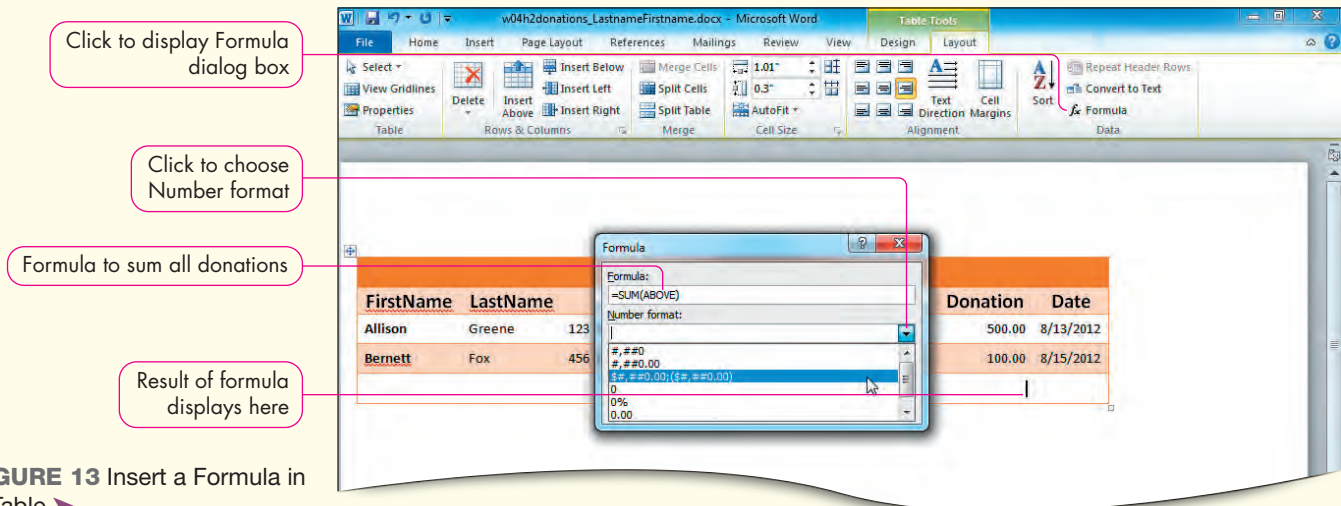


FIGURE 13 Insert a Formula in a Table ➤

- Open the *w04h1donations_LastnameFirstname* document if you closed it after the last Hands-On Exercise, and save it as **w04h2donations_Lastname Firstname**, changing *h1* to *h2*.

TROUBLESHOOTING: If you make any major mistakes in this exercise, you can close the file, open *w04h1donations_LastnameFirstname* again, and then start this exercise over.

- Click in the last row of the table. Click the **Layout** tab, if necessary, and then click **Insert Below** in the Rows & Columns group.

You add a new row where you can sum the total amount of donations.

- Click in **cell G5**, the cell in the seventh column and fifth row. Click **Formula** in the Data group to display the formula box.

Notice the formula `=SUM(ABOVE)` is entered by default. We can use the default formula because it will add the contents of cells directly above this one. The formula is not case sensitive; you can type formula references in lowercase or capital letters.

- d. Click the **Number format arrow**, select **#,##0.00;(\$#,##0.00)**, as shown in Figure 13, and then click **OK**.

The result of *\$600.00* displays in a number format with a dollar sign and two decimal places because these numbers represent a monetary value.

- e. Save the document and leave it open.

TIP **Updating Formula Results**

If you add or remove cells that affect the results of a formula in a table, the formula result will not change automatically. Right-click the formula, and then select **Update Field** to display the new results.

STEP 2 CONVERT TEXT TO A TABLE

Wacey remembered that she previously saved some raw data about donations received and asks you to put it in a table like the other information. You agree, knowing Word includes a feature for conversions of text to a table. Refer to Figure 14 as you complete Step 2.

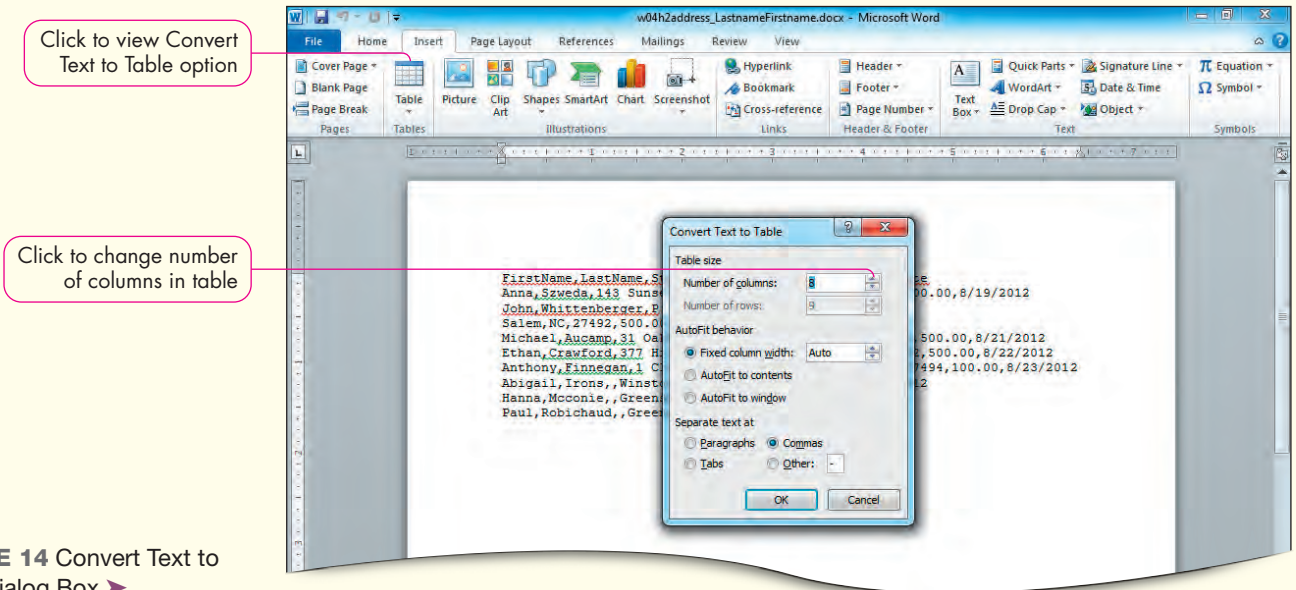


FIGURE 14 Convert Text to Table Dialog Box

- a. Open *w04h2address* and save it as **w04h2address_LastnameFirstname**.
- b. Press **Ctrl+A** to select all text in this document, and then click the **Insert** tab.
- c. Click **Table** in the Tables group, and then click **Convert Text to Table**. View the options in the Convert Text to Table dialog box, as shown in Figure 14, but do not make any changes at this time. Click **OK**.

The listing of donors and their related information now displays in a table and the commas that separated the data are removed.

- d. Press **Ctrl+C** to copy the table to the clipboard.

TROUBLESHOOTING: If you deselect the table after step c, click the Table Move handle to select the entire table, and then perform step d.

- e. Save the document.

STEP 3 COMBINE TWO TABLES INTO ONE

Now that you have converted the additional data into a table, you want to combine it with the first table so you can manipulate all the data together. It is not always possible to combine two tables easily, but in this case, you can use Copy and Paste to merge the two tables that contain similar information into one. Refer to Figure 15 as you complete Step 3.

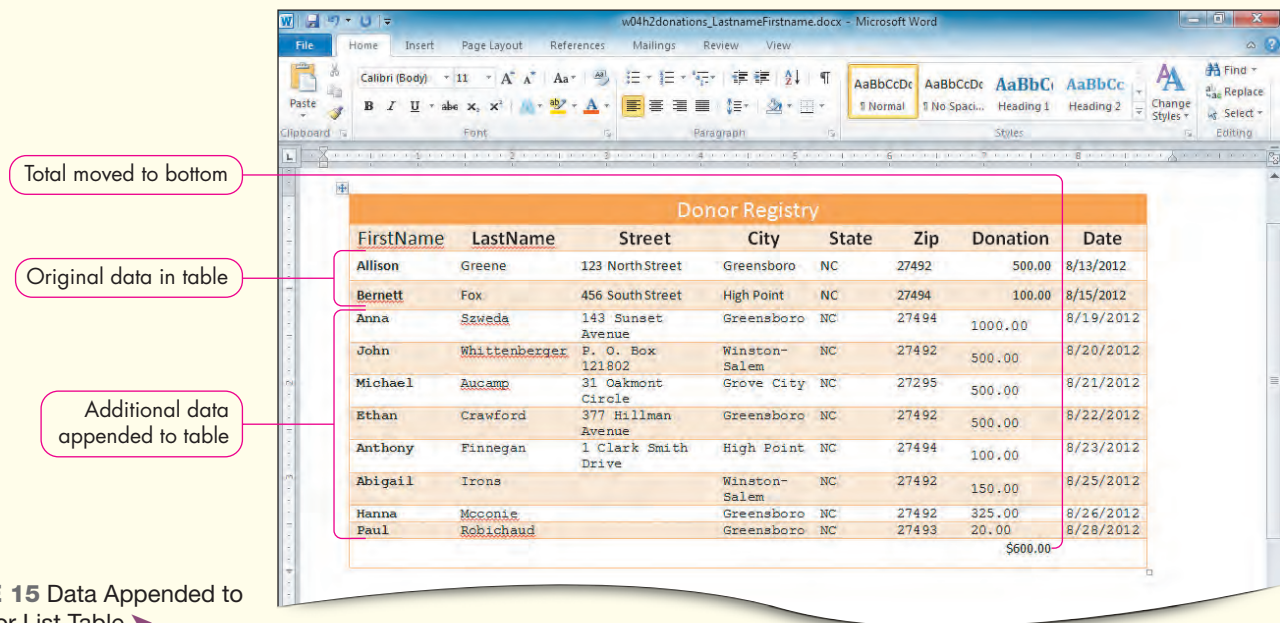



FIGURE 15 Data Appended to the Donor List Table ▶

- Make *w04h2donations_LastnameFirstname* the active document.
- Place the insertion point on the line immediately below the table.

TROUBLESHOOTING: If you have trouble placing the insertion point on the line below the table, position the insertion point in the last cell of the table and click  two times.

- Press **Ctrl+V** to paste the rows from the table in the clipboard into this document.

TROUBLESHOOTING: If necessary, click Paste Options and select Merge Table.

Because both tables contained the same number of columns, the copied table appends directly to the existing table, displaying a table with many more rows of donor information. Unfortunately, there is an extra header row which needs to be removed, and the row containing the total line is no longer at the bottom, so you must move it.

- Select the entire sixth row, which is a repeat of the column headings. Right-click and select **Delete Rows**.
- Select the entire fifth row, which displays the formula to total the donations. Press **Ctrl+X** to cut the row. Place the insertion point on the line directly below the last row of the table, and then press **Ctrl+V**.

The row now displays at the bottom of the table, but the formula results are the same (as seen in Figure 15). Next, you update the formula to reflect the additional donations that now display in the table.

- f. Right-click the formula that displays on the last row of the table, and then select **Update Field**.

The new total of \$3,695.00 now displays.

- g. Save the document but leave it open for the next step. Close *w04h2address_LastnameFirstname*.

STEP 4 SORT DATA IN A TABLE

The data are combined and you are almost ready to turn the document over to Wacey for review. You know that it will be helpful to display the information sorted by date so she can try to remember the people she visited with on certain occasions. You complete the sort and then make a few last adjustments so the information displays nicely on paper. Refer to Figure 16 as you complete Step 4.

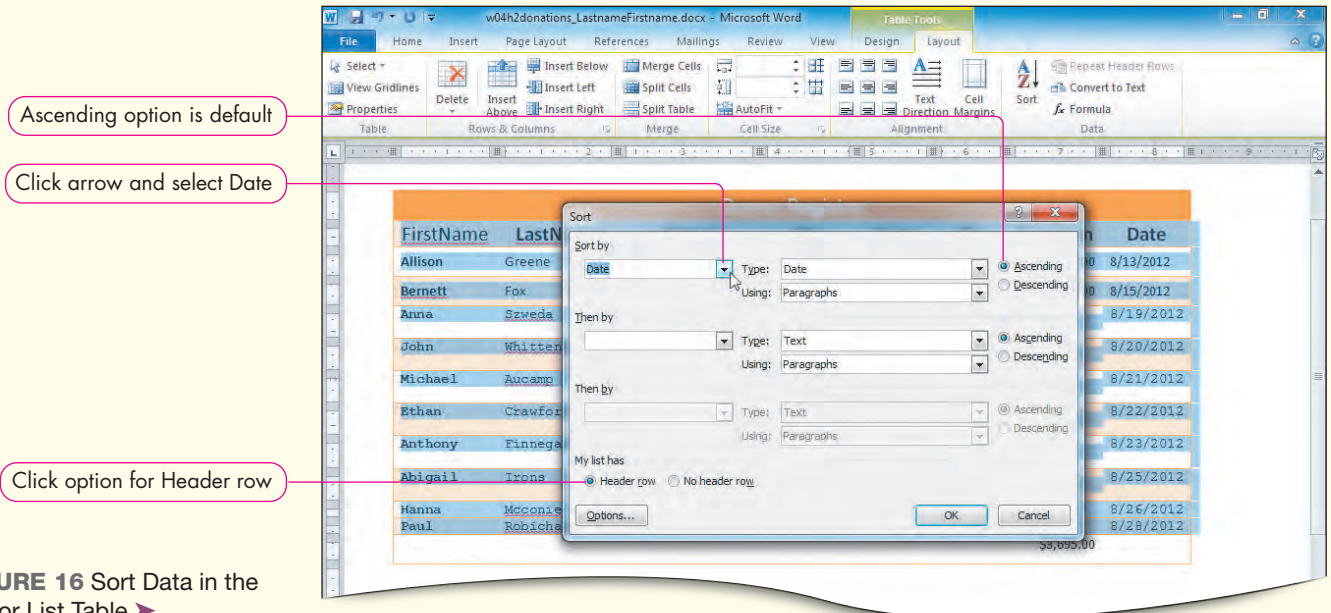


FIGURE 16 Sort Data in the Donor List Table ▶

- a. Drag to select rows 2 through 12 in the table. That is, select all table rows *except* the first and last row. Click the **Layout** tab, and then click **Sort** in the Data group.
- b. Click **Header row** in the *My list has* section, at the bottom of the dialog box.
- c. Click the **Sort by** arrow, and then select **Date** (the column heading for the last column). Click **Ascending**, if necessary, and compare your settings to Figure 16. Click **OK**.

