



Excel Lesson 1

Microsoft Excel Basics

**Microsoft Office 2010
Introductory**

Objectives

- Define the terms *spreadsheet* and *worksheet*.
- Identify the parts of a worksheet.
- Start Excel, open an existing workbook, and save a workbook.
- Move the active cell in a worksheet.

Objectives (continued)

- Select cells and enter data in a worksheet.
- Edit and replace data in cells.
- Zoom, preview, and print a worksheet.
- Close a workbook and exit Excel.

Vocabulary

- active cell
- active worksheet
- adjacent range
- cell
- cell reference
- column
- formula
- Formula Bar
- landscape orientation
- Microsoft Excel 2010 (Excel)
- Name Box
- nonadjacent range
- portrait orientation

Vocabulary (continued)

- range
- range reference
- row
- sheet tab
- spreadsheet
- workbook
- worksheet

Introduction to Spreadsheets

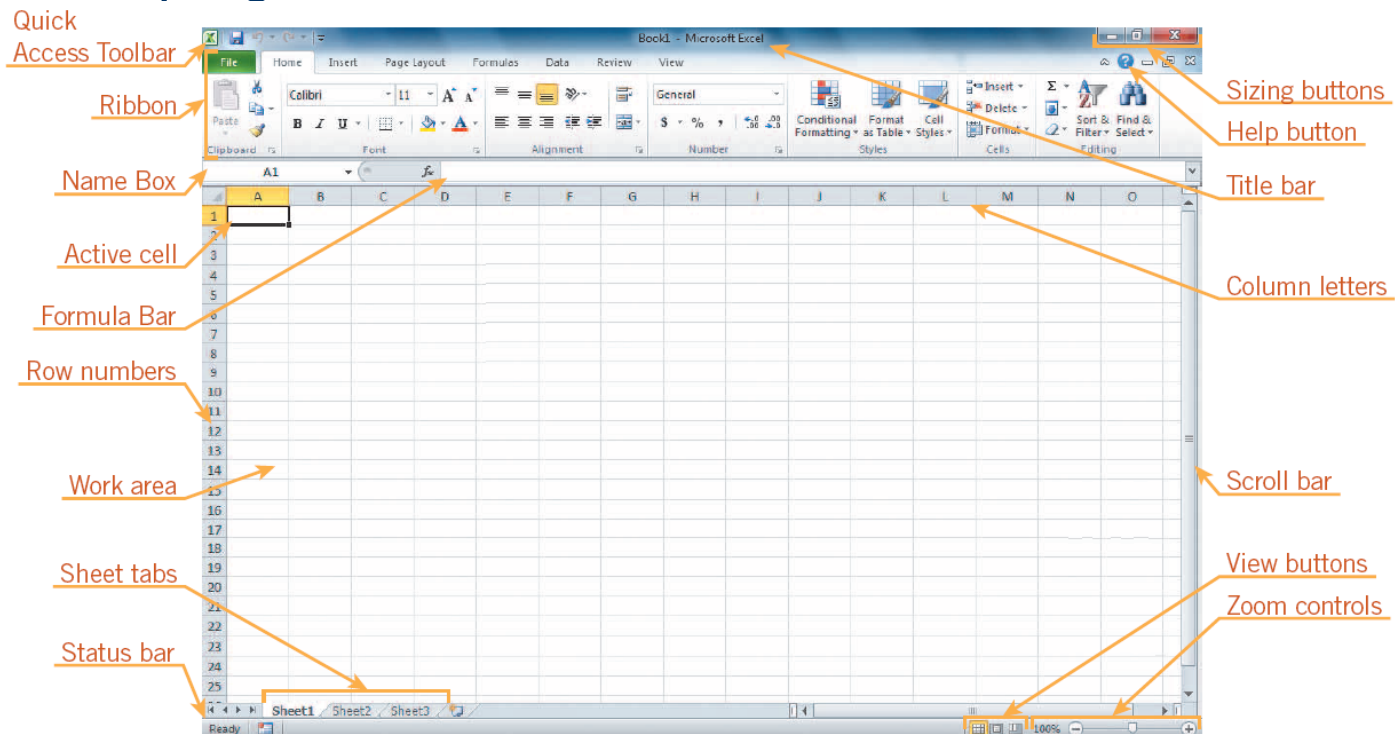
- **Microsoft Excel 2010** is the spreadsheet program in Microsoft Office 2010.
- A **spreadsheet** is a grid of rows and columns in which you enter text, numbers, and the results of calculations.
- In Excel, a computerized spreadsheet is called a **worksheet**. The file used to store worksheets is called a **workbook**.

