



Excel 101 at the Pickerington Public Library

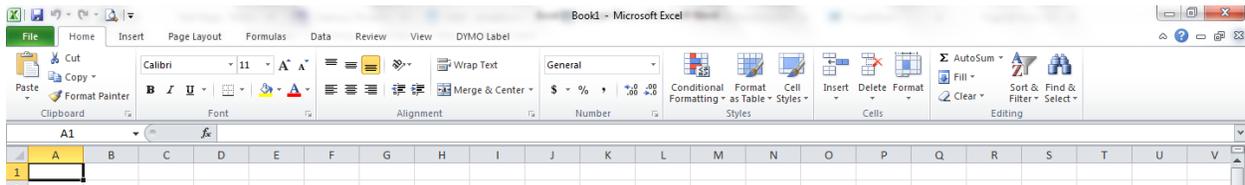
Introduction to Microsoft Excel 2010 Edition

Excel Layout: Get to Know the Spreadsheet

The Ribbon: Formatting in Tabs and Groups

Tabs:

- **Home:** Text formatting (similar to Microsoft Word), but also number formatting, cell formatting, and basic formula functions
- **Insert:** Pictures (similar to Word), but now includes charts, once data is entered
- **Page Layout:** Options in formatting your workbook overall
- **Review:** Spelling and grammar checks, also similar to Word



Note that **Formulas** is a tab unique to Excel (compared to Word or PowerPoint) and provides commonly used formulas

Tabs are further organized into **Groups**, each with their own set of commands to further customize the contents of your spreadsheet

Lesson practice: Click on pop-out buttons to see additional group options

Lesson practice: Customize and minimize the Ribbon

1. The File Tab (aka: Backstage View)

- Create new workbooks: File + New
 - Keyboard shortcut: CTRL + N
- Save workbooks: File + Save, or File + Save As (used for new workbooks)
 - Keyboard shortcut: CTRL + S (only for Save)
- Open and close existing workbooks: File + Open; File + Close
 - Keyboard shortcut: CTRL + O (open); CTRL + W (close)
- Open and close recent workbooks: File + Recent
 - Here you can view recently opened workbooks – and more importantly, can see their locations on your device
- Print spreadsheets: File + Print
 - Keyboard shortcut: CTRL + P

Lesson practice: We'll start by creating a new workbook, using the File Tab (or using shortcuts, depending on your preference). We'll be using this workbook during the class, but we will also practice:

- Opening a new workbook (using the File Tab, or shortcut): find a file on the desktop called Excel 101 Example_Attendance, and open that workbook.

2. Workbooks and Worksheets

- A **workbook** is the basic Excel file: it contains **spreadsheets**, also known as worksheets, or sheets.
- *Lesson practice: Rename sheets:* All workbooks begin with three sheets, called Sheet 1, Sheet 2, and Sheet 3. You can rename these sheets by double-clicking on the sheet name, and retyping your preferred name.

3. How Worksheets Are Organized

- Cell: the most basic unit of a spreadsheet, the intersection of a column and a row
 - Always begin on cell A1 when a new Workbook is opened
- Cell Range
 - Selecting multiple cells at once:
 - Formatted as, for example, **B1:B7 (B1, B2, B3, B4, B5, B6, B7)**
- Name Box
 - Indicates which cell is currently selected, and its *cell address*: the column, designated as a letter, and the row, designated as a number

Lesson practice: Move to different cells to see how the Name Box changes

- Formula Bar
 - See the contents of your active cell, whether the contents are text, numeric, or a formula
- Rows
 - Horizontal
 - Numbered: left side of page/screen
- Columns
 - Vertical
 - Lettered: top of page/screen

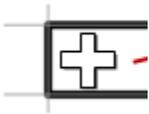
Excel Basics: Entering Information into Excel

1. Entering Your Content:

- Type text
- Changing column size and row size
- Auto-fix text

- Editing text in a cell
- Deleting Text

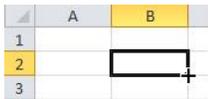
2. Using the Cursor:



Select mode, or the default cursor for Excel: it allows you to select a cell or multiple cells (by clicking and dragging), or selection rows and columns



Click and drag: When this cursor is active, it will allow you to click and drag the contents of one cell to another – essentially, cut and paste for your cells.