The entries in the table are rearranged chronologically from the oldest to most recent date of donation.

TROUBLESHOOTING: If you do not first click Header row, the headings for each column will not display in the Sort by list; instead you will see the column numbers listed. You can sort by column number (1, 2, 3, or 4), but it is important to click the Header row option before you leave this dialog box so the header row is not included in the sort.

- d. Select **cells G5 through G12** (the donation data from the added table), and then click **Align Center Right** in the Alignment group.

Now the donation amounts for the data appended to this table are aligned with the other amounts that you typed in earlier.

- e. Change the font of the newly inserted donors to match the first two donors by completing the following steps:
- Select the rows that contain the data appended to the table, and then right-click to display the Mini toolbar.
 - Click the **Font arrow** on the Mini toolbar, and then click **Calibri**.
 - Right-click the selected rows again to display the Mini toolbar, if necessary, click the **Font Size arrow**, and then click **11**.
- f. Click **Properties** in the Table group.
- g. Click the **Table tab**, if necessary, and then click **Center** in the *Alignment* section. Click **OK**. Click anywhere to deselect the table.

Your table is now centred between the left and right margins. This alignment alters the location of the table, but not the data inside the table. It also creates an attractively styled and easy-to-read document.

- h. Save the document.
- i. Modify the document in preparation for an upcoming exercise by making the following changes:
- Press **Ctrl+Home**, and then delete the two empty lines at the top of the document.
 - Place the insertion point on the first row of the table, if necessary. Right-click, and then select **Delete Rows**.
This deletes the title of the table. Because the table uses a style, the row containing column headers now becomes row one and assumes the formatting of the previous title.
 - Click **Properties** in the Table group. Click **Left** in the *Alignment* section. Click **OK**.
 - Save this document as **w04h2donortable_LastnameFirstname**.
To use this table of information in the next Hands-On Exercise, it is necessary to strip out some of the formatting. Whereas the formatting is beneficial if the table is distributed in print or strictly for viewing, it is unnecessary when the table is used in other activities where only the data are important, such as the one you will perform next.
- j. Close the document.

Mail Merge

At some point in your personal or professional life, you will need to send the same message to a number of different people. For example, you will send a graduation announcement to all your family and friends, you might send a cover letter with a resumé to several organizations, or you might need to send a letter to a group of customers informing them of an upcoming sale. In each case, you will need to personalize either the letter or the recipient's address on the letter or an envelope. You can use Word's Mail Merge feature to generate these types of documents easily and efficiently. **Mail merge** is a process that combines content from a main document and a data source, with the option of creating a new document.

Mail merge is a process that combines content from a main document and a data source.

A **form letter** is a letter you will print or e-mail many times, personalizing each one for the recipient.

Mail merge is used most frequently to create a set of **form letters**, which are letters you might print or e-mail many times, personalizing or modifying each one for the recipient. When you apply for a job after graduation, you might send the same cover letter to many different companies. You could spend hours personalizing and resaving individual letters, but when you use mail merge, you can update several letters simultaneously and quickly. An example of a mail merge is illustrated in Figures 17, 18, and 19, in which Wacey Rivale has

written a letter of appreciation to each person who donated to the CDRC, then merges that letter with her log that contains addresses, donation amount, and dates. When complete, she produces letters addressed to each donor individually.

In this section, you will learn about the mail merge process by creating a main document and selecting a recipient list. You then will create form letters by combining the information from both sources.

... you might send the same cover letter to many different companies. You could spend hours personalizing and resaving individual letters, but when you use mail merge, you can update several letters simultaneously and quickly.

Merge field for first name

Merge field for donation amount

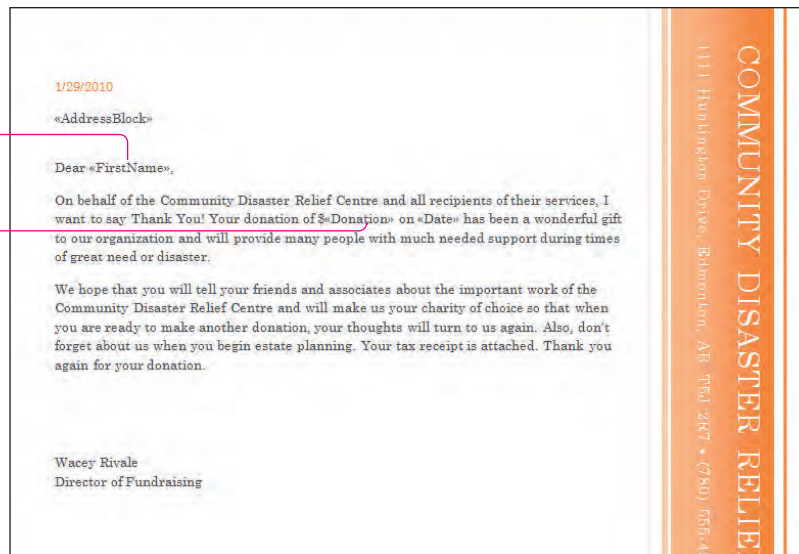
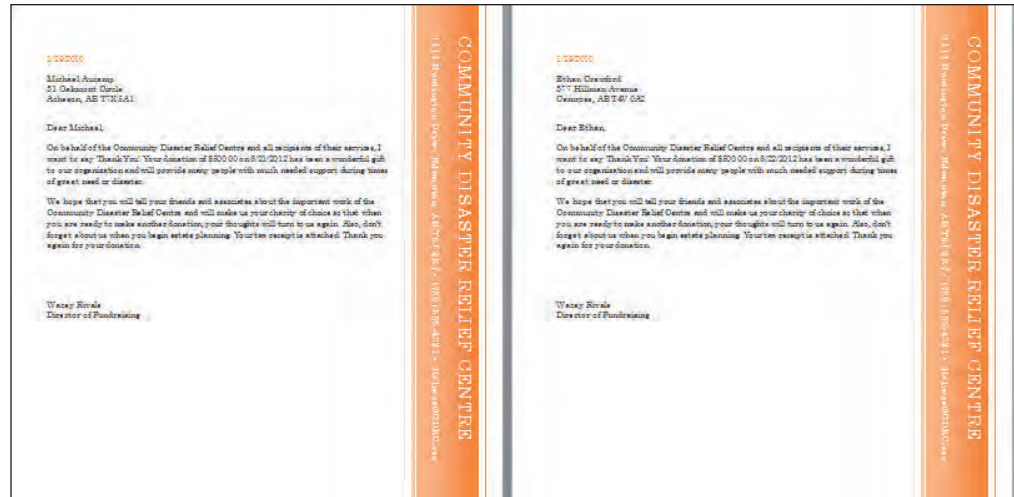


FIGURE 17 Main Document Showing Merge Fields ▶

FirstName	LastName	Street	City	Province	Postal Code	Donation	Date
John	Whittenberger	P. O. Box 121802	Fairview	AB	T0H 1L0	500.00	8/20/2012
Anna	Szweda	143 Sunset Avenue	Camrose	AB	T4V 0A2	1000.00	8/19/2012
Paul	Robichaud		Camrose	AB	T4V 0A2	20.00	8/28/2012
Hanna	Mcconie		Camrose	AB	T4V 0A2	325.00	8/26/2012
Abigail	Irons		Fairview	AB	T0H 1L0	150.00	8/25/2012
Allison	Greene	123 North Street	Camrose	AB	T4V 0A2	500.00	8/13/2012
Bennett	Fox	456 South Street	Grande Cache	AB	T0E 0Y0	100.00	8/15/2012
Anthony	Finnegan	1 Clark Smith Drive	Grande Cache	AB	T0E 0Y0	100.00	8/23/2012
Ethan	Crawford	377 Hillman Avenue	Camrose	AB	T4V 0A2	500.00	8/22/2012
Michael	Aucamp	31 Oakmont Circle	Acheson	AB	T7X 5A1	500.00	8/21/2012

FIGURE 18 List of Names, Addresses, and Donations ▶

FIGURE 19 Merged Form Letters ▶



The **main document** contains the information that stays the same for all recipients.

A **merge field** serves as a placeholder for data that will be inserted into the main document during the mail merge.

Selecting a Main Document

The mail merge process uses two files as input, a main document and a data source; by merging these two files you can create a set of individualized letters, envelopes, e-mails, or other documents. The **main document**, also known as a source or starting document, contains the information that stays the same for all recipients. The main document also includes one or more **merge fields** that serve as placeholders for the variable data that will be inserted into the individual letters, as shown in Figure 17.

You can use an existing document as a main document, or you can create one from a blank document. When you click *Start Mail Merge* in the Start Mail Merge group of the Mailings tab, you can choose from several categories to use as your main document. Table 3 describes the document types and how they are typically used in a mail merge.

TABLE 3 Main Document Types	
Document Type	How It Is Typically Used in a Mail Merge
Letters	To send letters to a group after personalizing each letter.
E-Mail Messages	To send e-mail messages to a group of people after personalizing each message.
Envelopes	To print an address on an envelope for each person in the group.
Labels	To print address labels for each person in the group, which can then be attached to an envelope for mailing.
Directory	To create a single document that contains a list of addresses.

A **wizard** makes a process easier by asking a series of questions, then creating a document structure based on your answers.

The last option displayed when you click *Start Mail Merge* is the Step by Step Mail Merge Wizard. A **wizard** makes a process easier by asking a series of questions, then creating a customized document structure based on your answers. In this case, the wizard simplifies the process of creating form letters and other types of merge documents through step-by-step directions that appear automatically on the Mail Merge pane. The options for the current step appear in the top portion of the pane and are self-explanatory. Click the link to the next step at the bottom of the pane to move forward in the process, or click the link to the previous step to correct any mistakes you might have made. This is a very easy-to-follow process and helps you work through the mail merge procedure without knowing exactly what you need to click in the Mailings tab.

TIP Printing Mailing Labels or Envelopes

If you want to create mailing labels or envelopes, the Create group on the Mailings tab includes commands that help you select the correct settings. You can use these options to print items that would not necessarily be included in a mail merge, such as a single envelope or a sheet of return address labels.

Selecting or Creating Recipients

After you choose the type of document you will use in a merge, the next step is to create or select a list of recipients. Typically, this is the information you need to insert in an address block, or specific information, such as a company name. A recipient list, sometimes called a **data source**, contains individual pieces of data and each is known as a **field**. Common fields in a data source include first name, last name, address, city, province, postal code, phone number, and e-mail address. A group of fields for a particular person or thing is called a **record**. Figure 18 demonstrates a sample data source. Your data source might come from:

- A Word document that contains information stored in a table
- An Access database
- An Excel worksheet
- Your Outlook Contacts

The first row in the data source is called the **header row** and identifies the fields in the remaining rows. Each additional row contains a record, and every record contains the same fields in the same order—for example, Title, FirstName, LastName, and so on.

TIP Using a Word Table as a Data Source

When your source data are stored in a table in Word, you can ensure the mail merge will work correctly if you save the table by itself in a separate file with no blank lines above the table. The first row of the table must contain field names. To use your table as a recipient list, click Use Existing List after you click Select Recipients in the Start Mail Merge group on the Mailings tab. Navigate to the location where the document is saved, select the file, and click Open.

If you do not have a preexisting list to use as a data source, you can create one in Word. Click Select Recipients in the Start Mail Merge group of the Mailings tab, and then click Type New List. A New Address List dialog box displays with the most commonly used fields for a mail merge, as shown in Figure 20. You can enter data immediately or click Customize Columns to add, delete, or rename the fields to meet your particular needs. When you save, the list is saved as a database file with the .mdb extension.

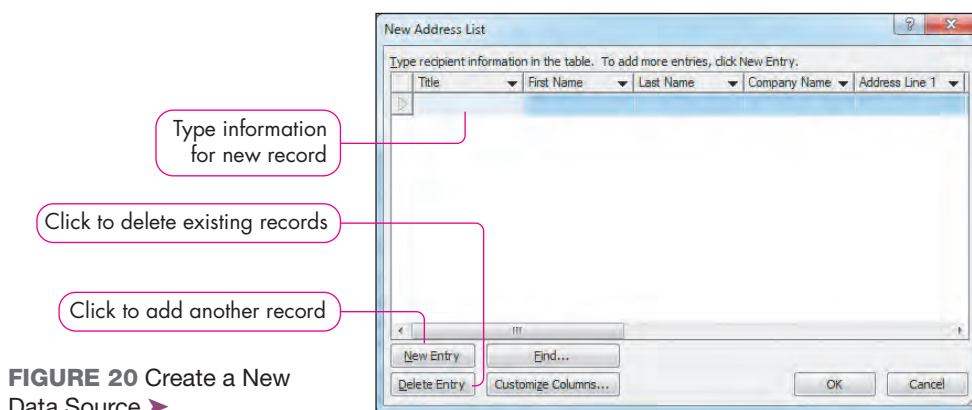


FIGURE 20 Create a New Data Source ►

If you want to add new records to a source file you created in Word, you can click Edit Recipient List in the Start Mail Merge group of the Mailings tab. Note that you can only edit the list after it has been selected as a recipient list for the mail merge. When the Mail Merge Recipients dialog box displays, click the name of the data source, and then click Edit. The Edit Data Source dialog box displays. Click Add New and a blank form displays as the last record, and you can immediately populate the fields with your data (see Figure 21).

