



Estimated Time:
1.5 hours

LESSON 10

Working with Tables

■ OBJECTIVES

Upon completion of this lesson, you should be able to:

- Create a table and insert text.
- Insert and delete rows and columns.
- Adjust column width and row height.
- Use the Draw Table and Eraser tools to create and edit a table grid.
- Format text alignment and direction within a table cell.
- Format borders and shading and apply table styles.
- Sort data in a table.
- Convert text to a table and vice versa.

■ DATA FILES

To complete this lesson, you will need these data files:

Step10–13.docx

Project10–1.docx

Project10–2.docx

■ VOCABULARY

ascending order

cell

descending order

gridlines

merging cells

Quick Tables

splitting cells

MODULE 2 Key Applications

Suppose you have a document in Word that includes information you want to arrange in several lines across two or three columns. How can you create the columns you need in Word? If your answer is “Set tab stops,” you’re correct. However, there’s also an easier and faster way. The table features in Word make the task of arranging text and numbers in columns both quick and easy. Borders and shading also help to organize information in a meaningful way.



VOCABULARY

cell

Creating a Table

A table consists of cells to which you add content, such as text, numbers, or graphics. A **cell** represents one intersection of a row and a column in a table. In a table, rows go across and columns go down. It is common to add headings at the top of columns to label the content in the columns.

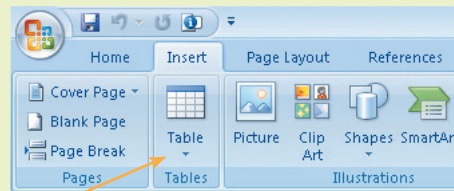
To create a table, you must first decide how many columns and rows you want in the table. You then create a table grid and enter the data.

To move the insertion point from one cell to another, you can press the arrow keys or Tab. When you reach the end of a row and press Tab, the insertion point moves to the first cell in the next row.

Step-by-Step 10.1

1. Open a new blank document. Click the **Insert** tab and then click the **Table** button in the Tables group shown in **Figure 10–1**. A grid of table cells appears.

FIGURE 10–1
The Tables group on the Insert tab

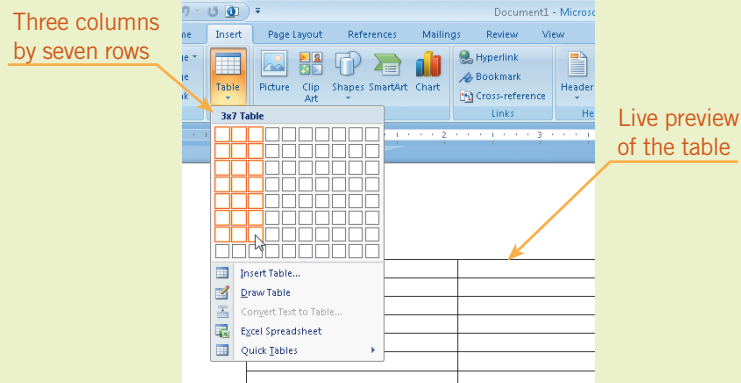


2. Drag the mouse pointer down the grid until seven rows of cells are highlighted, then continue to drag the mouse pointer across until the top of the grid shows 3×7 Table, as shown in **Figure 10–2**. Click, and the table is inserted in the document.

FIGURE 10–2
The Insert Table grid with the number of columns and rows selected

EXTRA FOR EXPERTS

You can also create a table by opening the Insert Table dialog box and entering the number of rows and columns. On the Insert tab, click the **Table** button and then click **Insert Table** to open the dialog box.



- Because the insertion point is now positioned in a table in the document, the Ribbon adapts and shows Table Tools, which are features you can use to format and edit tables. Compare your screen with **Figure 10-3**. There are two Table Tools tabs: the Design tab and the Layout tab.

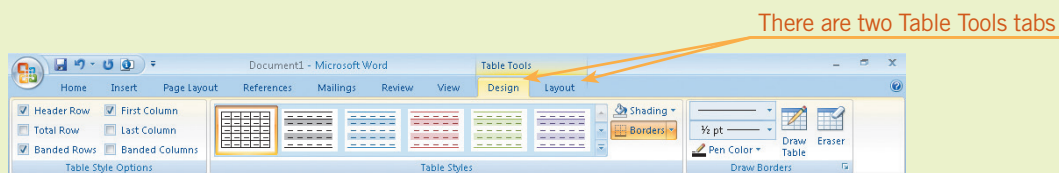


FIGURE 10-3
The Table Tools Design tab

- The insertion point should be positioned in the first cell of the table. Press **Tab** to move the insertion point to the next cell to the right in the same row. Enter **20 Minutes**. Press **Tab** and then enter **40 Minutes**.
- Press **Tab** to move the insertion point to the first cell in the next row.
- Press the **down arrow** to move the insertion point down to the third row.
- Enter the remaining data shown in **Figure 10-4**. Use Tab or the arrow keys to move from one cell to another.

	20 Minutes	40 Minutes
Cross-country skiing	192	384
Downhill skiing	144	288
Golf: carrying clubs	132	264
Mountain biking	204	408
Weight lifting	72	144

HEADS UP

If nonprinting characters appear in your document, small squares will show in the left corner of each table cell. These squares are called end-of-cell markers. They will move to the right as you enter text in the cell. End-of-cell markers do not print.

FIGURE 10-4
Table content for Step-by-Step 10.1

- Save the document as **Calories1** and leave the document open.

Modifying the Table Structure

After you create a table, you may decide to change it. For example, you may need to add more rows or delete a column. Word has many features that make these changes easy.



Inserting Rows and Columns

To insert a new row at the end of the table, you can position the insertion point in the last table cell and press Tab. To insert a new row anywhere else in the table, or to insert new columns, you can use the insert commands on the Table Tools Layout tab.

Step-by-Step 10.2

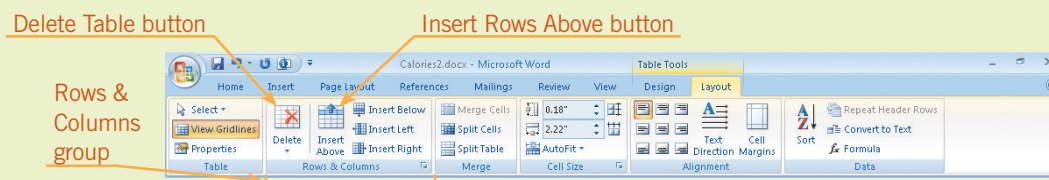
- If necessary, open **Calories1** from your solution files. Save the document Calories1 as **Calories2**. If necessary, click any cell in the table to show the Table Tools Design tab.

- Position the insertion point in the last cell in the table at the lower right (144). Press **Tab** to create a new row. Enter the following information in the new row:

Golf: using a cart 84 168

- Move the insertion point to any cell in the third row (*Cross-country skiing*). Click the **Table Tools Layout** tab for more table tools, as shown in **Figure 10-5**.

