

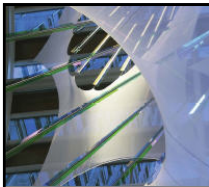


## **Tutorial 1 – Using Excel To Manage Data**

**After completing Tutorial 1, students will be able to:**

- Identify Components of an Excel worksheet
- Navigate a Worksheet
- Navigate Between Worksheets
- Plan a Worksheet
- Enter Data into a Worksheet
- Change the Size of a Row or Column
- Insert or Delete Rows and Columns
- Work with Ranges
- Move a Selection of Cells
- Calculate Sums with AutoSum
- Edit a Worksheet
- Undo an Action
- Use the Spell Checker

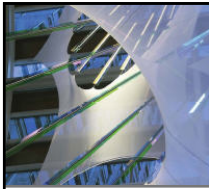
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## **What is Excel?**

- Excel is a computerized spreadsheet, that helps you report and analyze information.
- Excel stores spreadsheets in documents called workbooks.
- Each workbook is made up of individual worksheets, or sheets.
- Because all sorts of calculations can be made in the Excel spreadsheet, it is much more flexible than a paper spreadsheet.

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## Identify major components of the Excel window

- Toolbars
- Row & Column headings
- Formula bar
- Name box
- Mouse pointer
- Sheet tabs
- Task Panel
- Scroll bars
- Active cell

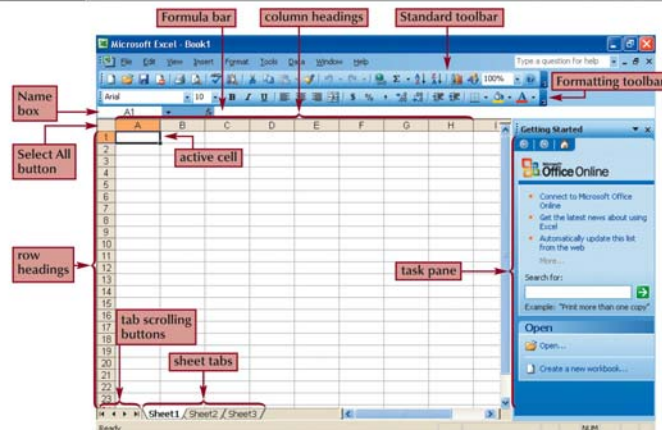
Cash Flow Comparison		
Actual versus Budget		
	Estimated	Actual
Cash balance(start of month)	\$ 1,500.00	\$ 1,500.00
Receipts		
Cash sales	1700.00	1852.00
Cash expenditures		
Advertising	200.00	211.00
Wages	900.00	900.00
Supplies	100.00	81.00
Total cash expenditures	1200.00	1192.00
Net cash flow	900.00	860.00
Cash balance(end of month)	\$ 2,400.00	\$ 2,360.00

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## Identify Excel components

Figure 1-3 Parts of the Excel window



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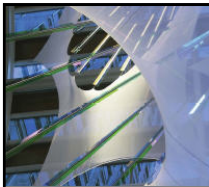


## Descriptions of Excel components

Excel window components ◀ Figure 1-4

Feature	Description
Active cell	The cell in which you are currently working. A dark border outlining the cell identifies the active cell.
Column headings	The letters that appear along the top of the worksheet window. Columns are listed alphabetically from A to IV (a total of 256 possible columns).
Formula bar	The bar located immediately below the toolbars that displays the contents of the active cell. As you type or edit data, the changes appear in the Formula bar.
Name box	The box that displays the cell reference, or column and row location, of the active cell in the workbook window.
Row headings	The numbers that appear along the left side of the worksheet window. Rows are numbered consecutively from 1 to 65,536.
Select All button	Square button located at the intersection of the column and row headings that you click to select the entire contents of the worksheet.
Sheet tabs	Tabs located at the bottom of each worksheet in the workbook that display the names of the sheets. To move between worksheets, click the appropriate sheet tab.
Task pane	The pane that provides access to frequently used tasks. When you start Excel, the Getting Started task pane appears. The task pane disappears once you open a workbook. There are several task-specific panes available in Excel.
Tab scrolling buttons	Series of buttons located to the left of the sheet tabs that you can click to move between worksheets in the workbook.
Toolbars	Toolbars that provide quick access to commonly used commands. The Standard toolbar contains buttons for the most frequently used program commands, such as Save and Print. The Formatting toolbar contains buttons used to format the appearance of the workbook, such as Bold and Italics. Additional toolbars are available.