Autofill mode: When this cursor is active, it will allow you to fill other cells based on a pattern of previously entered information.



Resize columns and rows: When the mouse is between two columns or two rows, this cursor will activate. As you drag the cursor to the left or right (for columns), or up and down (for rows), it will resize the cells.



I-Cursor: Activate this cursor by hovering your mouse over the formula bar: you are now ready to start typing in the currently active cell.

3. Moving Content on the Spreadsheet:

- Moving left and right on Excel:
 - TAB key or Right directional arrow: moves right
 - SHIFT+TAB keys or Left directional arrow: moves left
- Moving up and down on Excel:
 - Up or down directional arrows
 - ENTER key: moves down by 1 cell

4. Copy and Paste

Just as with other Microsoft Office products, CTRL + C and CTRL + V will copy and paste text, this time from one cell to another.

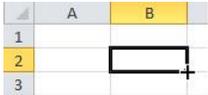
Lesson practice: move data from one cell to another elsewhere on the page, using copy/paste OR using the click and drag cursor.

5. Special Functions to Customize Spreadsheets

- **Resizing and Auto-resizing**

Lesson practice: In cell A1, enter a long string of text (for example, a first and last name). Double-click between columns A and B, and your column will automatically size to fit the text. (You can also auto-resize between rows.) You can also use the resize arrow to pull your column back and forth until its size fits your text.

- **Autofill**



Lesson practice: Starting with any blank cell of your new spreadsheet, enter the following text: January, February, and March. At the last cell (March), use the autofill cursor, and drag your mouse through the next three cells. What happens?

- **Hiding Columns and Rows**

Lesson practice: Right-click on any column in your spreadsheet, then select Hide. Do the same for any row: right-click, then select hide. To make them visible again, click “Format” in the Cells Group, and select “Hide and Unhide” from your Visibility options.

Excel Basics: Setting Up a Spreadsheet

Let’s start setting up a simple budget calculation spreadsheet! This lesson will use the Excel formula **Autosum**. *Before starting this lesson, open a new workbook* (File + New, or CTRL + N).

1. Entering Text:

In cell A1, type “Jane Doe’s Budget,” in cell A4, type “Expenses,” and in cell C3, type “January.” *Do not worry about formatting your text at this time.*

To enter months February – May, use the auto-fill tool: click on cell C3 (January), and drag and pull across cells D3 through G3. Auto-fill will populate the rest of the months.

Fill in the Expenses following categories in the following cells:

- A6: “Rent”
- A7: “Utilities”
- A8: “Internet”
- A9: “Entertainment”
- A10: “Food”
- A11: “Misc. Expenses”
- A13: “Monthly Expenses”
- H3: “Category Total”

In cell C6, type “500,” and use auto-fill to drag through cell G6 – this will prevent you from typing the same amount multiple times. We can do the same for the following categories, in which the amounts do not change:

- Enter 100 into cell C7, then auto-fill through cell G7
- Enter 50 into cell C8, then auto-fill through cell G8
- Enter the following data for each of these categories:
- Entertainment: 80, 150, 70, 90, 50, for cells C9-G9
- Food: 200, 250, 150, 92, 215, for cells C10-G10
- Misc. Expenses: 40, 15, 86, 0, 125, for cells C11-G11

2. Entering Comments

You can enter comments into Excel cells in order to explain, or provide context, to particular data. Here, we'll be adding comments to amounts that are higher than others in their categories: to do so, right-click on the cell of your choice, and select Insert Comment from the drop-down menu. Type in a comment, such as "Dinner expenses"; to close the comment window, simply click elsewhere on your spreadsheet.

500.00	\$ 500.00	\$ 500.00	\$ 500.00	\$
100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$
50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$
80.00	\$ 150.00	\$ 70.00	\$ 90.00	\$
200.00	\$ 250.00	\$ 150.00	\$ 92.00	\$
40.00	\$ 15.00	\$ 86.00	\$ 0.00	\$

Comments are denoted by the red triangle in the upper corner of a cell: you can right-click on those cells to edit or delete existing comments.