FIGURE 10-5
The Table Tools
Layout tab



- In the Rows & Columns group, click the **Insert Rows Above** button in the Rows & Columns group. A new row is entered above the row where the insertion point is positioned, and the table now has nine rows.
- Drag across all the cells in the fourth and fifth rows (*Cross-country* and *Downhill*) to select the cells. Click the **Insert Rows Below** button . Because you selected two rows, two new rows are inserted below the selection. Click anywhere in the document window to deselect the cells.
- Enter the following information in the sixth and seventh rows:
Walking: 15 minutes/mile 108 216
Running: 9 minutes/mile 264 528
- Move the insertion point to any cell in the third column (*40 Minutes*). Click the **Insert Columns to the Left** button . A new column is added to the left side of the column where the insertion point is positioned.
- Position the mouse pointer above the first row in the first column. When the mouse pointer changes to a down-pointing arrow , click to select the column. Click and drag the mouse pointer across to select both the first and the second column.
- With the first two columns selected, click the **Insert Columns to the Right** button . Two new columns are added to the right side of the second column and the width of the columns is automatically adjusted. Notice the text automatically wraps to a new line within the cells of the first column.
- Click in the top cell of the new third column and enter **30 Minutes**. Press the **down arrow** to move down to the fourth row and enter the following numbers to complete the column:

EXTRA FOR EXPERTS

You can use the number pad on your keyboard to enter numbers. Make sure that NUMLOCK is turned on.


288
216
162
396
198
306
108
126

11. Save the changes and leave the document open.

Deleting Rows and Columns

To remove rows or columns, you must choose the Delete commands on the Table Tools Layout tab. When you delete a row or column, the text in the cells is also deleted.

Step-by-Step 10.3

1. If necessary, open **Calories2** from your solution files. Save the document Calories2 as **Calories3**. If necessary, show the Table Tools Layout tab.
2. Position the mouse pointer to the left side of the ninth row (*Mountain biking*). The pointer will change to a right-pointing arrow . With the arrow pointed at the first cell of the ninth row, click the mouse button to select the entire row.
3. With all the cells selected in the ninth row, press **Delete**. When you delete the text in a cell, the cell boundaries remain.
4. With the insertion point in the ninth row, click the **Delete Table** button in the Rows & Columns group, and then click **Delete Rows**. The row where the insertion point is positioned is deleted.
5. Select the ninth row (*Weight lifting*), click the **Delete Table** button, and click **Delete Rows**.
6. Select the two blank rows, click the **Delete Table** button, and then click **Delete Rows**.
7. Position the insertion point in the first cell in the first column (a blank cell). Click the **Delete Table** button and then click **Delete Cells**. The Delete Cells dialog box will open.
8. Click the second option **Shift cells up** and then click **OK**. The cell is deleted, and the contents of the cells below the deleted cell are shifted up.
9. Click the **Undo** button to restore the table cell and the data that was in it.

HEADS UP

You can also select table cells by clicking the **Select Table** button in the Table group on the Table Tools Layout tab.

EXTRA FOR EXPERTS

You can also quickly access commands to insert and delete cells, rows, and columns by right-clicking the selected cell or cells and then choosing a command from the shortcut menu.

10. Select the two blank columns, click the **Delete Table** button, and then click **Delete Columns**.
11. Save the changes and leave the document open.

Adjusting Column Width and Row Height

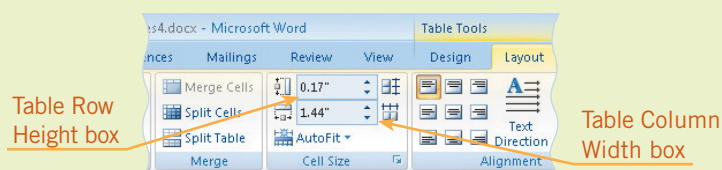
When you create a table grid, Word makes all the columns the same width, and the entire width of the table is based on the settings for the margins and paper size when the table is inserted. You can adjust the width of each column automatically using the AutoFit feature. You can choose to automatically adjust the column width as needed, to accommodate the contents within the cells, or you can choose to automatically resize the table to fit in the document window. This is useful because the table width automatically adjusts when the window size changes.


The height of each row is the same when the table is first inserted, but when the text wraps to a second line within a cell, the height of all the cells in that row is automatically increased to accommodate the extra line of text.

Step-by-Step 10.4

1. If necessary, open **Calories3** from your solution files. Save the document Calories3 as **Calories4**. If necessary, switch to Print Layout view.
2. Click the **View** tab and click the **Page Width** button in the Zoom group.
3. Position the insertion point in the first cell in the table (a blank cell) and click the **Table Tools Layout** tab. In the Cell Size group, shown in **Figure 10–6**, note the height of the row that appears in the Table Row Height box.


FIGURE 10–6
The Cell Size group on the Table Tools Layout tab



4. Move the insertion point to the fourth row (*Walking*). Notice that the numbers in the Table Row Height box change to reflect the difference in the height of the row.
5. With the insertion point positioned in the first column, look at the width of the column that appears in the Table Column Width box. Click anywhere in the second and third columns. The numbers in the Table Column Width box may vary for each column.
6. With the insertion point positioned anywhere within the table, click the **AutoFit** button  **AutoFit** in the Cell Size group and then click **AutoFit Contents**. The text in the first column no longer wraps within the cells, and the extra white space in the other three columns is eliminated.

HEADS UP

When a table cell is formatted for AutoFit Contents, Word will automatically adjust the cell width each time the cell contents change.

7. With the insertion point positioned anywhere within the table, click the **AutoFit** button again and then click **AutoFit Window**. Extra space is added to the columns so that the table fills the width of the page.
8. Click the **Page Layout** tab, click the **Page Orientation** button, and then click **Landscape**. The width of each column adjusts so the table fills all the space between the left and right margins.
9. Click the **Page Orientation** button and then click **Portrait** to return to the original page orientation.
10. Click the **Undo** button arrow and then click **AutoFit Window**. This will restore the setting so that the columns are adjusted to fit the contents.
11. Click the **Table Tools Layout** tab and in the Table group, click the **Select Table** button  and then click **Select Table**.
12. Click the up arrow in the Table Row Height box to increase the row height to 0.3".
13. Deselect the table rows. Save the changes and leave the document open.

Merging and Splitting Table Cells

When you remove the boundary between two cells, it is called *merging cells*. You can merge cells horizontally or vertically. You can merge cells when you want to create a heading to span across two or more columns.

When you convert a cell into multiple cells, it is called *splitting cells*. You can split a cell into two or more rows and/or two or more columns. You can also split a table into two separate tables.

VOCABULARY

merging cells

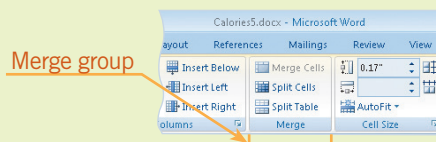
splitting cells


Step-by-Step 10.5

1. If necessary, open **Calories4** from your solution files. Save the document **Calories4** as **Calories5**. Also, if necessary, click in the table and then click the **Table Tools Layout** tab.
2. With the insertion point positioned anywhere within the table, click the **AutoFit** button in the Cell Size group and then click **AutoFit Window**.
3. Position the insertion point in the first row in the table and then click the **Insert Rows Above** button. A new row is added and the four cells in the new row are selected.