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## Navigate within worksheets

- To navigate within a workbook, you use the arrow keys, PageUp, PageDown, or the Ctrl key in combination with the arrow keys to *supersize* movements. Tabs move you right; use enter to go down a row (*reverse in combination with shift*).
- The most direct means of navigation is with your mouse.
- To navigate between sheets, click the sheet tabs.

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## Navigation keystrokes

Shortcut keys for navigating a worksheet **Figure 1-5**

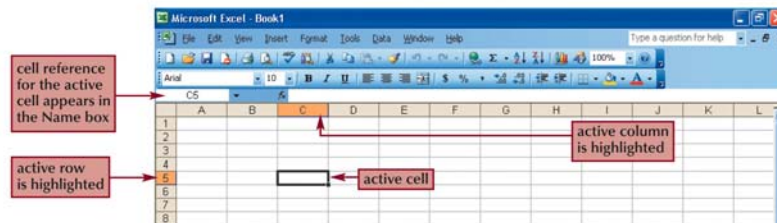
Keystroke	Action
↑, ↓, ←, →	Moves the active cell up, down, left, or right one cell
Ctrl + Home	Moves the active cell to cell A1
Ctrl + End	Moves to the last cell in the worksheet that contains data
Enter	Moves the active cell down one cell, or moves to the start of the next row in the selected range of cells
F5	Opens the Go To dialog box, in which you specify the cell you want to move to
Home	Moves the active cell to column A of the current row
Page Up, Page Down	Moves the active cell up or down one full screen
Tab, Shift + Tab	Moves the active cell to the right or left one cell

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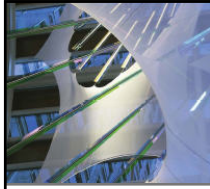


## The Active Cell

**Figure 1-6** Making cell C5 the active cell



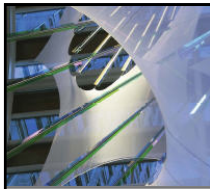
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## Developing a Worksheet

- Determine the worksheet's purpose.
- Plan the layout of the worksheet
- Enter the data and formulas.
- Test the worksheet and make any necessary edits / corrections.
- Document the worksheet and improve appearance.
- Save and print the complete worksheet.

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## Entering Data into a Worksheet

- To enter data, first make the cell in which you want to enter the data active by clicking it.
- Enter the data (text, formulas, dates, etc.) into the active cell.
- Use the Alt+Enter key combination to enter text on multiple lines within the same cell.
- Use TAB key, arrow keys, or ENTER key to navigate among the cells.

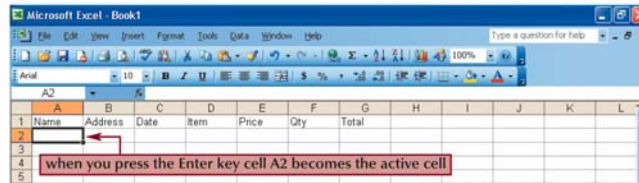
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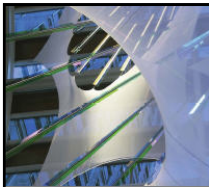
## Entering Data into a Worksheet

Entering text into the worksheet

Figure 1-9



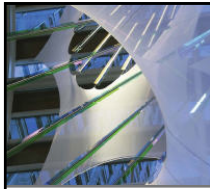
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## Resize worksheet rows and columns