Starting Excel

- You start Excel from the Start menu in Windows. Click the Start button, click All Programs, click Microsoft Office, and then click Microsoft Excel 2010.
- The Excel program window has the same basic parts as all Office programs: the title bar, the Quick Access Toolbar, the Ribbon, Backstage view, and the status bar.

Starting Excel (continued)

- Excel program window



Exploring the Parts of the Workbook

- Each workbook contains three worksheets by default. The worksheet displayed in the work area is the active worksheet.
- **Columns** appear vertically and are identified by letters. **Rows** appear horizontally and are identified by numbers.
- A **cell** is the intersection of a row and a column. Each cell is identified by a unique **cell reference**.

Exploring the Parts of the Workbook (continued)

- The cell in the worksheet in which you can type data is called the **active cell**.
- The **Name Box**, or cell reference area, displays the cell reference of the active cell.
- The **Formula Bar** displays a formula when a worksheet cell contains a calculated value.
- A **formula** is an equation that calculates a new value from values currently in a worksheet.

Opening an Existing Workbook

- Opening a workbook means loading an existing workbook file from a drive into the program window.
- To open an existing workbook, you click the File tab on the Ribbon to display Backstage view, and then click Open in the navigation bar. The Open dialog box appears.

Opening an Existing Workbook (continued)

- Frogs workbook open in Excel

Frog Census*					
Species	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
African Dwarf Frog	18	39	21		78
African Clawed Frog	17	22	18		57
Fire-bellied Toad	6	9	3		18
White's Tree Frog	30	26	18		74
Horned Frog	13	19	14		46
Red-eyed Tree Frog	41	22	23		86
Total	125	137	97	0	359

*Data collected by committee member volunteers.

Saving a Workbook

- The Save command saves an existing workbook, using its current name and save location.
- The Save As command lets you save a workbook with a new name or to a new location.

Moving the Active Cell in a Worksheet

- The easiest way to change the active cell in a worksheet is to move the pointer to the cell you want to make active and click.
- You can display different parts of the worksheet by using the mouse to drag the scroll box in the scroll bar to another position.
- You can also move the active cell to different parts of the worksheet using the keyboard or the Go To command.

Moving the Active Cell in a Worksheet (continued)

- Keys for moving the active cell in a worksheet

TO MOVE	PRESS
Left one column	Left arrow key
Right one column	Right arrow key
Up one row	Up arrow key
Down one row	Down arrow key
To the first cell of a row	Home key
To cell A1	Ctrl+Home keys
To the last cell of the column and row that contain data	Ctrl+End keys
Up one window	Page Up key
Down one window	Page Down key

Selecting a Group of Cells

- A group of selected cells is called a **range**. The range is identified by its range reference, for example, A3:C5.
- In an **adjacent range**, all cells touch each other and form a rectangle.
 - To select an adjacent range, click the cell in a corner of the range, drag the pointer to the cell in the opposite corner of the range, and release the mouse button.

Selecting a Group of Cells (continued)

- A **nonadjacent range** includes two or more adjacent ranges and selected cells.
 - To select a nonadjacent range, select the first adjacent range or cell, press the Ctrl key as you select the other cells or ranges you want to include, and then release the Ctrl key and the mouse button.

Entering Data in a Cell

- Worksheet cells can contain text, numbers, or formulas.
 - Text is any combination of letters and numbers and symbols.
 - Numbers are values, dates, or times.
 - Formulas are equations that calculate a value.
- You enter data in the active cell.

Changing Data in a Cell

- You can edit, replace, or clear data.
- You can edit cell data in the Formula Bar or in the cell. The contents of the active cell always appear in the Formula Bar.
- To replace cell data, select the cell, type new data, and press the Enter button on the Formula Bar or the Enter key or the Tab key.
- To clear the active cell, you can use the Ribbon, the keyboard, or the mouse.

Searching for Data

- The Find command locates data in a worksheet, which is particularly helpful when a worksheet contains a large amount of data. You can use the Find command to locate words or parts of words.
- The Replace command is an extension of the Find command. Replacing data substitutes new data for the data that the Find command locates.