FIGURE 10–7

The Merge group on the Table Tools Layout tab



- With all the cells in the new row still selected, click the **Merge Cells** button  in the Merge group, shown in **Figure 10–7**. Click in the table to deselect the row. The four cells have merged into a single, wide cell.

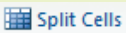

- Position the insertion point in the new blank row and then click the **Split Cells** button . The Split Cells dialog box will appear.
- Change the number in the Number of columns box to **1**. Change the number in the Number of rows box to **2**. Click **OK**. Click anywhere in the table to deselect the row. You will see that the row is split into two rows.
- Position the insertion point in the top blank row and enter **NUMBER OF CALORIES BURNED**. Press **Enter** and then enter **Body weight: 150 lbs.**. The height of the cells is automatically adjusted to accommodate the two lines of text.
- Click in the second row of the table and click the **Split Cells** button. Click **OK** to accept the proposed settings of two columns and one row. The row will be split evenly into two cells.
- Position the mouse pointer over the border that splits the row into two cells. When the pointer changes to a double-headed arrow, drag the border to the left so that it aligns with the first column border, as shown in **Figure 10–8**.

FIGURE 10–8

Drag a cell border to resize the cell

NUMBER OF CALORIES BURNED			
Body weight: 150 lbs.			
	20 Minutes	30 Minutes	
Cross-country skiing	192	288	
Downhill skiing	144	216	
Walking: 15 minutes/mile	108	162	
Running: 9 minutes/mile	264	396	
Golf: carrying clubs	132	198	
Weight lifting	72	108	
Golf: using a cart	84	126	

- Click in the cell directly below *Body weight* and enter **Activity**. Click in the cell directly above the *20 Minutes* column and enter **Length of Time**.
- Position the insertion point anywhere in the seventh row (*Running*), and then click the **Split Table** button . The rows now appear in two separate tables.

12. Click the **Undo** button to return the two tables to one table.
13. Save the changes and close the document.

Drawing a Table

There may be occasions when you need to create and customize a more complex table. For example, the table may require cells of different heights or a varying number of columns per row. The Draw Table tool is very useful for creating complex tables. When you use the Draw Table tool, you use the mouse to draw the table grid on the screen the same way you would use a pen to draw the grid on a sheet of paper. The document must be displayed in Print Layout view.

The Eraser tool enables you to remove cell boundaries. Click the Eraser button, and the pointer changes to an eraser. When you point and click a cell boundary, the line will be selected. When you release, the boundary is deleted.



2-2.1.3
2-2.1.13



EXTRA FOR EXPERTS

You can also use the Draw Table tool and the Eraser tool to add, delete, split, and merge cells in an existing table.

Step-by-Step 10.6

1. Open a new blank document. Click the **View** tab, make sure the Ruler is checked, and then click the **Page Width** button.
2. Click the **Insert** tab. Click the **Table** button and then, in the menu below the grid, click **Draw Table**. The mouse pointer changes to a pencil.
3. Position the mouse pointer in the upper-left corner of the document near the flashing insertion point. Notice that as you move the mouse pointer, the position of the pointer is indicated on both the horizontal and vertical rulers.
4. To draw the outside boundary of the table grid, position the pointer in the upper-left margin. Then click and drag the pencil down and to the right. As you drag the mouse, markers on the vertical and horizontal rulers will show the table size, as shown in **Figure 10–9**. Release when the table (box) is approximately 6 ½ inches wide by 2 ½ inches high.

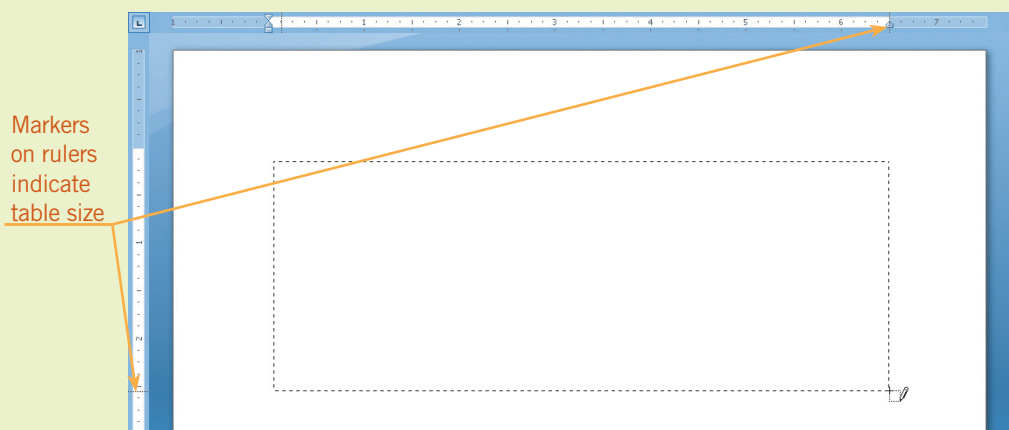
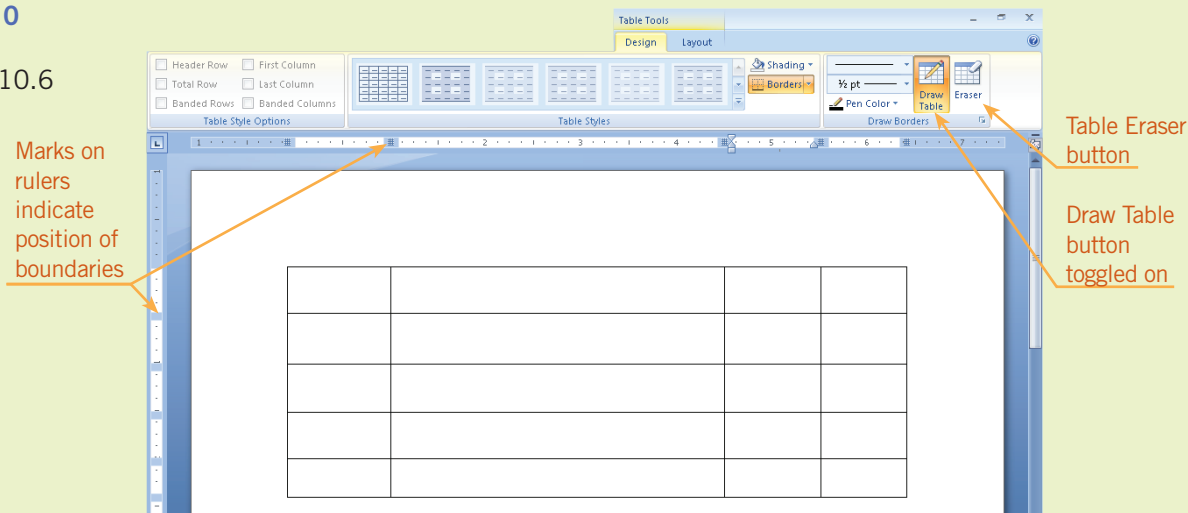


FIGURE 10–9
Creating the outside boundary of a table grid

- To create the cell lines inside the table, position the point of the pencil where you want the line to begin and then click and drag to the point where you want the line to end. A broken line will display as you drag the mouse. Draw all of the lines illustrated in **Figure 10–10**. Note that the four horizontal lines are $\frac{1}{2}$ inch apart and the three vertical lines are positioned at 1 inch, 4 $\frac{1}{2}$ inches, and 5 $\frac{1}{2}$ inches on the horizontal ruler.