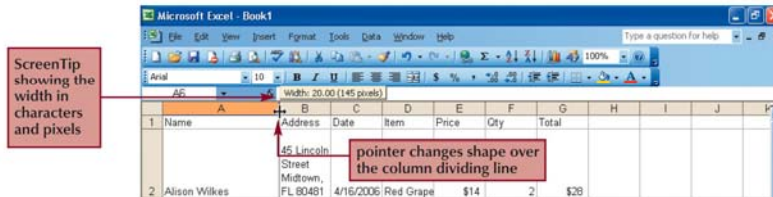
- There are a number of methods for altering row height and column width using the mouse or menus:
  - Click the dividing line on the column or row, and drag the dividing line to change the width of the column or height of the row
  - Double-click the border of a column heading, and the column will increase in width to match the length of the longest entry in the column
- Widths are expressed either in terms of the number of characters or the number of screen pixels.

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## Resize a column

Figure 1-17 Increasing the width of column A



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## Identify cell ranges

- A group of worksheet cells is known as a cell range, or range.
- Working with ranges in a worksheet makes working with the data easier.
- Ranges can be adjacent or nonadjacent.
  - An adjacent range is a single, rectangular block of cells
  - Select an adjacent range by clicking on a cell and dragging to an opposite corner of a rectangle of cells
  - A nonadjacent range is comprised of two or more adjacent ranges that are not contiguous to each other
  - To select a nonadjacent range, begin by selecting an adjacent range, then press and hold down the Ctrl key as you select other adjacent ranges

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## Select and move worksheet cells

- To select a large area of cells, select the first cell in the range, press and hold the Shift key, and then click the last cell in the range.
- Once you have selected a range of cells, you may move the cells within the worksheet by clicking and dragging the selection from its current location to its new one.
- By pressing and holding the Ctrl key as you drag, Excel will leave the original selection in its place and paste a copy of the selection in the new location.
- To move between workbooks, use the Alt key while dragging the selection.

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## Adjacent and nonadjacent ranges

	A	B	C	D	E	F	G	H
	Name	Address	Date	Item	Price	Qty	Total	
1	Name	Address	Date	Item	Price	Qty	Total	
2	Alice Wilkes	45 Lincoln Street Middown, FL 32421	4/16/2006	Red Grapefruit	\$14	2	\$28	
3	David Wu	315 Oak Lane Middown, FL 32422	4/16/2006	Navel Oranges	\$17	1	\$17	
4	Carl Ramirez	900 South Street Crawford, FL 31691	4/17/2006	Navel Oranges	\$17	2	\$34	
5	Jerry Dawson	781 Tree Lane Middown, FL 32313	4/16/2006	Deluxe Combo	\$21	4	\$84	
6								
7								
8								

	A	B	C	D	E	F	G	H
	Name	Address	Date	Item	Price	Qty	Total	
1	Name	Address	Date	Item	Price <td>Qty</td> <td>Total</td> <td></td>	Qty	Total	
2	Alice Wilkes	45 Lincoln Street Middown, FL 32421	4/16/2006	Red Grapefruit	\$14	2	\$28	
3	David Wu	315 Oak Lane Middown, FL 32422	4/16/2006	Navel Oranges	\$17	1	\$17	
4	Carl Ramirez	900 South Street Crawford, FL 31691	4/17/2006	Navel Oranges	\$17	2	\$34	
5	Jerry Dawson	781 Tree Lane Middown, FL 32313	4/16/2006	Deluxe Combo	\$21	4	\$84	
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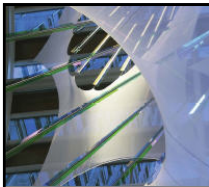


## Range selection techniques

Other range selection techniques **Figure 1-23**

To Select...	Action
A large range of cells	Click the first cell in the range, press and hold down the Shift key, and then click the last cell in the range. All of the cells between the first and last cell are selected.
All cells on the worksheet	Click the Select All button, the gray rectangle in the upper-left corner of the worksheet where the row and column headings meet.
All cells in an entire row or column	Click the row or column heading.
A range of cells containing data	Click the cell where you want to begin the selection of the range, press and hold down the Shift key, and then double-click the side of the cell in the direction that you want to extend the selection. Excel selects all adjacent cells that contain data, extending the selection of the range to the first empty cell.