Searching for Data (continued)

- Find and Replace options

SEARCH OPTION	SPECIFIES
Find what	The data to locate
Replace with	The data to insert in place of the located data
Format	The format of the data you want to find or replace
Within	Whether to search the worksheet or the entire workbook
Search	The direction to search: across rows or down columns
Look in	Whether to search cell contents (values) or formulas
Match case	Whether the search must match the capitalization you used for the search data
Match entire cell contents	Whether the search should locate cells whose contents exactly match the search data

Zooming a Worksheet

- You can change the magnification of a worksheet using the Zoom controls on the status bar.
- The default magnification for a workbook is 100%.
- For a closer view of a worksheet, click the Zoom In button or drag the Zoom slider to the right to increase the zoom percentage.

Zooming a Worksheet (continued)

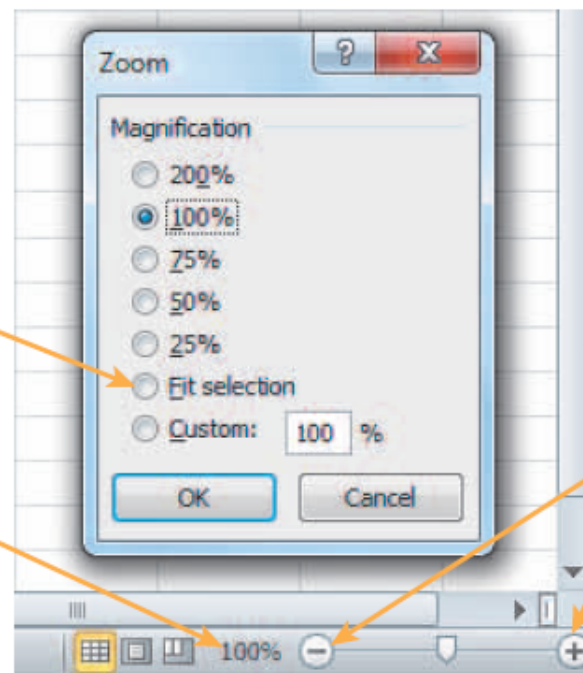
- Zoom dialog box and controls

Zooms the worksheet
so the selected range
fills the worksheet window

Zoom level button

Zoom Out button

Zoom In button



Previewing and Printing a Worksheet

- You can print a worksheet by clicking the File tab on the Ribbon, and then clicking Print in the navigation bar to display the Print tab.
- The Print tab enables you to choose print settings.
- The Print tab also allows you to preview your pages before printing.

Closing a Workbook and Exiting Excel

- You can close a workbook by clicking the File tab on the Ribbon, and then clicking Close in the navigation bar. Excel remains open.
- To exit the workbook, click the Exit command in the navigation bar.

Summary

In this lesson, you learned:

- The primary purpose of a spreadsheet is to solve problems involving numbers. The advantage of using a computer spreadsheet is that you can complete complex and repetitious calculations quickly and accurately.
- A worksheet consists of columns and rows that intersect to form cells. Each cell is identified by a cell reference, which combines the letter of the column and the number of the row.

Summary (continued)

- The first time you save a workbook, the Save As dialog box opens so you can enter a descriptive name and select a save location. After that, you can use the Save command in Backstage view or the Save button on the Quick Access Toolbar to save the latest version of the workbook.
- You can change the active cell in the worksheet by clicking the cell with the pointer, pressing keys, or using the scroll bars. The Go To dialog box lets you quickly move the active cell anywhere in the worksheet.

Summary (continued)

- A group of selected cells is called a range. A range is identified by the cells in the upper-left and lower-right corners of the range, separated by a colon. To select an adjacent range, drag the pointer across the rectangle of cells you want to include. To select a nonadjacent range, select the first adjacent range, hold down the Ctrl key, select each additional cell or range, and then release the Ctrl key.

Summary (continued)

- Worksheet cells can contain text, numbers, and formulas. After you enter data or a formula in a cell, you can change the cell contents by editing, replacing, or deleting it.
- You can search for specific characters in a worksheet. You can also replace data you have searched for with specific characters.

Summary (continued)

- The zoom controls on the status bar enable you to enlarge or reduce the magnification of the worksheet in the worksheet window.
- Before you print a worksheet, you should check the page preview to see how the printed pages will look.
- When you finish your work session, you should save your final changes and close the workbook.