FIGURE 10–10
Table grid for
Step-by-Step 10.6

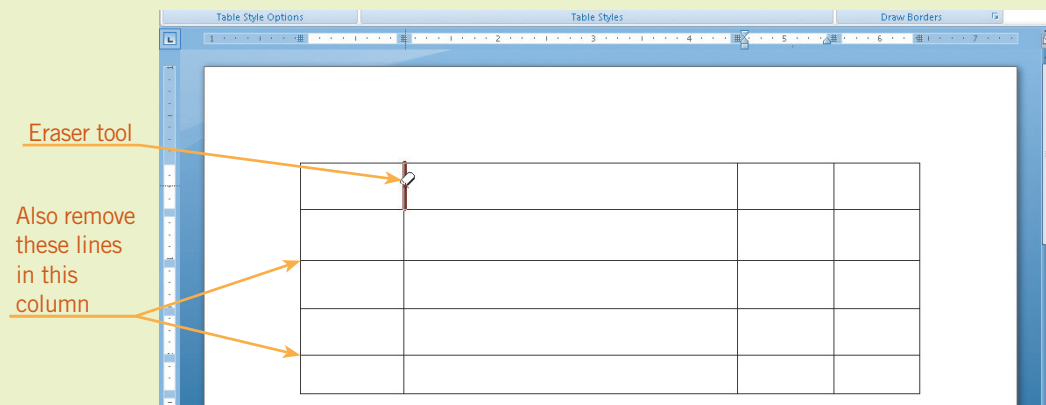


HEADS UP

You can also press **Escape** to toggle off the Draw Table option.

- On the Table Tools Design tab in the Draw Borders group, click the **Draw Table** button to toggle off the Draw Table option.
- Click the **Table Eraser** button. The pointer changes to an eraser.
- Position the eraser in the first row on the vertical line between the first and second cells. When the lower corner of the eraser is positioned over the line and you hold down the mouse button, the line appears selected as it does in **Figure 10–11**.

FIGURE 10–11
Eraser tool with
selected line



- Release the mouse button to delete the selected boundary. If you click and the line is not deleted, reposition the eraser and try again. The line will only be deleted if it is selected when you click.

10. Erase two more lines in the first column as indicated in **Figure 10–11**.
11. Click the **Table Eraser** button to toggle the feature off.
12. Enter the table text shown in **Figure 10–12**.

Recycling Rate		2000	2010
PET	Soft drink bottles	48%	
	Vegetable oil bottles	12%	
HDPE	Milk jugs	29%	
	Bleach and laundry detergent bottles	14%	

FIGURE 10–12

Table content for Step-by-Step 10.6

13. Save the document as **Recycling Rate1** and leave the document open.

Formatting Tables

You can make a table easier to read by enhancing its appearance. For example, aligning numbers within a cell can make the data easier to read. Changing the border colors and adding shading to some of the cells can help the reader quickly identify different types of data.



2-2.1.13
2-2.1.14
2-2.1.15

Aligning Data within Table Cells

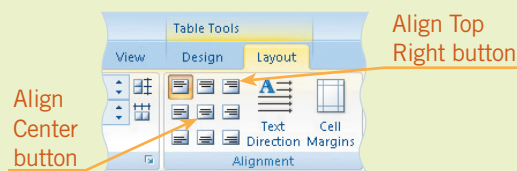
The Alignment group in the Table Tools Layout tab includes several buttons you can use to align text within the cells. You can align text at the top, center, or bottom of a cell, as well as to the left or right. You can also change the direction of text in a table cell. The direction of the text toggles between three text positions: top to bottom, bottom to top, and horizontal (the default position).


Step-by-Step 10.7

1. If necessary, open **Recycling Rate1** from your solutions files. Save the document Recycling Rate1 as **Recycling Rate2**. Click the **Table Tools Layout** tab.
2. Drag the mouse pointer down the left side of the table to select all the rows in the table.
3. Click the **Table Row Height** box and enter **0.5**. All the rows are now exactly the same height.

FIGURE 10–13

The Alignment group on the Table Tools Layout tab



4. In the Alignment group, click the **Align Top Right** button  shown in **Figure 10–13**. The text in each cell is aligned at the right side of the cell beginning at the top boundary of the cell.





5. Click the **Align Center Left** button . The text begins at the left side of the cells and is centered between the top and bottom boundaries of the cell.
6. Deselect the rows. Point to the cell with *PET* and drag down to select that cell and the cell with *HDPE*.
7. With both cells selected, click the **Text Direction**  button in the Alignment group. The text rotates to the right and is shown from top to bottom.
8. Click the **Text Direction** button again. The text rotates to the right and now reads from bottom to top.
9. Notice that the buttons in the Alignment group are altered to reflect the new text direction. Click the **Align Center** button  in the location shown in **Figure 10–13**. The text is centered between the left and right and top and bottom boundaries of the cell.
10. Click in the first cell (*Recycling Rate*) and then click the **Align Center** button.
11. Select the last two columns (*2000* and *2010*) and then click the **Align Center Right** button . The text in each cell is aligned at the right side of the cell and centered between the top and bottom boundaries.
12. Deselect the cells. With the insertion point positioned anywhere within the table, click the **AutoFit** button, and then click **AutoFit Contents**. Your table should look like the table shown in **Figure 10–14**.

FIGURE 10–14

Table with text rotated and aligned

Recycling Rate		2000	2010
PET	Soft drink bottles	48%	
	Vegetable oil bottles	12%	
HDPE	Milk jugs	29%	
	Bleach and laundry detergent bottles	14%	

13. Save the changes and leave the document open.



Formatting Borders and Shading

As you worked with the Calories and Recycle Rate tables you created in this lesson, the lines you saw on the screen were actually borders. By default, Word formats a ½ point single-line border around all cells in a table. Generally, the default border will be appropriate for the tables you create. However, there may be occasions when you want to customize the border and add shading or color to some of the table cells. You may even want to remove the border completely. When you remove the borders from table cells, the boundary lines for the cells still remain. These boundary lines in a table are called **gridlines**. Gridlines are used for layout purposes; they show on the screen, but they do not print.

VOCABULARY

gridlines

Step-by-Step 10.8

1. If necessary, open **Recycling Rate2** from your solution files. Save the document Recycling Rate2 as **Recycling Rate3**.
2. Select all the cells in the table.
3. Click the **Table Tools Design** tab. In the Table Styles group, click the **Bottom Border** button arrow  and then click **No Border**.
4. Click in the table to deselect it. Your document should now show lines that indicate the cell boundaries, as shown in **Figure 10–15**. If you don't see any broken blue lines in your table, click the **Table Tools Layout** tab and click the **View Table Gridlines** button .