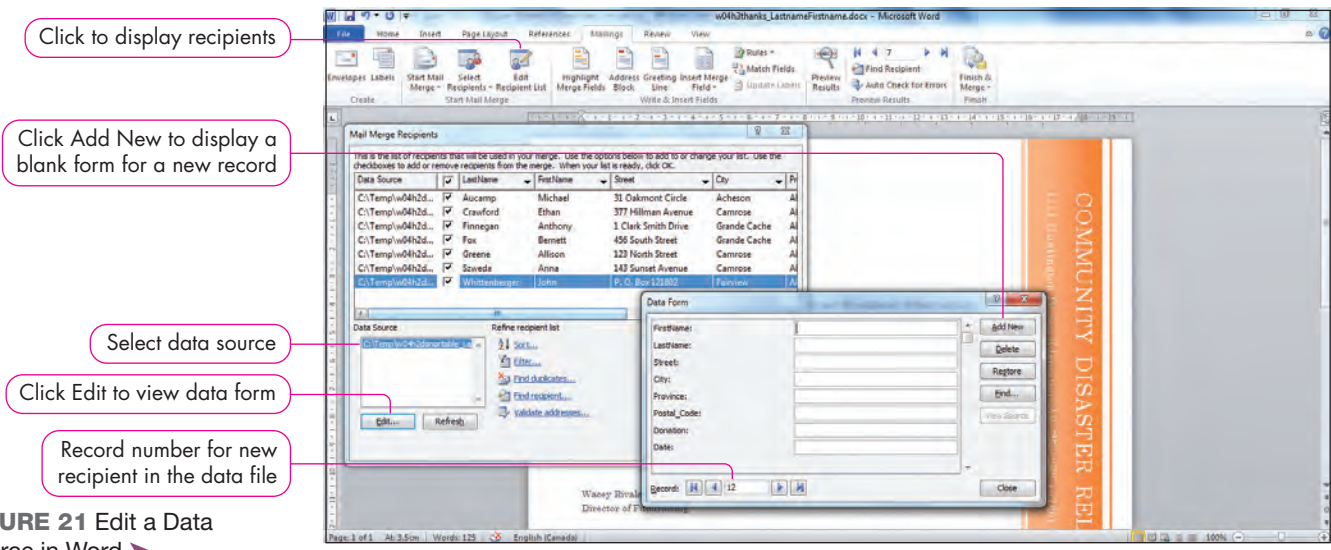


FIGURE 21 Edit a Data Source in Word ▶

Using Excel Worksheets as a Data Source

Even though you can create and use data sources in Word, there is a very good probability you will also need to perform a mail merge with a data source that was created and saved in a different Office application such as Access or Excel. The database and spreadsheet applications are designed to organize large amounts of information, so they are perfect candidates to hold the source data you want to use in a mail merge.

The database and spreadsheet applications are designed to organize large amounts of information, so they are perfect candidates to hold the source data you want to use in a mail merge.

An Excel worksheet is comparable to a giant table in Word; it can contain hundreds of rows and columns of data. A manager who must keep track of large amounts of information probably stores it in a spreadsheet, which makes a good candidate for a data source in a mail merge and prevents you from having to retype any data you might want to use in a merge. As long as the worksheet data has a header row, you can use it as a data source in a mail merge. Look at Figure 22 and notice how the worksheet displays data suitable for use in a mail merge.

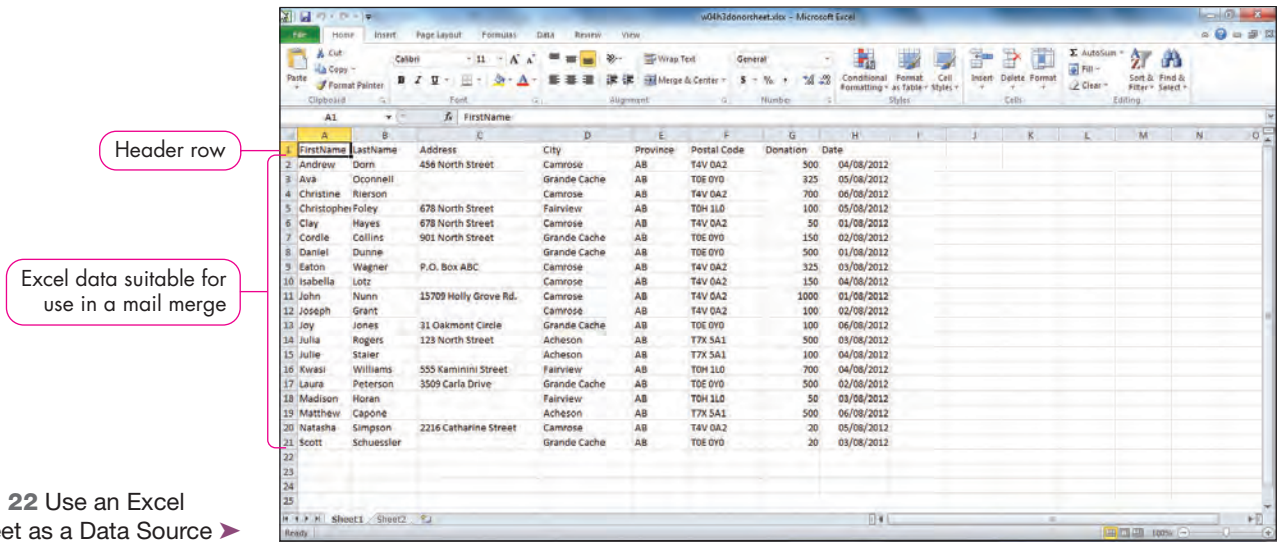


FIGURE 22 Use an Excel Worksheet as a Data Source ➤

To merge a Word document with data stored in Excel, click Select Recipients in the Start Mail Merge group on the Mailings tab, and then click Use Existing List. When the Select Data Source dialog box opens, browse to the location where the Excel worksheet is stored, click the file name, and then click Open. Excel worksheets have the extension .xlsx (or .xls if an older version), so you might need to change the type of file in the *Files of type* box at the bottom of the window.

Using Access Databases as a Data Source

A **database table** is a collection of related records that contain fields to organize data.

Access is a database program, and databases are designed to store large amounts of data. Information in a database is stored in tables. A **database table** is a collection of related records that contain fields to organize data. Access also includes features that enable you to query the database tables so you can extract and view only data that meet your search criteria. Figure 23 provides a look at a database file. Because database files can contain so much data, it is advisable to use the query feature to narrow down the data to only that which will be needed in the mail merge. Filtering the data from the database is much more efficient and easier than sorting and deleting unwanted pages in a Word document after a mail merge.

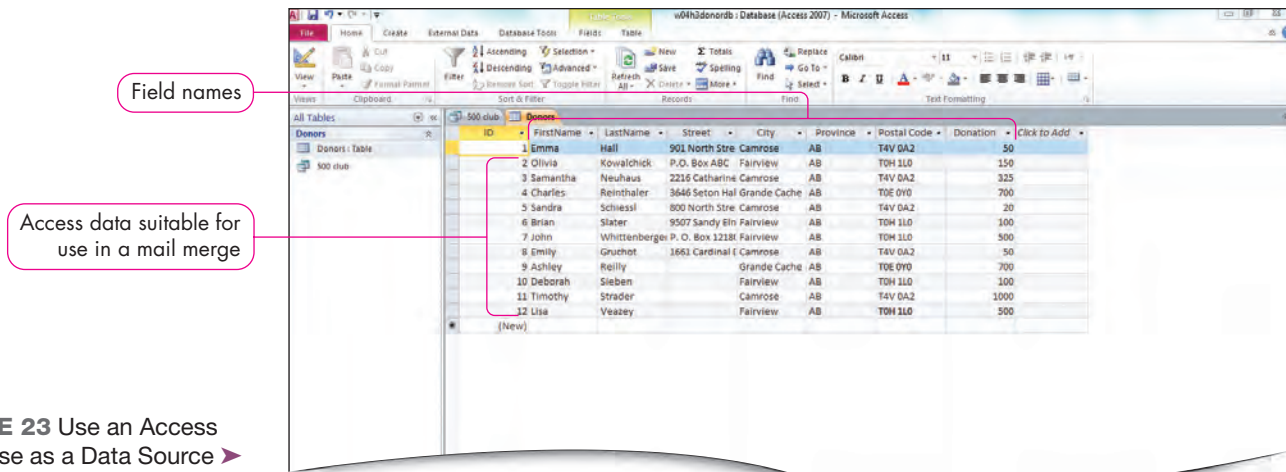


FIGURE 23 Use an Access Database as a Data Source

The process of selecting recipients from a database for use in a mail merge is the same as in Excel. However, when you merge a Word document with an Access database, you can select to use a table or a query as the source of your data. If a database includes queries, the query names will display in the Select Table dialog box along with any tables it contains, as shown in Figure 24. When you select to use the query as a data source, only records that meet the query criteria will be available for your mail merge. This can be beneficial if you are certain all the data you need is extracted by that query, but it can limit your data and omit necessary records if the query is too restrictive.

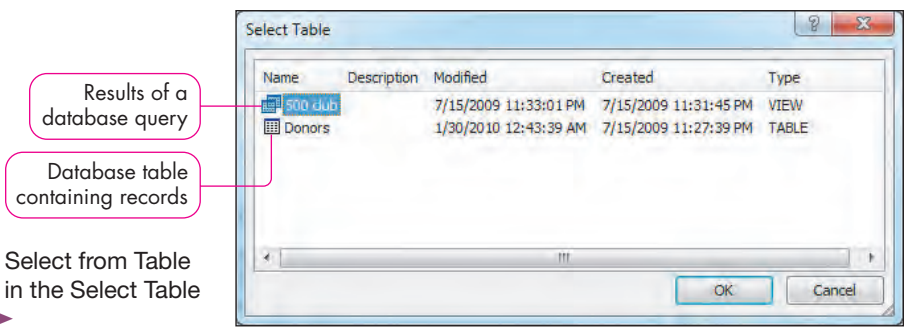


FIGURE 24 Select from Table and Queries in the Select Table Dialog Box

Access database files have the extension .accdb (or .mdb if an older version). A database uses field names to classify the data it contains, which makes it very compatible for a mail merge. However, the Access file you use as a data source might not use the same field names as Word expects; for example, a database may use LNAME as a field name instead of LastName. In this situation, you can use the Match Fields command to create a link between the Word document fields and the Access database fields. After you select the recipient list for your mail merge, click Match Fields to display a list of fields that Word often uses and a list of the fields found in the data source. You can then select a database field that matches the required fields in Word.

Sorting and Filtering Records in a Data Source

Before merging the data source with the main document, you might want to rearrange the records in the data source. For example, you might want to sort the data source in alphabetical order by last name, or in descending order by sales, if included. If you have a large number of form letters to send, you can receive a discount at the post office if you follow certain procedures. One procedure is to sort the letters by Postal code. You can save a lot of work hours if you sort the data source before merging instead of after merging and printing. When you click Edit Recipient List in the Start Mail Merge group on the Mailings tab to display the

Mail Merge Recipients dialog box, several options offer a variety of methods to sort the source data, as shown in Figure 25.

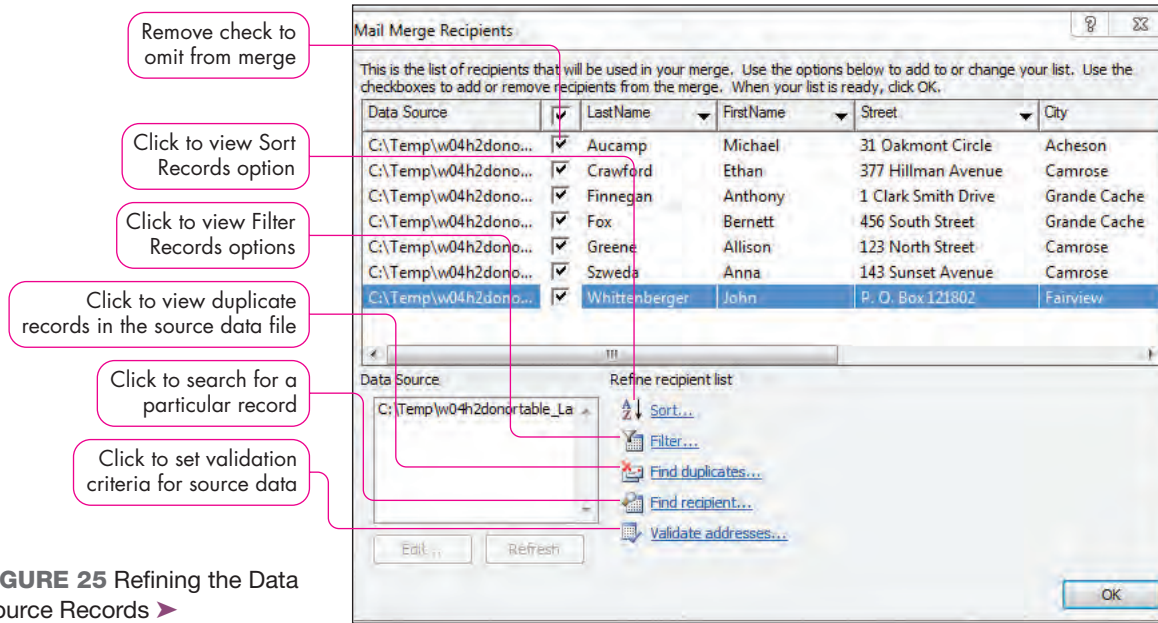


FIGURE 25 Refining the Data Source Records ▶

A **filter** specifies criteria for including records that meet certain conditions.

When you click Sort or Filter, the Filter and Sort dialog box displays and enables you to perform more complex sorts. The Filter Records tab enables you to **filter**, or specify criteria for including records that meet certain conditions during the merge process. For example, you may want to filter the source data by province so only companies in the province of Manitoba are included in the mail merge.

The Sort Records tab enables you to specify up to three levels for sorting records. For example, you can first sort by province, further sort by city within province, and finally sort by last name within city (see Figure 26).

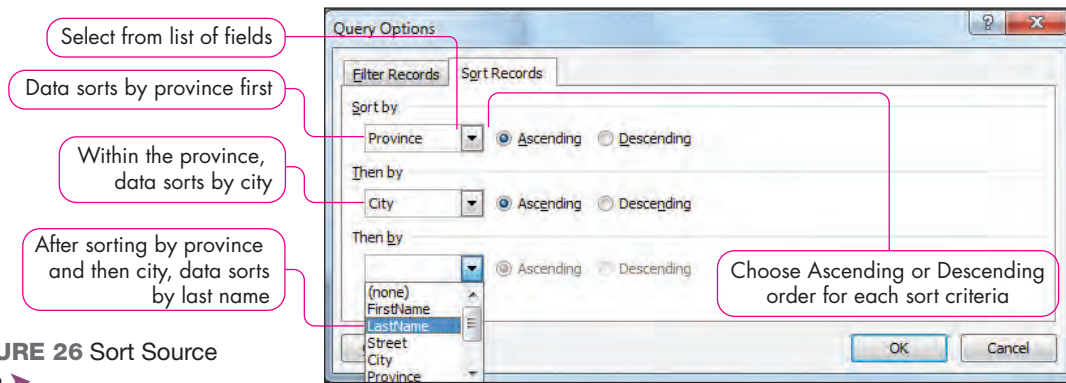


FIGURE 26 Sort Source Data ▶

Inserting Merge Fields

When you write a letter or set up your e-mail in preparation for a mail merge, you insert a merge field in the main document. The merge field is a placeholder that specifies where information from the data source will display in the main document. Because it corresponds with a field in the data source, matching the two fields guarantees that the right data will be inserted into the main document when you complete the merge. View Figure 17 again to view the merge fields that correspond to the fields in the source document in Figure 18.