3. Calculating Totals



To calculate the total for each category, we will use the **Autosum** formula:

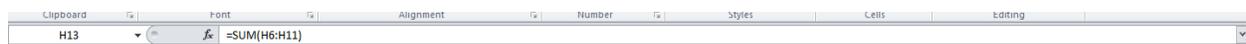
- Rent category: While cell H6 is selected, double-click the Autosum button. The total will appear in the cell.

Lesson practice: The auto-fill function can also save time when it comes to replicating formulas. Select cell H6, and use the fill handle to drag down cells H7 to H11. The sum formula will copy across cells, but it will update for the different cell ranges. Click on cell H11 to see how the sum formula has changed.

To calculate the totals for each month, select cell C13, then double-click the Autosum button. The total will appear in the cell. You can now auto-fill across D13 through G13 to get the monthly totals.

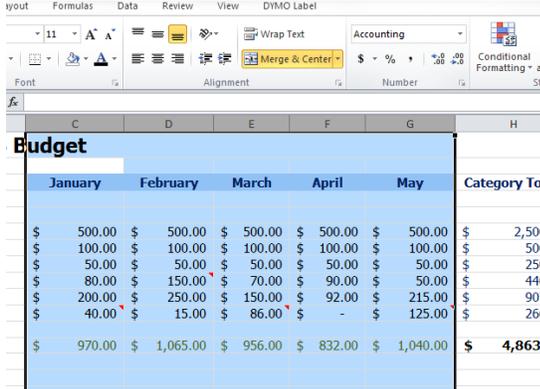
To calculate the overall total, click in cell H13, then double-click the Autosum button. Excel is calculating the sum of cells C13:G13, and that will result in the amount **4863**.

You can check the sum's accuracy by changing the sum formula: select cell H13, then click on the formula bar to edit the cell range: change your sum to **H6:H11**. The totals will match.



4. Formatting Spreadsheet

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	C	D	E	F	G	H
Budget	January	February	March	April	May	Category Total
\$	500.00	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00	\$ 2,500.00
\$	100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 500.00
\$	50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 50.00	\$ 250.00
\$	80.00	\$ 150.00	\$ 70.00	\$ 90.00	\$ 50.00	\$ 440.00
\$	200.00	\$ 250.00	\$ 150.00	\$ 92.00	\$ 215.00	\$ 907.00
\$	40.00	\$ 15.00	\$ 86.00	\$ -	\$ 125.00	\$ 266.00
\$	970.00	\$ 1,065.00	\$ 956.00	\$ 832.00	\$ 1,040.00	\$ 4,863.00

Highlight columns C-H (any column that contains numbers). In the **Home** Tab, click on the drop-down menu that appears in the **Numbers** group of commands. Change the format from “General” to “**Accounting**.” (You can also click on the **Comma** symbol as a shortcut.)

To eliminate the decimals, click on the **Decrease Decimal** button, once for each decimal place you want to eliminate.

Changing the number formatting may also change how your text fits in its columns. If any # signs appear, that means your columns are too small for their content. Double-click between column headings to auto-fit your newly formatted spreadsheet.

5. Editing Your Spreadsheet: Inserting Columns and Rows

Lesson practice: To add another month after your spreadsheet has already been compiled, you can insert a new column:

Highlight column H, then right-click. From the drop-down menu, select **Insert**. A new, blank column (H) will appear to your left, while shifting the existing content to column I. Enter “June” into cell H3, the fill in the following cells:

- H6: 500
- H7: 100
- H8: 50
- H9: 20
- H10: 175
- H11: 45

How can we update the results of our calculations? We'll need to adjust the formulas to reflect the new totals: start by updating the first category total: delete the contents of cell I6, then double-click Autosum to update the formula.

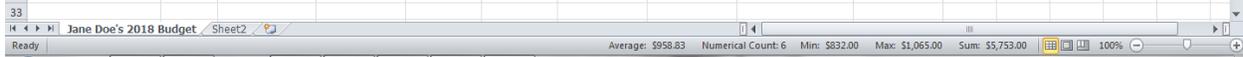
Autofill the new formula through cells I7:I11, then auto-fill the new formula into cell I13, which will update the final total. The new total should appear as **\$5,753.00**.