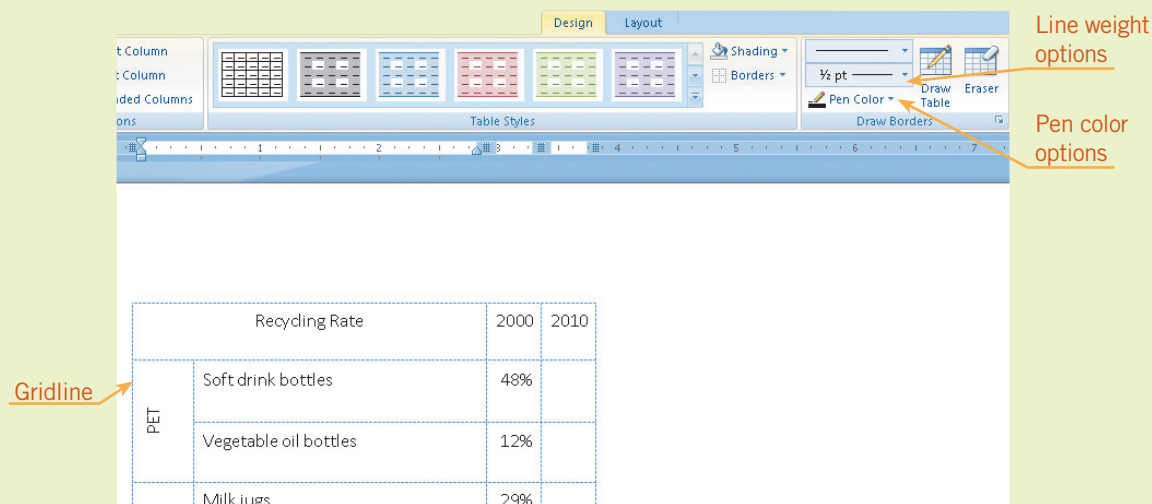




FIGURE 10–15
Table gridlines

5. Select the first row in the table. On the **Table Tools Design** tab in the **Table Styles** group, click the **Shading** button arrow . Select a light green color. The shading is applied to the selected cells.
6. Select the cells containing *PET* and *HDPE*. Repeat the shading color format. (Hint: Press **F4**.)

MODULE 2 Key Applications

7. Select all the cells in the table. In the Draw Borders group, click the **Line Weight** list arrow, and then click $\frac{3}{4}$ pt. You must change the line weight setting before applying the border.
8. Click the **Pen Color** button arrow  and select a dark green color. You must also choose the border color before applying the border.
9. Click the **Borders** button arrow and then click **All Borders**. The $\frac{3}{4}$ pt dark green border line is applied to all selected cells.
10. Click in the table to deselect the cells. Select all the cells in the first row.
11. Click the **Line Weight** list arrow and then click $1\frac{1}{2}$ pt.
12. Position the mouse pointer over the **Borders** button. The ScreenTip should show *All Borders* because that was the last border format applied. The pen color is also still set for dark green. Click the **Borders** button. The $1\frac{1}{2}$ pt dark green border is applied to all borders of the selected cells.
13. Select the cells containing *PET* and *HDPE*. Repeat the border format.
14. Click in the table to deselect the table cells. Save the changes and close the document.

Applying Table Styles

As you can see, formatting borders and shading can take time. That's why Word provides several table designs that you can apply with a single click. These styles are referred to as built-in styles.

Step-by-Step 10.9

1. Open **Calories5** from your solution files and save the document **Calories5** as **Calories6**.
2. Select the first two rows, and in the Paragraph group, click the **Center** button.
3. With the insertion point positioned anywhere in the table, click the **Table Tools Layout** tab, click the **AutoFit** button, and then click **AutoFit Contents**.
4. Select all the cells that contain numbers (excluding the column headings), beginning with the calories data *192* through the calories data *168*, and then click the **Align Top Right** button in the Alignment group.

- Click the **Table Tools Design** tab. In the Table Styles group, position the mouse pointer over the second style, **Light Shading**. A live preview of the new style will appear in the document window and the ScreenTip will show the name *Light Shading*, as shown in **Figure 10-16**.

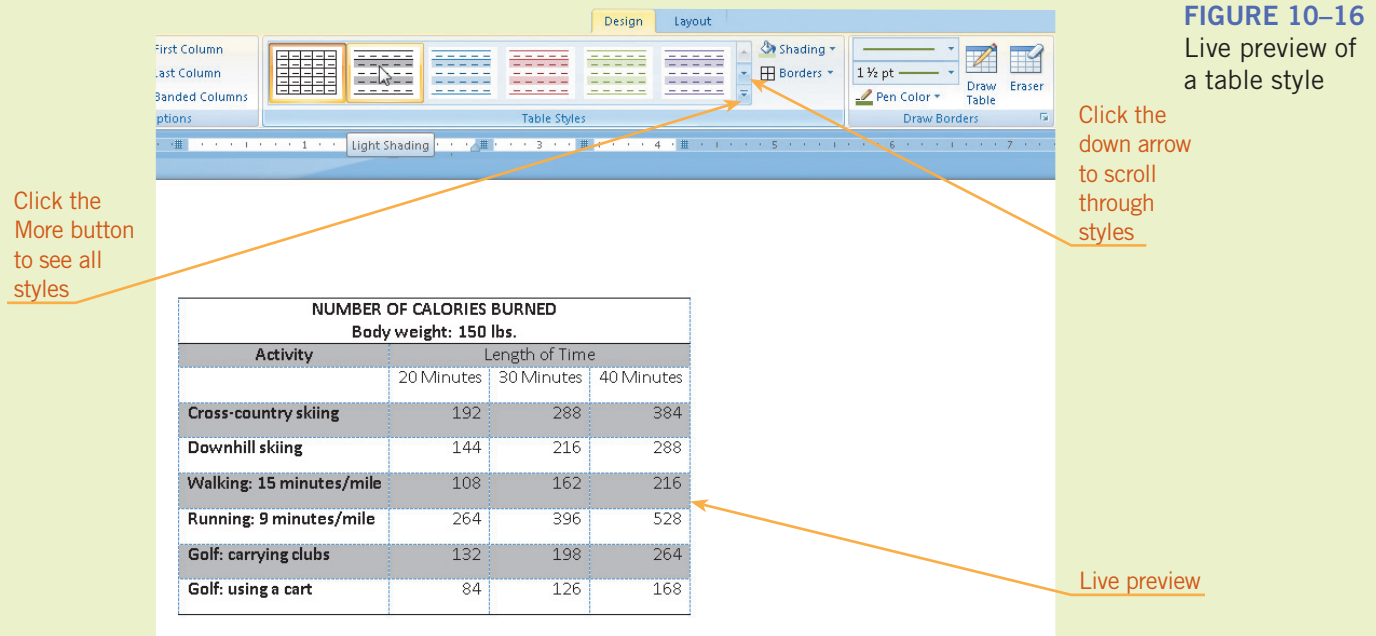


FIGURE 10-16
Live preview of a table style

- Move the mouse pointer over each of the other styles that appear in the Table Styles group to see a live preview of each style. Click the down arrow to see the next set of styles.
- Click the **More** button to show all the built-in styles.
- Click the **Light List – Accent 2** table style. The borders and shading are automatically applied to the table.
- Select the column headings *Length of Time*, *20 Minutes*, *30 Minutes*, and *40 Minutes*, and apply the bold format. (Hint: Click the **Bold** button on the Mini toolbar, or press and hold **Ctrl** and then press **B**.)
- Save the changes and close the document.