The merge fields display in the main document within angle brackets, for example <<AddressBlock>>, <<FirstName>>, or <<Donation>>. These entries are not typed explicitly but are entered automatically when you select one of the source data fields that

display when you click Insert Merge Field from the Write & Insert Fields group of the Mailings tab. (See Figure 27.)

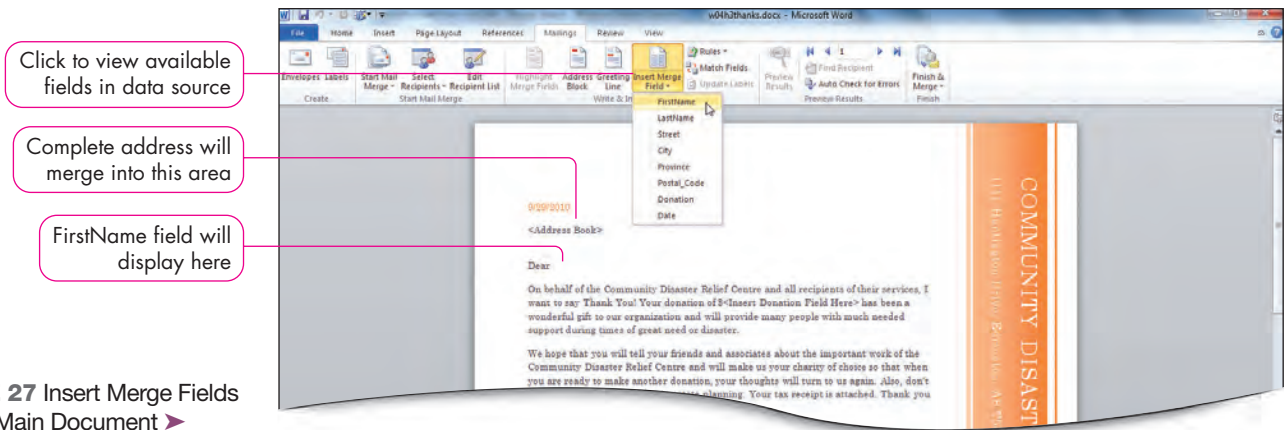


FIGURE 27 Insert Merge Fields into the Main Document ►

Merging a Main Document and a Data Source

After you create the main document and identify the source data, you are ready to begin the merge process. The merge process examines each record in the data source, and when a match is found, it replaces the merge field in the main document with the information from the data source. A copy of the main document is created for each record in the data source, thus creating individual form letters, for example. Figure 19 displays two of the personalized letters after a mail merge.

To complete the merge, click **Finish & Merge** in the **Finish** group on the **Mailings** tab. Three options display when you click **Finish & Merge**: *Edit Individual Documents*, *Print Documents*, and *Send E-mail Messages*. To create a new document that contains the results of the merge, you should select *Edit Individual Documents*. This enables you to preview each page of the merged documents prior to saving or printing. If you select *Print Documents*, you will have the opportunity to specify which pages to print; however, you cannot preview the document prior to printing. To conserve paper, you should choose *Edit Individual Documents* and use *Print Preview* before you print. The last option, *Send E-mail Messages*, enables you to make selections and complete the e-mail information prior to sending, as shown in Figure 28. To use this option, you must have an e-mail field where addresses display for the recipients in your data source.

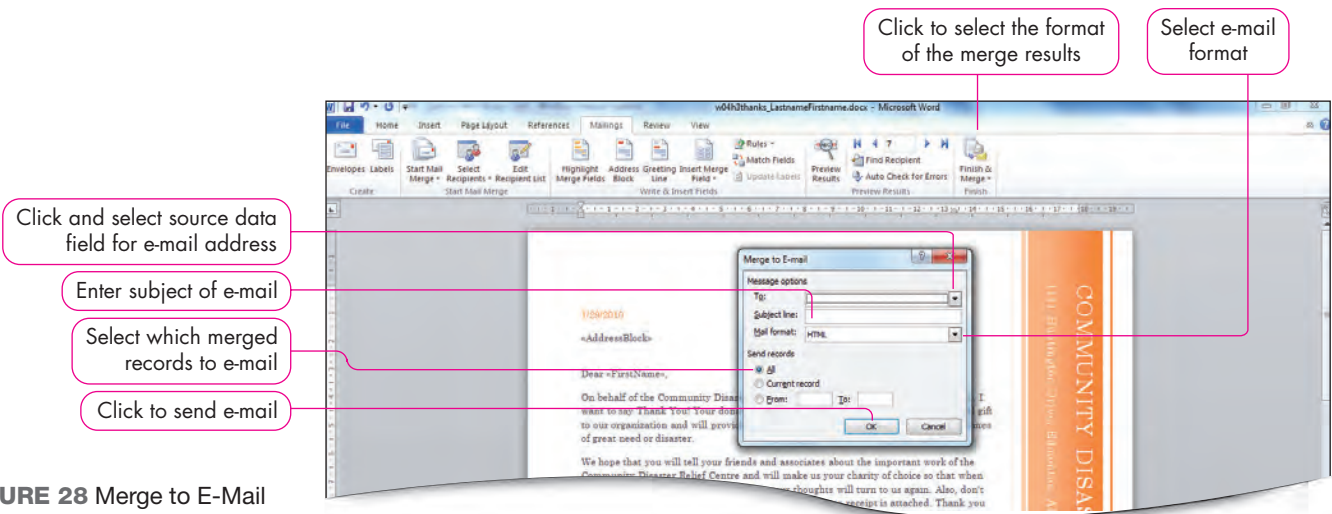








FIGURE 28 Merge to E-Mail Dialog Box ►

The same data source can be used to create multiple sets of form documents. You could, for example, create a marketing campaign in which you send an initial letter to the entire list, and then send follow-up letters at periodic intervals to the same mailing list. Alternatively, you could filter the original mailing list to include only a subset of names, such as the individuals who responded to the initial letter. You could also create a different set of documents, such as envelopes or e-mail messages.

If you want to generate a list from the source data, you can use a Directory mail merge. Select Directory as your source document type and Word will merge all the source data onto the same page instead of merging each record onto a separate page.

The Mail Merge feature is exciting, yet a bit complex. Use Table 4 to acquaint yourself with the commands on the Mailings tab. Once you successfully complete a mail merge, you will enjoy finding ways to use it over and over!

TABLE 4 Mail Merge Commands

Icon	Command Name	Description
	Envelopes	Opens the Envelopes and Labels dialog box. Enables you to insert recipient and return address information.
	Labels	Opens the Envelopes and Labels dialog box. Enables you to insert an address for labels and select to print a full page of the same label or a single label.
	Start Mail Merge	Enables you to choose the type of main document, such as letters or envelopes, to create. Enables you to use Mail Merge Wizard.
	Select Recipients	Enables you to select the data source file that you want to open and use with the main document or opens a New Address List dialog box to create a data source.
	Edit Recipient List	Opens the Mail Merge Recipients dialog box. Enables you to sort or select records to include in a merge. Also enables you to add, edit, and delete the data source records.
	Highlight Merge Fields	Shades the fields in the main document so you can quickly see where the merged information will display.
	Address Block	Opens the Insert Address Block dialog box. Enables you to choose the formats for the inside address.
	Greeting Line	Opens the Greeting Line dialog box. Enables you to choose the level of formality for the salutation.
	Insert Merge Field	Opens the Insert Merge Field dialog box. Enables you to select and insert fields in the main document.
	Rules	Displays decision-making criteria to increase your options for filtering records.
	Match Fields	Opens the Match Fields dialog box. Enables you to select fields from another data source, such as an Access database table, to match with required fields in Word.
	Update Labels	Copies the merge fields from the first label to the other labels.
	Preview Results	Displays the data from the data source in the respective fields in the main document so that you can verify correct placement.
	First Record	Displays the first merged record. Works with Preview Results.
	Previous Record	Displays the previous merged record. Works with Preview Results.
	Go to Record	Enables you to enter the number of a specific record to go to.
	Next Record	Displays the next merged record. Works with Preview Results.
	Last Record	Displays the last merged record. Works with Preview Results.
	Find Recipient	Opens the Find Entry dialog box. Enables you to find data in a specific field or in all fields.
	Auto Check for Errors	Enables you to check for errors and report those errors during the merge process.
	Finish & Merge	Enables you to choose how to display or process the results of the mail merge.

3 Mail Merge

Wacey Rivale always sends a letter of gratitude to the people who have donated to the CDRC. You will use an existing letter as the main document and use the table you recently created as a recipient list in a mail merge process, which makes sending letters quick and easy. Wacey later finds more donor information, created in Excel and Access, which you also use to generate letters. Lastly, you create mailing labels for the letters.

Skills covered: Start the Mail Merge Process and Select a Recipient List • Complete the Main Document • Complete the Mail Merge and View Results • Use an Excel Spreadsheet Recipient List • Use an Access Database Recipient List • Use Mail Merge Wizard to Create Mailing Labels

STEP 1 START THE MAIL MERGE PROCESS AND SELECT A RECIPIENT LIST

You open the letter of gratitude to use as a source document in the mail merge process. Then you must select recipient information, which includes address and amount received from each donor. The document that contains the table of donor information you created recently will work perfectly in this process. Refer to Figure 29 as you complete Step 1.

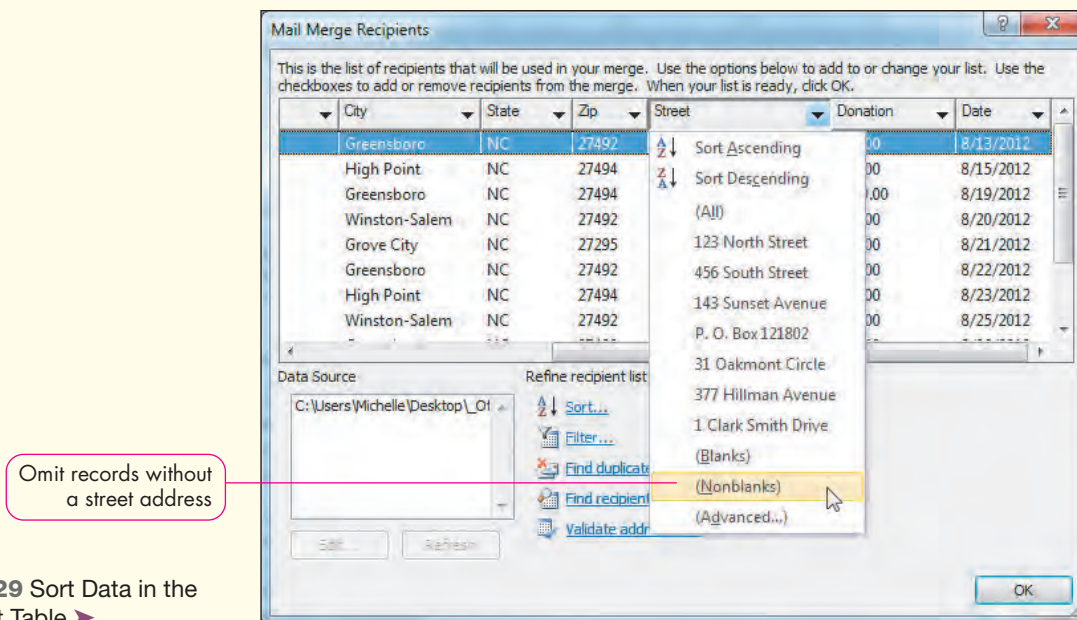


FIGURE 29 Sort Data in the Donor List Table ►

- Open *w04h3thanks*, and then save it as **w04h3thanks_LastnameFirstname**.
The document contains a letter that you will mail to the people who have donated to the CDRC.
- Click the **Mailings** tab, click **Start Mail Merge** in the Start Mail Merge group, and then click **Letters**.
You are telling Word that this document onscreen is the main document you are using for the mail merge operation.
- Click **Select Recipients** in the Start Mail Merge group, and then click **Use Existing List**. Navigate to the location where you store your documents, and then select *w04h2donortable_LastnameFirstname*.

This is the last document you created in Hands-On Exercise 2, which contains the donor information in a table with no title row.

- d. Click **Edit Recipient List** in the Start Mail Merge group.

The Mail Merge Recipients dialog box opens and displays information about donors. It also provides features you use later, such as sort and filter.

- e. Filter and sort the data used in the mail merge by completing the following steps:
 - Scroll to the right to view more columns.
 - Click the **Street arrow**, and then click **(Nonblanks)**, as shown in Figure 29.
 - Click **Sort**.
 - Click the **Sort by arrow**, and then select **LastName**. Click **OK** to close the Query Options dialog box.
 - Click **OK** to close the Mail Merge Recipients dialog box.

When the process is complete, letters will only be generated to people for whom Wacey has an address. When printed, the letters will be sorted by the donor's last name. This simplifies the process of matching letters with tax receipts before mailing.

- f. Save the document.

STEP 2 COMPLETE THE MAIN DOCUMENT

Now you need to update the source of your mail merge, the letter of gratitude, to include placeholders for the information that it pulls in from the recipient list. You want to include the donor address, name, amount of donation, and date of donation. Refer to Figure 30 as you complete Step 2.