You can also autofill the formula from cell G13 into cell H13, which will update the June total (**\$890.00**)

6. Check Your Work with Auto-Calculate.

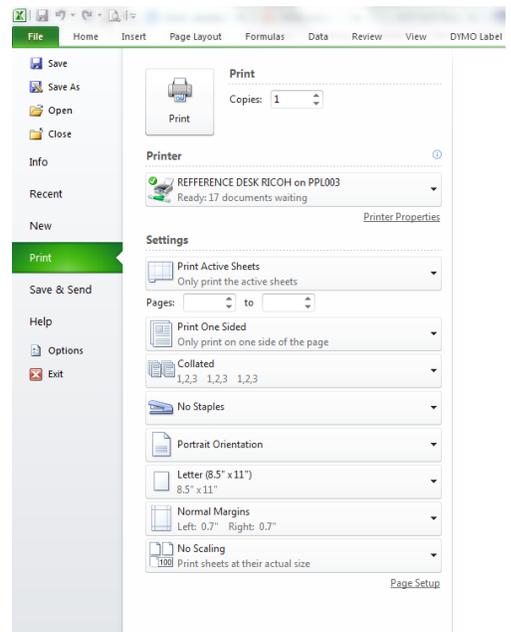
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Highlight the cell range C6:C12, then check the status bar at the bottom of your screen. It will automatically calculate the sum of the selected cells, and that sum will appear below.



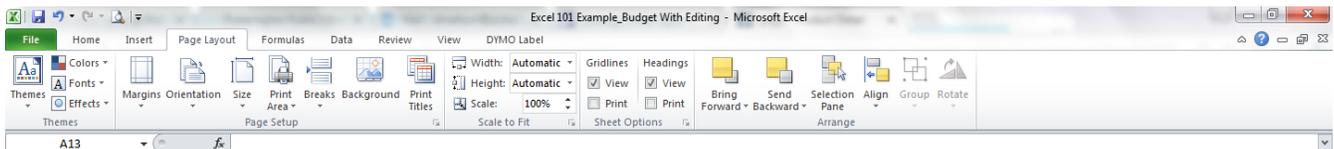
Excel Basics: Saving and Printing Your Spreadsheets

1. Return to the **File Tab** (Backstage View)
2. Select **Save As**, for first time saving a document.
3. Select “Documents” on the left-side of the screen.
4. When the dialogue box appears, name your document – for example, **Sample Budget** – then click Save.
5. Once you have already saved your spreadsheet, you only have to click **Save** to save any future edits. You can also use the keyboard shortcut CTRL + S, to save as you go.
6. To print your spreadsheet, click on the **File Tab**.
7. Select **Print**. Before printing, check the Print Preview screen to ensure document fits on a single page.



Lesson practice: Changing print settings:

- Excel defaults to Portrait orientation – change the orientation to **Landscape**.
- Excel also defaults to letter size paper – you can adjust the paper to **legal size**
- You can also **scale** the spreadsheet to fit on a single sheet of paper
- To change the print settings from within the spreadsheet, click on the File tab again, and the **Page Layout** tab: in the **Page Setup** group, you can change the margins, page orientation, and paper size. Under the **Sheet Options** group, you can also opt to print gridlines:



Excel Basics: Recommended Resources

Library Resources

Visit any location of the Pickerington Public Library during library hours to speak with a staff member. Staff members are available to assist in the computer lab one-on-one as time allows.

Materials on Microsoft Excel are available in print at the Pickerington Public Library, and in e-book format through the library's digital lender, OverDrive (available at <https://clc.overdrive.com/>). Recommended titles include:

Excel 2013 Simplified: 005.54 McF

Excel 2016: In Easy Steps: 005.54 Pri

Teach Yourself Visually Excel 2010 and *Teach Yourself Visually Excel 2013*: 005.54 McF

Online Resources

Microsoft Office: Online support for Excel

<https://support.office.com/en-US/Excel>

GCFLearn Free is a free resource recommended by library staff:

<https://www.gcflearnfree.org/>

Excel 2010 help: <https://www.gcflearnfree.org/excel2010/>