Using Quick Tables

Word also provides built-in tables, called **Quick Tables**, which include sample data and table formats. You can insert a Quick Table in a document and then replace the sample data with your own data, and you can modify the table structure and styles. Editing text in the cells of a table is a similar process to entering text in a document. You can enter and delete text, or select and replace the text. The Cut, Copy, and Paste commands are available, and you can also use drag-and-drop editing.

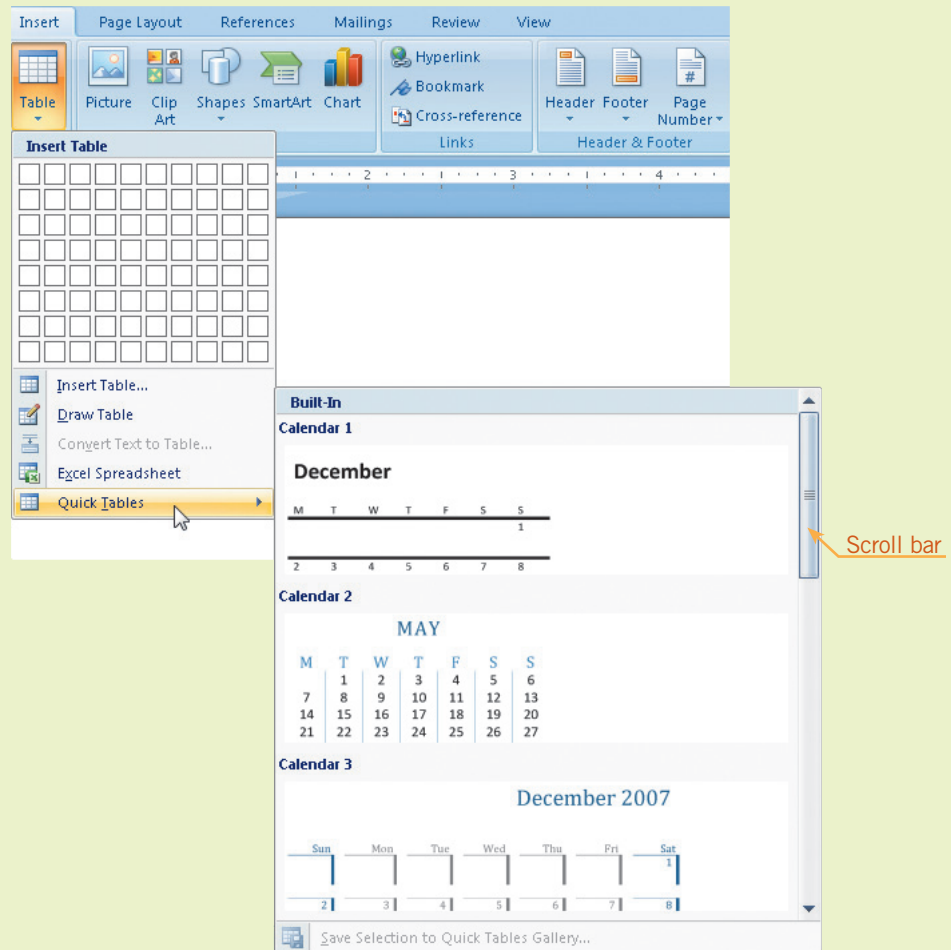
VOCABULARY

Quick Tables

Step-by-Step 10.10

1. Open a new blank document.
2. Click the **Insert** tab. Click the **Table** button and then, in the menu below the grid, point to **Quick Tables**. The submenu shown in **Figure 10–17** appears.

FIGURE 10–17
The Built-In menu for Quick Tables





3. Scroll down and click the **Matrix** Quick Table. A table with sample data is inserted in the document.
4. Select all the rows in the table. Press **Delete** to remove all the text from the cells.
5. Click the **Table Tools Layout** tab and select the two columns at the right side of the table. In the Rows & Columns group, click the **Delete Table** button and then click **Delete Columns**.
6. Enter the data shown in **Figure 10–18** to complete the table. You will need to add two new rows at the bottom of the table grid.

Member Name	# Members in Family	Member #	# Years of Membership
Collica	5	103238	13
Sanchez	2	103241	13
O'Connell	4	103339	13
Wright	6	105166	11
Anderson	7	104655	12
Klopf	4	103210	13
Mendoza	2	104112	12

FIGURE 10-18

Table content for Step-by-Step 10.10

7. Select all the rows in the table, click the **Home** tab, and then change the font to **Arial**.
8. Click the **Table Tools Layout** tab. Select the first column and then click the **Align Bottom Left** button  in the Alignment group. Select the second, third, and fourth columns and click the **Align Bottom Center**  button.
9. Save the document as **Members1** and leave the document open.

Aligning and Resizing Tables on the Document Page

In this lesson, you have been selecting all the cells in a table, but you may not have actually selected the entire table. When you show nonprinting characters, you can see that every row ends with a marker. These end-of-row symbols must be included in the selection for the entire table to be selected.

To align a table on the page horizontally, you must first select the entire table. Once the entire table is selected, you can format the alignment in the same way you align text paragraphs.

You may have noticed a marker that sometimes appears at the upper-left corner of a table. This symbol is the table move handle, and you can drag the marker to reposition the table on the page. You can also use the table move handle to select the entire table.

The resize handle is another marker that sometimes appears in the lower-right corner of a table, and when you drag this symbol, you can resize the table.

Step-by-Step 10.11

1. If necessary, open **Members1** from your solution files. Save the document Members1 document as **Members2**.
2. If necessary, click the **Home** tab and then click the **Show/Hide ¶** button in the Paragraph group to show nonprinting characters.
3. Position the insertion point anywhere within the table, and click the **Table Tools Layout** tab.

FIGURE 10–19
Nonprinting characters
in a table

Member-Names	# Members in Family	Member-#	# Years of Membership
Collica	5	103238	13
Sanchez	2	103241	13
O'Connell	4	103339	13
Wright	6	105166	11
Anderson	7	104655	12
Klop	4	103210	13
Mendoza	2	104112	12

- Click and drag the **table move handle**, shown in **Figure 10–19**, to reposition the table on the page. If you do not see the table move handle, move the mouse pointer around the upper-left corner of the table until it appears.

- Click the **table move handle** to select the entire table. Notice that the end-of-row markers are also selected.
- Click the **Home** tab. Click the **Center** button in the Paragraph group. The table is centered horizontally.
- Point to the lower-right corner of the table. When the resize handle appears, position the mouse pointer over the handle. The pointer will change to a double-headed arrow. Drag the handle about one inch to the right to increase the width of the table.
- Save the changes and leave the document open.