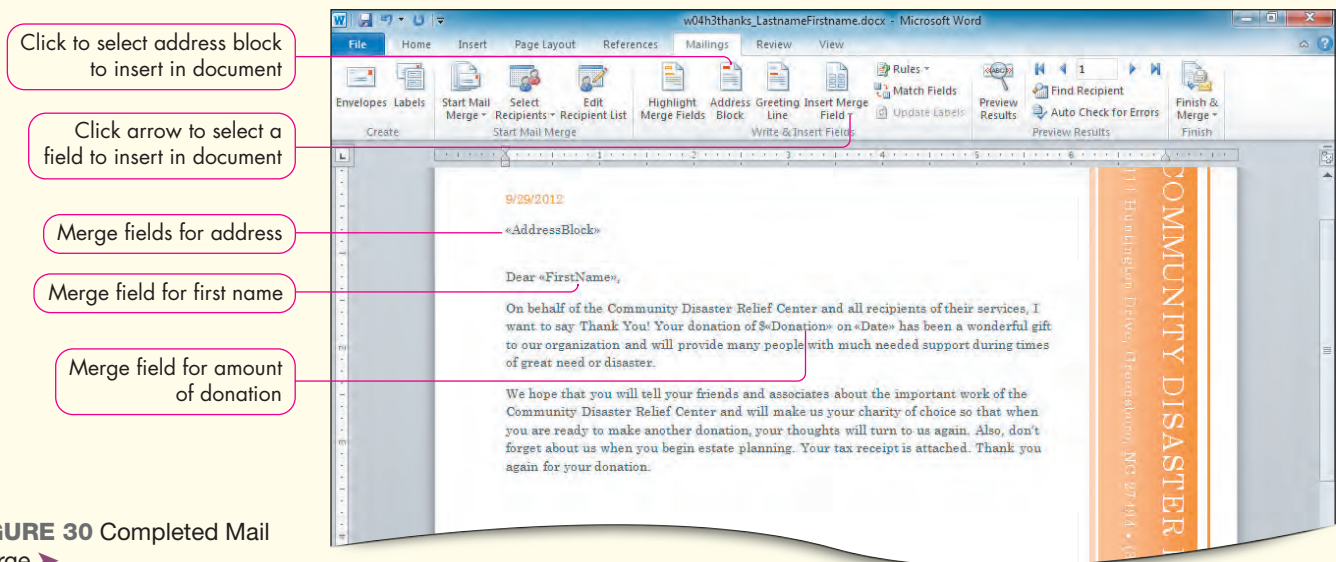



FIGURE 30 Completed Mail Merge ►

- a. Click **Pick the Date**, click the arrow, and then click **Today**.
- b. Insert the address by completing the following steps:
 - Place the insertion point on the left side of the text *Insert Name and*.
 - Click **Address Block** in the Write & Insert Fields group. Look at the address in the Preview panel.

Notice the first and last name display on the first line and the city, state, and ZIP display on the second line. The street address does not display, which is not correct. This is a problem with matching the names of the fields in the main letter and the source document which holds the recipient information.
 - Click **Match Fields** in the bottom-right corner of the Insert Address Block dialog box.
 - Locate *Address 1* in the column that displays fields in the Required for Address Block column.
 - Click the **Address 1 arrow**, and then click **Street**.

- Click **OK** to close the Match Fields dialog box.
In the Preview window, the address displays for the first recipient, *Michael Aucamp*.
 - Click **Next** (an arrow pointing right) in the *Preview* section of the Insert Address Block dialog box.
The entry for *Ethan Crawford* displays in the *Preview* section of the dialog box.
 - Click **OK** to close the Address Block dialog box.
The AddressBlock field displays in the document.
- c. Select and delete the three lines that display *Insert Name and, Street and, City, ST, ZIP fields Here*.
- d. Insert a salutation by completing the following steps:
- Click one time to position the cursor on the left side of *Insert Greeting Line here*. Type **Dear** and press the **spacebar**.
 - Click the **Insert Merge Field arrow** in the Write & Insert group.
 - Click **FirstName**. Press **,** to display a comma after the name.
 - Delete the text *Insert Greeting Line here* from that line.
The merge fields show the recipient's first name in the salutation line.
- e. Insert the donation date and amount in the letter for each person by completing the following steps:
- Select the text *<Insert Donation Field Here>* in the second line of the first paragraph.

TROUBLESHOOTING: If you find it difficult to drag to select the exact text and symbols to remove from this paragraph, position the insertion point at the left edge of the text, hold down Shift, and then press and hold  until all text is selected.

- Click **Insert Merge Field**.
- Click **Donation**, click **Insert**, and then click **Close**.
- Press **Spacebar**, type **on**, and then press **Spacebar**.
- Click the **Insert Merge Field arrow**.
- Click **Date**.

The placeholder for donation and date displays in the paragraph, as shown in Figure 30. You now know two different ways to insert the individual fields into the main document.

- f. Save the document.

STEP 3

COMPLETE THE MAIL MERGE AND VIEW RESULTS

You preview the final product before completing the mail merge, just to be sure you inserted the information correctly and included spaces where needed so words do not run together. Then you complete the merge and display the letters in a new document in which you can make individual edits if needed. Refer to Figure 31 as you complete Step 3.

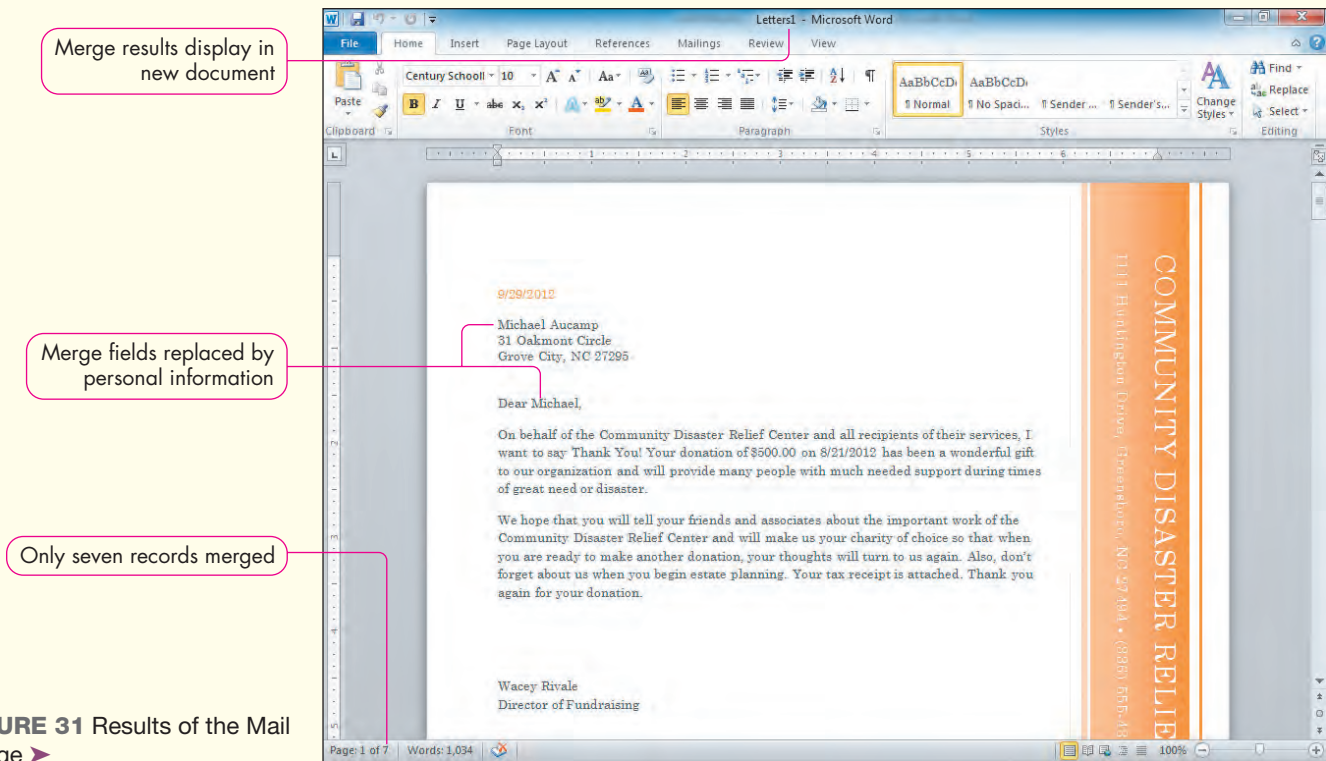


FIGURE 31 Results of the Mail Merge ►

- a. Click **Preview Results** in the Preview Results group. Click **Last Record** to preview the letter addressed to *John Whittenberger*.

You can navigate from record to record or specify a record to preview using the First Record, Previous Record, Go To Record, Next Record, and Last Record navigational commands in the Preview Results group on the Mailings tab.

- b. Click **Preview Results** to return to the letter and view the mail merge fields.

The Preview Results command is a toggle that alternates between the original source document and a preview of the final documents.

- c. Click **Finish & Merge** in the Finish group, and then click **Edit Individual Documents**. Click **OK** to merge all records with the letter.

The letter merges with the recipients and displays in a completely new document, as shown in Figure 31. Scroll through the new document and view the seven pages, one for each letter.

- d. Press **Ctrl+S** to display the Save As dialog box, and then save the merged letters as **w04h3letters_LastnameFirstname**.
- e. Save and close all documents.

STEP 4 USE AN EXCEL SPREADSHEET RECIPIENT LIST

Wacey has found another list of donor information which was stored in an Excel spreadsheet. You tell her you can print another set of letters with this information because the letter you use in the mail merge can be modified to use information from a different source or recipient list, such as a spreadsheet, just as easily as a Word table. Refer to Figure 32 as you complete Step 4.

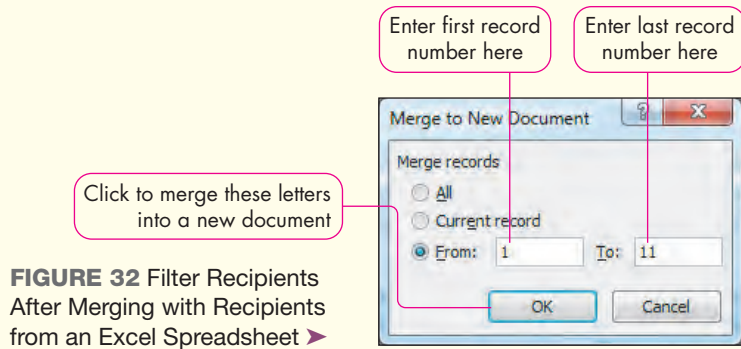


FIGURE 32 Filter Recipients After Merging with Recipients from an Excel Spreadsheet ►

- a. Open *w04h3thanks_LastnameFirstname*, and then click **Yes** if a screen displays the message *Opening this document will run the following SQL command.*
- b. Click the **Mailings** tab, click **Select Recipients**, and then click **Use Existing List**.
The Select Data Source dialog box displays.
- c. Navigate to the location of your data files, select *w04h3donorsheet.xlsx*, and then click **Open**. When the Select Table dialog box displays, click **OK**.
- d. Click **Preview Results** to view the first merged letter. Click **Last Record** to view the last letter.
The last letter is number 20. Notice that there is no street address for that record. You do not want to print letters to people for whom addresses are unknown. You can do a manual filter when you complete the final merge step.
- e. Click **Previous Record** again until you determine which letter has the last complete address. You find that the 11th letter has a complete address displaying.
- f. Click **Finish & Merge**, and then click **Edit Individual Documents**. Click **From**, type **1** in the first box, and then type **11** in the second box, as shown in Figure 32. Click **OK**.
You create a new document that contains letters for only the first 11 individuals in the recipient list.
- g. Save the new file as **w04h3exletters_LastnameFirstname** and close the document. Leave *w04h3thanks_LastnameFirstname* open for the next step.

STEP 5 USE AN ACCESS DATABASE RECIPIENT LIST

Just as you finish the second mail merge, Wacey runs in to tell you she found another file that contains donor information. However, this list is in an Access database. You assure her that Word accepts Access tables and queries as source data too, so with one more round of mail merge, more letters will be ready today. Refer to Figure 33 as you complete Step 5.

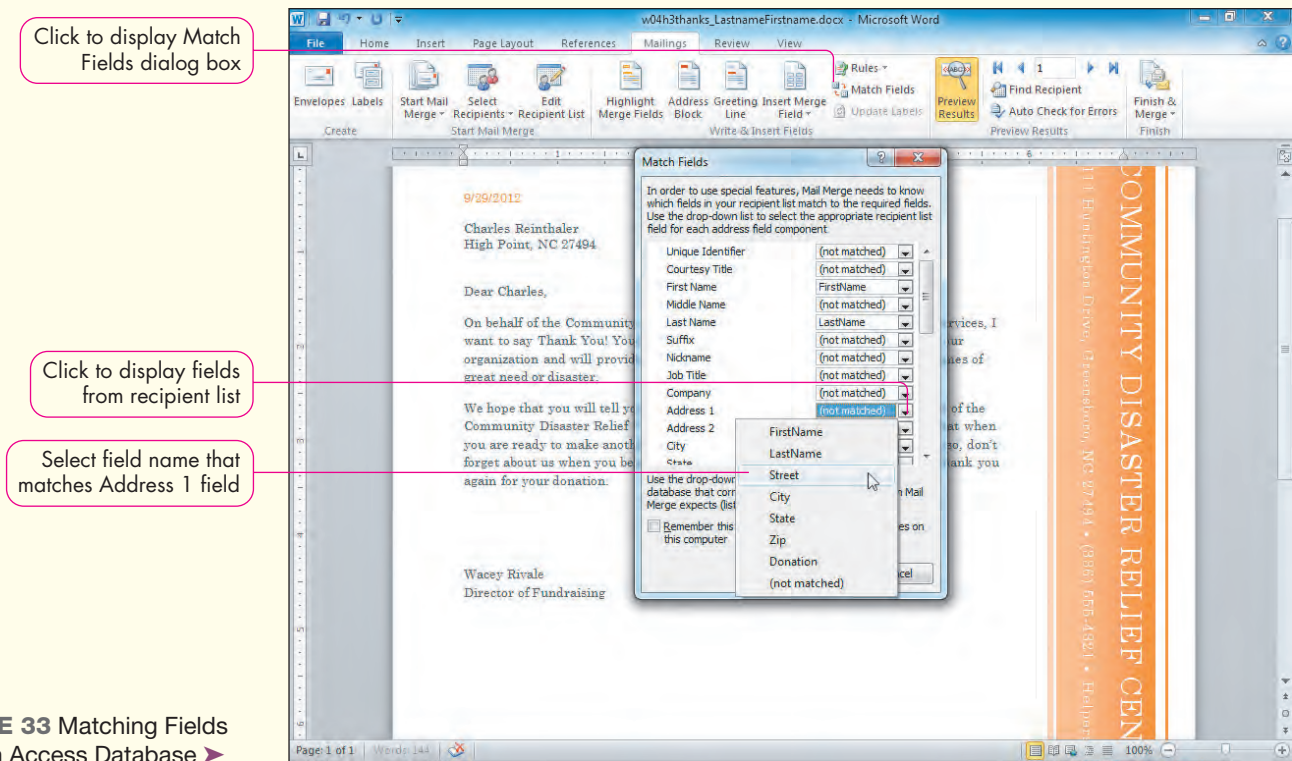


FIGURE 33 Matching Fields from an Access Database ►

- a. Click **Select Recipients** in the Start Mail Merge group, and then click **Use Existing List**.
- b. Navigate to the location of your data files, select *w04h3donordb.accdb*, and then click **Open**. When the Select Table dialog box displays, click **OK** to select the data in a query named *500 club*.