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## Moving selected cell ranges

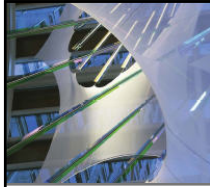
Moving the selection to the range A5:G9 **Figure 1-24**

cell reference of the new location is displayed in a ScreenTip

outline indicates the new location of the selected cells

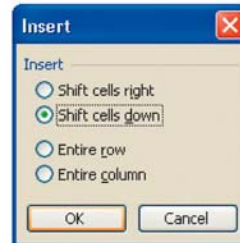
	A	B	C	D	E	F	G	H
1	Name	Address	Date	Item	Price	Qty	Total	
2	Alison Wilkes	45 Lincoln Street Midtown, FL 80481	4/16/2006	Red Grapefruit	\$14	2	\$28	
3	David Wu	315 Oak Lane Midtown, FL 80422	4/16/2006	Navel Oranges	\$17	1	\$17	
4	Carl Ramirez	900 South Street Crawford, FL 81891	4/17/2006	Navel Oranges	\$17	2	\$34	
5	Jerry Dawson	781 Tree Lane Midtown, FL 80313	4/18/2006	Deluxe Combo	\$21	4	\$84	
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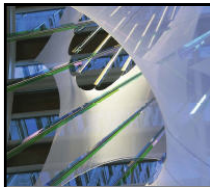


## Insert worksheet rows and columns

- You can insert one or many additional rows or columns within a worksheet with just a few steps using the mouse or menu options.
- You can insert individual cells within a row or column and then choose how to displace the existing cells.
- You can click the Insert menu and then select row or column, or right click on a row or column heading or a selection of cells and then choose Insert from the shortcut menu.



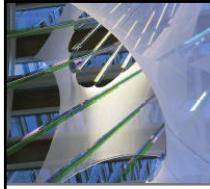
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## Delete worksheet rows and columns

- To delete and clear cells, rows, or columns, you can use the Edit menu, or right click on a heading or a selection of cells and choose Delete from the shortcut menu.
- Clearing, as opposed to deleting, does not alter the structure of the worksheet or shift uncleared data cells.
- What can be confusing about this process is that you can use the Delete key to clear cells, but it does not remove them from the worksheet as you might expect.

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## Use the Undo and Redo features

- Editing is an intrinsic task in any document, and especially useful are the Undo and Redo actions.
- The Undo feature allows you to sequentially back up to a certain action, such as a delete, a move, an entry, etc. and allows you to reverse those actions.
- Redo allows you to reapply actions one step at a time that you have previously undone.

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## Insert, move, and rename worksheets

- Worksheets are much like pages within a book; you peruse through them like you flip the pages of a book.
- There are several ways to move, copy and work with worksheets.
- Right click on the sheet tab and choose Move or Copy. Select a new position in the workbook for the worksheet or click the Create a copy checkbox and Excel will paste a copy of that worksheet in the workbook.
- The same shortcut menu for the sheet tab also gives you the option to insert, delete or rename a worksheet.

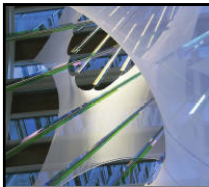
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## Print a workbook

- To Print a worksheet, you can use:
  - A menu
  - The Print button on the standard toolbar
  - The Ctrl-P keystroke to initiate a printout of the worksheet
- Excel uses the same basic methods for printing as other Windows and Microsoft Office applications.

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## The Print dialog box

Print dialog box **Figure 1-33**

print the selected cells in the active sheet

print the content of the active sheet or sheets

preview the printed output

print the content of the entire workbook

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