Sorting Data in a Table

Tables organize material to make it easier to read, and you have discovered how formatting the table and the characters in the table can add clarity to the information. You can also sort the information in a table on different search criteria to organize the table contents to emphasize data in different ways.

Sorting data in **ascending order** rearranges it into alphabetical order from A to Z, or numerical order from lowest number to highest number. Sorting data in **descending order** rearranges the data in alphabetical order from Z to A, or numerical order from highest number to lowest number.

VOCABULARY
ascending order
descending order

Step-by-Step 10.12

- If necessary, open **Members2** from your solution files. Save the document Members2 as **Members3**.
- Position the insertion point anywhere in the table, and click the **Table Tools Layout** tab.

- Click the **Sort** button in the Data group, shown in **Figure 10–20**, to open the Sort dialog box.

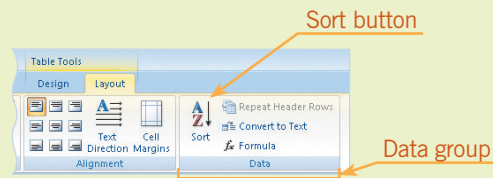


FIGURE 10–20

The Data group on the Table Tools Layout tab

- Confirm that the Sort dialog box looks like the Sort dialog box in **Figure 10–21**, to sort by Member Name. The type of content to be sorted is Text.

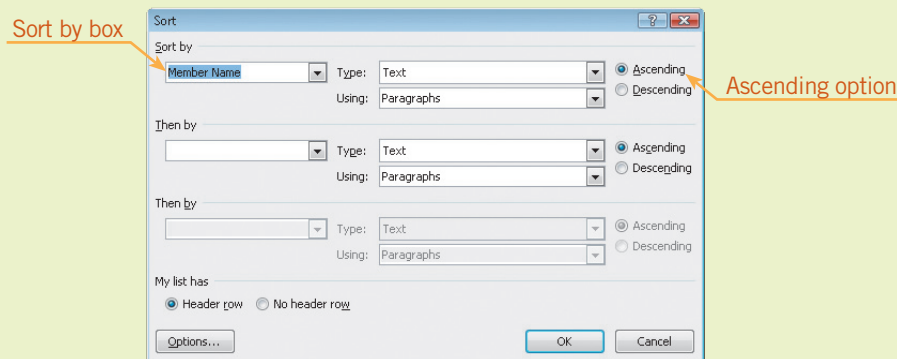


FIGURE 10–21

The Sort dialog box

- To sort the data in descending alphabetical order according to the entries in the *Member Name* column, click the **Descending** option.
- Click **OK**. The entries in first column of the table now appear sorted in reverse alphabetical order. Notice that the other columns in the rows were rearranged so that the correct entries for each row are in the second, third, and fourth columns also.
- Click the **Sort** button again. In the Sort by text box, click the list arrow and then click **Member #**. Notice that the Type text box changes to Number.
- Click the **Ascending** option, and then click **OK**. The table is now arranged so that the numbers in the third column are in order from lowest to highest, and the other columns in the rows were rearranged also to keep the entries in rows together.
- Save the changes and close the document.

Converting Text to a Table and a Table to Text


Assume that you've already created a multicolumn list using tab settings. You decide that you want to organize the data in a table because it will be easier to format. In Word, it isn't necessary to enter all the data again. Word can quickly convert text separated by paragraph markers, commas, tabs, or other characters into a table with cells.



MODULE 2 Key Applications

When converting text to a table, Word determines the number of columns needed based on paragraph markers, tabs, or commas in the text. When converting a table to text, Word inserts paragraph markers, tabs, or commas to show where the column breaks are.

Step-by-Step 10.13

1. Open **Step10–13** from your data files. Save the document as **Scores1**.
2. Select all the lines of text.
3. Click the **Insert** tab. Click the **Table** button and then click **Convert Text to Table**. The Convert Text to Table dialog box opens.
4. Under Table size, the number of columns should already be set to 3. Under AutoFit behavior, select **AutoFit to contents**. Under Separate text at, make sure Tabs is selected.
5. Click **OK**. Click anywhere in the window to deselect so you can see the revised content. The selected data is now formatted in table cells.
6. Save the changes to the document, and then save the document as **Scores2**.
7. With the insertion point positioned anywhere within the table, click the **table move handle** to select the entire table.
8. Click the **Table Tools Layout** tab. In the Data group, click the **Convert to Text** button  **Convert to Text**. The Convert Table to Text dialog box opens.
9. Replace the hyphen in the Other box with an asterisk (*) and click **OK**. The columns of text are now separated with an asterisk instead of a tab character.
10. Deselect the text. Save the changes and then close the document.

NET BUSINESS

Internet Fraud

Internet fraud refers to any type of scam or hoax that uses one or more components of the Internet, such as e-mail, blogs, or Web sites. The most common types of Internet fraud are auction and retail schemes, business opportunities and work-at-home schemes, identity theft, investment schemes, and credit/debit card fraud. Internet fraud is a federal crime. If you think you've been the victim of Internet fraud, you can file a complaint online at the FBI Web site, www.fbi.gov.

White collar crime refers to a full range of frauds committed by business and government professionals, and Internet fraud is one of the white-collar crimes that the FBI investigates. The Internet Crime Complaint Center (or IC3) is a partnership of the FBI and the National White Collar Crime Center.

SUMMARY

In this lesson, you learned:

- The table feature in Word enables you to organize and arrange text and numbers easily.
- To change the layout of information after you create a table, you can insert and delete rows and columns.
- The AutoFit feature automatically adjusts the width of a column based on the contents of the cells in a column.
- The Draw Table tool and the Eraser tool are especially useful when you need to create a complex table.
- You can format text alignment in table cells the same way you apply those formats in other Word documents.
- Borders and shading greatly enhance the appearance of a table and often make the table easier to read.
- Word provides several built-in styles to make it fast and easy to apply borders and shading to a table.
- Word provides Quick Tables that are already formatted and contain sample data, so you can quickly create a table.
- You can use the Sort feature to reorganize the table contents to emphasize data in different ways.
- Word can convert text to a table or vice versa.

VOCABULARY REVIEW

Define the following terms:

ascending order
cell
descending order

gridlines
merging cells

Quick Tables
splitting cells

REVIEW QUESTIONS

TRUE / FALSE

Circle T if the statement is true or F if the statement is false.

- T F 1. Table rows go down a page, and columns go across a page.
- T F 2. You cannot hide the gridlines in a table.
- T F 3. When you remove the boundary between two cells, you are splitting the cells.
- T F 4. When you delete a row or column, the text in the cells is also deleted.
- T F 5. Word can create a table from text in which data is separated by paragraph markers, tabs, or commas.

MULTIPLE CHOICE

Select the best response for the following statements.