The Access database file contains a table of data, but it also includes a query created to extract specific information from the table. In this case, the query displays only patrons who donated more than \$500.

TROUBLESHOOTING: If you click the Donors table in the Select Table dialog box by mistake, you can repeat steps a and b to select the 500 Club query. You can use the Donors table for the merge, but you will have more fields to select from than you have in the 500 Club query.

- c. Click **Remove Field** in the Invalid Merge Field dialog box.

An Invalid Merge Field dialog box displays because your letter includes a merge field for date (of donation) and the data in the query does not have a match for the field. Since that information is not available, you will remove the merge field in the source document (the letter).
- d. Click **Preview Results**, if necessary, to view the first merged letter.

You notice as you are viewing the letter to Charles Reinthaler that the address block does not include a street address. You check for unmatched fields between the query and the letter.
- e. Click **Match Fields** in the Write & Insert Fields group. Click the **Address 1** arrow, select **Street** (shown in Figure 33), and then click **OK**.
- f. Click **Next Record**, and then click **Previous Record** in the Preview Results group.

Now the complete address for Charles Reinthaler displays.
- g. Delete the word *on* and the space that follows it from the second sentence in the first paragraph.

Since you are no longer displaying the date of the donation, the sentence must be corrected.

- h. Ensure the letter is only mailed to people for whom we have a complete mailing address by completing the following steps:
 - Click **Edit Recipient List** in the Start Mail Merge group.
 - Click **Filter** to display the Filter and Sort dialog box.
 - Click the **Filter Records** tab, if necessary.
 - Click the **Field arrow**, and then select **Street**.
 - Click the **Comparison arrow**, and then select **Not equal to**.
 - Click **OK** to close the dialog box. Click **OK** to close the Mail Merge Recipients dialog box. You have set a filter so any record containing blanks in the address field will not be used in the mail merge. Only two records meet all criteria.
- i. Click **Finish & Merge** in the Finish group, click **Edit Individual Documents**, click **All**, and then click **OK**.
In a new document, two letters display.
- j. Save the new document as **w04h3acletter_LastnameFirstname**, and then close it. Close **w04h3thanks_LastnameFirstname** without saving, but do not exit Word.

TIP Saving Merged Letters

Typically, you only save the original documents and recipient lists used in a mail merge. The document that contains the individual letters as a result of the mail merge is usually printed and mailed. You save the merged documents in this exercise so you can submit them to your instructor, if necessary.

STEP 6 USE MAIL MERGE WIZARD TO CREATE MAILING LABELS

Wacey is hoping you can help with one last request—she needs to send out the first set of letters today. If you can create mailing labels to put on the envelopes, it will prevent another assistant from having to address envelopes manually. You agree to do it because creating labels is as easy as generating a letter. Refer to Figure 34 as you complete Step 6.

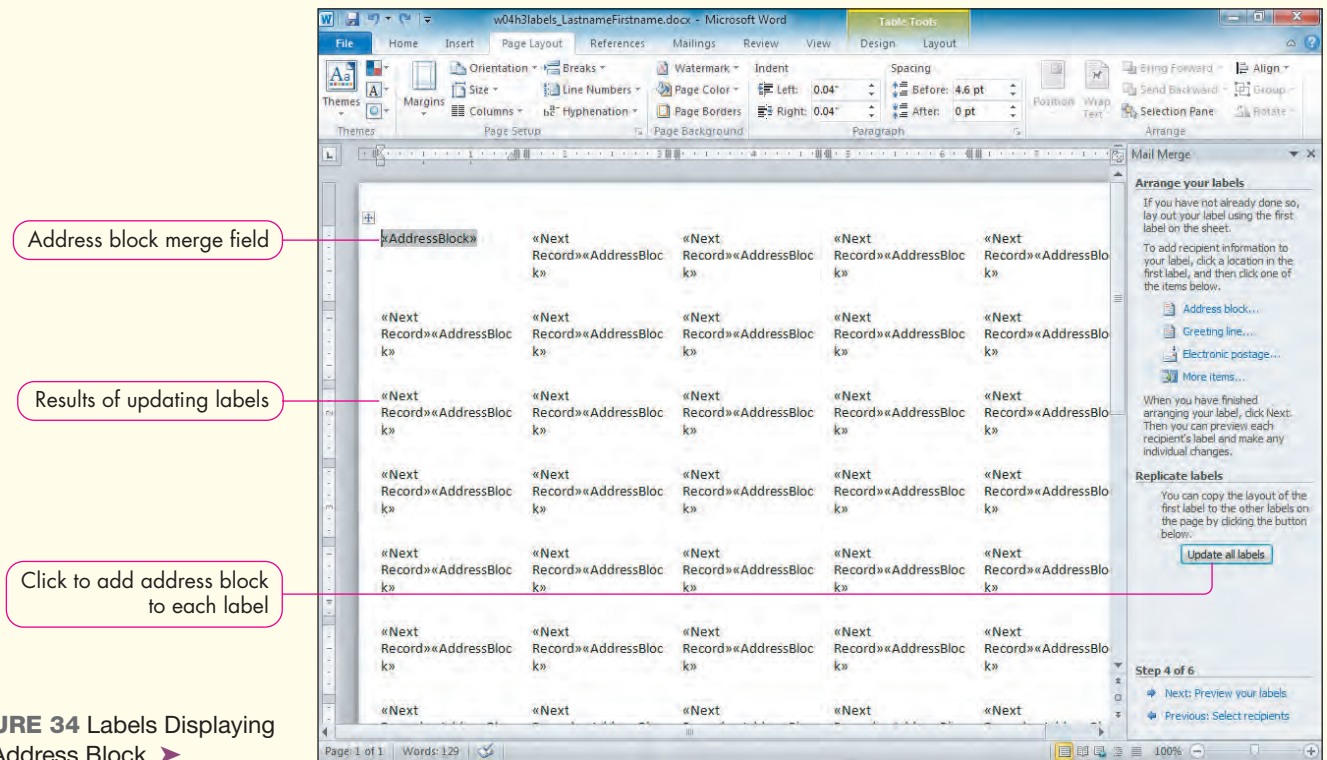


FIGURE 34 Labels Displaying the Address Block ➤

- a. Press **Ctrl+N** to display a new document. Save the document as **w04h3labels_LastnameFirstname**.
- b. Click the **Mailings** tab, click **Start Mail Merge**, and then click **Step by Step Mail Merge Wizard**.
The Mail Merge pane displays.
- c. Click **Labels** in the *Select document type* section of the Mail Merge pane, and then click **Next: Starting document** at the bottom of the pane.
- d. Click **Label options** in the *Change document layout* section of the pane.
The Label Options dialog box displays.
- e. Click the **Label vendors arrow**, and then click **Avery A4/A5**. Click **C2651** from the Product number list. Click **OK**. Click **Next: Select recipients** at the bottom of the pane.

TROUBLESHOOTING: If you do not have the Avery A4/A5 label, consult with your instructor for an alternative product.

Most packages of labels will display a product number on the package that will also display in this list. This product number helps Word to set up a template that matches the layout of the labels, which then ensures the labels print correctly.

- f. Click **Browse** in the *Use an existing list* section of the pane, and then navigate to the location where you saved the recipient list, *w04h2donortable_LastnameFirstname*. Select the file, and then click **Open**.
The Mail Merge Recipients dialog box displays.
- g. Click the **Last Name arrow**. Click **Sort Ascending**.
- h. Click the **Street arrow**, and then click **(Nonblanks)**.
- i. Click **OK** to select the remaining recipients, and then close the dialog box.
The document displays the Next Record code throughout the document to indicate the labels are ready.
- j. Click **Next: Arrange your labels** in the bottom of the Mail Merge pane. Click **Address block** in the *Arrange your labels* section of the pane.
The Insert Address Block dialog box displays.
- k. Click **Match Fields**, click the **Address 1 arrow**, click **Street**, and then click **OK**.
- l. Click **OK** to close the Insert Address Block dialog box. Click **Update all labels** in the *Replicate labels* section of the pane.
The Address Block field displays on each label, as shown in Figure 34. The default font size for the document is so large the addresses will not display correctly on the labels. You will reduce the size of the font to enable the address information to fit.
- m. Press **Ctrl+A** to select all the label fields. Click the **Home** tab, click the **Font Size arrow**, and then select **9**. Click the **Paragraph dialog box launcher**, and then reduce the **Spacing Before** in the *Spacing* section to **0 pt**. Click **OK** to close the Paragraph dialog box.
- n. Click **Next: Preview your labels** in Step 4 of 6 of the Mail Merge pane. In Step 5 of 6, click **Next: Complete the merge**.
- o. Click **Edit individual labels** in the *Merge* section of the Mail Merge pane. Click **OK** in the Merge to New Document dialog box.
A new document displays with seven labels at the top of the page.
- p. Save the document as **w04h3mergelabels_LastnameFirstname**, and then close it. Close the original document without saving. Submit based on your instructor's directions.

CHAPTER OBJECTIVES REVIEW

After reading this chapter, you have accomplished the following objectives:

- 1. Insert a table.** Tables represent a very powerful capability within Word and are used to organize a variety of data in documents. Tables are made up of rows and columns; the intersection of a row and column is called a *cell*. You can insert additional rows and columns if you need to add more data to a table, or you can delete a row or column if you no longer need data in the respective row or column. Individual cells can be merged to create a larger cell. Conversely, you can split a single cell into multiple cells. The rows in a table can be different heights and/or each column can be a different width.
- 2. Format a table.** Each cell in a table is formatted independently and may contain text, numbers, and/or graphics. To enhance readability of table data, you can apply a predefined style, which Word provides, or use Borders and Shading tools to add colour and enhance it. Furthermore, you can align table data—at the left margin, at the right margin, or centred between the margins. You also can change the text direction within a cell.
- 3. Sort and apply formulas to table data.** You can sort the rows in a table to display the data in ascending or descending sequence, according to the values in one or more columns in the table. Sorting is accomplished by selecting the rows within the table that are to be sorted, and then executing the Sort command on the Layout tab. Calculations can be performed within a table using the Formula command in the same tab.
- 4. Convert text to a table.** If you have a list of tabulated items that would be easier to manipulate in a table, you can use the Convert Text to Table command. The command also works in reverse, enabling you to remove data from a table and format it as tabulated text.
- 5. Select a main document.** The mail merge process uses two files as input, a main document and a data source; by merging these two files, you can create a set of individualized letters, envelopes, e-mails, or other documents. The main document, also known as a *source* or *starting document*, contains the information that stays the same for all recipients. A wizard makes a process easier by asking a series of questions, and then creating a template based on your answers. If you want to create individual envelopes or a sheet of mailing labels that are not part of a mail merge process, the Create group on the Mailings tab includes commands that you use to select the correct settings.
- 6. Select or create recipients.** A recipient list, sometimes called a *data source*, contains individual pieces of data known as *fields*. Common fields in a data source include first name, last name, street, city, province, postal code, phone number, and e-mail address. You can sort or filter the recipient list to specify criteria for including records that meet certain conditions during the merge process. The Sort Records tab enables you to specify up to three levels for sorting records. You can also use Excel spreadsheets or Access databases or queries as source data for a mail merge.
- 7. Insert merge fields.** When you write your letter or set up your e-mail in preparation for a mail merge, you insert a merge field in the main document. The merge field is a placeholder that specifies where information from the data source will display in the main document. The merge fields display in the main document within angle brackets. Because it corresponds with a field in the data source, matching the two fields guarantees that the right data will be inserted into the main document when you complete the merge.
- 8. Merge a main document and a data source.** The merge process examines each record in the data source, and when a match is found, it replaces the merge field in the main document with the information from the data source. A copy of the main document is created for each record in the data source, thus creating individual form letters.

KEY TERMS

Ascending order

Border

Cell

Cell margin

Column width

Data source

Database table

Descending order

Field

Filter

Form letter

Header row

Mail merge

Main document

Merge field

Record

Row height

Shading

Sorting

Syntax

Table

Table alignment

Table Move handle

Table style

Text direction

Wizard

MULTIPLE CHOICE

- You have created a table containing numerical values and have entered the SUM(ABOVE) function at the bottom of a column. You then delete one of the rows included in the sum. Which of the following is true?

 - The row cannot be deleted because it contains a cell that is included in the sum function.
 - The sum is updated automatically.
 - The sum cannot be updated.
 - The sum will be updated after you right-click the cell and click the Update Field command.
- What happens when you press Tab from within the last cell of a table?

 - A Tab character is inserted just as it would be for ordinary text.
 - Word inserts a new row below the current row.
 - Word inserts a new column to the right of the current column.
 - The insertion point appears in the paragraph below the table.
- What happens when you type more than one line of text into a cell?

 - The cell gets wider to accommodate the extra text.
 - The row gets taller as word wrapping occurs to display the additional text.
 - The first line is hidden by default.
 - A new column is inserted automatically.
- Assume you created a table with the names of the months in the first column. Each row lists data for that particular month. The insertion point is in the first cell on the third row, which lists goals for April. You realize that you left out the goals for March. What should you do?

 - Display the Insert tab, and then click the Table command.
 - Display the Table Tools Design tab, and then click the Insert Cell command.
 - Display the Table Tools Layout tab, and then click the Insert Left command.
 - Display the Table Tools Layout tab, and then click the Insert Above command.
- You have a Word document that contains a list of people who were sent an invitation to a wedding. You are responsible for monitoring their responses to the invitation, whether they will attend or not, and to determine the grand total of those attending. Using skills learned in the chapter, what would be a good way to track this information?

 - Copy the names into an Excel spreadsheet, and then use mail merge to populate a table in Word.
 - Convert the list of names to a table; add columns that enable you to mark their response, including the number who will attend, and use a formula to add up the numbers when all responses are received.
 - Type the list of names into a Word table; add columns to mark a response, and a formula to add up responses.
 - Insert a two-column table beside the names and mark the responses as declined or attending.
- When you generate a new data source during the mail merge process, what type of file do you create when it saves?