1. If you have already entered the data in a table, you can quickly add pre-designed borders and shading by _____.
 A. using the AutoFormat feature C. applying a table style
 B. using Quick Table formats D. using the Table Design command
2. The _____ option adds extra space to table columns so that the table fills the width of the page.
 A. AutoFit Contents C. AutoSize Window
 B. AutoFit Window D. AutoWidth Column

3. When using the mouse to draw the table grid on the screen, the document must be _____.
 - A. in Print Layout view
 - B. in Draft view
 - C. at the zoom setting of 100%
 - D. in Print Preview
4. Use the _____ tool to remove cell boundaries.
 - A. Remove Border
 - B. Table
 - C. Eraser
 - D. Cell Margins
5. Converting one cell into multiple cells is called _____ cells.
 - A. merging
 - B. combining
 - C. grouping
 - D. splitting

FILL IN THE BLANK

Complete the following sentences by writing the correct word or words in the blanks provided.

1. To insert a new table, you click the _____ tab on the Ribbon.
2. Built-in tables called _____ include sample data and table formats.
3. To create a complex table, use the _____ tool to position cell boundaries just where you want them.
4. Sorting text in _____ order arranges it in alphabetical order from A to Z.
5. _____ are nonprinting cell boundaries.

PROJECTS

PROJECT 10-1

1. Open **Project10-1** from the data files. Save the document as **Population**.
2. Position the insertion point at the end of the document and create a grid for a 3x6 table (3 columns and 6 rows).
3. Complete the table by entering the data shown in **Figure 10-22**.

	2000	2010
18-24	30,388	28,513
25-34	52,697	44,248
45-54	27,157	40,347
55-64	42,802	50,938
65+	33,640	39,048

FIGURE 10-22 Table content for Project 10-1

4. You realize you left out the data for the 35-44 age group. Insert a row in the proper location and enter the following data:
35-44 23,864 25,890
5. It would be helpful to see the percent change in population. Add a column to the right of the 2010 column and enter the

column heading **% Change** in the first row. Insert the following information in the cells of the new column:

-6.2
-16.0
+8.5
+48.6
+19.0
+16.0

6. Insert a new row above the first row of the table and merge all cells in it. Enter the table title **Population by Age**. Center and bold the contents in the first two rows of the table.
7. Automatically adjust the column widths to the content.
8. Center the table horizontally on the page.
9. The data in the *% Change* column would look better if the decimal points were aligned. Right-align the numbers (but not the column heading) in this column.
10. Shade alternate rows of the data beginning with the 18-24 row.
11. Save the changes and close the document.

PROJECT 10-2

1. Open **Project10-2** from the data files. Save the document as **Hurricane History**.
2. Select only the tabbed data (not the blank line or the source line) and convert the text to a table. Accept the suggested number of columns, select AutoFit to contents, and separate the text at tabs.
3. Insert a new row at the top of the table and merge all cells in it. Enter the title **Costliest U.S. Hurricanes**, press **Enter**, and then enter **(\$ in Billions)**.
4. Center the text in the new heading you just entered in the first row.
5. Center the data in the *Category* column, and right-align the data in the *Damage* column.
6. The data for Hurricane Andrew is wrong. Change the year for Andrew to **1992**.
7. The data in the table is currently arranged in ascending order according to the *Year* column. Select all the cells with numbers in the *Damage* column and sort the data for Column 4 so that the storms are listed in order, with the most expensive storm first.
8. You decide the first ten entries in the table give enough information about the destructive power of hurricanes. Delete the last five rows in the table.
9. Apply a table style that will enhance the table and make it easier to read. If necessary, modify the table style to emphasize all the column headings.
10. Save the changes and close the document.

PROJECT 10-3

1. Open a new blank document and save the document as **Order Form**.
2. Use the Draw Table tool (and the Eraser tool, if necessary) to create the table shown in **Figure 10-23**.

Customer	Name					
	Address					
	City, State, ZIP					
	Phone					
Clothing	Item #	Color	Size	Qty.	Price	Total
Accessories						
Thank you for shopping with us!					TOTAL	

FIGURE 10-23 Table grid and content for Project 10-3

3. After completing the grid and entering the text, automatically format the table to fit the window.
4. Select all the cells in the first column, set the text direction as shown, and center all the text vertically and horizontally using the Align Center option. Select all remaining cells and center all text vertically in the table cells using the Align Center Left option.
5. Select the entire table and set the row height at **0.6 inches**.
6. Enhance the appearance of the table by adding or removing borders, adding shading, and formatting text, using bold and/or italic.
7. Save the changes and close the document.

PROJECT 10–4

1. Open a new blank document and save the document as **Agenda**.
2. Insert the **Matrix** Quick Table.
3. Edit the columns and rows and replace the sample data to create a table that matches the table shown in **Figure 10–24**.
4. Align the text in all cells, except the headings, using the **Align Center Left** format.
5. Select all the cells and change the font to **Arial**. Select the column headings and apply the bold format.
6. Save the changes and close the document.

Session	Time	Topic	Speaker	Room
1	8:30 a.m. – 9:45 a.m.	Regulatory Framework	John Preston	Indian
2	10:00 a.m. – 11:45 a.m.	Fact or Fiction?	Jo Ricci	Atlantic
3	1:30 p.m. – 2:45 p.m.	Techniques for Data Collection	Pat Swanson	Pacific
4	3:00 p.m. – 4:45 p.m.	Moving Forward	Ellis Arnold	Arctic

FIGURE 10–24 Table grid and content for Project 10–4



TEAMWORK PROJECT

If you completed Project 10–2, you learned how costly hurricanes can be in terms of property damage. The data shown in the Hurricane History table was compiled by the National Oceanic and Atmospheric Administration and is current only through 2006. You have probably heard about several powerful and costly Atlantic hurricanes in the United States. With a partner, see if you can update the table with more recent data.

1. Write down the years from 2006 to the last complete hurricane season (hurricane season begins in June and ends in November, so if you are working on this project before the end of November, do not include the current year in your list).
2. Split the years with your partner so that you each have half of them to research.

3. Using Web search tools or other research tools, try to locate a summary of hurricane damage for each year.
4. If any of the years you research total more dollar damage than the hurricanes shown in the Hurricanes table, insert new rows to add the data you have found.
5. When you have compiled the data, experiment with sorting the rows using different criteria and applying different formats to the column heads, borders, cells, and text.
6. With your partner, decide which format presents the data the way you prefer, and then add your names and the current date to the bottom of the document page.



CRITICAL THINKING

ACTIVITY 10–1

The owner of the stable where you ride horses has been complaining about the comings and goings of her part-time staff and unpaid helpers (of whom you are one). She'd like a way to keep track of names, phone numbers, what days and hours each helper

is scheduled, and hourly pay (if any). Use what you have learned in this lesson to create a table that will help the stable owner organize the information about her staff. Enter several fictitious entries in the table (including yourself) to test your solution.



ONLINE DISCOVERY

In this lesson, you learned to use tables to organize data in Word. Did you realize that tables are also used to organize Web page content? Open several different Web pages and identify the table grid used for organizing the content on each page. Be sure to include all Web page elements, such as the Web page title at the top and

the menu of links which often appear at the left. You will see that sometimes table border lines are used to enhance the appearance of the page, but in many cases, the table structure is not obvious in the Web page design. (Hint: Sometimes selecting all the content on the Web page will help identify the table structure.)