 - Document (.docx)
 - Worksheet (.xlsx)
 - Database (.mdb)
 - Rich text (.rtf)
- During a mail merge process, what operation can you perform on a data source so only data that meet specific criteria, such as a particular city, are included in the merge?

 - Sort
 - Propagate
 - Delete
 - Filter
- When you click Edit Individual Documents on the Mail Merge pane, and then click OK, the merged document _____.

 - overwrites the main document
 - is automatically printed
 - is saved to a new document file
 - appears in a new document window
- When you use mail merge to create address labels, what option do you click to copy the address field from the first label to the rest of the labels before performing the merge?

 - Copy and paste
 - Update all labels
 - Edit recipient list
 - Sort and filter
- Which of the following is not a good use for mail merge?

 - To print mailing labels for Christmas cards from a list of addresses in an Excel spreadsheet
 - To send the same personalized letter to all your business clients
 - To create return address labels that display your home address
 - To e-mail a meeting announcement to every member of your professional organization

PRACTICE EXERCISES

1 Toronto City Theatre

You are the manager of the Toronto City Theatre and each month you mail tickets to patrons who have placed orders over the phone or online. You know that it is time-consuming to copy and paste the patrons' names and addresses from your Excel worksheet into the cover letter you send with the tickets, so you decide to create a mail merge document that you can quickly update and send each month. Later, you decide to use a filter so you print only letters to patrons attending the September performance. This exercise follows the same set of skills as used in Hands-On Exercise 3 in the chapter. Refer to Figure 35 as you complete this exercise.

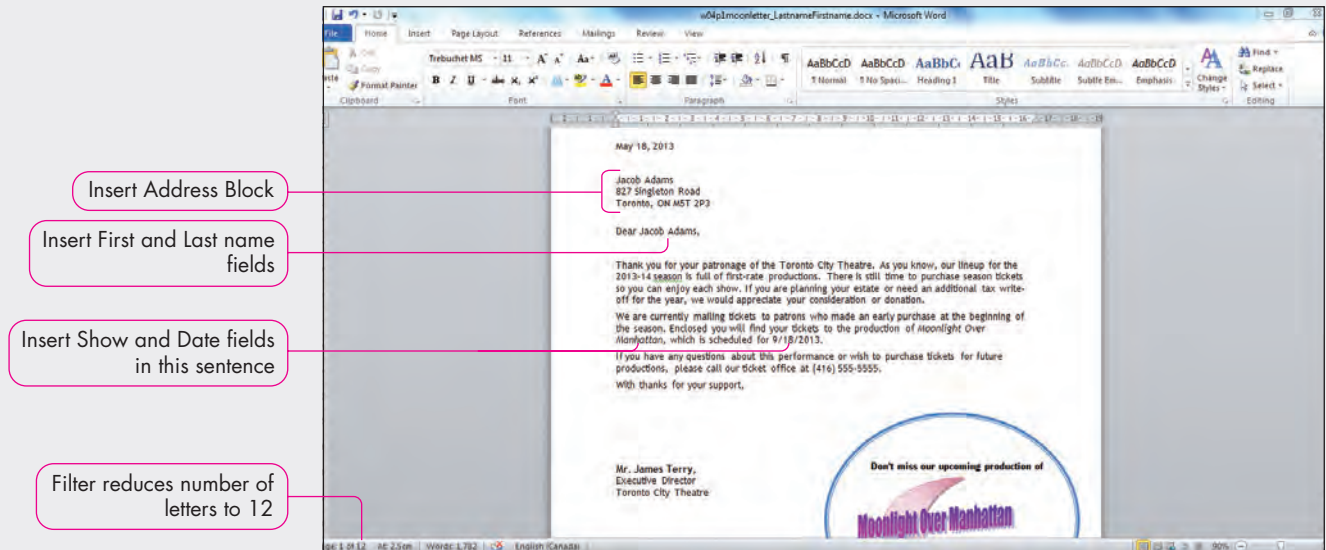


FIGURE 35 Prepare a Mail Merge Form Letter to Theatre Patrons ▲

- Open *w04p1theatre* and save it as *w04p1theatre_LastnameFirstname*.
- Click the **Mailings** tab, click **Start Mail Merge** in the Start Mail Merge group, and then click **Letters**.
- Select a recipient by completing the following steps:
 - Click **Select Recipients**, and then click **Use Existing List**.
 - Navigate to the location where data files are stored, click *w04p1patrons.xlsx*, and then click **Open**.
 - Make sure *Sheet1* is selected, and then click **OK** when the Select Table dialog box displays.
- Insert merge fields by completing the following steps:
 - Move the insertion point two lines below the date. Click **Address Block**, and then click **OK** to insert the patron's address at the top of the letter.
 - Move the insertion point to the left side of the comma in the salutation line *Dear*, and then click the **Insert Merge Field** arrow. Click **Fname**, press **Spacebar**, click **Insert Merge Field**, and then click **Lname**.
 - Place the insertion point between the two spaces on the right side of the word *of* in the last sentence of the second paragraph. Click **Insert Merge Field** arrow, and then click **Show**.

TROUBLESHOOTING: If you find it difficult to determine where to place the cursor, click Show/Hide (¶) on the Home tab to display formatting marks such as spaces.

- Move the insertion point to the end of the last sentence of the second paragraph, just before the ending period. Click **Insert Merge Field arrow**, and then click **Date**.
- e. Click **Preview Results**. To correct the extra spacing around the address block, complete these steps:
 - Select the three lines that make up the address block.
 - Click the **Page Layout tab**.
 - Click the **Spacing After arrow** in the Paragraph group until **0 pt** displays.
- f. Finish the merge by completing these steps:
 - Click the **Mailings tab**, click **Finish & Merge**, and then click **Edit Individual Documents**.
 - Click **From**, type **1** in the first box, type **34** in the second box, and then click **OK**. There were four records at the end of the list that did not contain addresses. You do not want to print those letters.
 - Save the new document as **w04p1ticketletter_LastnameFirstname**. Close the file.
- g. Select **w04p1theatre_LastnameFirstname**, and then save it as **w04p1theatre2_LastnameFirstname**.
- h. Filter the recipient list in preparation for creating letters to patrons attending the January production by completing the following steps:
 - Click the **Mailings tab**, if necessary, and then click **Edit Recipient List** to display the Mail Merge Recipients dialog box.
 - Click **Filter** to display the Filter and Sort dialog box. Click the **Filter Records tab**, if necessary.
 - Click the **Field arrow**, and then click **Show**.
 - Click the **Comparison arrow**, and then click **Contains**.
 - Type **Moon** in the **Compare to box**, and then click **OK**.
 - Click **OK** again to close the Mail Merge Recipients dialog box.
- i. Click **Last Record** to determine how many pages your merge will create. If the filter is set correctly, your merge will create 12 letters.
- j. Click **Finish & Merge**, click **Edit Individual Documents**, click **All**, and then click **OK**.
- k. Save the new document as **w04p1moonletter_LastnameFirstname**. Compare your letter to Figure 35, and then close the document.
- l. Save and close all documents, and submit based on your instructor's directions.

2 Marti Appraisal Company

You work as a real estate assessor and must bill for services each month. Traditionally, you type the total amount of your services in the document, but after a discussion with another assessor you discover how to use table formulas and begin to use them to calculate your total fees on the invoice. In this exercise, you develop a professional-looking invoice and use formulas to calculate totals within the table. This exercise follows the same set of skills as used in Hands-On Exercises 1 and 2 in the chapter. Refer to Figure 36 as you complete this exercise.

Marti Appraisal Company, LLC			
Invoice Number: 300		Invoice Date: 8/20/2012	
Bill to: Heartcountry Bank 33252 S. Campbell Ave. Laurier, MB R0J 1A0		Submit Payment to: Marti Appraisal Company, LLC 2048 S. Glenn Ave. Laurier, MB R0J 1A0	
File #	Appraisal Date	Property Address	Appraisal Fee
75	8/1/2012	335 Valley Vista Dr., Springfield	800.00
70	8/2/2012	105 Amanda Ln., Nixa	300.00
65	8/4/2012	2402 E. Lee St., Republic	300.00
77	8/4/2012	3324 N. Hickory Hills Ct., Nixa	100.00
Total			\$1,500.00
Thank You for your business!			

FIGURE 36 Completed Invoice ▶

- a. Open a blank document and save it as **w04p2invoice_LastnameFirstname**.
- b. Click the **Insert tab**, and then click **Table**. Drag to select one column and three rows (1 × 3 table).
- c. Add information in the first row by completing the following steps:
 - Type **Marti Appraisal Company, LLC**.
 - Right-click to display the Mini toolbar, and then click **Center**.
 - Select the text, click the **Font size arrow** on the Mini toolbar, and then select **28**.
 - Click the **Page Layout tab**, and then click the **Spacing After arrow** until **12 pt** displays.
 - Press **→** to move the insertion point to the right side of the text.
 - Click the **Insert tab**. Click **Clip Art**.
 - Search for **House** and insert a graphic in the first row next to the Company name. Close the Clip Art pane.
 - Click the **Format tab**, if necessary, click **Position** in the Arrange group, and then click **Position in Middle Right with Square Text Wrapping**.
 - Reduce the height of the Clip Art so it is no more than 2.54 cm (1") high; the width will adjust proportionally to the height.
- d. Select the second and third rows. Click the **Layout tab**, click **Split Cells** in the Merge group, and then click **OK** to accept the new size of 2 columns by 2 rows.
- e. Fill in the last two rows of the table with the following information:

Invoice Number: 300	Invoice Date: 8/20/2012
Bill to: Heartcountry Bank 33252 S. Campbell Ave. Laurier, MB R0J 1A0	Submit Payment to: Marti Appraisal Company, LLC 2048 S. Glenn Ave. Laurier, MB R0J 1A0

- f. Select the text you just typed and use the Mini toolbar to increase the font size to **14**. Press **Ctrl+L** to left justify, if necessary.
- g. Select the second row of the table, click the **Page Layout tab**, and increase both **Spacing before** and **Spacing after** to **6 pt**.
- h. Format the table borders by completing the following steps:
 - Click the **Table Move handle** to select the whole table.
 - Click the **Design tab**, click the **Borders arrow** in the Table Styles group, and then click **Borders and Shading**.
 - Click the **Borders tab** in the Borders and Shading dialog box, if necessary.
 - Click **Box** in the Setting area on the left side. Click **OK**.
 - Select the second row of the table.
 - Click the **Borders arrow** in the Table Styles group, and then click **Bottom Border**.
 - Select the first row of the table.
 - Click the **Borders arrow**, click **Borders and Shading**, and then click the **Shading tab**.
 - Click the **Fill arrow**, select **Red, Accent 2, Darker 25%**, and then click **OK**.
- i. Add a second table for invoice details by completing the following steps:
 - Press **Ctrl+End** to move your cursor to the end of the document.
 - Press **Enter** two times.
 - Click the **Insert tab**.
 - Click **Table**.
 - Drag to select a four column by five row table (4 × 5).
- j. Type the following column headings in the first row:

File #	Appraisal Date	Property Address	Appraisal Fee Due
---------------	-----------------------	-------------------------	--------------------------

- k. Modify the size of the columns in this table by completing the following steps:
 - Click the **Table Move handle** to select the whole table.
 - Click the **Layout tab**, if necessary.
 - Click the **Width arrow** until 2.54 cm (1") displays.
 - Place the insertion point in the third column.
 - Click the **Width arrow** until 6.35 cm (2.5") displays.

l. Type the following appraisal information in rows 2 through 4.

65	8/4/2012	2402 E. Lee St., Republic	300.00
70	8/2/2012	105 Amanda Ln., Nixa	300.00
75	8/1/2012	335 Valley Vista Dr., Springfield	800.00

m. Add the total amount due in row five by completing the following steps:

- Drag to select the first three cells in row five. Click **Merge Cells** in the Merge group on the Layout tab.
- Type **Total** in this new larger cell, and then press **Ctrl+R**.
- Place the insertion point in the last column of this row (**cell D5**), and then click **Formula** in the Data group.
- Make sure **=SUM(ABOVE)** displays in the Formula box. Click the **Number format arrow**, select **#,##0.00;(\$#,##0.00)**, and then click **OK**.

n. Press **Tab** to add one more row to the table. In that row, complete the following steps:

- Drag your mouse across each cell in the last row to select the whole row.
- Click **Merge Cells** in the Merge group.
- Type **Thank you for your business!**
- Press **Ctrl +E** to centre the sentence in the row.

o. Place the insertion point in the first cell of the fourth row, and then click **Insert Below** in the Rows & Columns group. In the new blank row, type the following:

77	8/4/2012	3324 N. Hickory Hills Ct., Nixa	100.00
-----------	-----------------	--	---------------

p. Sort the information in the table by date by completing the following steps:

- Select rows one through five.
- Click **Sort** in the Data group.
- Click **Header row** under *My list has*.
- Click the **Sort by arrow**, and then select **Appraisal Date**.
- Click **OK**.

q. Click in **cell D6**, which holds the formula. Right-click, and then select **Update Field**.

r. Format the table for readability by completing the following steps:

- Click the **Design tab**.
- Click anywhere in the second table, and then click the **More button** in the Table Styles group.
- Select **Medium Shading 1 - Accent 2** (third column, fourth row) from the gallery.
- Select **cells D1 through D6** (the first six rows of the last column), and then press **Ctrl+R** to right align.
- Click the **Layout tab**, click **AutoFit**, and then click **AutoFit Window** to expand the size of the table to the right margin.
- Select the total amount due in **cell D6**, and then click **Bold** on the Mini toolbar.
- Click the **Table Move handle** to select the whole table, and then increase the font size to **12 pt** using the Mini toolbar.
- Select the *Thank you* sentence in the last row, and then select **Bold** from the Mini toolbar, if necessary. Compare your results to Figure 36.

s. Save and close the document, and then submit based on your instructor's directions.

MID-LEVEL EXERCISES

1 Regional Science Fair

The Regional Science Fair will occur on the campus of Bow Valley College in the spring, and students from schools across the southwest portion of Alberta compete in such areas as physics, chemistry, environment, meteorology, and astronomy. As the volunteer coordinator, you must maintain a list of people who will donate their time to the event. You decide to send a reminder to each volunteer so they will be sure to arrive at their designated time.

- Open *w04m1reminder* and save it as **w04m1reminder_LastnameFirstname**.
- Use the reminder as the main document in a mail merge.
- Use *w04m1times.xlsx* as your data source. Insert fields for first and last name, time in (start time), and time out (end time) in the appropriate locations in the reminder document. Centre the start and end time fields in the table.
- Preview the merge results, and then edit the recipient list. Sort the source data so that it sorts the Time In field in ascending order.
- Filter the source data so that any record containing a Time Out of *9:00:00 PM* will not be included in the merge.
- Merge the documents, and then display the results in a new file. Save the merged reminders as **w04m1mergedreminder_LastnameFirstname**.
- Save and close all documents, and then submit based on your instructor's directions.

2 Building Materials

You are the executive assistant to a general contractor, and your duties include listing the materials that will be used on a home remodelling project. Due to the large number of people who work on the project, from plumbers to electricians to carpenters, it is necessary to keep detailed records of the materials and supplies to use during the remodel. After the first job, you decide to provide the crew with a table of materials that includes pictures. This also might be helpful for any crew member who does not speak English. Refer to Figure 37 as you complete this exercise.

Supply List			
Item	Quantity	Price	Cost of Materials
Cabinet	1	200.00	\$ 200.00
Ceramic tile	100	1.00	\$ 100.00
Drill	1	45.00	\$ 45.00
Drywall (Gypsum)	3	8.00	\$ 24.00
Faucet	1	75.00	\$ 75.00
Flashlight	1	12.00	\$ 12.00
GROUT	1	20.00	\$ 20.00
Hammer	3	10.00	\$ 30.00
Lumber (2x4)	10	3.50	\$ 35.00
Measuring tape	3	8.50	\$ 25.50
Nails	150	.02	\$ 3.00
Paint	5	15.00	\$ 75.00
Paintbrushes	9	4.00	\$ 36.00
PVC pipe	6	3.00	\$ 18.00
Saw	2	25.00	\$ 50.00

Supply List			
Item	Quantity	Price	Cost of Materials
Screwdriver	2	6.00	\$ 12.00
Screws	125	.03	\$ 3.75
Sink	1	150.00	\$ 150.00
Toilet	1	175.00	\$ 175.00
Towel holder	2	9.50	\$ 19.00
TOTAL COST OF MATERIALS			\$1,202.25

FIGURE 37 Supply List ►

- a. Open *w04m2construction* and save it as **w04m2construction_LastnameFirstname**.
- b. Convert this list to a three-column table so you can organize the list of materials and add more data.
- c. Insert two rows at the top to use for a heading and item descriptions.
 - Create a title row on the table by merging cells in the first row.
 - Insert the text **Supply List** as the title.
 - Use the second row as a header for the columns.
 - Enter the following labels for each column: **Item, Quantity, Price**.
- d. Align the prices of each item in the third column. The prices should appear to align on the decimal point.
- e. Centre the data in the second column, which displays the quantity of each item you will use in the project.
- f. Sort the data in ascending order by Item.
- g. Use the **Split cell option** to split the third column in two. The label for the fourth column is **Total Cost**.
- h. Insert a column to the left of the first column. Insert a picture of the supplies in the first column.
 - Use symbols, clip art, or pictures to visually describe the following materials in your table: drill, hammer, paint, paintbrushes, saw, and screwdriver. You might not be able to locate a graphic for each item, but you should be able to find at least five to use in the table.
 - Include Office.com content in your search, if needed.
 - Resize the graphics as necessary so they do not exceed 2.54 cm(1") in height or width.
 - Align each graphic in the centre of the cell.
- i. Use a formula to calculate the total cost of each item and display it in the fifth column. To calculate the cost of materials, multiply the cell that contains the quantity by the cell that contains the price. For example, the formula for the cabinet is =C3*D3. You might also explore the Product function to calculate the cost of items. If you use a function, you can copy the formula from cell to cell, but must update each one to reflect the different data they calculate.
- j. Add a row at the bottom of the table. Merge the first four columns of this row into one cell, and then type **TOTAL COST OF MATERIALS**. Insert a formula in the last column to calculate the total cost of materials used in this project.
- k. Apply the **Light Grid - Accent 1** (sixth column, ninth row) style to the table. Use the Borders (and Shading) feature on the Design tab to add a double-line outside border to the table. (Hint: Use the Custom setting.) Centre the table horizontally on the page.
- l. Use Help if needed to indicate the first row will repeat as a header row at the top of each page if your table spans more than one page. Merge cells in the first row to enlarge the cell containing the title.
- m. Save and close the document, and then submit based on your instructor's directions.

DISCOVER



DISCOVER



3 Finding Dakota

CREATIVE CASE



In an unfortunate mishap, your five-year-old dog, Dakota, escaped from your yard and is now missing. After calling local shelters and pet stores, you decide to create a flyer to post around the neighbourhood and shops so that people will know whom to contact if they see her. Figure 38 displays a flyer that is intended to give information about your dog and also provide a tag with contact information that someone can pull from the flyer and take home. Use a table as the basis of this document. If allowed by your instructor, use a picture and description of your own pet or other animals. Refer to Figure 38 as you complete this exercise.

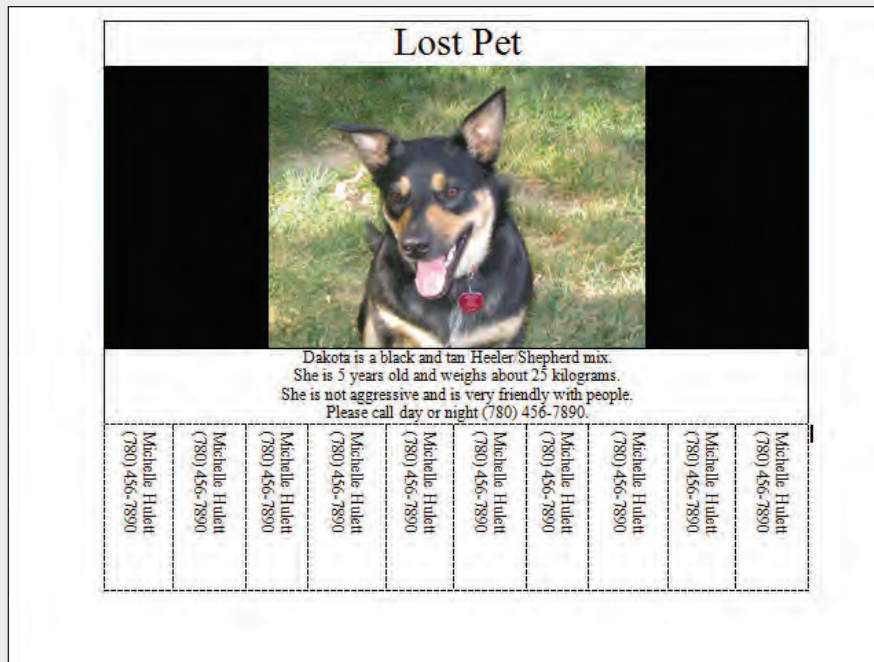


FIGURE 38 Lost Pet Flyer ►

- Open a new document and save it as **w04m3lostpet_LastnameFirstname**.
- Create a table with five columns and four rows (5 × 4 table).
- Merge all the cells in the first row, and then enter the text **Lost Pet**. Select the text, and then change the font size to **26 pt**. The row height will increase automatically to accommodate the larger text. Centre the text in the cell.
- Merge the cells in row 2. Use shading to place a black background in the cell. Locate pictures of your pet or pets; we have provided a picture of Dakota, *dakota.jpg*, in the Exploring Word folder. When you locate the file, insert the picture. The row height will expand automatically to accommodate the picture. Centre the picture in the cell. You should use the Size features in Word to reduce the size of the photo if it displays too large for the page.
- Merge cells in the third row, and then enter text to describe your pet or pets. Feel free to duplicate the information provided in Figure 38. Change the font size to **14 pt**, and then centre the text in the cell.
- Use the Draw Table tool to double the number of columns in the last row from 5 to 10. Use Help if needed to learn about this tool.
- Type your name and phone number in the first cell of the fourth row. Use the Text Direction feature to rotate the text, as shown in Figure 38. Centre and align the text at the top of the cell and increase the height of the cell, if necessary, to display the contents on two lines.
- Use Copy and Paste to populate the remaining cells with the owner information.
- Change the formatting of the fourth row to display a dashed line around each of the cells.
- Save and close the document, and then submit based on your instructor's directions.



You work as the business manager for an Arizona Sports Medicine Clinic and are responsible for many forms of correspondence. This week, you want to send a letter of welcome to three physical therapists recently hired at the clinic. Additionally, you need to send your weekly reminders to patients who are scheduled for upcoming treatment or consultations. In the past, the letters were generated manually and names were typed in each letter separately. However, because you now use Word 2010, you decide to create and use source data documents and implement a mail merge so you can produce the letters quickly and accurately.

Create a Table Containing Therapist Information

You will create a new document that includes a table of information about the new physical therapists. Then you personalize the welcome letter created for the therapists and use information from the table to create a personal letter for each person.

- Open a new, blank document and save it as **w04c1therapists_LastnameFirstname**.
- Create a table with the following information:

Name	Credentials	Street	Days working	Salary
Mike Salat	M.S., ATC	2342 W. Cardinal Street	Monday–Thursday	\$60,000
Justin Ebert	M.S., ATC	34234 S. Callie Place	Monday–Friday	\$65,000
Karen Rakowski	ATC, PT	98234 E. Shepherd Lane	Monday–Friday	\$65,000

- Separate the name into two columns because it will be easier to use in form letters using mail merge features. Make necessary changes to the table to display the therapists' first and last names in two separate columns. (Hint: Uncheck the option *Merge cells before split* in the Split Cells dialog box.)
- Create three new columns for the City, State, and ZIP Code information, and then populate each one with **Conway, AR 72032**.
- Create a new row, and then use a formula to total the Salary column. This amount is referenced in the letter, although you do not use it in the mail merge. Use Currency formatting, which will cause total salary amount to display with two decimal places, unlike the salary entries in the cells above.
- Sort the data in the table by Last Name.
- Save the document.

- Preview the results before merging. Filter the recipients so the fourth record does not generate a letter.
- Complete the mail merge, displaying the results in a new document. Save the merged letters as **w04c1ptwelcome_LastnameFirstname**. Close all files.

Produce a Reminder Letter for Patients

Your second project for the day is the generation of a letter to remind patients of their appointment with the therapists. For this project, you use an Access database as the source because that is how your office stores patient information.

- Open a new document and save it as **w04c1reminder_LastnameFirstname**. Start a mail merge letter and pull your recipients from *w04c1patients.accdb*. When you select the database file, use the Patients table.
- Insert today's date in the top-right corner of the letter. Insert an address block in the return address area of the letter. Add an appropriate salutation of greeting to the patient.
- Type the following for the body of the reminder letter:
Please remember that you have an appointment at the Sports Medicine Clinic of Conway on *date*, at *time*. If you have paperwork to fill out, please arrive at our office 15 minutes prior to your appointment time stated above. Thank you!
- Insert the fields for date and time in the first sentence and remove the star markers.
- Finish the letter by typing the closing salutation:

**Sincerely,
The Sports Medicine Clinic of Conway
(501) 555-5555**

Merge Therapist Information into a Welcome Letter

Now that you have documented information about the new Physical Therapists, you can use it as a source for the welcome letter.

- Open *w04c1welcome* and save it as **w04c1welcome_LastnameFirstname**.
- Start a mail merge using the welcome letter as the source document. The recipient information will come from *w04c1therapists_LastnameFirstname*.
- Replace the starred placeholders in the letter with the fields from the recipient table. Insert today's date in the appropriate place.

- f. Edit the recipient list and add your name, address, and a date for an appointment. If file or network security does not enable you to modify the source data file, copy the file to your own disk and redirect the mail merge to use the file from the new location. If you cannot copy the file, omit this step.
- g. Sort the recipient list by appointment date, and then appointment time. Do not print letters for people who do not have a scheduled appointment.
- h. Change the formatting of the document so the letter is single spaced with no spacing before or after any paragraph.
- i. Merge the documents into a new document, and then save it as **w04c1appointments_LastnameFirstname**. If a Mail Merge dialog box displays indicating Word found locked fields during the update, click **OK** to clear the dialog box.
- j. Save and close all documents, and submit based on your instructor's directions.

Employee Directory

GENERAL CASE



The management of your company requires you to keep a current list of employee contact information in case you need to contact someone for an emergency situation. You have a worksheet that contains the contact information, but you do not yet know how to use Excel and you need to create and format a list very quickly. You are mastering the Mail Merge feature of Word and remember you have the option of creating a directory, which lists the source data on one page instead of printing each one on a separate page. This would be a good tool to use in generating the master list. Open a new document and prepare the contact information list using a mail merge operation. Use the file *w04b1personnel.xlsx* as your data source. Save the main document as **w04b1directory_LastnameFirstname**, and save the result of your mail merge as **w04b1directorylist_LastnameFirstname**. Use the Microsoft Help feature, if necessary. It might be helpful to format your data in a table so it is easier to read. Close all documents and submit based on your instructor's directions.

Great Plains Travel Agency

RESEARCH CASE



You are a travel agent at the Great Plains Travel Agency and your boss wants you to develop a travel itinerary to a popular destination. Choose a location, and then use the Internet to help you determine the expenses that a customer will incur if he or she chooses that location. Create a table in Word that details costs associated with transportation, lodging, activities, and food. Create multiple columns that enable you to break down costs by category and by day (such as seven nights in a hotel that costs \$200 per night) and add formulas to show subtotals and the total cost of the trip. Save your work as **w04b2travel_LastnameFirstname**. Close the document and submit based on your instructor's directions.

Wedding Invitations

DISASTER RECOVERY



Your friend is experiencing high levels of anxiety because she cannot complete a mail merge operation to create labels for her wedding invitations. She has used the Mail Merge feature previously; however, when you open the labels, a dialog box appears and indicates there is no link from that main document to the data source (address list). You decide to troubleshoot the operation by first opening the file *w04b3labels*, to see how it was set up to use the addresses in *w04b3labeladdresses.accdb*, and then determine if you can find the reason why it does not work. If you can solve the problem, create mailing labels for the wedding and save the new file as **w04b3weddinglabels_LastnameFirstname**. Rename and save the original file you fixed as **w04b3labels_LastnameFirstname**. Close all documents and submit based on your instructor's directions.